What is Learning in a Participatory Culture?

Educators are learning how to engage today's digital kids to share and distribute knowledge within learning communities.

BY ERIN REILLY

TODAY, WE HAVE ENDLESS POSSIBILITIES FOR TAKING MEDIA INTO OUR OWN HANDS TO CONNECT WITH others in meaningful ways. We have new ways of working together to develop knowledge, and new ways to use media to shape how we present ourselves to others and learn from them. To connect and collaborate with each other to produce and circulate information in this new participatory culture, we have developed new tools such as game engines and new institutions such as YouTube and Facebook.

In the white paper "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century," the Project New Media Literacies (Project NML) team at the Massachusetts Institute of Technology addressed the need to engage learners in today's participatory culture. Young people are actively creating and circulating media content within social networks that extend from their circle of friends to those in the virtual world community. However, the team believes that young people also must learn to reflect upon their new media creations in ways that encourage the important learning skills of teamwork, leadership, problem solving, collaboration, communication, and creativity.

Outside the classroom, children learn by gathering clusters of information as they move seamlessly between their physical and virtual spaces.

Our education system also is in the midst of this paradigm shift, where new methods, environments, and assessment models need to be acquired to keep pace with our increasingly networked culture. As the conversation about the digital divide shifts from questions of technological access to ones concerning participation, educators must work to ensure that every young person has access to the tools, skills, and experiences needed to join in this new participatory culture. Educators also have a chance to give students the cultural competencies and social skills they need in their future roles as 21st-century citizens and workers.

Formal schools have been slow to react to the emergence of the participatory culture, however, due to an exaggerated interpretation of the perils of social media and to a lack of understanding of the promises and affordances of a networked society. In their stead, after-school programs and informal-learning communities are stepping in with programs and activities that demonstrate the learning potentials of participatory culture accelerated through social media. To help educators and learners become more proficient in adapting to today's rich media landscape, the white paper identified 11 social skills that we all must acquire if we are to be active participants in our own life-long learning. And since then, Project NML has expanded the original list to also include the skill of visualization (see page 9). These social skills and cultural competencies—the new media literacies—shift the focus of traditional literacy, for example, from individual expression to also encompass community involvement. The new media literacies then can be understood as offering ways of thinking (mindsets—for example, "collective intelligence") and ways of doing (skill sets—for example, "transmedia navigation") that recruit the traditional literacies of reading and writing into new kinds of literacy practices.

Learning in Zoey's Room

The Digital Youth Project, a grantee of the MacArthur Foundation's Digital Media and Learning Initiative, recently completed a three-year study of the learning and innovation that accompany young people's everyday engagements with new media. The goal of the study was to understand the ways youth use new media, focusing on how they play, communicate, and create, and how these interactions affect their friendships as well as their aspirations, interests, and passions. In its final report,

the project team, led by anthropologist Mimi Ito, explained that children use digital tools and broadband media to "hang out" with friends, "mess around" with programs, and "geek out" as they dig deeper into subjects they love, from rock stars to rocket science. Beyond what they are learning in school, they are connecting socially and are being influenced by each other's knowledge. These informal mentors have effectively taken their place among the many sources influencing children's processes of knowledg-building and identity-forming.

I began to understand this new way of learning in 2001 when I co-created an online community for middle school girls called Zoey's Room. Armed with the knowledge that 93 percent of tweens and teens are using the Internet and that girls are the power users of social-networking sites such as MySpace and YouTube, we launched Zoey's Room as an interactive technology club for girls in Maine. The project quickly expanded into a national mentoring community that creatively engages girls in science, technology, engineering, and math (STEM) activities through peer-to-peer learning and mentoring by female employees at companies such as National Semiconductor and Microsoft who volunteer their STEM expertise.

Today, Zoey's Room is a social network and blended learning environment in which teens learn STEM subjects via online interaction and through offline practical applications of science and math challenges in after-school programs run by organizations like the YWCA. The collaborative environment allows girls to feel safe to explore and tinker, fail and try again, and rely on a group of peers and mentors who will circulate STEM material, support their learning, and build ongoing relationships. Learning occurs as girls move between the online community and their extended community of peers and mentors, who validate the results of their experiments. In short, Zoey's Room allows young women to "geek out" on their love for girlhood and STEM projects.

Zoey's Room's blend of the social aspects with a positive learning environment has demonstrated that access to a participatory culture functions as a new form of the hidden curriculum. In a sampling of 100 Zoey's Room members in 2007, 46 percent participated via an after-school club and 54 percent participated on their own at home—showing that school is just one of the nodes in these students' learning eco-system. When these 100 girls answered very specific science, technology, engineering, and math questions we put to them in the survey, the majority of girls got 12 out of 13 of the answers right—proving that they actually learned terms, concepts, and principles of certain STEM topics by doing the various activities in the program.

Exploring New Media Literacies

My work on Zoey's Room was an ideal segue to applying practice to Project NML's research into how a participatory culture facilitates learning in the 21st century. Outside their classrooms, which largely still follow a top-down model of teachers dispensing knowledge, today's children learn by searching and gathering clusters of information as they move seamlessly between their physical and virtual spaces. Knowledge is acquired through multiple new tools and processes as kids accrue information that is visual, aural, musical, interactive, abstract, and concrete and then remix it into their own storehouse of knowledge. Describing how learning and pedagogy must change in this new cultural and multimedia context, the think tank New London Group argues that "literacy pedagogy now must account for the burgeoning variety of text forms associated with information and multimedia technologies."

New Literacies, New Skills

Literacy in the traditional sense has been a one-way street. A writer creates what a reader consumes. But with the explosion of new forms of digital media and the growth of participatory culture, the notion of literacy has evolved from individual expression to community involvement. Most of the new literacies involve social skills developed through collaboration and networking and build on the foundation of traditional literacy, research skills, technical skills, and critical-analysis skills taught in the classroom. These new skills include:

***PLAY*—the capacity to experiment with one's surroundings as a form of problem solving.**

***PERFORMANCE*—the ability to adopt alternative identities for the purpose of improvisation and discovery.**

***SIMULATION*—the ability to interpret and construct dynamic models of real-world processes.**

***APPROPRIATION*—the ability to meaningfully sample and remix media content.**

***MULTITASKING*—the ability to scan one's environment and shift focus as needed to salient details.**

***DISTRIBUTED COGNITION*—the ability to interact meaningfully with tools that expand mental capacities.**

***COLLECTIVE INTELLIGENCE*—the ability to pool knowledge and compare notes with others toward a common goal.**

***JUDGMENT*—the ability to evaluate the reliability and credibility of different information sources.**

***TRANSMEDIA NAVIGATION*—the ability to follow the flow of stories and information across multiple modalities.**

***NETWORKING*—the ability to search for, synthesize, and disseminate information.**

***NEGOTIATION*—the ability to travel across diverse communities, discerning and respecting multiple perspectives and grasping and following alternative norms.**

***VISUALIZATION*—the ability to interpret and create data representations for the purposes of expressing ideas, finding patterns, and identifying trends.**

— from* Confronting the Challenges of Participatory Culture: Media Education for the 21st Century, *by Henry Jenkins, with Ravi Purushotma, Katherine Clinton, Margaret Weigel, and Alice J. Robison

A Novel Approach

I used transmedia storytelling with students enrolled in an undergraduate children's literature class at the University of South Florida, College of Education. While the students read the popular vampire saga *Twilight* for novel study, I introduced the concept of transmedia navigation by discussing how stories and characters can have a presence or different meanings across a variety of media platforms. In class, the students searched for their own transmedia connections to characters from *Twilight*. The following week, they explored audio and video connections. Finally, they wrote a summary of how transmedia navigation helped or hindered their aesthetic experiences with *Twilight*. (*Check out the Expressing Characters challenge at www.newmedialiteracies.org/library.*)

LESSONS LEARNED: I have taught the children's literature class three previous semesters, and never before have I experienced such excitement about an assigned reading. Transmedia navigation enhanced the in-class discussions of the text. I learned the power of transmedia for enhancing aesthetic text response. The students enjoyed sharing websites and experiencing the book through multiple modalities. Many students commented on the power of the audio in enhancing their aesthetic connection to the story. Other students discussed the effects of video on their enjoyment. Many students commented on the value of comparing and contrasting the book and the movie version. Some students thought the inclusion of the movie enhanced their enjoyment of the text, especially those who did not enjoy reading.

Most importantly, these pre-service teachers experienced the power of transmedia navigation. Most of them are planning to use this strategy in their teaching internships and when they graduate and have their own classrooms.

Deborah Kozdras
University of South Florida, College of Education,
Childhood Education and Literacy Studies
Tampa, FL

Indeed, they describe how "the proliferation of communications channels and media supports" sets up a need for "creating the learning conditions for full social participation."

The media-literacy movement has effectively taken the lead among educators in this regard by teaching students to analyze the media they consume and to see themselves as both consumers and producers of media. However, even this learning often is relegated to electives or to after-school programs rather than being integrated across curricula. The new media literacies allow us to think in very different ways about the processes of learning, because they acknowledge a shift from the top-down model to one that invokes all voices and all means of thinking and creating to build new knowledge. For many educators, however, this raises issues of maintaining control, building trust, and providing an open-source culture of learning that allows students to share their own expertise in the classroom. At the same time, the mindsets and skill sets of the new media literacies are changing the discipline itself. In effect, we are teaching an outdated version of literacy if we do not address the sorts of practices that new media and new technologies support.

Invitation to Participate

Integrating the new media literacies into learning echoes the concept of syndesis presented by social anthropologist Robert Plant Armstrong in "What's Red, White, and Blue and Syndetic?" (1982). Syndesis is a process that strings together self-contained moments or increments of what Armstrong calls "presence" to form a whole. Syndesis has important applications to today's learning environment because it ensures that educators and students contribute to the body of knowledge being formed by the group. The end result is an environment that shares information in multiple formats that become similar only when the group pulls them together.

One major approach to the new learning paradigm at Project NML is the Learning Library, a new type of learning environment that embraces the characteristics of syndesis and participatory culture. The Learning Library is an activities-based model that aggregates media from the Web—such as a video, image, or audio file—and provides tools for users to integrate that media into a learning objective. Educators are encouraged to load their own media or draw on media by others that already exist in the Library to shape new learning challenges and to collaboratively build and share new collections based on particular themes. These challenges range from playing a physics game designed to experiment with problem-solving, to developing collaborative ways to bring innovation into the classroom, to learning about attribution while exploring issues involving copyright, public domain, fair use, and Creative Commons.

Project NML has seeded the Learning Library with its first collection of 30 learning "challenges" so that users can explore and practice applying the new media literacies to their classroom activities. One example from our first collection of challenges, called Expressing Characters, uses the new media literacy of transmedia navigation. In this activity, a student learns how plot can be extended across media by following the adventures of Claire Bennet, a character from the TV show *Heroes*. After exploring how Claire is already portrayed on television, in a graphic novel, and on MySpace, learners practice transmedia navigation by adapting and extending one of their own favorite characters into media forms in which the character does not currently exist. Bringing their own experiences to this challenge, students then load their creations into the Library, where they can be viewed and remixed into a different learning objective by others. By exploring and practicing the new media literacy skill of transmedia navigation, students learn to make meanings across different media types—not just in relation to print text. In this way, these new modes of communication are highlighting the need to teach new ways of expression and new methods of understanding the digital world.

Conclusion

A prime goal of Project NML is to understand what happens when multiple forms of media are fully integrated into processes of learning. The new media literacies build upon existing print

literacy practices, making possible new literacy practices where, according to the New London Group, "the textual is also related to the visual, the audio, the spatial, the behavioral, and so on." And these practices offer new resources and pathways for learning the disciplines.

Our students are already appropriating information from the Web and turning it into new knowledge. They are already learning from each other and participating in the learning of their peers. They already connect, create, collaborate, and circulate information through new media. The goal for us, as educators, is to find new ways to harness and leverage their interests and social competencies to establish a participatory learning environment. Teachers and administrators must learn to leverage this new learning paradigm to engage our students, and we encourage you to use the Learning Library and see if it works for your context.

Erin Reilly is a recognized expert in the design and development of educational content powered by virtual learning and new-media applications. As research director of MIT's Project New Media Literacies, Reilly helps conceptualize the vision of the program and develop a strategy for its implementation. Before joining MIT, Reilly co-created Zoey's Room, a national online community for 10- to 14-year-old girls, encouraging their creativity through science, technology, engineering, and math. In 2007, Reilly received a Cable's Leaders in Learning Award for her innovative approach to learning and was selected as one of the National School Boards Association's "20 to Watch" educators.

RESOURCES

Armstrong, Robert Plant. "What's Red, White, and Blue and Syndetic?" *Journal of American Folklore,* 1982. www.afsnet.org/publications/jaf.cfm

Building the Field of Digital Media and Learning. MacArthur Foundation. digitallearning.macfound.org

Jenkins, Henry et al. "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century." MacArthur Foundation, October 2006. digitallearning.macfound.org

LiveJournal. www.livejournal.com

The New London Group. "A Pedagogy of Multiliteracies: Designing Social Futures." In *Multiliteracies: Literacy Learning and the Design of Social Futures,* edited by Bill Cope and Mary Kalantzis. Routledge, November 1999.

Pew Internet & American Life Project. www.pewinternet.org

Zoey's Room. www.zoeysroom.com

Teaching and Learning

My mom has taught high school and college English for 40 years. When I introduced her to the Learning Library, she immediately saw how it could be used to introduce students to literary terms through examples from other media. I encouraged her to build a Learning Library challenge so I could observe what strategies helped her adapt her expertise to this new way of thinking.

In her first try, she focused on alliteration and assonance in poetry and I realized she was thinking of media as a consumer product that she could use to supplement her objective. She did not understand that the media examples in the Learning Library are meant to help her create pathways to new meaning.

Contrary to the concept of syndetic thinking, she wanted the students to come to one answer through her examples. She needed to add a way for the students to practice the skills of alliteration and assonance and to find multiple answers. She needed to leave the result more open so that the students could adapt her content to their own contexts.

When she tried again, my mom chose multiple examples for students to learn alliteration and assonance. This addition opened the lesson beyond a one-answer solution and provided a springboard for them to think of alliteration and assonance in broader contexts.

She also changed the end of the lesson by encouraging students to create and share their own media elements for poems they created using alliteration and assonance. She also provided a space for discussion, so that the students could reflect on and share their poems or songs with each other. The final result was a collaborative learning experience of alliteration and assonance that wasn't tied to a specific response.

As my mom discovered, the Learning Library allows students who are challenged by a particular learning concept or objective to use media from the Web—such as images, video, audio files, websites, text, or games—to authenticate their own experiences, strengthen their knowledge, and create and share their challenges with their peers in the learning community. For educators, the Learning Library stores and provides challenges that serve as springboards for remixing information and applying it to their own ideas and teaching objectives. For all participants, the Learning Library provides a venue to explore and practice the new media.

My mom used the Learning Library to make connections among different media in a new context. Through the experiment, she saw the potential of separate and seemingly different media to be joined in a new way. Each entity reverberates with its own meaning, but when the entities are juxtaposed with one another, they create new meaning. Her example, along with students' participation in creating new media elements—now housed as a learning concept in the Learning Library—introduces a reiterative process that can spark a learning objective around which others can build a new challenge.

To learn more, click on Poetry as Experience in the Learning Library at www.newmedialiteracies.org/library.

—Erin Reilly