

New Literacies in a Web 2.0, 3.0, 4.0, ...∞ World

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We live in epochal times. The rapid emergence of the Internet is having an historic impact on literacy practices and on the very nature of literacy itself. Each article in this issue has articulated these changes. Each brings a unique and important perspective to its analysis. They illustrate that, today, literacy means many different things to many different people. This issue presents a multifaceted description of many new literacies and issues that have emerged as the Internet, and related technologies, define this century.

To place these articles in context, one must realize that even more profound changes to literacy lie ahead. The Internet, and its potential to disseminate rapidly new technologies of literacy, ensures that literacy will rapidly and continually change. Thus, as we explore the ideas in these articles, it is important to understand that literacy is not just new today; it becomes new every day of our lives. These articles direct our way into this rapidly changing future by exploring a number of important aspects of the changes to literacy.

Adolescents' Engagement with Web 2.0 and Social Media

Using a socially constructed perspective of digital literacies, Alvermann, Hutchins, and DeBlasio (2012) remind us of how adolescents enter into online worlds and rapidly reshape this landscape through their engagement with online texts, games,

and social networking. Historically, adolescents have regularly been at the forefront of language change (Croft, 2000; Eckert 2000; Kerswill, 1996; Roberts, 2002), co-opting language forms and bringing dynamism, identity, and creativity as they reconstruct them and make them their own. Then, another generation arrives and reconstructs language forms in even newer ways in a process that brings continuous new life to language and literacy. In an online age, our youth continue this pattern in especially powerful ways.

The authors remind us that these online digital literacies generate high levels of engagement among youth. Meanwhile, the gulf between their engaged online life outside of school and a less engaged offline life inside of school increases, raising important concerns. Alvermann et al. (2012) suggest that *turn-around* pedagogies (Comber & Kamler, 2005) might provide an important strategy for reconnecting youth with the academic literacies of school.

As a first step, they suggest that teachers become better acquainted with the online literacies and lives of their students. This would enable them to develop effective strategies to connect these online literacies with the more academic, and online, literacies of school life. As a second step, the authors encourage us to engage in research and inquiry to identify the factors and strategies affecting successful integration of digital literacy practices. They call for thoughtful classroom action based on that self-inquiry.

The need for *turn-around* pedagogies is a very real one. Although adolescent *digital natives* often are highly skilled with social networking, texting, video downloads, MP3 downloads, or mash-ups, they are not always as skilled with the informational literacies of an online life including locating information (Bilal, 2000; Eagleton, Guinee, &

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Langlais, 2003) or critically evaluating information (Bennett, Maton, & Kervin, 2008; Sutherland-Smith, 2002; Wallace, Kupperman, Krajcik, & Soloway, 2000). In fact, adolescents frequently overgeneralize their ability to read online information effectively, informed by their ability to engage successfully with online social networking, texting, and video games (Kuiper, 2007).

The authors of this article focus on a central challenge for schools among adolescents and provide a conceptually sound and eminently practical solution for us all. They not only encourage us to think about the issue but also show us productive steps we might take to reengage students in our classrooms with digital literacies.

Exploring The Home and School Involvement of Young Children In Digital Spaces

Barone (2012) initiates a central conversation for all of us concerned with our youngest literacy learners by asking, *When and how are new literacies most appropriately integrated into classroom life?* Although there has been some resistance in the educational community to having young children spend time with digital media (Lankshear & Knobel, 2003), Barone carefully and conservatively documents its extensive use by this population. This is important because research and practice with online and other digital media often have focused on older students (Barron et al., 2011; Marsh, 2011). It is puzzling why we have focused on older students because the ability to read, write, and communicate online will profoundly impact our children's future (International Reading Association, 2009) and getting a later start in school often means missing important opportunities for literacy and learning (Snow, Burns, & Griffin, 1998). Moreover, the interactive nature of digital literacies, and the Internet in particular, are especially suited to the needs and learning styles of young children.

In this article, Barone provides a comprehensive review of the arguments on both sides of the issue. She then reviews work on the involvement of young children with digital media at home and at school, allowing us a careful look at the terrain in both areas. She pays particular attention to recent work on the use of blogs (Zawilinski, 2009) and wikis in classrooms, providing examples of effective use. Barone concludes by raising the central issue in this area: "The challenge for researchers will be to document the changes in literacy acquisition of young children as they experience digital media and traditional forms of literacy simultaneously" (p. xx)

It is important that scholars of early literacy direct us into these important contexts for young

children. The interactive nature of the Internet suggests that it may be especially accessible to children, who often learn best by actively constructing knowledge through complex experiences (National Association for the Education of Young Children, 2009). Many digital tools, like the Internet, have affordances that respond immediately to a child's natural, exploratory, and interactive learning style. This often allows young children quickly to learn new and unfamiliar interfaces (Marsh, 2011).

Uses of Digital Tools and Literacies in the English Language Arts Classroom

Beach (2012) focuses his contribution on the gap between students' existing, authentic, out-of-school literacy practices and the contrived, in-school literacy practices often taught in schools. He offers a list of ways in which teachers and researchers might use what we know about this gap and the ways in which it can be narrowed to improve student learning. Through an examination of the existing research on how English Language Arts (ELA) teachers use digital tools in the classroom, Beach shows how traditional, print-focused literacies often are "*remediated*" (p. xx) by teachers using digital tools. According to Beach, remediation, or combining traditional print literacies with newer digital literacies to engage students in responding to and producing new print and digital texts, can strengthen student learning. He argues that ELA teachers should: (a) identify the affordances and challenges of using digital tools so they can model and scaffold their effective use, (b) design engaging and authentic contexts in which they use digital tools with students as co-learners for collaborative meaning-making, and (c) redefine criteria for assessing student learning in terms of digital literacies.

Beach helps us to understand both how and why innovative methods can be effectively integrated into secondary English classrooms. His work is important to every secondary English teacher, providing direction to the challenges and opportunities we face as literacy rapidly changes in an online world.

Teachers as Designers

Dalton and Smith (2012) report on a study exploring how teachers integrate literacy and technology into lessons created using the Internet-based program Strategy Tutor. The authors found that teachers used Strategy Tutor to integrate technology into their lessons in useful ways. They also found that teachers did not include much web evaluation or media literacy skill building, suggesting that they do

not always conceptualize new, online literacies. What appeared most challenging for teachers was the uses of technology in service of disciplinary learning, or as Mishra and Koehler (2006) frame it, instruction that integrates teachers' technology, pedagogy, and content knowledge (TPACK).

The special contribution these authors make is in showing us how these teachers successfully designed multimodal units using the Strategy Tutor tool. They were able to integrate these types of texts, along with comprehension strategies, into the overall context of their lesson designs. Thus, design tools might be a useful way for teachers to create lessons that support digital literacies. This would be important, especially in light of the resistance Beach touches upon that some teachers have to integrating new technologies into their classrooms and the findings on this study about the failure to integrate technology and content learning. A good tool could successfully bridge teachers' own gaps between traditional and newer literacies. This article offers a picture of what might be possible for literacy educators who have access to effective and supportive Internet tools.

21st Century Literacies in Teacher Education

The issue of multimodal texts is a theme that runs throughout many of these articles. Karchmer-Klein and Shinas (2012) report on a study that sought to determine how teachers translate instruction in multimodality to their own development of multimodal texts. The graduate student participants in this study were enrolled in a course that taught multimodality. Assignments took place in Glogster, a tool that permits the use of a wide range of modalities when composing.

The study revealed that scaffolding was an essential element of multimodal learning for teachers. In addition, they found that the complexity of a tool sometimes limited its use. Apparently, new literacies were required, and these often took time to learn or, sometimes, restricted the full use of a tool like Glogster. Finally, the study points to the importance of professional development and teacher education in this area. New questions are raised about how best to accomplish this.

Reading Multimodal Texts in the 21st Century

Serafini (2012) also explores issues of multimodality, using the construct of a "reader-viewer" (p. xx) to describe readers in a multimodal context. Serafini describes the *reader-viewer* as one who "...attends to the visual images, structures, and design elements of multimodal texts in addition to written language" (p. xx). He proposes four new

reader-viewer resources or social practices: navigator, interpreter, designer, and interrogator. His article explains how a reader transits these social practices.

Serafini does not suggest that students no longer need to decode; rather, he believes decoding is part of navigation. In navigating, students must decode and navigate design elements and visual images. Additionally, as designers, readers design their own texts through the process of navigation. The reader-viewer moves from producer of text to navigator and interpreter. Serafini further asserts that teachers rarely teach these important navigation and design skills.

Serafini's emphasis on the reader-viewer's choices points to a new way of thinking about online reading. And, Serafini describes what this might look like with picture books and graphic novels. Like Beach, Serafini does not offer a single, unified notion of what is different about reading multimodal texts from traditional texts. Rather, he offers many detailed notions about what is different. His unified concept of the reader-viewer, however, begins to present an important vision of how this might be conceptualized.

Thinking About Changing Conceptions of Literacy

The articles in this issue remind us of what many, but not all, realize—that literacy is changing. These articles conceptualize the changes taking place in a number of important venues: adolescent literacy, young children's home and school environments, ELA classrooms, software design tools, teachers engaged in explorations with multimodality, and the reading of multimodal texts. As a group, they remind us of the many different issues that are emerging as the Internet becomes this generation's defining technology for literacy and learning.

As we consider the larger picture of this change, we believe it is important to recognize that the changes taking place to literacy are both rapid and continuous; the Internet provides a vehicle for the immediate dissemination of new technologies that require new literacies and enable new social practices. In an online world, literacy learning is continuous for every one of us. There is no escaping this fundamental aspect of our lives online.

Put another way, literacy has become deictic. Deixis is a term used by linguists to define words whose meanings change rapidly as their context changes (Fillmore, 1972; Murphy, 1986; Trauth & Kazzazi, 1996). *Today*, for example, is a deictic term; the meaning of *today* becomes *yesterday* within the space of 24 hours. The meaning of literacy also has become deictic because we live in an age of rapidly

changing information and communication technologies, each of which requires new literacies (Leu, 1997, 2000) and enables new literacies practices (Lankshear & Knobel, 2006). To be literate tomorrow will be defined by even newer technologies that have yet to appear and even newer discourses and social practices that will be created to meet future needs. Thus, when we speak of new literacies we mean that literacy is not just new today; it becomes new every day of our lives.

We think it more appropriate to define literacy today as a continuous construct, one that is continuously changing. A construct such as new literacies accomplishes this. In doing so, we acknowledge that change is central to literacy, and we are continuously open to the questions, and the ideas, that such a conceptualization permit.

This raises a fundamental problem, however. How can we develop adequate theory when the object we study is itself ephemeral, continuously being redefined by a changing context? This is an important theoretical challenge that our field has not previously faced.

A Dual Level Theory of New Literacies

Leu, Kinzer, Coiro, Castek, and Henry (in press) have proposed a dual level theory of new literacies to address this dilemma. Recognizing that changes to literacy are taking place at many levels and dissatisfied with isolated attempts to capture those changes, they believe that a collaborative approach to theory building is essential, one that takes advantage of the power of multiple perspectives (Labbo & Reinking, 1999). This approach suggests that the best solutions result from collaborative groups who bring diverse, multiple perspectives to problems (Page, 2007). They argue that we no longer can afford to work in separate theoretical worlds, ignoring others and only privileging our own. We must find ways to bring all of our intellectual capital to the important task of understanding the extraordinary complexities that now define literacy as it continually changes and becomes richer and more complex.

To account for both the continuous changes taking place to literacy and the growing multiplicity of perspectives that are emerging, they frame new literacies theory on two levels: lower case (new literacies) and upper case (New Literacies). The former explores a specific area of *new literacies* such as the new literacies of adolescents (e.g., Alvermann, Hutchins, & DeBlasio, 2012; Beach, 2012), the new literacies of early childhood (e.g., Barone, 2012), the new literacies of multimodal reading (Serafini, 2012) or a new technology, such as Strategy Tutor (e.g. Dalton & Smith, 2012) or Glogster (e.g., Karchmer-

Klein & Shinas, 2012). Lower case work also includes those who explore a focused disciplinary base, such as the semiotics of multimodality in online media (e.g., Kress, 2003) or a distinctive conceptual approach such as new literacy studies (Street, 1995, 2003). These lower case perspectives are better able to keep up with the rapidly changing nature of literacy in a deictic world because they are closer to the specific types of changes that are taking place and interest those who study them within a particular heuristic. Lower case perspectives also permit our field to maximize the lenses we use and the technologies and contexts we study. Every scholar who studies new literacy issues is generating important insights for everyone else, even if we do not share a particular lens, technology, or context. How, though, do we come to understand these insights, taking place in many different fields from many different perspectives? For this, Leu et al. (in press) suggest that we require a second level of theory, an upper case New Literacies theory.

What defines this broader theory of New Literacies? *New Literacies*, as the broader, more inclusive concept, includes those common findings emerging across multiple, lower case theories. New Literacies theory benefits from work taking place in the multiple, lower case dimensions of new literacies by looking for what appear to be the most common and consistent patterns being found in these lines of research. This approach permits everyone fully to explore their unique, lowercase perspective of new literacies, allowing scholars to maintain close focus on many different aspects of the rapidly shifting landscape of literacy during a period of rapid change. At the same time, each of us also benefits from expanding our understanding of other new literacies perspectives. By assuming change in the model, everyone is open to a continuously changing definition of literacy, based on the most recent data that emerge consistently, across multiple perspectives, disciplines, and research traditions. Moreover, areas in which alternative findings emerge are identified, enabling each to be studied again, from multiple perspectives. From this process, common patterns emerge and are included in a broader, common, New Literacies theory.

This process enables the broader theory of New Literacies to keep up with consistently changing elements that will always define literacy on the Internet while it also informs each of the lower case theories of new literacies with patterns that regularly are being found by others. We believe that when literacy is deictic and multifaceted, a dual-level theory of New Literacies is not only essential but also provides a theoretical advantage over any single-dimensional approach to theory building and

research. We are richer for working together and engaging in common research and theoretical conversations, something we believe happens too rarely in literacy research.

What are the central principles of New Literacies theory that appear to be emerging from new literacies research? Leu et al. (in press) suggest that there are currently at least eight principles of New Literacies that appear to be common across the research and theoretical work currently taking place:

1. The Internet is this generation's defining technology for literacy and learning within our global community.
2. The Internet and related technologies require new literacies to access fully their potential.
3. New literacies are deictic.
4. New literacies are multiple, multimodal, and multifaceted, and, as a result, our understanding of them benefits from multiple points of view.
5. Critical literacies are central to new literacies.
6. New forms of strategic knowledge are required with new literacies.
7. New social practices are a central element of new literacies.
8. Teachers become more important, though their role changes, within new literacy classrooms.

The Future of Literacy Research

In reviewing the articles in this issue, one can see that, together, they contribute importantly to the conversations taking place in the research community. The editors and authors are to be commended for advancing these ideas at such a timely moment in the history of literacy research. It is this type of work that will define the future of literacy research because the most important challenge for each of us might be with looking beyond our own specific research area to include findings taking place in other, related, new literacies work. We must begin to think in ways that do not simply privilege our own work but that embrace the many other perspectives that can enrich our own understanding. By looking across multiple new literacies, we will develop a far richer understanding of the important work that each of us is conducting. We believe that the articles in this issue provide an important model, helping us to benefit from one another's work in a time of rapid change.

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