Today’s student is likely to engage daily in numerous literate practices, from print to film to multimodal forms such as Web sites and video games. She lives in a media saturated world and averages nearly six and a half hours a day with media.¹ She is a media multitasker, watching television as she instant messages and completes her homework. When she plays video games, she usually works as a member of a team and with intense concentration even on these long, time-consuming projects. She searches for information on the Internet, displays herself on myspace.com, and takes pictures on her cell phone, then chooses between a number of media sharing sites in which to upload them. She can simultaneously be an actor, director, editor, and publisher with the movie software that came with her computer. She expects her teachers to guide her through this information era, not dictate “correct” answers to rote questions that Google can provide in seconds through multimodal means, e.g., text, video, and digital images.

For educators, this student is a symbol of ongoing change in which new media technologies offer emergent modes of communication, learning, and play. Teaching Tech-Savvy Kids: Bringing Digital Media Into the

Classroom, Grades 5–12 addresses how new media technologies are altering and expanding literate practices among our everyday acts of communication, our informal learning environments and our leisure activities. We are living in both an exciting and nerve-wracking time as notions such as space and time shift, issues such as portability and interconnectedness become widespread and standardized, and long-standing divisions between private and public spheres are blurred (Burbules & Callister, 2000). These issues, as well as the experiences of the student described above, push educators to question how to think about the changes happening beyond school walls and how these changes affect school-based learning. The answers to these questions cannot be to ignore these changes or to be satisfied with superficial solutions such as wired classrooms or additional hardware. When educators discuss and analyze emergent modes of communication, learning, and play, we are forced to rethink long-standing practices and relations within schools.

TOUGH QUESTIONS EDUCATORS MUST ADDRESS

One of our goals as educators in understanding youth and digital media should be to frame our discussion around learning, literacy and knowledge rather than merely concentrating on the integration of and access to technological tools. For this reason I believe educators need to ask themselves and discuss collectively some tough questions:

1. What does learning look like in the 21st century?
2. What does literacy look like in the 21st century?
3. What is knowledge in the 21st century? (Or what does it mean to know something in our mediated culture?)

These are three questions we must ponder, rethink, and explore within ourselves, with colleagues and parents, and with students. Pedagogy, curriculum, and assessments are important philosophical issues and determining factors within education, but the most basic issues we as teachers need to address are our core assumptions around learning, literacy, and knowledge and the relationship between the three. The technological changes that are currently taking place—and will continue to do as they have throughout human history—are reshaping everyday practices and relations. As teachers we must try to understand this phenomenon in order to grow professionally, to continue to have influence over our teaching environments, and to support student learning. This book will assist you in understanding these changes, help you adopt some
of these new media practices as your own, and present tangible ways for you to incorporate these issues into your teaching. Additionally, the book can help stimulate your thinking around learning, literacy, and knowledge in the 21st century.

Addressing these three questions will test our ability as educators to see past our training, to see past our own experiences with technology and to see past the fear and uncertainty of institutional change in order to create learning environments and interventions based on the most recent and the most informed research on youth. It is pertinent to discuss education and schooling in the 21st century, for our schools are neither situated in a vacuum nor immune to changes and conditions impacting the rest of our lives. Historically the educational system in the United States has not been prone to change, and for administrators and teachers to offer competitive, engaging classrooms, we need to account for the massive technological changes currently taking place. This is not meant to scare but to motivate us. The chapters in this book bring together the latest research on youth and digital media and offer educators opportunities to understand and explore this relationship both personally and professionally. If we are working and teaching in an institution still wedded to a dated vision of schooling, we have the ability to learn from research, ask ourselves tough questions, and strive to create learning environments in which a 21st century student is entitled.

I realize these questions do not have easy answers and one of the arguments of this book is to move away from an outdated school-based view that there is “one right answer” or one “right” way to learn. We must shift our understanding of learning and literacy as:

- Broadly conceived and not easily defined or standardized
- Complex and not based on effortless transmission
- Socially and ideologically constructed and not merely neutral entities (Street, 1995)
- Inclusive of the intellectual funds students gain at home and from youth culture (Moll, Amanti, Neff, & Gonzalez, 1992)
- Changing over time and not limited to static definitions

When we shift our understandings of learning and literacy to encompass these characteristics, educators can come to view new media through a relational lens and avoid discussions in which new media technologies are presented as an either-or proposition.

Unfortunately the current discourse around youth and new media technologies is based on extreme views. One extreme suggests that kids’ use of digital media is dumbing down an entire generation, while the other side
suggests that school is now irrelevant and should be replaced with kids directing their own learning online. Educators cannot continue to get caught in a polarized debate only to judge if school-based learning is better or worse than informal learning. This dichotomy will not allow us to initiate a dialogue regarding new media; it will only condone or condemn such learning experiences. Starting with three tough questions about the state and nature of learning, literacy, and knowledge in the 21st century can open up new spaces for discussion, queries, insights, and change.

WHAT IS NEW MEDIA?

What is new media or digital media? New media is an umbrella term used to describe technologies of the late 20th century and that are new. This currently includes but is not limited to the Internet, cellular phones, interactive television, computer games, and virtual worlds. New media is relative though; radio was considered new in the early 1900s, although it was not considered new in the early 2000s. As new technologies are integrated into our daily lives, they become part of our everyday experiences and, as the years go by, are viewed as commonplace and unoriginal—almost invisible as a technology, e.g., writing, pencils, paper, and chalkboards.

Adding the term digital to the phrase digital media signals a form of content that is created and distributed electronically based on binary codes. Digital media is currently the predominant form of new media. Due to its digital code, content such as a digital video or e-mail can be edited, shared, and even in some cases—such as in virtual world—interactive. Social networks and Web sites in which people can read and generate content are possible due to digital computers. But I do not want to simply focus on a laundry list of digital media nor do I want to focus on technical definitions. For teachers it is important to concentrate on how new media technologies are being integrated into our daily lives. This includes how our cell phones, our laptops, our iPods, our video game players, and even our digital video cameras get woven into the ways we develop and maintain our relationships, negotiate our social status and our ability to communicate. From this relational perspective (Burbules, & Callister, 2000) we can discuss students’ participation with digital media including how they produce and distribute media and engage in appropriating, recirculating, archiving, and annotating media content in powerful new ways (Jenkins, 2006). By discussing how new media influences our lives, teachers can come to appreciate how learning, literacy, and knowledge in new media environments differ from traditional school-based experiences.
But the terms *new media* and *digital media* should not imply that all forms of mediation are new. For instance, students seem to be addicted to text messaging with their cell phones, but writing is not a new medium. What’s new is the fact that we can write to each other on our cell phones, since the telephone was previously limited to verbal communication. When I was growing up in the 1980s, the phone was something I used while at home. I was delighted when my parents finally bought a cordless phone so I could talk to friends in the comfort of my own room. Yet the cordless phone created tension and often times disagreements between my parents and me: when I was in my room with the door locked, my parents were less likely to monitor my conversations with peers and evaluate my overall time on the phone and ostensibly away from my homework. So new media can affect communicative practices and relations. Currently the age of kids who have their own cell phones keeps getting younger and younger and they often carry them at all times (and seem to be texting all the time) even though they are still using language and words to communicate.

And don’t think these text messages are unsophisticated. In fact, they are just the opposite. Christo Sims, a doctoral candidate at University of California, Berkeley’s School of Information, studies how kids use technologies such as cell phones and instant messenger as part of their everyday lives and that using lower and upper case letters, misspellings, and the casual appearance of a text message can often be quite purposeful (personal communication, December 12, 2007). From a teacher’s perspective, text messages can appear sloppy and rushed. It might seem as if the student may not know how to spell or rarely puts energy into composing a legitimate sentence. Here is our (adult) mistake. We want to judge our students’ text messages based upon standards for written English. In fact, we should take the perspective that our students are communicating much more about themselves than just their mastery of English (Baron, 2008).

Christo Sims (personal communication, December 12, 2007) argues that the casual, even sloppy, appearance can be seen as an attempt to explore social connections without exposing, too quickly, the degree to which they are emotionally invested in the outcome. He draws a comparison between such writing practices and that of youth fashion. In both cases the display is highly crafted and yet done in a way that hopes to suggest casualness and ease; as many youth say to suggest “no big deal.” For youth it can be scary to put oneself out there when trying to develop friendships and, as such, youth often appear casual as a way to hide the degree to which they are invested in their friendships. Thus they slowly feel out the other person. They get to know each other by writing short messages, ones where what is said can be carefully controlled. Remember when we were teenagers and there were high stakes involved with making
new friendships, being accepted by peers, publicly humiliated, or scrutinized? Those days were potentially horrible, and today’s youth use text messaging to allow conversations to develop more slowly and allow rejection to be carried out more silently. Essentially sloppy text messages may be a way for youth to protect themselves.

**MYTH:** Today’s high school students should be called the “look at me” generation. They are self-absorbed, superficial, narcissistic teens who are always online for no apparent reason. Their behavior is baffling.

**REALITY:** Our students’ forms of expression have changed from when we were kids. Once we come to understand how our students are using digital media, then their behavior becomes incredibly familiar. They may be online and texting all the time, but they are actively working to promote a social identity and, of course, maintain their friendships.

For a video interpretation of this “reality,” go to YouTube and watch “Are Kids Different Because of Digital Media?” from the MacArthur Foundation: (http://tiny.cc/teachtech_1_1).

At the most basic level, today’s students’ ability to communicate and hang out with one another looks different from our educational vantage point and may even appear like a waste of time or unproductive and does not equate with real learning. The questions and concerns around their communication practices are understandable. Hopefully after reading this book, today’s teenagers will look less like failures and more like typical teenagers who are interesting in dating, flirting, having fun, and creating and reinforcing their own creative youth culture. As today’s students develop a sense of self and identity, they become heavily invested in establishing and preserving relationships with peers; however, the way they go about maintaining their relationships just looks different from previous generations. Although these communication patterns may feel foreign and off-putting, the main thing to remember is that their forms of communication are often based on how they want to present themselves to other teenagers.

**KEY CHARACTERISTICS OF NEW MEDIA**

I was fortunate enough to be a collaborator on a research project titled, “Kids’ Informal Learning with Digital Media: An Ethnographic Investigation of Innovative Knowledge Cultures.” This project was funded by a grant from the John D. and Catherine T. MacArthur Foundation and jointly carried out by researchers from U. C. Berkeley and the University of Southern California. One of the goals of the project was to put current academic
research on the learning and new media practices of youth into the hands of classroom teachers and educators. As such, this book draws extensively from the three-year ethnography of the “Kids’ Informal Learning with Digital Media” project and represents the most current instantiation of research on youth new media practices. I also drew from other research projects from the MacArthur Foundation and educational leaders in the field of new media and learning. Thus, each chapter includes stories and quotes from interviews and written materials from various sources.

From this broad research corpus, it becomes apparent that new media environments foster and support a community of learners, a shared culture of participation in which youth contribute their knowledge of the world and simultaneously demonstrate a keen sense of creativity within these mediated experiences. In these new media environments, youth are usually invested in friendship-driven and interest-driven practices where peer-based learning is the norm (Ito et al., 2008). According to Ito et al., friendship-driven practices of youth are based on the “day-to-day negotiations with friends and peers” (p. 9). These negotiations take place between age-based friends and peers from school, religious groups, sports, and other local activity groups. Ito et al. argue that these local friendship groups, from which youth navigate affiliations, friendships, and romantic partners, reflect their lives online. So a student’s friend and peer group at school (or other local activity groups) is most likely to be the primary source for the student’s friends’ list on social network sites such as MySpace and Facebook.

Interest-driven practices, according to the authors, place “specialized activities, interests, or niche and marginalized identities first” (Ito et al., 2008, p.10). Hence, friendship is not necessarily the driving force behind the formation of these peer networks rather the specific interest is foremost. For instance, digital video (Chapter 3) production and online role playing (Chapter 5) are popular interests in which youth can pursue self-directed learning, develop online friendships and affiliations, and gain recognition. These specialized interests are the impetus for an online social group to come together (Ito et al., 2008).

**CHARACTERISTICS OF NEW MEDIA ENVIRONMENTS**

A community of learners usually includes:

- Peer-based learning (Ito et al., 2008; Jenkins et al., 2006)
- Collaboration
- Creativity
- Interest-driven practices (Ito et al., 2008)
- Friendship-driven practices (Ito et al., 2008)
Peer-based learning is a common characteristic of new media environments. In these mediated settings, peer feedback and critique are highly prized. Although these environments are usually informal and less structured than school-based settings, a culture of shared participation helps to nurture a sense of membership and identity; thus youth can become heavily invested and committed to sharing their creative efforts and resources and providing feedback and critique to peers. Specifically in interest-driven settings, self-motivated learners can observe and communicate with people engaged in the same interests (Ito et al., 2008). As a result, youth can learn skills, receive recognition for their work, gain status as experts, and promote an ongoing identity based on a shared interest. In friendship-driven settings, youth can learn cultural norms of online interaction and gain valuable and sometimes painful lessons in growing up (Ito et al., 2008).

The characteristics of new media environments are ripe for integrating into the classroom as they foster engaging, student-centered learning experiences. Although I have intentionally separated each chapter into a discussion about a specific medium or media, these characteristics are the threads that weave the chapters of this book together to create a snapshot of youth and their new media practices: In Chapter 2, Christo Sims highlights Lynn—a young girl who is home-schooled—and her friendship-driven practices on a social network site that allow her to stay connected to her current group of friends from church and the local area; in Chapter 3, Patricia G. Lange details the story of Wendy who uses her interest in documentary video to engage in the civic issue of maintaining and enjoying local facilities such as parks; in Chapter 5, C. J. Pascoe chronicles the story of Clarissa, an avid writer and reader who finds an online writing community in which to create fabulous fictional stories and receive insightful feedback from peers. These examples and the other research-based Stories from the Field demonstrate that teenagers, when given the opportunity to pursue their interests in a communal space and receive support and feedback from peers, are hungry for chances to express themselves in creative ways.

Educators have an opportunity to tap into this hunger in the form of a community of learners, peer collaboration and feedback and interest-based subject matter. Our classrooms can be sites in which collaboration is demonstrated through sharing knowledge, creativity is demonstrated through production and publication, and students are asked to respond to peers with authentic feedback and critique. Teachers do not necessarily need to rely on the latest and most expensive technology to incorporate the key characteristics of digital media into their classrooms. It is feasible
to foster a classroom environment based on a community of learners, peer collaboration and feedback, and creativity without the help of the latest and most expensive technology. Educators do not have to get weighed down by a need to adopt technology at a record pace. Instead, start with the assumption that youth culture and its new media practices are a point for learning, discovery, and interest-based pursuits in which youth are agents in their own education. From this vantage point, it can become much easier to find a balance between integrating characteristics of new media environments into the curriculum and incorporating technology into classrooms.

WHAT TEACHERS CAN GET OUT OF THIS BOOK

Although Christo Sims’s insights into youth and their text messaging exchanges are interesting, how can teachers benefit from this book? What can teachers get out of a book that focuses on digital media practices? There are several answers to these questions. First and unfortunately, there remains a gap between our students’ participation with new media in school and outside of school. If many of our students are engaging in new forms of play, new online communities, and new types of communication, these technological distinctions are important for teachers to understand. This book will assist you in adopting and converting these new relationships with new media into your personal and professional lives and help you bridge this gap and discuss with your students the digital era and its impacts on the ways in which we live.

Second, our jobs as teachers are drastically improved if we can come from a perspective that understands the behaviors of our students. If all we see from our students are behaviors that appear foreign or are prohibited by the school, e.g., cell phones and texting, then we are missing out on myriad ways to connect with our students and their youth culture. I am not suggesting that teachers adopt youth culture as their own. Rather, I am suggesting that making a conscious effort to empathize with life for today’s teenagers is a prerequisite for good teaching.

Third, we are currently living in a digital age and there is new affiliation for, and new meaning associated with, geek status. It’s now extremely cool to be a geek. To “geek out” is to “dive into a topic or talent” as Ito et al. (2008, p. 2) describe it. For youth, to engage interest-driven practices is to throw themselves into open-ended projects that are time consuming and focused on gaining deep knowledge and expertise within a specific area. While providing a social space with access to peer
support and feedback, these interest-based practices also promote self-directed learning (Ito et al., 2008). Interest-driven engagements provide educators with examples of how youth geek out, and for educators looking for ways to motivate students, these insights are invaluable.

Fourth, Henry Jenkins (2006), a media educator, suggests that we need adults to help mentor and guide teens with their media-laden experiences. He is not advocating for a surveillance culture. Rather, Jenkins suggests that there are ethical concerns when chatting online or posting a video of one’s self and adults, such as teachers, can assist teenagers in this uncharted territory. Additionally, youth can assist adults in their quest to understand new media and participatory culture. Thus, there is a need for cross-generational perspectives when discussing new media environments.

By focusing on new media practices, teachers can harness the communicative practices of youth within the classroom. Read how Maryanne Berry uses instant messaging, or IMing in her twelfth-grade English class.

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**A TEACHER’S PERSPECTIVE**

**Online Conversations Support Student Engagement With Literature**

By Maryanne Berry, English Teacher

As educators, we generally assume that the incessant texting, messaging, and e-mailing that students conduct distracts from learning. But what if this fast paced style of communication could be used to foster conversations that supported learning? About five years ago, I decided to experiment by assigning online conversations in response to an independent reading project on contemporary novels. For years I had assigned my Advanced Placement Literature and Composition students reader response journals as a way of following students’ progress through their books. While reading their chosen novels, twelfth graders would periodically jot down questions, predictions, observations and insights. They would copy powerful passages from the text and analyze them. Some of the journals had a kind of “canned” quality; the predictions were safe, the interpretations bland. Sometimes I suspected that students used supplementary sources in order to fake their way through the process. Though students exchanged journals in class with peers who had read the same book, the conversations generated by these exchanges lacked the liveliness one experiences when reading a book with someone equally engaged. A student whose journal was weak might learn something by reading stronger writing but when she went back to the book after class would she have been given the support she needed to engage more confidently with the novel? Could the interest of the struggling reader be sustained?
I told the students that they were welcome to form their own groups (of two to four people) but that I wanted all groups to be coed. I’d read a little research about the differences in the way boys and girls interacted in online settings that suggested that all male groups might be less successful than mixed or female groups and I also wanted students to extend a bit beyond their single gender friendships to include students with whom they had not previously worked. Once the groups were formed, each member was responsible for researching book reviews in order to propose a novel to the group. This part of the project, though time consuming, allowed students to discuss the kinds of books they enjoyed and to acquaint them with the process of researching various media in order to discover acclaimed contemporary fiction. Students ultimately selected novels and set reading schedules that would allow them to meet the goal of completing their reading within the time frame of the quarter semester.

After reading a designated number of pages, they chose either to e-mail journal responses to one another or to meet online to discuss their reading using an IM or chat room program. All groups were required to respond to their books a minimum of four times and to submit the transcripts to me. I read the transcripts and asked questions and made comments that I hoped would provoke further thought and analysis. A few class periods were devoted to discussing the critiques I provided and pursuing discussions generated in the online sessions.

Seven of the 10 groups chose instant messaging as their chief mode of response. The dialogue texts that they produced were generally longer than those who contributed e-mailed journal responses. In a few cases, students who instant messaged were able to code their responses by the minute of each exchange and I was surprised to find that several groups would meet as long as an hour at a time. Transcripts of those students who opted to instant message revealed lively exchanges and while there were digressions—mostly about homework—students stayed largely on track.

With those who instant messaged, it was easy to see how one student’s ideas influenced another’s: the exchanges were lively, sometimes antagonistic or erratic, punctuated with “lol” the term for “laughing out loud.” The e-mailed journal (e-journal) responses were more deliberative. Students often responded to each other’s points specifically, giving the exchanges a dialogic quality. One drawback, however, was that the first sender’s responses seemed to prompt his peers to respond only to the issues he generated. Though the writers of e-journals made reference to specific aspects of the novels they read, the structured nature of the “paragraph response” demanded that students develop a “take” on a character, event, or description, so that the journals did little to reveal questions or misunderstandings. Instant messaged dialogic texts created a different structure, the screen became a space where students could talk/write in a free flowing negotiation their interpretations of text. The e-mailed journal responses resembled short written letters between readers, while the instant messaging resembled spoken conversations.

(Continued)
While e-journal accounts read much like other assignments submitted for a grade, transcripts of the instant messaged dialogue offer greater insight into reading as a social process as it unfolds over time. I noticed a number of interesting features of students’ digitally mediated experience. First, it is interesting to note that the students, while not close friends, seemed very natural in their exchange; the transcript suggests that the exchange was lively and convivial. Second, students used the process of creating a dialogue to reveal both their understanding and their questions about the book they read. Finally, they moved from character analysis of the protagonist, a low level of interpretation, through empathetic and personal responses, until they arrived at more abstract and complex understanding of the novel’s central questions.

In all online conversations students complemented one another’s understanding and took turns leading each other. Together they constructed a process of shared questioning, similar in style to the one we practiced in our English class, a kind of spiraling activity mediated by the novel they read and their written responses to each other’s thoughts. Both the affordances and constraints of instant messaging shaped the ways that they responded to each other. The intimacy of the virtual “space” in which instant messaging is conducted created an opportunity for my students to demonstrate aspects of their learning rarely witnessed in classroom settings. The transcripts revealed both students as actively engaged in making meaning of the shared experiences of reading and writing.

Teachers need to investigate the possible uses of online communication rather than dismiss them out of hand. I have facilitated this project over the last five years, sometimes modifying it, in order to discover how it can be most effective with a particular group. The instant message program was not devised with literary analysis in mind. In order to be successful using instant messaging to discuss a text, students need to bend the rules of the program; they need to slow down the rate of exchange and allow each other to complete their thoughts. The results offer us an unusual and telling look at a process of communication that clearly supports learning. We owe it to ourselves and our students to encourage them to think with the tools they love to use.

**Issues to Consider:**

- Though this project focuses on works of literature, any work of length might be an apt substitute for novels in an online conversation project. Students appreciated the support of the members of their group in meeting reading deadlines. One student told me, “I kept up with the reading because I didn’t want to let my group down.”
- Students can often suggest methods for convening in an online setting. Both Google (googlegroups.com) and Facebook (facebook.com) offer free tools for forming collaborative groups.
- Teachers can rely on instant messaging to foster both free-form and directed (the teacher offers guiding questions) discussions. In this manner, virtual spaces are created for collaborative learning that can continue outside the classroom.
This book is designed to give teachers access to the latest research about what kids are doing in their everyday lives with digital media, discuss potential implications for how it can connect to classroom practices and also give teachers a space to begin what can only be considered a long and engaging discussion about bringing new media into the secondary classroom. The point of the book is not to prescribe “cut-n-paste” activities for teachers to integrate into their classrooms but to really grapple with serious technological and communicative changes that deeply affect how and what students learn in school. This book is first and foremost a philosophical discussion regarding education in the 21st century.

There is a tendency among classroom teachers to argue, “Just tell me how to weave these technologies into my curriculum. I don’t have the time to analyze and understand technological and communicative change.” Here is the problem. We are acting as if these technologies are neutral, somehow just inconsequential tools to be used to further instruction when in fact these technologies are used as socio-cultural forms and connected to larger cultural contexts (Buckingham, 2007). Buckingham argues digital media

provide new ways of mediating and representing the world and of communicating.... The problem with most educational uses of such media is that they continue to be regarded as merely instrumental means of delivering information—in effect, as neutral tools or “teaching aides.” (p. 145)

Thus, it is expected that readers of this book are not solely looking for activities to insert into their curriculum or new tools to assist instruction. It isn’t as easy as insert technology, out comes student learning. Instead, my hope is that teachers will commit themselves to understanding the numerous ways youth are participating and learning with new media and, at the same time, how new media are essentially altering our understanding of learning, literacy, and knowledge.

REFERENCES AND HELPFUL RESOURCES


Ito, M., Horst, H. A., Bittanti, M., boyd, d., Herr-Stephenson, B., Lange, P. G.,
Pascoe, C., J., & Robinson, L. (with Baumer, S., Cody, R., Mahendran, D.,
new media: Summary findings from the Digital Youth Project. The John D. and
Download the report at http://digitalyouth.ischool.berkeley.edu/report
Confronting the challenges of participatory culture: Education for the 21st cen-
.cc/teachtech_1_2
teaching: Using a qualitative approach to connect homes and classrooms.
Theory Into Practice, 31(2), 132–141.
Connected. Open to Change. (P. Taylor & S. Keeter, Eds.). Retrieved March 24,