FEATURES

8 Opening the Space
Making the School Library a Site of Participatory Culture
Andy Plemmons

16 Can Public Education Coexist with Participatory Culture?
Elizabeth Losh & Henry Jenkins

22 Sci-Fi, Storytelling, and New-Media Literacy
Mega Subramaniam, June Ahn, Amanda Waugh & Allison Druin

28 Raising the Bar
Engaging Staff and Students in a Culture of Participation
Sue Kowalski

38 PLAYful Practices
Students at Creekview High School Discuss Participatory Learning
Buffy Hamilton

46 Inform, Perform, Transform
Modeling In-School Youth Participatory Action
Research through Gameplay
Antero Garcia

52 Stewards of Digital Literacies
Howard Rheingold

56 From Shards to Stained Glass
Crowdsourcing an E-Book
Kristin Fontichiaro

60 Digital Games and Libraries
James Paul Gee
"We need to empower students, at all ages, to take on active roles in the school library so they can meaningful contributors to this collective space."

Raising the Bar — pg 28

COLUMNS

66 Technology Quest Column
E-books, E-readers and the Questions they Kindle
Elizabeth E. G. Friese

68 Learning for Life Column
Learning for Life (L4L) in the Socially Connected School Library
Karen Gavigan

70 CBC Column
Producing and Consuming Content: Participating in the Online Social Culture
Darcy Pattison

DEPARTMENTS

4 President’s Column
To the Moon!
Susan D. Ballard

6 Guest Editors’ Column
Participatory Culture in the School Library
Buffy Hamilton & Ernie Cox

80 Index to Advertisers
It must be serendipity! I have the opportunity to write my first column for Knowledge Quest, as president of AASL, when the theme is “Participatory Culture.” Isn’t that at the heart of our association? “Or, at the very least, shouldn’t it be? Perhaps I am taking advantage of the term in its broadest sense versus what I am certain the contributors to this issue have addressed—a culture in which we not only consume ideas and information, but also one in which we actively participate and produce through social media, as well as one that acknowledges that “[u]sers must be treated as co-developers” (O’Reilly 2005) as a standard meme for the modern digital age. So given that context, I admit I may be stretching the term—or am I?

As we begin a new school year and AASL begins another year in which committees, task forces, the AASL Board, and staff undertake to achieve the goals and objectives of our Strategic Plan, I hope each and every one of us will reflect on what it means to be a “participatory” member of AASL and consider how we can contribute to the advancement of our professional culture. Drafting off of the work of Nancy Everhart, AASL president 2010–2011, and Carl Harvey, AASL president 2011–2012, I have developed a focus for the year ahead that continues the efforts undertaken by AASL over the past two years. Nancy focused on the concept of “Vision” and conducted a remarkable tour of thirty-eight affiliate organizations. She was able to share with communities and decision makers a vision of excellence for school libraries by recognizing programs that had achieved it. Carl encouraged “Engagement” asking us to step up and be engaged in our schools, our communities, and our profession. So, in a very real sense, my focus advances their work as I propose that we demonstrate that “School Librarians have IT—innovation = transformation.” I hope we will be able to develop our brand and ensure that we are acknowledged as leaders in essential innovation that can lead to the transformation of the communities we serve, enabling them to meet the lifelong learning needs of students. We must be focused, intentional, and strategic in articulating that our brand is like no other and that we are uniquely qualified to deliver positive and sustainable results related to student achievement.

In providing a context for this undertaking, when the members of the 2012–2013 AASL Board met for the first time at ALA Annual Conference in late June, I asked them to think back to the 1960s, when our society was challenged to share a vision, engage, innovate, and transform the very nature of what we thought about our world and the environs beyond. In September 1962 John F. Kennedy inspired a whole generation to consider a new frontier, I still thrill at the words of this young president who proclaimed in an address at Rice University in Houston:

“We choose to go to the moon. We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win, and the others, too.”

We need to be prepared to demonstrate that as learning communities restore programs and retool for the future, we are the right people at the right time.

To the Moon!

Susan D. Ballard, 2012–13 AASL President
I was ten years old, but I remember feeling that I was a part of something bigger and that I could be involved by endeavoring to be a better student in math and science so that I might understand what we were striving for, why it was important, and, ultimately, contribute to its achievement.

And now, so many years later I feel that, in a very real sense, AASL is also choosing to go to the moon, and beyond, because the future of our students depends on our efforts. We recognize the challenges that we face and refuse to shy away from them. Times may be tough, but indicators are emerging that suggest that we are turning a corner and that better times are coming soon.

We need to be prepared to demonstrate that as learning communities restore programs and retool for the future, we are the right people at the right time. We have the best set of national learning standards to help schools to address the needs of students and prepare them to be college- and career-ready. We must recognize that by pooling our talent and our energy, by rededicating ourselves to the foundational principals of our profession—equity of physical and intellectual access to ideas and information; intellectual freedom and privacy; development of flexible learning environments; collaborating on instructional design, delivery, and assessment, and coteaching—that we have the “right stuff” that can propel ourselves, our students, and the communities we serve into the future.

When the National Aeronautics and Space Administration (NASA) began the Apollo Mission the project’s goals went beyond landing Americans on the Moon and returning them safely to Earth. It also included:

- Establishing the technology to meet other national interests in space.
- Achieving preeminence in space for the United States.
- Carrying out a program of scientific exploration of the Moon.
- Developing man’s capacity to work in the lunar environment” (NASA 2009).

It occurs to me that the goals of AASL also go beyond simply creating a value for our work. As articulated in our Strategic Plan (2009) they include:

- “The education community will have a shared vision that AASL’s standards and guidelines are a model of excellence for student learning.”

- “AASL’s professional development opportunities are essential, valuable, and available to school librarians.”

- “All stakeholders understand and recognize that the school librarian and school library programs are essential to teaching and learning.”

- “AASL fosters vibrant, inclusive, accessible, and supportive communities for school librarians.”

This is our challenge and our mission—to work collaboratively with all those responsible for student achievement so that students are indeed Learning4Life and that they are able to think, create, share, and grow. If we are to succeed, the work we have ahead of us requires the very best each of us has to offer. The AASL Board, Affiliate Assembly, various committees and task forces, and staff are working hard to be more responsive, flexible, and nimble—but nothing gets better unless everyone chooses to get involved to develop and implement solutions.

Let’s keep NASA’s Apollo Mission Motto in mind: “This is a team. We’re trying to go to the moon. If you can’t put someone up, please don’t put them down.”

I look forward to the year ahead and encourage all of us to stay engaged and focused on the vision AASL has developed for the 21st-century learner and school library programs. Where are we going? To the moon!

---

Susan D. Ballard is the President of AASL. She is a school library media educator and consultant and an Adjunct Professor in the Simmons College GSLIS/ITL program.

---

Works Cited


When we began working on this issue of Knowledge Quest, the first thing we did was cast our nets wide to bring in as many voices and perspectives on the topic of participatory culture as possible. As the table of contents shows, we found a wealth of ideas from people within librarianship and broader K–16 educational settings.

Before you begin browsing the journal we do have a few guiding questions for you as the reader:

- Why consider participatory culture in the context of the school library?
- How does participatory culture matter in the larger educational landscape?
- How can participatory culture and learning bolster implementation of the Common Core standards?

We think every article in this issue can inform your answers to these questions. Of immediate concern to many school librarians is their role in helping students develop skills and attitudes needed to meet the Common Core standards. The Common Core State Standards Initiative is intended to provide a comprehensive understanding of what youth should be expected to learn across the K–12 experience. The initial set of standards for mathematics and English Language Arts were published in the summer of 2010 by the National Governors Association and the Council of Chief State School Officers. A majority of states have adopted these standards for implementation as of this writing. How the standards–based goals are achieved in practice is left to state and local decision makers. In the best situations educators are empowered to design the learning experiences. School librarians are uniquely qualified and positioned to make a school-wide impact.

Reading is identified in the AASL’s Standards for the 21st Century Learner <www.ala.org/aasl/standards> as one our profession’s common beliefs. Reading is also given central importance in the Common Core standards:

…[s]tudents must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and informational texts. Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements. By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that will also give them the background to be better readers in all content areas. Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades. (NGACBP and CCSSO 2010, 10)

Noticeably absent in the Common Core standards’ concept of complex texts are transmedia texts inhabited by youth culture. Expansion of the concept of literacy is an area for school librarians to mentor.
students and teachers alike through the video game environment described in James Gee’s article.

The Common Core writing standards call on educators to provide students with opportunities to write varied types of texts for many purposes while using the power of digital networks to collaborate with and gain awareness of our global society.

Participatory culture can blossom if enough time is devoted to innovative, long-term sustained learning experiences that integrate writing, reading, speaking, and listening. Chopping up the school day into discrete content areas, governed by bells, and bounded by physical classrooms and the random distribution of students to rosters will not accomplish the best outcomes. In this issue, Kristin Fontichiaro’s article describes her experience editing and distributing a crowd-sourced book is a fine example of what the power of distributed intelligence can do to meet the writing standards.

Research is given a central place throughout the content standards. School librarians already know a great deal about this component of the student learning experience. Do we have more to learn about how to integrate this process into a holistic and new context?

Dive into the action research project of Antero Garcia and his students to get the answer. Find out how a classroom becomes vitally connected to learners’ community by producing new knowledge through varied texts, media, and interactions. This author gives educators a roadmap to transform the traditional classroom into an active student-oriented space centered on the personalization of learning.

Standards would mean nothing without the ability to assess student learning in relationship to them. One of the many considerations outlined in Common Core State Standards Initiative documents targets what assessments might look like:

…these standards will ultimately be the basis for an assessment system that would include multiple measures of student performance. Once states agree on the final standards, attention will be turned to creating a high quality system of measurement that would include proper incentives for teachers to teach these standards and a variety of assessments that will reinforce teaching and learning tied to the agreed upon expectations. (n.d., 1)

How will school librarians be part of standards-based assessment in the era of Common Core? How do we invite students to assess their own learning experiences and academic growth? The Common Core will bring a shift in grading practices for many districts. Standards-based grading calls on educators to realize that traditional grading has often bundled content ability, and student behaviors and attitudes into one number or letter grade. Participatory learning offers a rich context to grow the dispositions in action and self-assessment strategies in AASL’s Standards for the 21st-Century Learner and the content rigor of the Common Core State Standards.

The articles in this issue present a range of theoretical and practitioner perspectives on participatory culture and learning. The authors offer school librarians many possible starting points for conversations with teachers, students, and administrators; these conversations can help us identify touch-points for change to reshape and improve the educational landscape.

Buffy Hamilton is the librarian at Creekview High School in Canton, Georgia. She is a 2011 Library Journal Mover and Shaker, a 2011 winner of the (ALA) Office for Information Technology Policy (OITP) Cutting Edge Library Service Award, the 2010 Georgia Library Media Specialist of the Year, and was included in the 2010 National School Boards Association Technology Leadership Network “20 to Watch.” She blogs at The Unquiet Librarian, <http://theunquietlibrarian.wordpress.com>, winner of the 2011 Salem Press Best School Library Blog Award.

Ernie Cox is the Teacher-Librarian at Prairie Creek Intermediate School in Cedar Rapids, Iowa. In 2010 he was named one of Library Journal’s 2010 Movers and Shakers. For more about Ernie visit his Prairie Creek Library Blog <http://prairiecreeklibrary.blogspot.com>

Works Cited


Opening the Space
Making the School Library a Site of Participatory Culture

Andy Plemmons
plemmons@clarke.k12.ga.us
In just a few years, you have revolutionized the way our library is used. Even though I know you are the leader in what takes place in our library, you have created a space that truly feels like our library rather than your library.

—Ellen Sabatini, Principal,
David C. Barrow Elementary School

These words from my annual evaluation during the 2011–2012 school year resonated as I reflected with my principal on our school library program. Participatory is a word I’ve embraced when developing the vision, mission, and goals for our program that serves students in grades Pre-K–5. I want our library to be a space where students have a voice, a space where they are free to create, and a space where they feel connected with the global community. For encouragement, focus, and vision, I constantly find myself coming back to the work of Henry Jenkins. In Confronting the Challenges of Participatory Culture he defines participatory culture as having “relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing with others, and informal mentorship whereby experienced participants pass along knowledge to novices. Members believe their contributions matter and have some degree of social connection with one another” (Jenkins 2006, 7). Embedding these principles within the lessons and overall environment of our school library to establish our library as a site of participatory culture is an essential part of my vision for libraries.

Decisions That Matter

Three years ago a group of upper-grade students stood out to me. They entered the library, wandered around the shelves, reluctantly talked to me about what they were looking for, and left empty-handed as I followed them out the door, making suggestions. If these students weren’t finding the books that spoke to them in our library, then they needed the power to put what they wanted onto the shelves. They became the pioneers of a project that has expanded over the past three years. Whether the project has been called Student Voice Student Choice, Leader Librarians, or Book Choice Champions, the premise has been the same: give students a budget and let them make the decisions about what books are purchased for the library.

Most recently, in the 2011–2012 school year, eleven boys from second through fifth grades took on this challenge. The boys self-selected this project from numerous other projects in our school-wide enrichment clusters offered every Wednesday. The boys immediately noticed the absence of girls, and the boys decided that it would be important to talk to girls, too, about their reading interests. Through numerous conversations, they developed a survey in Google Docs and dispersed throughout the school armed with iPads and a wireless signal (see Figure 1). To define what the most popular genres were for our school, the team surveyed 199 students out of almost 500. Identifying these genres—which included sports, comics, television, and wizards—helped the team members make decisions as they browsed vendor websites and catalogs, as well as met face to face with vendors. These students grappled with tough challenges like a limited budget and an overflowing wish list. In the end, they ordered 110 books that were grounded in the requests of the school and met their budget goals.

While the students waited for the books to arrive, they developed a marketing plan that included Animoto videos of their process <http://tinyurl.com/8q58bfx> and book titles <http://tinyurl.com/8q58bfx>, posters to hang throughout the school, and a commercial for our morning broadcast.

The boys unpacked the books when they arrived, prepared them for checkout, and created a display in the school library. Just as in the past two years when we had a similar project, within one day of availability all of the books were checked out, and they continue to be among the most popular books in our library.

Why do these books continue to be the most circulated books in our library? I believe a big part is the power of participation and the power of students’ being given the opportunity to be trusted to make decisions that matter.

Figure 1. Students roamed the halls with iPads and used Google forms to survey the reading interests of Pre-K–5 students.
decisions that matter to the greater school community. Students know that in our library they have a voice to make decisions, and, through our library surveys, informal conversations, and projects such as the ones centered around student book budgets, they openly offer their suggestions to improve our program.

A Space to Create

One of our beliefs is that creating information and story is just as important as consuming information and story. In collaborative projects for single classes or whole grade levels, we consider options for how students can create new kinds of information through culminating projects and how those projects can reach a wide audience. Many of these activities develop from the smallest sparks of ideas brought up by classroom teachers. These endeavors put artistic creation in the hands of students and provide strong support to students in their process.

In Pre-K a teacher wanted her students to create their own weather reports. Across a series of lessons in the school library, students watched weather forecasts from local news stations, brainstormed a list of weather words, and thought about what jobs would be needed to put together a weather report on television. The students toured our morning broadcast studio and learned about the jobs that our fifth-grade students do every morning to broadcast the news to the school. With support from the classroom teacher and paraprofessional, parents, and me, the students worked in small groups to write weather scripts and make picture cue cards. Finally, the students came to the broadcast studio and filmed their reports. Each student in each group had a job to do either in front of or behind the camera (see Figure 2). Their finished videos were played for the entire school as well as uploaded to TeacherTube and published on our library blog.

In another instance, a fifth-grade teacher wondered how we might capture some of the stories of individuals who attended our school since its 1923 establishment. This idea developed into the Barrow Oral History Project <www.clarke.k12.ga.us/Barrow.cfm>. Multiple teachers worked with me to plan instructional centers on the primary-source documents of our school, crafting effective interview questions, using technology such as digital cameras and Audacity, and exploring other oral history projects. These instructional centers built the background knowledge and supports for students to begin the creative process of documenting our school’s history through personal stories. All fifth-graders were involved in interviewing and digitally recording twenty-eight different interviews with former Barrow students from as far back as 1925.

History standards came to life as students heard personal stories of attending Barrow during the Great Depression and in times of war. Students made connections with local legends such as Dan Magill, a University of Georgia tennis legend and acclaimed sportswriter (see Figure 3). More importantly, these students took leadership in creating a webpage archive of stories that otherwise would have gone untold. These histories will live on for future generations of Barrow students to experience.

Product creation has become a hallmark of the collaborative lessons in our school library. The list seems to grow daily as more creative ideas come forth from the students and teachers. Whether it’s using digital cameras and Photo Story to demonstrate the changing seasons, weaving together
multiple formats of text into a transmedia Simplebooklet <http://simplebooklet.com/index-sb.php>, or using iPads to record and upload video book reviews to our blog and catalog, our students are eager to use their imaginations to create new content that is readily available to the world.

What stands out to me the most in each of these instances is how engaged each and every learner becomes no matter his or her strengths, weaknesses, or labels. Offering students a space to create in multiple formats through multiple methods, including technology and online tools, breaks down the barriers I’ve seen when a blank piece of paper and a pencil are placed in front of a student. Mistakes aren’t really mistakes in a participatory culture supported with multiple mediums of creation. Students play, explore, learn what works and what doesn’t, and teach one another when they discover solutions. Students are more engaged because, rather than sit and listen to one person dispense information, they are each in charge of exploring, learning, and contributing. Experts in a variety of areas begin to emerge.

Passing the Torch

For the past two years our fifth grade has put teaching into the hands of the students through a major social studies collaboration. The project started out as a research project for one unit but evolved into a project that spanned three units from the turn of the twentieth century to the Cold War. In collaborative groups, students were assigned a collection of social studies standards. Using a graphic organizer with guiding questions, they used pathfinders, databases, and books in the school library while researching their topics. Students used the information they gathered to create interactive glogs on Glogster <http://edu.glogster.com> (see Figure 4). Students used the posters to teach one another the information and concepts from their grade-level social studies standards.

When this project began, I had never used Glogster. I knew what it was supposed to do, but I could in no way claim to be an expert. I am often asked to teach students how to use a specific program on the computer, but rather than have them sit for an hour while I walk through each step of what to do, I like to give a whirlwind introduction and offer a space to explore. In the introduction, I remind students that we all have the power to figure things out, and when we do, we need to be willing to share that learning with others.

Because of this project, I have learned more about Glogster in two years than I ever could have learned on my own. Individual students discovered ways to record and embed video and audio within Glogster, how to change the colors...
of individual graphics, and how to create Animoto videos and upload them to the Glogster gallery <http://tinyurl.com/9yeqbcx>. It seemed that no matter what roadblock we encountered, a student was able to find a solution. When one student discovered something new, the information rapidly spread throughout the group as students began to ask how to do the same thing in their glogs.

Students who had never been looked at as an expert in anything school-related suddenly found themselves being the one person every group needed to ask for help. These experts began taking time away from their own projects to support others, while simultaneously thinking about how to make their work even better. This crowdsourcing of expertise was an instructional breakthrough for me, and it led me to constantly remind myself and others within our participatory culture that you don’t need to be an expert in something to use it as a creative tool for learners. You just need to be willing to offer the space for students to develop their expertise and pass that learning on to others.

In 2010 our library was named the Exemplary Elementary Library Media Program for the state of Georgia <http://tinyurl.com/9e5yqk>. Part of this honor involves hosting an open house for school librarians and the community. Because I knew how much I had learned from my students, I wanted them to share their expertise with our visitors. The day was a showcase of multiple projects from the year. In each instance, the students and I introduced the project. Then, our visitors sat with students as they shared their final products, and taught the visitors many of the tips and tricks they had learned with each tool they used. Pre-K students shared their weather forecasts. Second-graders read their self-published graphic novels. The Leader Librarians shared the steps they had used to purchase student-selected books for the library. Fifth-graders demonstrated Glogster and photo-editing tools (see Figure 5). Our visitors were enveloped in a day of professional learning and became members of our participatory culture as they began sharing their own knowledge about projects from their own schools.

This model has my wheels turning for the future of our school library. What would it be like if student expertise was more widely known throughout the school? Could cross-grade-level collaborations occur naturally if students knew who to ask for support? What would it take for teachers and students to look to one another as experts and truly learn from one another rather than one person holding the knowledge?

Showcasing Work

When students create in the participatory culture of our school library, they know that their creations reach a wider audience than the classroom teacher and the school librarian. Their work will be connected with all of the members of the culture within the school through library exhibits and presentations, and also shared beyond the library walls through our:

- Blog: <http://barrowmediacenter.wordpress.com>
- Facebook page: <www.facebook.com/pages/David-C-Barrow-Elementary-Media-Center/1287535320830>
- Twitter feed: <http://twitter.com/#!/barrowmc>
- Website: <www.clarke.k12.ga.us/webpages/plemmons/index.cfm>
- YouTube channel: <www.youtube.com/user/BarrowMediaCenter?feature=mhsn>

Andy will present a webinar based on this feature, Tuesday, October 9 at 6 p.m. CST! This webinar will be available for anyone who wants to attend. Visit <www.ala.org/aasl/kqwebinars> to register.

Figure 5. During our “Exemplary” Open House, fifth-graders taught librarians from other schools how to use Glogster.
Each March and April our school library also becomes a space of deep, poetic reflection as all classes engage in poetry workshops leading up to an event called Poem in Your Pocket Days. We explore the school library shelves for book titles that can be pieced together into a poem, take digital pictures of the book-spine poems, and record the poems in Photo Story to make a class collection. We take self-portraits with digital cameras, use photo-editing tools, use professional methods to print and matte the images, and write autobiographical poetry to display on the tops of the library shelves. Alongside these lessons, our school library sponsors a poetry contest. This contest is one of the many opportunities that we provide during the year for students to submit their creations to be recognized. Our rules are simple:

1. Submit an original poem in any format written on anything. (Napkins are OK.)

2. Turn it in with the contest cover sheet.

In two years we have received over three hundred original poems.

Whether or not students enter our contest, they have all experienced and written poetry in preparation for Poem in Your Pocket Days. For two days our school library is transformed into a poetry café with paper-covered tables set with lanterns and confetti. A poet’s stool draped with fabric is in front of a backdrop enhanced by mood lighting. An open microphone stands ready for every student in the school to step up and read a poem, and they all do. As the students approach the microphone and share their personal poetry, they aren’t just reading for the people in the room. Through Adobe Connect, students’ poetry reaches out to an audience of online listeners. Parents, grandparents, aunts and uncles, and students at other schools enter the online meeting room and listen. The readings are recorded and featured on our library blog for those who cannot attend. Through this tool, we’ve had guests listen live from all across the United States and as far away as India and Afghanistan. Our listeners make comments, and the students get immediate feedback and recognition for their skilled writing and their bravery.

While the goal of our contest and Poem in Your Pocket Days is to allow as many members of our school community as possible to contribute, sometimes smaller opportunities emerge. One of my roles is to listen closely for these opportunities. David, a student with an amazing poem, stood out during the writing workshops and poetry contests. Here’s his exceptionally moving poem:

David came to the library to see his poem sitting on the shelf next to Shadra Strickland’s illustrations. "She does really good work," he said. I could tell how proud he was of seeing his poem on display. When Shadra Strickland visited our school, she had already read David’s poem and wanted to be sure to meet him.

For David, this opportunity led to others. I was recognized by our local Foundation for Excellence (<http://tinyurl.com/956jtgl>) with the Kathryn H. Hug Instructional Leadership Award, and one of the requirements is to have a student introduce you at the awards banquet. I really did not need to think long before David came to mind. Once again, David stretched his writing skills and crafted
a beautiful introduction to my speech by making an analogy to his favorite sport: football (see Figure 6). Because of these opportunities to contribute in ways that were very different than what might be asked of him in a traditional classroom, David now sees himself as a poet and writer. He has developed into a leader within his grade level. When you ask him about moments he is most proud of at Barrow, he always names the poetry contest and speech.

According to Henry Jenkins, “Not every member must contribute, but all must believe they are free to contribute and that what they contribute will be appropriately valued” (Jenkins 2006, 7). In a sea of students, I make it my goal to continue to look for the Davids who need a space for their voices and their contributions to be heard.

Looking Forward

In the coming year we will be building a new school. With this new building comes a whole conversation about what it means to be a 21st-century classroom, school library, and school. I will consider many elements when informing the architect and designers about our school library, but participatory culture will be one of the guiding features. At the moment, all of the pieces of what I consider to be participatory culture are planned and intentional. In the future, I would like to see our culture continue to offer planned opportunities for participation, but I would also like our culture to develop some spontaneity. I want students to showcase their talents through impromptu talent shows, poetry readings, and digital showcases. I would love to see students take the lead in developing art shows and exhibits in the school library.

Most of all, I want students to take more ownership of the library, and freely plan and offer suggestions to improve our program of being more inclusive of all of the members of our school community. I feel as if we have scratched only the surface in what is possible for students to be creators of content, and it is my goal for all students to have a space and a moment where they have felt like their contributions truly mattered for the greater good of our global community.

Andy Plemmmons
is a school librarian in Athens, Georgia.
He teaches students in grades Pre-K–5
at David C. Barrow Elementary. The participatory culture and collaborative projects of the Barrow Media Center are regularly featured on his blog <http://barrowmediacenter.wordpress.com>.

What would it take for teachers and students to look to one another as experts and truly learn from one another rather than one person holding the knowledge?

Works Cited

CAN PUBLIC EDUCATION COEXIST WITH PARTICIPATORY CULTURE?
TWO BROTHERS ARE DISCUSSING how they have “hacked” the school’s computers in the technology lab adjacent to the school library.

Both boys say that the software firewall blocking access to the open Internet is easy to penetrate. They compare notes on their respective techniques for subverting the school’s computer security software, and they discuss technical specifics such as command prompts, proxy servers, IP addresses, port forwarding, configuring client browsers, and a whole catalog of programs with names that mock Internet restrictions in schools, libraries, and workplaces.

The two brothers are particularly amused to find out that they have both used coconspirators successfully. Working in pairs, it is apparently relatively easy to have a friend distract the teacher in the computer lab while the other student finds the computer network’s username and password, which is usually written on a sticky note at the teacher’s workstation. The most common password and username turn out to be the name of the school itself.

The younger brother then praises a duo of female students who are particularly good at getting the most sensitive password information and explains how these girls can spend an entire class hour supposedly devoted to computer literacy on surfing forbidden social-network sites or playing online games instead. The older brother describes their figuring out that the assigned typing tutorial that they are supposed to be working on is incredibly easy to reprogram to automatically create personal high scores of typed words per minute—scores that are high enough to please those grading the class work and yet low enough not to raise suspicion.

The brothers can’t stop laughing about how gullible and unrealistic computer teachers are as the boys try to top each other’s stories about exploits in the lab.

If you were to overhear this real-life conversation in your school, what would be the right way to react? Should the students be disciplined for their disrespect for authority and their flouting of school rules? Should the students be praised for their ingenuity and their ability to figure out how sophisticated security systems really work? What if both courses of action are both wrong and right?

Complexities of Participatory Culture

In this article, we suggest that this conversation between two students tells us a lot more about the complex state of what we call “participatory culture” in classrooms today than educators might want to hear. We argue that school librarians can help bridge the gap between the excitement of having students experiment with new forms of social learning and new digital-media practices, and meeting the obligations of institutions to promote responsible citizenship, respect for others, and a willingness to sometimes sacrifice immediate self-interest for the long-term common good.

If school libraries have long functioned as sites where students have less-structured and more unmediated interactions with large collections of information, these experiences with traditional media may present good models as educators consider how to approach digital literacy education in new ways. We also assert that laws and regulations mandating that schools be cut off from potentially subversive content on the Web based on “the predator panic,” “the bullying panic,” or “the distraction panic” should be challenged by anyone who cares about access to information and the learning that it promotes. Librarians have historically been champions of intellectual freedom and have often been the last line of defense when the community has sought to cut young people off from meaningful engagement with the online world.

Elizabeth Losh
lizlosh@ucsd.edu

Henry Jenkins
hjenkins@usc.edu

OVER THE PAST FIFTEEN YEARS, we first wired the classroom and then hobbled the computer, leaving teachers and students alike unable to meaningfully engage with the rich resources of the Web as a consistent element in the educational experience.
Over the past fifteen years, we first wired the classroom and then hobbled the computer, leaving teachers and students alike unable to meaningfully engage with the rich resources of the Web as a consistent element in the educational experience. The news media criticize countries like Iran for blocking the access of their citizens to resources on the Web, and yet those same media outlets tolerate much stricter forms of control very close to home.

**Policies Hampering Instruction**

Working with schools in Los Angeles, researchers from Project New Media Literacies (NML) discovered that teachers could use passwords to work around the restrictions on accessing core sites, but the passwords worked for only twenty to thirty minutes at a time. As a consequence, at the start of the period teachers were unable to set up the YouTube videos they needed, but rather had to stop the instruction to punch in codes. The result was a highly stilted set of exchanges that actively discouraged the instructional use of web-based materials.

NML staffers also found while working on a project concerning Herman Melville that district filtering software in Indiana blocked access to many key sites because the title of his best known novel includes the word “dick.”

Beyond issues of basic access to resources, many schools and school systems block access to some of the key platforms, such as YouTube, Facebook, Twitter, or LiveJournal, where participatory culture takes place. Even materials created for social media platforms by the White House or other government entities can’t be accessed from many school libraries and classrooms.

Ironically, we might overhear two teachers having a conversation very similar to the one described at the beginning of the article. To complete their pedagogical mission, these teachers also must hack the computer and route around certain constraints on their ability to access core sites. The key difference may be that the teachers are apt to be less well-informed about how digital media work and less accustomed to seeking the shared expertise of the participatory culture around them. Research suggests that teachers are less likely than many of their professional peers to have had formative experiences playing games or exploring the Web; they are often creatures of print culture, which is a good thing in many ways, but leaves them less than fully prepared to integrate digital media into their instruction or to be able to advise their students about safe and ethical engagement with the online world.

**Challenges Facing Students—and Teachers**

Outside of school, students and teachers confront the double challenges of the digital divide—relating to access to technology—and the participation gap—relating to access to core skills, competencies, and experiences needed to become a meaningful participant in the emerging culture. The digital divide and participation gap would be less significant if the online world was purely recreational—another way of young people getting into trouble or just killing time, as is often implied by advocates of anti-access policies. But a growing body of research, much of it coming from the MacArthur Foundation’s Digital Media & Learning initiatives, is finding that online communities have become powerful sites of informal learning and operate according to principles very different from those mandated by our current era of high-stakes testing.

"Affinity spaces," as James Paul Gee (2005) has labeled them, are critical sites of important kinds of exploration, experimentation, and play, where at least some young people are developing and deploying their own expertise in the service of their own passions and interests.

Researchers are telling us how some young people are developing programming abilities through engaging with game modding sites (Taylor and Witkowski 2010); research and writing skills through Wikipedia (Forte and Bruckman 2006); math skills through participation in fantasy baseball leagues (Halverson and Halverson 2008); global connections through engagement in fan communities around Japanese anime, manga, and cosplay (costume play) (Black 2008); historical research through discussions around games like Civilization III (Squire 2011); and writing skills by producing fan fiction and receiving feedback on their work (Jenkins 2006), just to cite a few of the examples that have been closely researched. Participatory culture has many mechanisms to support peer-to-peer learning as young people enter interest-driven and friendship-driven networks.

The benefits of these experiences, though, are unevenly distributed. Some youth have strong adult support as the young people identify and engage with activities that are meaningful for their personal growth and development, while others engage in practices without the kind of mentorship that might allow them to meaningfully link these activities to other kinds of educational opportunities. Many young people lack the background
to know how to find the space online that would be most rewarding for them. Even many who have access to digital technologies are not using them in ways that will be valuable for their futures.

Connecting Instead of Disconnecting

In each of the cases described above, schools have a central role to play in connecting what takes place outside the classroom with the kinds of assessments and certifications that will create future educational, economic, civic, and creative opportunities for students. These opportunities connecting what students are learning outside of school with what happens within formal education have been described by Mimi Ito and her colleagues as “connected learning.” At their Connected Learning website, they explain how problems occur when there is a strong disconnect between formal education and learning outside school. Each time a teacher tells students that what they care about the most, what makes them curious and passionate outside of school, does not belong in the classroom, that teacher also delivers another message: What teachers care about and what is mandated by educational standards have little or nothing to do with learners’ activities once the school bell rings.

What Can We Do—and Not Do?

So, let’s be clear about several things: First, in suggesting educators need to find new ways of engaging with digital media in their instruction and of recognizing the value of participatory culture and connected learning, we are not suggesting that educators should ignore some very real risks and challenges concerning the ways that young people are using new media technologies. We think educators should be centrally concerned with helping young people acquire ethical standards and skills in critical judgment, helping them avoid some of the risks and achieve some of the opportunities associated with new media platforms and practices.

At Harvard, the GoodPlay Project (<www.goodworkproject.org/research/goodplay>), run by Howard Gardner, has conducted extensive interviews with young people about their online lives and has consistently found that they lack the kind of formal mentorship that we might take for granted in school-based activities. Gardner’s team (Davis et al. 2010), for example, describes the role of faculty advisors on student newspapers; these advisors help students think through ethical issues around how they are choosing to cover their communities as well as provide feedback to help students raise their writing to professional standards. By contrast, many more young people today reach far larger audiences via blogs and social media, yet lack mature and knowledgeable mentors who might be able to give them advice on how to navigate the largely uncharted waters of online social relationships.

So much of current educational policy relating to Web 2.0 tools is restrictive, seeking to limit learners’ choices, rather than providing them with the mentorship they need to make smart decisions now and into the future. Seeking to respond to this gap in mentorship, the GoodPlay project partnered with the New Media Literacies project to develop an ethics casebook Our Space, designed to give educators and students reflective tools for working through some of the challenges they confront as participants in online communities, and as creators and circulators of media content. The casebook is available at <www.goodworkproject.org/practice/our-space>. (Be patient when downloading; it’s a big file!)

Young people may not need adults snooping over their shoulders, but they certainly need adults helping to watch their backs. Existing policies often assume young people will act badly when using new media; instead these policies should encourage educators to model ways that students might act responsibly. For example, NML worked with a school in Indiana that had banned the use of Wikipedia, not because of the debates about its accuracy, but because many young people had been caught vandalizing sites. NML sought special permission to incorporate Wikipedia into instructional activities and worked with teachers to help students understand the core ethical pillars of the Wikipedia community, and

Each time a teacher tells students that what they care about the most, what makes them curious and passionate outside of school, does not belong in the classroom, that teacher also delivers another message: What teachers care about and what is mandated by educational standards have little or nothing to do with learners’ activities once the school bell rings.
Young people may not need adults snooping over their shoulders, but they certainly need adults helping to watch their backs.

learn how to make meaningful revisions in the context of what they were learning in their classes. The young people were able to make and defend contributions to the site’s coverage of Herman Melville, in the process gaining a greater sense of the importance of taking ownership over the accuracy of the information they transmit to the world (Jenkins et al., In Press). This lesson was valuable not only in terms of what students learned about 19th-century American literature but also in terms of what they learned about cybersocialization.

External Influences

The second reality we acknowledge is that schools are being pushed into blocking access to many sites and Web 2.0 tools because blocking is the simplest and surest way of avoiding potential litigation. School principals worry about costly lawsuits involving privacy or harassment, and school boards dread hearing from offended parents who object to sexually explicit or religiously divisive content. Meanwhile, headlines and sound bites call for concerned citizens to protect children from all harms, real and imagined, and local PTAs are often quick to react too proactively. Restrictive federal legislation such as the Communications Decency Act (CDA) or the Deleting Online Predators Act (DOPA) has faced challenges from courts and constituents, hindering full implementation. However, the Children’s Internet Protection Act (CIPA), which requires schools receiving federal funds to certify that filtering software is used on campus, was upheld by the U.S. Supreme Court. State and local laws often go even further, by mandating that violators be disciplined or by focusing on the standard of “appropriateness” rather than on content that can be proven to be directly harmful to the young.

Shifting Focus to Solutions that Support Learning

Of course, we know that anxieties about young people’s access to new media and new technologies have a long history that goes back at least to the debates between Plato and Aristotle. Even in the time of the ancients, people worried about the influence on children of depictions of sex and violence in the Greek theater. Over time we have seen moral panics involving women’s access to novels in the late eighteenth century or links between comic books and juvenile delinquency in the 1950s.

We don’t mean to suggest that contemporary fears about dangers on the Web are completely irrelevant; we simply want to encourage educators to take steps to ensure that access to a diversity of viewpoints is preserved and that young people are able to achieve the diverse literacy skills that they will need in the future. At Project New Media Literacies, we also want to help school librarians make effective arguments for less Internet filtering on school campuses. We believe young people will be safer if schools provide them with access to knowledgeable adults who can provide them with informed and meaningful advice about their online activities. In the current situation, that role is most apt to fall on school librarians whose roles in guiding learners through the research process may extend to coaching young people on the best use of new media resources.

Young people are not rendered safer when schools block access to these sites; instead, blocking ensures that many kids will be forced to confront online risks on their own. Many young people lack opportunities to learn how to use new media tools effectively and appropriately. Reliance on blocking sends the message that sites and tools important to students have little to nothing to contribute to intellectual pursuits.

Instead of focusing on gatekeeping with relatively “dumb” technologies that can’t distinguish intelligently between harmful and meaningful Web content and tools, let’s focus on ways young people can learn from “smart” librarians. Specifically, let’s focus on how school librarians can help young people interact with human mentors and peers as students learn to observe norms and respect boundaries.

Importance of Infomediaries

Understanding the role of what have been called “infomediaries” in that process is also important. A global impact study team of researchers funded by the Gates Foundation in the Investigating the Social & Economic Impact of Public Access to Information & Communication Technologies project have examined public computing practices all around the world. Rather than assume that information literacy and fluency depends on access to a particular high-tech device, such as the XO computer or the iPad, members of this team have focused on how the dynamics of cultural groups and the social
The Two Brothers

The two brothers at the opening of this story may have been antagonists of the computer teacher whom they saw as a blind and arbitrary gatekeeper, but they loved their school librarian. They felt quite differently about their school librarian, because she was an artist with a loft downtown and ran a popular “comics club” in the library. Under the librarian’s supervision kids enjoyed drawing comics and developing their creative abilities while hanging out with a group of peers. This school librarian also was successful at reaching so-called “slow” or “late” readers, who were often boys, by offering them enticing summaries of both new and classic books. The brothers saw in their school librarian a warm and caring person who opened up a world of “content” to them by telling them—more quickly than any computer could—what was inside the books on the shelves, making recommendations that appealed to their personal interests much more efficiently than Google’s customization algorithm, and truly encouraging meaningful activity in a vibrant participatory culture defined by a supportive and engaging affinity group.

Elizabeth Losh is the author of "Virtualpolitik: An Electronic History of Government Media—Making in a Time of War, Scandal, Disaster, Miscommunication, and Mistakes" (MIT Press 2009) and, with Jonathan Alexander, the forthcoming "Understanding Rhetoric: A Graphic Guide to Writing" (Bedford/St. Martin’s). She is the Director of the Culture, Art, and Technology program at Sixth College at U.C. San Diego. Among the topics about which she writes are institutions as digital content-creators, the discourses of the media literacy of policy makers and authority figures, and the rhetoric surrounding regulatory attempts to limit everyday digital practices.

Henry Jenkins is Provost’s Professor of Communication, Journalism, Cinematic Arts, and Education at the University of Southern California, where he oversees the work of Project New Media Literacies and Civic Paths (which focuses on youth and political participation). He is coauthor, with Sam Ford and Joshua Green, of the 2013 book "Spreadable Media: Creating Value and Meaning in a Networked Culture" (New York University Press, In Press) and, with Wyn Kelley, "Reading in a Participatory Culture"e (Teacher’s College Press, In Press). His blog is at <henryjenkins.org>.

Works Cited


Jenkins, Henry et al., eds., In Press. Reading in a Participatory Culture. New York: Teachers College Press.


SCi-Fi, STOryTElling, and New Media Literacy
Introduction
Understanding how to better engage young students in science, technology, engineering, and math (STEM) is essential. The constraints of U.S. K–12 schools (e.g., insufficient institutional supports, lack of technology access, testing pressures, etc.) often make it difficult to create truly engaging STEM curricula with which students can deeply identify (Edwards, Subramaniam, Ryu, and Oxley 2012). Educators currently have a unique opportunity to leverage resources that resonate with young people today, such as science fiction, sci-fi movies, and sci-fi games (Moyer, Donaldson, and Wilson 2010); popular science media such as *National Geographic* and *Discovery Education* (Roche 2010); and online communities and social-media platforms (Ito et al. 2010). This is a prime time for school library programs to link these forms of media and technology to science learning.

We contend that school library programs are uniquely suited to lead innovative thinking about how to leverage these resources to help young people see the value of STEM in their everyday lives (Subramaniam, Ahn, Fleischmann, and Druin 2012). For school library programs to function as bridges to these resources, many substantive questions must be addressed. How could school libraries structure educational programs, access to media resources, and curriculum to create engaging learning experiences for students? What would be the role of the school librarian in designing and implementing STEM-infused programs? To begin answering these questions, we report here on the Sci-Dentity project launched in January 2012 <http://scidentity.umd.edu>. Sci-Dentity is a project through which researchers at the University of Maryland are collaborating with school librarians to design ways to incorporate science storytelling, new-media literacies, and participatory culture to ignite students’ interest in STEM.

The Sci-Dentity Project
Our team of school library researchers and learning scientists from the University of Maryland are collaborating with school librarians in four public middle schools, located in a large U.S. city, to develop and supervise a free afterschool program for underserved young adults (ages eleven through fourteen). We are designing a program that encourages reading of science fiction, popular fiction, and graphic novels, watching sci-fi movies, and playing science-infused games. We encourage middle school students in the program to imagine the underlying science that inspires these popular forms of media, guide students to create their own science-inspired stories, and encourage them to write and share these stories in social media. The project’s researchers contend that the stories of our lives inspire the interests we pursue and what we aspire to be in the future. For example, prior research has found that NASA scientists were often inspired by stories such as *Star Wars* as they pursued their interest in science (Fleischmann and Templeton 2008).

The Sci-Dentity program is codesigned by the project team and partner school librarians who create and revise session-plan prototypes for the afterschool sessions (see Figure 1). The school librarians also assist the researchers in designing the features of the social-media site that can facilitate creative science storytelling activities among these young adults. Also, after each session, librarians and the team reflect and debrief to
guide the development of future lessons. Through formal and informal guided brainstorming with school librarians, the team leverages the librarians’ insights, as well as the resources and media available in the school library. The team experiments with various strategies to help these underserved young adults link science to their interests and experiences.

We have engaged these young adults in various activities that provide avenues for imagining themselves in the role of scientists. For example, in one of the afterschool sessions, young adults imagine themselves as creators and scientists by discussing the importance of science innovation and articulating the design of technologies. The young adults watched a short movie about storm-chasers, discussed the reasons why storm-chasers are involved in such endeavors, and identified the technologies used in such activities. We stimulate their thinking about scientific concepts by asking them to write stories of themselves as storm-chasers and to include the activities that they would perform and the technologies that they would use. Here, we share an excerpt of a story where a young adult identifies as a storm-chaser:

I am a storm chaser and I just got a call from my team back at the station. My partners told me that there is a huge tornado surfacing in the Maryland and District of Columbia area. My partner Mark and I quickly responded so that we could get as much information about the “funnel cloud” as we could.

In another session, young adults extracted a science fact from a science article or science fiction and used it as inspiration for a Sci-Dentity story written using a graphic organizer that we had provided (see Figure 2). Here is an example of a story written by a young woman who loves to read fiction novels about global warming; in her story she explains her futuristic view of global warming:

...the world in which I live is shrinking. The bears went first but now it’s all of us, we are slowly slipping away. My polar bear, the last polar bear is not doing so well she can hardly live off of the scraps I give her, and the portions are gradually getting smaller and smaller. You see my little village is situated on the end of the sea ice...or what used to be the sea ice it’s all gone now.

The students who participate in Sci-Dentity have numerous opportunities to use new-media literacy skills and explore participatory culture. We work from Jenkins’s notions of the literacy skills that are important in participatory communities; among these skills are play, performance, appropriation, judgment, transmedia navigation, networking, and negotiation (Jenkins 2006). We have found that the school library setting is ideal for the Sci-Dentity program because the environment enables young people to express these literacy skills. In Sci-Dentity students are encouraged to play with their imaginations as they create new narratives that weave science knowledge into their ideas for stories. A major focus of our research is striving to understand how to provide opportunities for young people to perform, which Jenkins defines as the ability to adopt different identities for the purpose of discovery. Many of the stories created by our students involve themselves as characters, or are inspired by friends, family, and other individuals in their lives.
In addition, the online community we are creating (<sci-dentity.org>) provides social-networking features such as personal profiles, which we hope will enable our young students to express themselves and develop their identities over time. Besides developing their online personas and networking at the sci-dentity.org site, the young adults in our program also have opportunities to practice information appropriation skills. One feature of the online community is the ability to remix stories from others in the social network. Our initial work with this feature has led us to explore deep issues of appropriation with the youths, such as: "Who gets credit for creative work?" "What is copying versus remix?" "How should remix be designed into technology tools?"

We intentionally involve a variety of media and interaction with information sources in our curriculum. As noted earlier, students may watch online videos about storm chasers, read comic books about mutant super-powers, find science facts via apps on an iPad, and integrate these sources into their sci-fi stories. To deeply engage with this type of learning experience, skills of transmedia navigation, judgment of information sources, and negotiation of different media forms are vital for students—and the school librarians play an important role in facilitating the learning of such skills.

**Incorporation of AASL Standards and Dispositions**

All common beliefs articulated in AASL’s *Standards for the 21st-Century Learner* (AASL 2007) serve as the foundation for Sci-Dentity. Of all the beliefs, the belief that learning has a social context—and is enhanced by opportunities to share and learn from others—is the backbone of the Sci-Dentity project. Emphasis on other beliefs—the importance of developing multiple literacies, reading as a window to the world, inquiry as a framework for learning, the importance of teaching ethical use of information, and technology skills’ important role in future employment—are also evident in Sci-Dentity, as demonstrated by the above examples of afterschool-session activities and stories that these young adults have written.

As young adults participate in Sci-Dentity, they acquire the literacy skills as elaborated by Jenkins; these skills align with the common beliefs and learning outcomes outlined in AASL’s *Standards for the 21st-Century Learner*. The *Standards for the 21st-Century Learner* include four standards that students must achieve: “(1) Inquire, think critically, and gain knowledge; (2) Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge; (3) Share knowledge and participate ethically and productively as members..."
of our democratic society; and (4) Pursue personal and aesthetic growth” (AASL 2007, 3).

As these young adults play and perform, they must inquire about the science knowledge that they would like to include, think critically about how to weave the science knowledge or fact into the story and gain knowledge about characters, contribution of each character to the story, and the role of science in their stories (standard 1). The interaction between the science facts and imagination, the ability to execute transmedia navigation, judgment of information sources, and negotiation of different media forms will allow these young adults to make informed decisions about their storyline, apply scientific knowledge to their stories and create innovative stories (standard 2). Through constant conscious practice of information appropriation obtained from STEM-infused resources and through consultation with their peers—whether to remix, how much to remix, and how to remix—young adults are learning how to share knowledge and participate ethically in the Sci-Dentity social–media site (standard 3). The learning of all these skills will contribute to the personal and aesthetic growth of these young adults as scientists and creators (standard 4).

A participatory culture such as the one facilitated by Sci-Dentity enables these young adults to acquire many dispositions in line with the AASL standards. Dispositions such as creativity, adaptability, practice of divergent and convergent thinking, social responsibility, teamwork, openness to new ideas, curiosity, and appreciation of literature are instilled and encouraged in Sci-Dentity.

Conclusion
In this project participatory culture is more than a buzzword. We found that new-media literacy skills are extremely important for young adults to fully engage with learning and deeply integrate new ideas about science into their own thinking. These new-media literacies are infused in the Standards for the 21st-Century Learner, and, in most schools, school librarians are the educators trained to facilitate the learning of these new literacies. To create and sustain a participatory community such as Sci-Dentity, we encourage schools to leverage the five roles (AASL 2009, 16–18) and the expertise that school librarians offer:

- The teacher role (facilitating the learning of these new-media literacies)
- The information specialist role (facilitating the provision and acquisition of science-infused resources)
- The program administrator role (managing a science-infused afterschool program that provides opportunities to leverage resources that resonate with young people)
- The instructional partner role (making cross-curricular connections to science and other subject areas)
- Leader (making the school library a place to advance students’ interest in STEM and learning STEM)

We strongly believe that the school library program is best equipped to facilitate programs such as Sci-Dentity at each school. Sci-Dentity provides an effective venue for school librarians to facilitate students’ acquiring the skills and developing the dispositions in AASL’s Standards for the 21st-Century Learner, and using these skills and dispositions to learn about STEM and envision STEM careers for themselves.

Acknowledgment
We thank the school district staff, school librarians, and middle school students who played an integral role in the project. We also thank Sara Allen, Jessica Garman, Natalie Greene-Taylor, Sereena Hamm, Lisa Hedge, Pam Hosimer, Jin Young Kim, Laura Miller, Alexandra Moses, and Greg Walsh for their help with this research project. This research is supported by National Science Foundation grant IIS-1124176. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.
Mega Subramaniam is an assistant professor and associate director of the Information Policy and Access Center in the College of Information Studies at the University of Maryland. She conducts research on the use of libraries as effective hybrid spaces to encourage science, technology, engineering, and mathematics (STEM) interest among young adults.

Amanda Waugh is a graduate research associate in the College of Information Studies at the University of Maryland. She received her Master's degree in Library Science from the College in spring 2012 and is currently in the doctoral program. She intends to research the intersection between school libraries and student achievement, particularly as they relate to STEM education.

June Ahn is an assistant professor in the Human Computer Interaction Lab (HCIL) and College of Information Studies with a joint appointment in the College of Education at the University of Maryland. His research focuses on the design and use of social technologies to create engaging learning environments. His work has examined the use of social network sites by young people and also the design of social computing to promote learning.

Allison Druin is ADVANCE professor for the STEM Senior Women's Council and codirector of the Future of Information Alliance at the University of Maryland. She also holds joint appointments in the College of Education and the Department of Computer Science. She is well known for her work on cooperative inquiry and codesign methods that involve children as designers of new technology. She has also conducted extensive research on children’s media and technology through the International Children’s Digital Library funded by the National Science Foundation.

Works Cited


At Pine Grove Middle School we pride ourselves on providing a school library program run by an invested team of students, staff, and our entire school community. Through a multifaceted approach we are continuing to increase the level of engagement from all groups of stakeholders. Because of these active partnerships, our school library program continues to expand our influence in many directions.

THE PLAYERS ON THE ROSTER

Pine Grove Middle School has a population of eight hundred students in grades 6 through 8. As we embrace a flexible library schedule, we balance collaborative full-class team instruction in and out of the school library, smaller work groups, and patrons who choose to come during study halls, planning periods, lunch activity periods, and before and after school.

To manage all aspects of a multipurpose learning commons, leadership and shared commitment by all are needed to keep operations running effectively. We strive to create an integrated school library program that supports teaching and learning while also delivering quality service to each of our patrons. All members of our library team, including students on our iStaff (described later in the article) are expected to give every one of these patrons satisfactory service.

Some patrons need a quick fix solution, but others seek collaboration and a higher level of engagement in the program. For example, a student might
perfectly by our iStaff team, while others best align with the school librarian or our support team.

**Success Starts with Staff**

To thrive, a successful school library program needs active participation from all members of its community. Initially, my goal was to make school staff members aware and informed about our library’s programs and services. Though this is a key step to stakeholder engagement, I have realized it is also the lowest level of engagement; simply receiving information or being aware doesn’t necessarily require any action or involvement. Yes, sharing information about subscription services, print and nonprint resources, and overall collaboration possibilities is important, but, if the library leader stops there, most likely the interaction will, too. Occasionally, a teacher or administrator will say, “I read your e-mail, and I would like to know more about…” but realistically, this type of communication, though well intended, becomes one-sided and is less likely to yield an automatic “win-win” result for both parties.

**Reaching Out—Repeatedly**

As an instructional leader, the school librarian must be the one to raise the bar, not just informing other educators about resources and services, but empowering all adults to become engaged in the school library program. For example, working with the art teachers at the beginning of the school year to select and order books that align with their needs is important. However, becoming aware of what the art curriculum will include in a marking period, and making ongoing connections about resources and including the teachers in planning for a library program is even better for them—and for the library program. I try to do more consistent outreach with our art and other special areas, for example, to bridge the gap between what we have and what they could use. Collaborating with the art teachers to set up a series of videoconferences with local artists, museum staff members, or other experts in the field results in an even higher level of engagement for the art teachers and their students—engagement with the curriculum and with the library program. Additionally, showcasing student artwork throughout the library not only enhances our atmosphere but celebrates student talents. It’s this type of rich collaboration that will serve as a healthy foundation for sustainability of the school library program.

Many school librarians will likely experience the feeling of being “stuck” at the lowest level of engagement. This situation can be frustrating, especially when we’ve tried multiple approaches to move our engagement with colleagues to the next level. At times it may be necessary to reprioritize or revise our outreach strategy. Perhaps our timing to connect with Mr. Jones might be bad for reasons we can’t control; instead maybe Mr. Hudson is completely open to the library initiatives now. Connecting with Mr. Jones later might result in a different outcome. Maybe your initial e-mail outreach doesn’t align with Ms. Smith’s style, but an in-person exchange might be the connection that works.

Persistence pays off when finding allies and willing collaborators. One may be a teacher who has come in to pick up a specific book (quick fix) or might want a book recommendation based on personal preferences (engaged conversation). At times a teacher needs to use the space for writing (quick fix) or wants to develop a collaborative plan that will provide a rich inquiry-learning experience (engaged conversation).

We have a type of “triage” management and use our levels of staffing (student, paraprofessional, librarian) to address all needs efficiently. Some jobs can be handled...
been a tried and true example of collaborative spirit or perhaps a teacher who has decided it’s time for a change. Maybe a rookie teacher will become an ally or maybe one rich with experience who is seeking a new instructional partner. Though outreach won’t always be easy or successful on the first attempt, it is the role of the library leader to provide the necessary outreach, connections, modeling, and direction to continue to raise the quality of participation by staff members. However, creating healthy working partnerships doesn’t happen overnight. Continuing to make connections that stimulate conversations, exchanges of ideas, and planning is key. Creating these partnerships will require pushing into classrooms, attending planning meetings, offering demonstrations, modeling, offering professional development or even issuing a personal invitation. Reaching the highest level of staff members’ engagement will take some initiative and persistence, but the result will have positive impact that will result in successful advocacy by satisfied patrons and improved learning outcomes for students. Remember that word spreads quickly, so when one teacher or team or grade level experiences satisfaction with the school library program, others will share the feedback for you.

Two years ago I was working with a sixth-grade teacher on a research project. Not far into the project, which focused on fact-finding, we both agreed, “There has to be a better way.” We changed the focus for the next project; we redesigned all aspects of the project with a focus on the Big 6 problem-solving model. Not only did our emphasis switch from fact-finding to inquiry, but also from product to process. We shifted from focusing on quantity of sources to focusing on a quality selection of credible and appropriate options.

We have continued to revise, reshape, and refocus how we coteach, and each time we’ve increased student investment and learning. The spin-off benefit is that as those students went to seventh and eighth grades, more teachers sought out collaboration on the recommendation of the sixth-grade teachers. Currently, I work at varying degrees of collaboration with multiple teachers across content areas and grade levels. With each connection, however, my goal is to increase the level of engagement by these teachers so our input and benefit is mutual. Though we haven’t achieved complete consistency with our approach, we have made incredible strides toward the development of a unified approach toward the research process through collaborative instruction with the school library program. The research process students now employ is based on input from almost all ELA teachers in the building and more accurately reflects the entire school’s culture instead of just my view from a librarian’s perspective. Our planning now has greater impact for more stakeholders.

Ideally, collaborative teaching is the norm in a school library program. The reality is, however, that healthy partnerships need to start somewhere, and the school librarian must stay in hot pursuit of these invaluable connections, even when they don’t come easily. Each collaborative connection may build at a different pace. If the librarian surfaces in a project only to teach about databases or citations, the teaching process becomes fragmented, and the
At the Pine Grove Middle School library, we engage staff members in programs and events. Our SOUP-er Bowl Buffett, for example, is held the Friday before Super Bowl weekend. Thanks to staff members who are willing to bring in crockpots of soup and all who pay a “canned-good admission fee,” staff members enjoy soup and snacks while benefiting our local food pantry. Bookapalooza is our annual literacy campaign to engage all members of our school community in the same book. This initiative is rich with opportunities for student leadership and participation as we promote literacy, community service, thematic discussions, activities, contests, and real-life tie-ins relevant to the messages in the book. Some of our programs have become such a tradition that folks are ready to participate as soon as the events start! We know our events have more impact when students and teachers are involved in their planning and implementation. Simply informing colleagues of our events is great, but raising the bar by getting them to be part of the events is more powerful.

Many of our programs and events have become annual traditions and make an impact in a variety of ways. Our SOUP-er Bowl Buffett, for example, is held the Friday before Super Bowl weekend. Thanks to staff members who are willing to bring in crockpots of soup and all who pay a “canned-good admission fee,” staff members enjoy soup and snacks while benefiting our local food pantry. Bookapalooza is our annual literacy campaign to engage all members of our school community in the same book. This initiative is rich with opportunities for student leadership and participation as we promote literacy, community service, thematic discussions, activities, contests, and real-life tie-ins relevant to the messages in the book. Some of our programs have become such a tradition that folks are ready to participate as soon as the events get started! We know our events have more impact when students and teachers are involved in their planning and implementation.

Including Faculty in Library Events
At the Pine Grove Middle School Library, we engage staff members in our programs and special events. Not only do folks know about our annual holiday sale in the school library, but they are the ones who donate the gently used and regifted items that become our sale’s inventory for students to purchase for 25 cents. Likewise, when we collect gently used books, bags, canned goods, or pennies for charity, it is the faculty that makes our events successful. Innovative leadership requires a librarian to pull out all the stops. Through creative problem solving and effective communication, the school librarian can break down barriers, circumvent obstacles, and establish new avenues for delivery of all aspects of the program. For example, our school library is extremely busy during the fifteen-minute slot before our school day starts. We have a diverse crowd of students and staff members who need to accomplish a range of tasks before the start of the school day. One decision to better manage this time slot was to have iStaff students deliver the technology (wireless laptop carts, mobile projectors, TVs) to classrooms so that our adult staff is available in the library to handle other service issues. Since that slight shift in time management, our morning rush is handled almost seamlessly, and I have more time to interact with students and teachers—my top priority during this time slot.

We have to look beyond the obstacles, both genuine and perceived, and create an avenue to collaboration that is mutually beneficial to all investors. If either side is getting short-changed, then it’s time for a change. Genuine obstacles that are standing in the way of student achievement need to take top priority, and the librarian and teaching partners need to pursue some alternative solutions. Sometimes stakeholders in the building view the school library’s mission differently than we do. The library is sometimes viewed as a “holding tank” for students who have been banished from class because of their behavior or their inability to participate in a range of events. Sometimes students are sent to the library for their “free time,” sometimes as part of a student’s personalized incentive plan or as a “reward” for a job well

Minimizing Obstacles
Scheduling and other factors can impact the level of collaboration and service. Innovative leadership that increases the active role of each partner, however, can still raise the level of engagement.

Many of our programs and events have become annual traditions and make an impact in a variety of ways. Our SOUP-er Bowl Buffett, for example, is held the Friday before Super Bowl weekend. Thanks to staff members who are willing to bring in crockpots of soup and all who pay a “canned-good admission fee,” staff members enjoy soup and snacks while benefiting our local food pantry. Bookapalooza is our annual literacy campaign to engage all members of our school community in the same book. This initiative is rich with opportunities for student leadership and participation as we promote literacy, community service, thematic discussions, activities, contests, and real-life tie-ins relevant to the messages in the book. Some of our programs have become such a tradition that folks are ready to participate as soon as the events get started! We know our events have more impact when students and teachers are involved in their planning and implementation.
done. Sometimes we get a class that lacks a substitute teacher.

We do our best to balance a flexible approach to customer service with maintaining an environment that aligns with student success. Sometimes we succeed and manage this range of traffic with finesse, and sometimes I have to revisit what is going on and make changes that are in the best interest of the program. Too much flexibility might compromise what we want to accomplish; too little flexibility can alienate a school community. Finding the balance can be a challenge, but to have a successful school library program, conflicts with our mission must be managed as they surface to keep our mission at the forefront.

Give Students an Opportunity to Engage

Engaging students in the school library program is nonnegotiable. If students are just passive members of the audience in a library, then we have failed to connect in a way that benefits them. We need to empower students, at all ages, to take on active roles in the school library so they can meaningful contributors to this collective space. Having an open door policy that empowers individuals and is built on expectations for student responsibility will provide a positive framework for student choice. The more students understand their role in the program, the more successful they will be as they select books, use technology, choose their seating, manage their time, and interact with peers.

Students come to our school libraries voluntarily on their own time and involuntarily with classes; students’ goals and objectives may vary from visit to visit. We all have our “regulars” and we get to know what they like to do, want to read, and where they prefer to sit. We also have our guests who seem to be testing the waters and haven’t really established a niche yet, but have chosen the library for a myriad of reasons. We want their repeat business, and the more ways they can be involved, the more likely they are to feel connected, welcomed, and valuable.

Each and every student who enters should have opportunities for engagement. If students perceive that library staff has an “us vs. them” attitude, students are unlikely to feel a connection strong enough to make them want to invest more than minimal time or energy into the school library program. When students see themselves as “patrons,” they will expect a certain level of service. In exchange, they have chosen the school library for a specific activity, class, or task, and with their choice comes a need for active participation and responsibility. Students (and staff) who come our way have a variety of needs; it is their role to communicate effectively, demonstrate some initiative, and seek staff support as needed to complete their tasks. Passive patrons who just hang by the door or front desk, and show little or no active role in their own success will have a less satisfactory experience.

Students need to be educated and guided so they understand their role in the successful business-customer relationship. Signage, demonstrations, direct teaching, iStaff help, and online tutorials can all help patrons find books they want, print their documents, find or access online sources. Our goal is to increase initiative while providing positive support for students’ library experience. Similar to when a student heads to the Gap, students can achieve some level of success on their own based on their active role, but a sales staff is around to help as needed.

Supporting Involvement at Various Levels

All students are different; some see the library as their retreat from active involvement—a place to just be and not have to engage in a structured way. At the other extreme, some students clamor to be a part of something, to be involved, to be active in a program. Middle school students especially are at a unique and unsettled stage of their lives. The pressure to secure a peer group, to have a niche like sports or music or arts or theater, and to feel comfortable physically and emotionally is intense. Though we know no one has it all figured out, the perception of some students that others have achieved success, but they haven’t leaves them feeling left out, alone,
The school library team has the unique opportunity to create an environment for active participation that challenges and supports students. A quiet student who keeps to himself might shy away from a group project, but be willing to give you a recommendation for another book in his favorite series. This willingness to share might be the foundation of similar interactions for him. Students who are likely to be leaders amongst their peers can often be invited to rally his/her own group to accomplish a task like making a banner, sorting supplies, or helping some younger students. Recently our middle school library volunteered to help automate the library in our Pre-K building. All those books have been shipped to our library. Though adult staff members are doing the cataloging, students are playing a key role in attaching spine labels, sorting books, and even designing bookends for the upcoming grand reopening of the Pre-K library. They are proud that they are contributing to this community project, and it is typical for one student to get three or four others involved on the spot to complete a job related to this project.

When students are part of the library program’s planning team, they spread the word; they recruit other students, and they become spokespersons and participants to make sure the events are successful. For example, at our annual Barnes & Noble book fair, students perform music, take photographs, and serve as hosts to this popular community event.

Going Beyond Making Resources Available

Just like with staff, when engaging students we must do more than post, share, or display information and resources. We need to “walk the talk” and engage in conversations with students—as many as possible. A flyer about Teen Book Festival might go unnoticed or seem intimidating to a student. A friendly conversation that provides a personal view of the information, however, might be just what’s needed to capture a student’s interest. A list of passwords for remote use of library resources may have been in the same place with the same message all year. However, a student might pay no attention until he or she is in the middle of a research project, and then—with a little nudge from someone on the library team—realize “This is just what I was looking for!”

If messages and information seem to go unnoticed, engage a student to help your rethink and personalize your promotion strategy. Sometimes books fly off the displays; other times we must actively bridge the gap between reader and book.

At our school library we are currently in the development stage of a Google site designed by students for students. Our goal for this project (managed by an iStaff member) is to have a collaborative virtual presence that will promote online resources like our Destiny catalog, databases, and e-edition of our local newspaper. Additionally, the site will showcase student work, special events, student-created tutorials, public-service announcements, appropriate social-media connections, and a monthly calendar of school library programs.

Structuring Student Involvement

Over the years, I’ve had many students who asked if they could do a job or help. The requests were sporadic; the jobs I had ready to go were often menial (push in chairs, straighten books, organize supplies), and the volunteer experience was at the low-middle level of engagement. Generally the students were helpful, and sometimes the experience was empowering for them, but too often it lacked long-term impact for the students or the library program. As I felt the need to have a “plan” to manage the students who wanted to help, we developed a program called “iStaff.” This single program has had exponential impact, evolving over the last year and continuing to expand. Students (forty-three iStaffers, with seventy-five applications pending) apply and are interviewed for shifts that they will work during their study hall, lunch, or activity times.

The main goal of the program is to empower students to use initiative and leadership to integrate their talent areas (technology, literature, public relations) into all aspects of the school library program. Students help manage the facility, offer input on collection development, deliver mobile technology, provide feedback on grant applications, and support instruction. Some iStaffers,
for example, have provided direct instruction, technical support, and classroom assistance for classes using NoodleTools for research. When a teacher and I are working with a class of twenty-five students at various levels of abilities, having three or four iStaffers work the room with us to offer help and guidance is priceless.

Since the iStaff program was formalized, we have had an increased number of students coming our way to get involved. In addition, I always seek out students who might be a good fit for the various programs in the library and/or encourage them to join our student work team. I try to find a “hook” to get learners invested and encourage others to do the same. Teachers, administrators, and parents will often hear about our events, programs, and iStaff, and give me names of students who might need an invitation or a gentle “nudge” to give it a try.

The energy of the iStaff members has a direct, positive impact in the school library. Like any volunteer group, we sometimes have our issues that require people and situations to be redirected or modified. Overall, however, we have created a program that is having an impact throughout the school and the larger community. Members of the iStaff team have become the eyes, the ears, and the voice for the library program, and their advocacy is powerful. Promotion coming from these students has a bigger punch than just my outreach.

Our iStaffers have attended New York State Library Legislative Day, participated in training with Dr. David Loertscher, served as tour guides for visiting educators from around the state, presented at a luncheon for school administrators for our region, participated in a regional video conference run by our superintendent, and are...
Students who are actively engaged as leaders, as our iStaff members are, have become a presence in and out of the library through their involvement. Often iStaff students will offer to assist a classroom teacher with technology, deliveries, or any connection related to the library. Teachers will use these students as their liaisons to the school library program and rely on iStaff members to bridge that gap. For example, an iStaff student might come the library and say, "Mrs. Smith needs eight copies of a certain book; can we order those?" In turn, the message gets sent back with this student to firm up the arrangement. Technology support and requests are often shared via iStaff students. Griffin might come down and say Mr. Brown needs a cart of laptops next Wednesday and ask to check the sign out book for him. Even indirect feedback from iStaff has incredible value. These students might share that Ms. Fields said she doesn’t like using the laptop cart because it never works right. That feedback allows us to troubleshoot and improve this teacher’s experience with our technology.

Participants directly benefit, too. Tim S., age 12, was recently interviewed by our local paper about his role on the iStaff. When reflecting on having been chosen to be a guest speaker at a luncheon for school administrators, he shared, “I really never talked in front of a big group before, and now I think I could do it again and not be nervous.” Last week, Kayla D shared her thoughts on being an iStaff coordinator with a visiting group of middle school teachers. “We don’t just help out; we’re like a family, and we work like a team.” Kayla heads to the high school, currently working on an article about their iStaff experiences.
next year and is already making plans for how she will impact the school with her leadership ability. She coordinated this year’s trip to Teen Book Fest in Rochester, NY for fifty students and staff, and is already making plans to do the same next year.

Advocacy arising from the iStaff program goes beyond the school building. Parents and guardians of iStaffers are aware of their children’s roles, and visit the school library to see and hear about their children’s jobs. We are in the process now of creating an iParent group as a spin off from this successful initiative. My vision is that the iParent group, formed by the families of our current iStaff members, would provide us with another valuable level of input and feedback, and empower families to be engaged as we develop policies, coordinate events, pursue grant funding, and extend our outreach.

Supporting Student Clubs

Though iStaff is one method of engaging students, it’s not the only avenue we travel to empower leadership and involvement. Many students create clubs that meet in the school library. Presently we have an “SBN” (Stop Bullying Now) team, a Virtual Magazine Club, and a Wii club. We’ve also hosted talent shows, Star Wars clubs, game clubs, craft groups, and a variety of other groups created by students for students.

Some students have a natural talent for leadership, while others need our support as they move their groups forward. However, all students involved in clubs benefit from our validation of their interests and their interactions with peers who have similar interests.

Don’t Go It Alone

Personal touches and constant outreach to create a high level of stakeholders’ engagement have limitless potential. Providing this level of outreach, however, can take a lot of time, and you are only one person. Students, staff, and community members can be the support and advocacy team that you need. People who are actively engaged as part of the school library program will become natural advocates for the aspects of the library program for which they are most passionate. The more passionate investors a library has, the more exponential the advocacy becomes!

The current climate for school libraries is a challenging one. These times, however, provide exciting opportunities for school librarians to provide instructional leadership and engage an entire school community in the development of a collaborative and multifaceted school library program. Close the doors to partnership in the school library and the influence of the program weakens. Open the doors to the possibilities that exist when all stakeholders are actively engaged, and create a program with exponential impact.

Sue Kowalski

is the librarian at Pine Grove Middle School in the East Syracuse Minoa (NY) Central School District. Pine Grove was an AASL 2011 National School Library Program of the Year recipient. She is the current president-elect of NYLA-SSL and recently named as a Visionary Leader by Teacher Librarian.

VALIDATION OF OUR LIBRARY TEAM’S MISSION

In our school library, it’s not unusual to hear questions and statements like:

“You know what WE should do?”

“You know what I was thinking WE could have?”

“I was wondering if you would be up for…”

“I have someone WE should hire.”

“How about WE order volumes 6–10 of this series?”

“Do you think WE could ever…?”
Students at Creekview High School Discuss Participatory Learning

Buffy Hamilton
buffy.hamilton@gmail.com

Envision a learning space where learners develop topics for investigation and research questions that are constructed through self-selected readings, research, and regular small- and whole-group discussions. In this learning space, students choose the tools and mediums for accessing, organizing, and sharing information, as well as select modes of traditional and digital composition to create representations of their journey of learning and insights gained from inquiry. Even though not all students are working formally with learning partners on projects, they still crowdsourced knowledge and skills as they come together as a learning community that is socially constructing understandings and meaning together.

This vision is a glimpse of a pocket of reality that has come to fruition as I’ve collaborated with teachers to foster learning experiences that are framed through Barbara Stripling’s model of inquiry (Stripling 2010) and helped students engage in what Project New Media Literacies calls PLAY (Participatory Learning and You). Learning environments that invite participatory learning seek to create learning spaces that:

- Increase motivation and engagement through experimentation and play
- Honor and invite connections between home, school, and community
- Posit teachers and students as colearners and coteachers who learn from each other and share expertise with each other (dialogic discourse is an essential part of these learning spaces)
- Emphasize relevance for students and their interests as learners (students are encouraged to choose topics and mediums)
- Provide regular opportunities to create and solve problems using a diverse range of tools, practices, and media that fit their needs as learners and provide opportunities to build
new skills for a “toolbox of learning” that allows them to try these mediums without fear of failure (Project New Media Literacies 2012).

My collaborative work with English teacher Susan Lester (www.theunquietlibrary.libguides.com/media21) over the last three years has been the school library program’s most successful effort at eliminating artificial boundaries between classroom and library learning spaces by providing students with experiences in which the Susan and I function as coteachers, and scaffold students’ new media literacies, literacies that “…constitute the core cultural competencies and social skills that young people need in our new media landscape. We call them ‘literacies,’ but they change the focus of literacy from one of individual expression to one of community involvement. They build on the foundation of traditional literacy, research skills, technical skills, and critical analysis skills taught in the classroom” (Project New Media Literacies 2011).

The first semester of these learning experiences is usually a significant learning curve for all of us as we work together to establish a sense of community and help students transition from a more traditional role of being passive learners to a new role that requires them to make decisions and take on increased ownership for their learning. While we attempt to integrate all of the new media literacies, we emphasize play, distributed cognition, collective intelligence, and judgment because they are essential literacies for helping students engage in scholarly, collaborative ways and for preparing them to engage in ethical, appropriate, and positive ways in the digital landscape of learning and information (see Figure 1).

Practices of PLAYful Learning from the Student Perspective

Much of the literature about participatory learning in schools and libraries is dominated by adult voices. What do sites of participatory learning look like from the student perspective? What does it mean to student learners to develop and apply the four practices of participation?

- **Create:** go beyond consumption and engage in creating content and alternate representations of learning
- **Circulate:** consider how and where we appropriately spread media
- **Collaborate:** work with others in a variety of spaces to complete learning activities and build new knowledge
- **Connect:** form relationships or partnerships for learning in face-to-face and virtual learning spaces

How does participatory learning help students become intellectually and emotionally invested in their learning experiences? Four of our sophomore students—Bethany Johnson, Jacob Morgan, Kristiena M. Shafer, and Jordan Grandt—have generously agreed to share their insights to help us as educators better conceptualize the dynamics and impact of participatory learning on student engagement and growth as learners.

**Figure 1.** Our targeted new media literacies.
Throughout my sophomore year in Ms. Lester’s and Ms. Hamilton’s Honors World Literature class, I have learned more hands-on and technological skills than I did in my freshman year courses or in middle school classes because of our participatory culture of learning. During this year I have been educated on new mediums for digital composition (VoiceThread and Prezi), finding the best articles to help inform and further guide my research, and strategies for working effectively as a team with group members. However, the most significant learning process for me was gaining information on how to conduct an interview.

My second semester inquiry project Are Amputations the Defining Crisis of War Today? <http://tinyurl.com/8o3gs6k> has left a lasting effect on me. My research partners and I subdivided our three major research questions; my specific research question pertained to the increased role of technology in prosthetic designs. In my research, I came across an article about the work of Scott Summit, an industrial designer who designs prosthetic limbs that are personalized to each and every amputee. As part of their efforts to help students develop new research skills, Ms. Lester and Ms. Hamilton required us to complete an interview with an expert on our topic. I immediately thought of Scott Summit as my leading candidate for an interview, but since he is so well known in the prosthetic limb world, I thought there was little to no chance he would want to participate in an interview with a sophomore high school student.

One morning while browsing through e-mails, I discovered he had replied and indicated he was more than willing to be interviewed by me. I was amazed to see that an important person was willing to take time out of his busy schedule to be part of a high school student’s interview. As the days went by leading up to the interview and I finalized my interview questions, I felt myself getting more and more excited about this interview. Finally, the day and time came for the interview; the interview itself was only ten questions and probably did not last more than thirty minutes, but in those thirty minutes I learned how the participatory learning method can change not only your understanding of your research question, but it can also confirm a career interest. During my conversation with Summit, I quickly realized how much I enjoyed the process of interviewing someone, and this experience fueled my existing desire to pursue a career as a fashion journalist.

Had I not been in a class that encouraged me to take a participatory approach to learning and to connect with a resource outside of traditional sources of information, I probably would not have had the opportunity to test the waters of interviewing an expert. The 21st-century skills I have acquired in this class are ones I plan to take with me into my future learning experiences in high school and beyond. Participatory learning is more than just an educational method; it is a process that can truly guide students along to a vision for themselves as learners and a bigger, brighter future through connected learning experiences.

Participatory learning is a great way for students to get engaged in their learning because it gives them more room for creativity and a feeling of pride about the work they produce. I know from my experiences in a participatory learning environment that the emphasis on creativity and choices for creating learning products make students want to work hard and do the best they can because it is truly their project. All that a student needs to create something amazing are some tools and the freedom to exercise his/her creative muscles. When I was introduced to Netvibes, a free tool for creating an information dashboard, I immediately started to make it my own. Because of the customization options that Netvibes gave me (theme, layout, and the ability to incorporate any kind of multimedia or widgets), I was able to craft an impressive information dashboard that really increased my productivity as a learner and researcher.

— Bethany Roper
Another aspect of participatory learning that really helped me excel was the freedom that I was allowed for research tools. One of my favorite web-based tools is Scoop.it, an online curating tool. I like this tool because it allows me to gather all of my sources and put them in one place, organize it all, and then find the information or sources that I need very quickly. Because I can easily “scoop” database articles into my Scoop.it “magazine” on my topic, I can quickly research and organize information that I can effortlessly use to create a great project.

An additional aspect of participatory learning that is appealing is having choices available for an end product. I think that it is important for students to get to choose what kind of medium that they want to use to present their information and understandings. For example, for my spring research project I chose Prezi as my creation medium. I had other choices, such as VoiceThread and Animoto, but I chose Prezi because it was a medium I had learned first semester and enjoyed. Because I was engaged with my research and had the freedom to choose a medium of creation that fit my needs as a learner, I truly wanted to craft the digital composition; consequently, I created a project that I worked hard on and enjoyed creating.

Kristilena: Community Counts
Creating, collaborating, and connecting are just three of the many aspects that are essential to participatory learning. While demonstrating these aspects of participatory learning, I really became involved with the work that I was doing and it was so much easier to manage time, learn more, and improve my academic achievement.

Through our projects, we have created learning products that go far beyond usual school products, and I believe this is due to being able to have a choice on what we were learning. Being a part of a class that was built around the students was so helpful to me; it has really changed how I feel about schoolwork. As part of our inquiry-driven projects in Honors World Literature with Ms. Lester and Ms. Hamilton, students were able to choose books [http://tinyurl.com/9629ve2] that interested them. Students then subsequently could choose the topics that interested them that were sparked from the reading of the books and our Fishbowl discussions [http://tinyurl.com/jkryhn8].

Our Fishbowl discussions were a place that all the students came together and shared with each other what issues they were seeing in their books as everyone had the opportunity to contribute to the conversations. The ideas and discussion from our Fishbowl discussions not only opened our eyes to new issues, but they also made us feel not shy about actually liking to do research for a project for school. Feeling proud of what we were doing really made us feel motivated to do a more-than-average job and create a media product that might actually make a difference in the way people looked at the issues that we took time to research and cared so much about.

Along with our ability to choose our topics to research, we were also given the opportunity to choose if we wanted to work alone, with a partner, or in a small group. All three of these options required us to collaborate with other people to get our projects finished. On the first project, I choose to work with a small group of four students. This was quite overwhelming at times because with that many people, there were many chances for someone to not complete a critical task. However, the experience of working with three other people and negotiating responsibilities really helped me learn to collaborate more effectively with others. On the second semester project I chose to work with a partner who was interested in the same topics as I was and with whom I knew I would work well. Working with a partner was much more beneficial to me because we both had similar work ethics, and we both wanted to have a product that went into more depth than usual school projects. Collaborating with my partner, my classmates, our teacher Ms. Lester, and our librarian Ms. Hamilton has improved my ability to work as a member of a learning community, an essential aspect of participatory learning.

I think that it is important for students to get to choose what kind of medium that they want to use to present their information and understandings.
— Jacob Morgan
Having experienced my first true encounter with participatory learning during my sophomore year, I can testify that it has broadened my knowledge about research with the use of technology to not only use as a tool, but to also create.

— Jordan Grandt

In the 21st-century classroom, participatory learning through the use of visualization, creativity, and personalization in the form of digital composition reflects the growing influence of media in the classroom. Having experienced my first true encounter with participatory learning during my sophomore year, I can testify that it has broadened my knowledge about research with the use of technology to not only use as a tool, but to also create. This new type of learning corresponds with the "Information Age" where we can connect and share information with people of similar interests from around the world. So what stands out for me about participatory learning?

It’s visual. The use of technology as a primary resource for information allows for a greater influence of illustration in a more hands-on manner. Students can express their ideas and research through trends that they find as they interpret their data. Instead of writing the normal essay in black ink on white paper, digital composition makes learning and applying knowledge more appealing through blogs, videos, and other mediums. Also, compiling the information into a creative media product rather than into paragraphs allows for final products that are much more engaging for the creator as well as for the viewer of the final digital composition.

It’s creative. Participatory learning allows for students to mold their knowledge into digital mediums that reflect their personalities. In my tenth-grade literature class, we were allowed to make our own choice as to what we researched and learned about. After we read approximately two novels revolving around the same subject, we were then released to test the waters until we found a more focused topic based on our readings that specifically interested each student. This freedom to personalize the learning experience gave us the opportunity to be creative, even in our research methods and topic choice. However, we were also given the chance to genuinely create when we composed our digital compositions. Using mediums such as Prezi, VoiceThread, and "Presentation Zen" style PowerPoint presentations and videos, we were able to compile our information into a project that reflected each of us as an individual.

It’s personal. Students are encouraged to deeply research and analyze information with help from teachers. This form of "colearning" allows for both the students and the teachers to each benefit and learn from the research. When going back to being able to choose the topic of research, colearning also relates to personalization because it gives students the freedom to choose topics that are intimate to their own personal experiences, beliefs, or interests. Consequently, students feel more motivation to learn; that authentic intrinsic motivation is often lacking in a more formal

Visit Knowledge Quest Online at <www.ala.org/aasl/knowledgequest> to listen to a complimentary podcast with Buffy and Ernie Cox on participatory culture and learning!
learning environment. Another factor to the personalization of participatory learning is that all the students in the classroom have a shared purpose to complete the final product. They can share sources and information to help each other gain the maximum amount of knowledge. As a result of experiencing a participatory learning environment, I have a more positive outlook about learning.

Conclusions

These student perspectives offer a window into the ways that participatory learning impacts how students conceptualize multiple literacy practices, metacognition, and social norms for learning communities. In addition, we see glimpses of how participatory learning provides students a context for transacting with a diverse set of information sources and mediums, and with their learning communities. It is my hope that the confidence and sense of purpose they gain from guided practice to independent application of tools and strategies for navigating familiar and new landscapes of information will give students a greater sense of agency in charting their own courses for themselves as learners.

The shared learning space we inhabited was one conducive to helping students make a shift from being solitary, passive learners to students who can participate in meaningful conversations for learning that amplify the knowledge they construct from those transactions into multimodal learning artifacts.

For meaningful educational reform, the challenge that these student voices raise is one that calls upon us—administrators, students, teachers, school librarians, parents, counselors—to work together to scale pockets of participatory learning into a larger culture of learning in schools that is the norm and not the exception. As school librarians, we can be the catalysts for this kind of authentic grassroots change that will disrupt pedagogies and practices that marginalize and silence young people, while enabling our students to help us collaboratively rewrite and compose new and more nuanced narratives of learning, libraries, and literacies.

Buffy Hamilton is the librarian at Creekview High School in Canton, Georgia. A twenty-year veteran educator, her research and practitioner interests include participatory learning and culture, ethnographic studies, digital composition, critical pedagogy, and social scholarship. She is a 2011 Library Journal Mover and Shaker, a 2011 winner of the (ALA) Office for Information Technology Policy (OITP) Cutting Edge Library Service Award, the 2010 Georgia Library Media Specialist of the Year, and was included in the 2010 National School Boards Association Technology Leadership Network “20 to Watch.” She blogs at The Unquiet Librarian, winner of the 2011 Salem Press Best School Library Blog Award.

Feeling proud of what we were doing really made us feel motivated to do a more-than-average job and create a media product that might actually make a difference in the way people looked at the issues that we took time to research and cared so much about.

— Kristiena M. Schafer
Kristiena M. Shafer is a junior at Creekview High School who enjoys riding/showing horses and playing softball.

Bethany Roper is a rising junior at Creekview High School. Her interests include fashion design and writing; she aspires to be a fashion journalist.

Jacob Morgan is a rising junior at Creekview High School; his passion is playing trumpet for the CVHS marching band.

Jordan Grandt is a native Georgian and junior at Creekview High School whose interests and hobbies include chorus, painting, writing, tweeting, and Star Trek.

Works Cited


Modeling In-School Youth Participatory Action Research through Gameplay

Antero Garcia
anterobot@gmail.com
In the spring of 2011 the seventeen ninth-grade students in my period-three class began receiving cryptic messages from a guileless spider. Using a class set of iPod Touches, the students dialogued with this mysterious talking animal and came up with a series of questions about their school and local community, including, “Why is there an absence of love in South Central Los Angeles?” and “What perpetuates stereotypes in South Central?” and others. Through research and conversation, students were provoked by their eight-legged confidant to subvert traditional stereotypes about their school space and to rewrite the school space around them.

Through the fictional premise of gameplay, these students blurred the line between research and role-play as part of my class curriculum, and—in doing so—helped me explore the structural challenges of enacting youth participatory action research (YPAR) within the context of a formal classroom space. As a seven-year veteran high school teacher and as a researcher, I was interested in the ways student ownership of critical research through YPAR could be motivated through principles of gaming. As a result, I created Ask Anansi, an alternate reality game (ARG) played in the “real world” by weaving elements of storytelling and fiction into the environment played as part of the class experience. The game drove the research process in my classroom and provided the students with a structure for their work.

School Context
My high school is one of the oldest public high schools in the city of Los Angeles. With a student population of approximately 3,400, it is one of the largest in the city. Its demographics mirror those of its surrounding community: 83 percent Latino, 15 percent African American, and 2 percent multiracial with an English Language Learner group that makes up 39 percent of the student population. Eighty-seven percent of the students receive free or reduced-price lunch (California Dept. of Ed. 2010). Only 35 percent of students graduate and the majority of these students do not graduate eligible to enroll in most four-year universities (UCLA IDEA 2010). In a deliberate effort to erase a cultural past of uprising, resistance, and negative press through renaming the community, mainstream media and the governing agencies of Los Angeles now refer to the community as “South Los Angeles.” However, despite the flooding of “South Los Angeles” messaging in media, I have never heard any of my students refer to this community as anything but “South Central.”

Playing with YPAR
My work with students in this project is guided by three principles of Participatory Action Research as delineated by Alice McIntyre (2000, 128):

1. The collective investigation of a problem
2. The reliance on indigenous knowledge to better understand that problem
3. The desire to take individual and/or collective action to deal with the stated problem
McIntyre saw the research process as “engaging in processes that position youth as agents of inquiry and ‘experts’ about their own lives” (2000, 126). Though documented examples of YPAR have occurred in extracurricular spaces (Morrell 2008; Romero et al. 2008; Stovall et al. 2009), I wanted to know how to support YPAR within the traditional 8:00 a.m. to 3:00 p.m. hours of the school day. For me, instilling youth-driven research within the classroom is about shifting to a “new culture of learning” (Thomas and Brown 2011) and, in particular, opening up space to foster the interests and knowledge of my students. I attempted to do this through sustained gameplay for seven weeks.

Not an app or a board game, Ask Anansi is a game that students play through role-playing, researching, and imagining over the course of seven weeks. This gaming experience guided students toward a process of identifying specific topics for critical inquiry and playing through the act of engagement and participation.

In *Homo Ludens: A Study of the Play-Element in Culture*, Johan Huizinga described the space in which games are played as a “magic circle,” emphasizing that the main characteristic of play is “that it is free;” furthermore, “[p]lay is not ‘ordinary’ or ‘real’ life. It is rather a stepping out of ‘real’ life into a temporary sphere of activity” (1949, 8). The magic circle of gameplay is one in which role-playing, acting, and behavior exceed social norms; it is here that students can comfortably pose, flex, and experiment in ways they may not typically be expected to participate or behave. Casting this magic circle around the activities in my classroom and shielding our inquiry from pressure for students’ social conformity, I created Ask Anansi as an ARG that steeps student action and problem-posing in a tradition of West African folklore.

In Ask Anansi student participation is community-centered; students engage in inquiry-based problem solving by communicating with Anansi and helping to unravel the stories he tells. The trickster spider-god of Caribbean folklore, Anansi has answers and solutions to any question students can imagine. Students pose research questions to Anansi. Sample questions that students asked in the class included a focus on the perpetuation of stereotypes in South Central and the “absence of love” within the school’s community. Anansi’s responses to such questions, however, are not always the most clear; he likes tricks, riddles, and befuddlement. As a result, student interaction with the fictitious character led them to document, interview, and collect evidence related to their research questions; communicating with Anansi acts as an engine to drive YPAR research, revision, and theory building. The Ask Anansi gaming environment allowed students to act, question, and engage in simultaneously critical and playful inquiry.

Over several days, I facilitated class-wide discussion where students shared images, individual research, and reflections they made about the school and neighborhood space in which they live. Through these discussions the students and I noticed prominent themes in the frustrations students had and concerns they shared about their community. From these patterns, students formed the research questions stated at the beginning of this article, and I attempted to move the class inquiry beyond the walls of the classroom. Exploring the campus for spaces that reflected student research topics, we participated in a whole-class scavenger hunt; students wrote clues that guided players to spaces on and around the school related to topics of equity and power. These clues led students to student-created QR code badges hidden at SCHS; encoded were questions to stimulate participants’ reflections on the space and its usage within the school. To fit within the theme of the alternate-reality game, the scavenger-hunt reward badges were wrapped scroll-like inside the ring portion of black plastic spider rings, the type typically given out to children around Halloween (see Figure 1).

As an example, I wrote a clue titled “The Hidden Vestibule” to demonstrate the writing and searching process for students: “To find my last badge, you need to follow the origins of your
curricular materials. From where does the ocean of learning materials flow? Can you find the origin? Once you arrive, you may have to do some climbing.”

The clue led to an abandoned classroom space in an upstairs alcove of the school’s textbook room. Students were signaled that they were in the right location by a solitary spider dangling from a string in the doorway of the rundown room.

After this brief demonstration, students spent a week busily creating and revising clues that I prepared to distribute to their peers. Students chose their locations and clues based on the research they had conducted. By that Friday, each student had received a sizeable workbook of more than eighty original clues. With a class period and a weekend to search on their own, students hunched over clues and copies of campus maps. During the class period students were encouraged to develop strategies to find as many clues as possible, and they scanned their maps plotting not only how to retrieve clues based on where they speculated the clues were hidden, but also how to do so efficiently. Two students, Elizabeth and Marjane, each grouped clues by proximity to each other in an effort to find badges (with QR codes) that were closest to one another and build a mapped journey of searching across the campus. Elizabeth started by searching for several locations in our building before venturing to the outside quad, the neighboring building, and the main lunch area, and two badges were located near the school’s auditorium.

The assignment also asked the students to conclude each of their descriptions by posing a question to the individuals that read them. After these cards were written and then revised by a classmate, students posted the cards prominently in the spaces where they had originally hidden clues. The hidden badges morphed into prominent public displays of knowledge and dialogue. One of Minerva’s clues, once hidden underneath the dusty water fountain outside our classroom, for instance, was later translated by her into a notecard that was taped directly above the water fountain, unavoidably within the line of sight of anyone using the fountain. Though water fountains may seem like minor features of a school campus, the students’ publicly voiced disdain for the fountain’s condition demonstrates a resistance to the traditional power structures within the school.

**Inform, Perform, Transform**

This brief description of the scavenger hunt sequence of Ask Anansi illustrates the ways youth can recontextualize their physical surroundings through game-based YPAR. This sequence followed a key thematic approach to critical transformative practice: Inform, Perform, Transform. This approach was adapted from my own experiences with another alternate-reality game, the Black Cloud (Niemeyer, Garcia, and Naïma 2009), in which students’ actions focused on improving local air quality and were informed by data collected at various nearby locations.

As its name states, this approach has three thematic components used within the classroom, and each of these has distinct activities tied to it.

**Inform**

During the “Inform” phase students gather, analyze, and collate information to produce their own, original work.

Students furthered their acquisition of three types of knowledge during the “Inform” phase of the unit described here:

1. **Indigenous expertise of their communities**
2. **Conceptual understanding of the function of gameplay and problem-posing inquiry**
3. **Functional literacy skills including writing challenging, engaging clues, and properly logging and reflecting on found items; these skills were primarily developed through student use of their mobile media devices to collect, analyze, and share research data while the students were not tethered to the desks and seats of a classroom.**

**Perform**

Within the “Perform” component students use the knowledge and information acquired through their informational inquiries, and produce/perform new work that is tied to a larger critical, conceptual, and/or academic goal.

In this unit students developed scavenger hunt clues for their classmates, hid them in and around their school space, and then later searched for classmates’ clues.

**Transform**

In the “Transform” component students extend their performance toward publicly shared knowledge and action, and focus on directly impacting and critically transforming their world.
Students adapted the closed, class-only scavenger hunt into a curated public exhibit to impact the public’s reading and interpretation of the South Central community.

This process allowed students to share their own body of knowledge, while the teacher acted as facilitator in this process and encouraged transformative performative action.

Assessing In-School Participatory Action Research

As I continued to develop and guide students throughout the gameplay of Ask Anansi, students expressed to me the ways this activity felt “different” from what they had done in other classes. While I felt enthusiastic about the student responses and what they may mean for in-school YPAR, I also realized that a significant challenge also loomed in extending this work in sustainable ways. The challenge with this project was not one of motivation or of finding the “right” question for students to investigate and then later act upon. My challenge related to creating democratic decision making and planning within the formal confines of a classroom.

While my classroom practice subscribed to critical pedagogical efforts of distributing knowledge and moving toward world-facing stances of engagement with curriculum (Duncan-Andrade and Morrell 2008; Freire 1970), this classroom is one that is still legally bound to teacher-authority and to preexisting socio-cultural assumptions from students about classroom spaces; students and school administrators have specific understandings of what schooling looks and feels like.

Although a “new culture of learning” that Douglas Thomas and John Seely Brown (2011) illustrated as being a result of participatory media and culture can signal ripe possibilities for learning, students and teachers alike are entrenched in an entirely different paradigm. The shift from one culture of learning to another is not a simple transition. As mandated sources of authority, forms of standardized testing, and teacher evaluations based on these tests drive “schooling” today, a pedagogy of “thinking about people as researchers, as agents of change, as constructors of knowledge, actively involved in the dialectical process of action and reflection aimed at individual and collective change” feels difficult to implement (McIntyre 2000, 148–49).

With Ask Anansi I ultimately relied on the fictitious Anansi to liberate the classroom space and help weave webs for developing the critical agents within my classroom. I intended for the lessons we wove in my class to continue to be drawn upon and developed long after my students leave SCHS. I intended for the lessons to help weave powerful civic lessons for the future of South Central.

Note: The names of the students in this feature have been changed.

Antero Garcia is an assistant professor in the English Department at Colorado State University. Prior to moving to Colorado, he spent eight years as a high school English teacher in South Central Los Angeles. His research focuses on critical literacies, youth participatory action research, and civic engagement. More information can be found at his blog <www.theamericancrawl.com>.

Works Cited


STEWARDS OF DIGITAL
Participatory culture, in which citizens feel and exercise the agency of being cocreators of their culture and not just passive consumers of culture created by others, depends on widespread literacies of participation. You can’t participate without knowing how. And cultural participation depends on a social component that is not easily learned alone or from a manual. That’s where school libraries and school librarians have a critically important part to play.

Librarians have always been stewards of literacy as well as curators of knowledge; knowing how to find what you want (starting with how to know what you want to find) has always been part of what people get from human librarians. But today, the personal and social importance of skills of critical information consumption, infotention (managed media attention), ethical collaborative research and networked coproduction of knowledge, digital citizenship, and network know-how is magnified multifold by digital media and networked publics.

I use the word “literacies” to encompass the social element as well as the individual ability to encode and decode is of limited value. Today’s literacies require knowledge of how to use information skills in effective collaboration with others.

Even if there was sufficient public enthusiasm and political will to educate today’s students to engage effectively with participatory culture, fiscal necessity makes it unlikely that building new campuses, and then training and hiring thousands of digital-literacy specialists will happen. It’s a good thing we already have the buildings and the specialists. In school libraries and librarians, we already have a public place and a community of experts to help us learn the cognitive and social skills as well as the technical skills for navigating today’s infosphere.

No Gatekeepers in Participatory Culture

I’ve been writing about life online since my 1987 article on virtual communities. And I was one of those kids who found refuge in the school library when the imprisoning rows and columns of chairs in my first classrooms couldn’t contain me. I was introduced to literacy as both skillful reading and writing, but also (by librarians) as a community that I could join one day. In those stacks of books were conversations about philosophy and science, engineering and theology, conversations that were unfolding over centuries—a community of thought that the alphabet and printing had made possible. To join the community of active print-literates as a writer, however, I had to pass through the gatekeepers of magazine and book editors of the pre-Internet era.

When I first explored text-only computer bulletin board systems in the early 1980s, I was immediately excited about the lack of gatekeepers. The community of active literates—those who knew enough about digital networks to bypass the gatekeepers—grew explosively as a significant portion of the entire human population got online and began publishing as well as consuming culture.

New Social Skills Everyone Needs

The power of individual digital media—a printing press and television production studio in your pocket—is truly active only when the power is accompanied by the new social skills that apply to networked publics. Knowing how to craft a blog post, edit a Wikipedia page, edit and upload a video is only part of the picture. Now we need to know how to behave in an online community, grow a personal learning network, and ethically share cultural productions.

Again, where else but the school library, and who else but school librarians are better equipped to facilitate these new literacies? And with the massive bypassing of gatekeepers, how do we deal with the massive floods of inaccurate information, misinformation,
disinformation—to say nothing of spam, porn, and political invective? On the Internet, anybody can publish. It’s heaven. On the Internet, anybody can publish. It’s hell.

When I wrote about the future of personal computers in 1985 (Tools for Thought), virtual communities in 1993 (The Virtual Community), the convergence of telephones, personal computers, and the Internet in 2003 (Smart Mobs), I dealt with criticism and debate over the question: “Is all this digital stuff any good for us?” To answer the question, first one has to define what one means by “us.” Some people benefit; others are left behind, and still others are unwitting victims of new media. It only makes sense to think about who you mean by “us” and about the social circumstances of digital inclusion. The economic and education divide between the world’s haves and have-nots is a real one, but markets and microchips are driving down the cost of admission to the infosphere; there are already six billion mobile subscriptions (Whitney 2012) and two billion Internet users on a planet of seven billion (based on Exploreedia 2011). The gap between those who know and those who don’t know how to use a text message or a social network to their advantage, and how to avoid the dangers associated with texting and Facebooking is an even more serious divide.

Good for Us? It Depends…

After a couple decades of thinking about “Is all this digital stuff any good for us?” I grew convinced that the answer is: “It depends on how many people know how to detect bogus information online, manage their infotention, participate as a contributing digital citizen, collaborate in virtual communities and collective intelligences, and navigate a world of social networks, social contagion, and social capital.”

In other words, the critical uncertainty about the future of digital media is literacy. That’s why I set out to coauthor Net Smart: How to Thrive Online, an evidence-based guidebook to today’s essential literacies of attention, participation, collaboration, crap-detection, and network know-how. Coauthor Anthony Weeks and I had in mind creation of a tool for librarians, teachers, and parents, as well as a vehicle for bringing some new lore to the knowledgeable and a wealth of otherwise non-obvious clues to the vast majority of new Internet users.

The critical uncertainty about the future of digital media is literacy.

Fostering Infotention

Attention—the basic material of thought and communication—is severely challenged by today’s always-on, available-everywhere media. From looking at your Blackberry when your child is talking to you, to physically colliding with people while texting and walking, to Facebooking in the classroom, entirely new distractions and competing legitimate claims on attention require a conscious and learnable discipline of attention management. It isn’t clear that librarians ought to consider themselves teachers of attention management, but certainly they ought to be interested in ways to foster mindful infotention among their constituencies.

Think Like a Detective

After attention, the second essential literacy is critical consumption of information (or “crap detection,” as Ernest Hemingway called it); this skill was part of what librarians provided for centuries during the print era. Critical thinking about what we read and discover in our research has always been fundamental, but now that everybody can publish anything, the loss of gatekeepers means that for the first time in the history of publishing it is the responsibility of the consumer of information, not the producer, to verify it.

If nothing else, helping people understand a little more than they do now about how to find information online and how to test that information, whether they find it on their own or someone else feeds it to them, is a crucial mission for today’s librarians. Not just search techniques, but “thinking like a detective” and other active, critical, mental mindsets are essential. If it had been possible to regulate what people could publish, we’d have far less bad information online. And we wouldn’t have the Web. The best way to improve the quality of the information commons is to raise the crap-detection literacy of the online population.

---

1 Pew Internet and American Life survey revealed that one in six Americans admitted bumping into something or someone while texting (Madden and Rainie 2010).

---

Visit <www.ala.org/aasl/slr> for a link to the School Library Research paper connected to participatory culture and learning: “Empirical Support for the Integration of Dispositions in Action and Multiple Literacies into AASL’s Standards for the 21st Century Learner.”
Disinfotainment Distraction or Collective-Wisdom-Sharing Machine?

Besides reducing the amount of bad information, school librarians have an opportunity to increase the amount of good information by helping their constituents learn how to become productive, mindful, effective participants. Blogs, wikis, knowledge-sharing sites, and collective encyclopedias may not have existed in previous decades of librarianship, but today they are the gateways to the community of digital literates. Participation is the third literacy I wrote about in *Net Smart*. Knowing how to use a blog to advocate and a wiki to organize, and how to curate resources with social bookmarking or other curation services are not that difficult to learn, but the technologies that make these practices possible don’t come with user manuals. Engineers have provided the infrastructure for the most explosive growth of access to knowledge in human history. But the know-how of populations is what will make the difference between that infrastructure becoming an always-on Panopticon and disinfotainment distraction or becoming a collective-wisdom-sharing machine.

Understanding How Structure and Dynamics of Networks Affect Participants

The ethics, mechanics, and mindset of collaboration and sharing are also within the school librarian’s portfolio. Knowing about copyright, Creative Commons, public domain, the line between collaborative investigation among students and cheating, and the ways in which groups of people learn and produce knowledge together online are essential today. As David Weinberger has explicated in *Everything is Miscellaneous* (*Times Books 2007*) and *Too Big to Know* (*Basic Books 2011*), technology has transformed knowledge into a networked phenomenon—for better and for worse. Although humans have been enmeshed in our own social and economic networks throughout the history of our species, the technological networks of satellites, fiber optics, and smartphones have changed the ways we know, what we know, and what knowledge itself means. Understanding the way the structure and dynamics of networks affect participants and participatory cultures has become another essential literacy. Bits of lore that have been confined to specialists have now become universally useful—sometimes essential: knowing what a small-world network is, how social capital is a network property, why a diverse portfolio of strong and weak ties is socially useful, how bridging networks profits the bridge-maker, how happiness and diseases spread in social networks, and how claims of fact are buttressed, contested, debated, and linked into networks of knowledge.

The digital knowledge-production and knowledge-distribution tools we have today were inspired by people such as Vannevar Bush, J.C.R. Licklider, and Douglas Engelbart, who emphatically believed that new information tools were necessary to address the significant problems humans were making for themselves. These pioneers understood that knowledge is power, and engineers made knowledge-machines that distributed power to billions. What has not yet been understood is how to teach those billions to become active participants. The question of how to use our tools to deal with the problems we’ve created with our previous tools begs the question: “How many people really know how to use the tools that are suddenly available?” Literacies are infectious, but they need stewards, catalysts, and teachers—librarians—to spread fast and far.
CROWDSOURCING AN E-BOOK

Kristin Fontichiaro
font@umich.edu
Piece by Piece

The hush and artwork of historic churches transport me to a calmer time and place. To stand in the stony quiet, with the light streaming through the stained-glass windows onto my face, is one of the feelings I love the most. At first glance, stained glass windows have little to do with e-books. Certainly, when Buffy Hamilton and I took a look at the landscape of e-books and the emotional pulse of our profession in summer 2011, we often saw shadows more than jeweled light. Two spectres lurked: e-book licensing as a barrier to e-book adoption in school libraries, and the need to bring together diverse voices about school libraries.

The First Shadow: E-Book Licensing Issues

School librarians are proud to recognize and meet patron needs. As e-readers transitioned from niche novelties to middle-class mainstays, we saw potential: The low-cost ability to customize reading (by adjusting text size or appearance or by reading text aloud) could eliminate barriers between content and our English Language Learners or struggling readers. However, content access and licensing created new barriers that frustrated many of our professional colleagues—a crack in our metaphorical windows. We knew there was another potential librarian angle for e-books: publishing them. Self-publishing was on the rise; amateur and professional authors alike were stepping into the book distribution business. Amazon, Smashwords, and Vook were making this possible at little to no cost. Could we harness these free tools to create resources or publish student work? Could we use these e-publishing platforms to empower librarians to think of themselves as publishers instead of as victims?

The Second Shadow: The Future of School Librarians

Secondly, we were worried about the state of our profession. My state’s historical reliance on manufacturing had triggered a deep recession that began years before the 2008 national crisis. My ten-year career in school librarianship—like that of many of you—has never been free of worry. Buffy was facing staffing cuts, as well, with the loss of her clerk.

Even as budgets were being slashed, the need for quality school librarians has never been greater. Many students and teachers struggle to dive deeply and thoughtfully into the information ocean; instead, they doggy-paddle with hurried searches, casually selected resources, and skimmed content. In the rush to integrate technology, classic assignments like research papers were often replaced with facile slide presentations. Savvy school librarians were making impact, but would budgets and outdated perceptions of librarianship sink the ship? School librarians’ constant struggle was—and is—exhausting, and many of us felt anger and pain like jagged glass shards.

2011: A Tipping Point

Was AASL 2011 a tipping point? Had we, as one of my University of Michigan students mused aloud in class, lost the Golden Age of School Librarianship, or were we on the brink of a breakthrough in our collective understandings about what school librarians could do? Certainly, the prominence of informational text and research projects in the Common Core State Standards for English Language Arts was promising, if vague. But if we were "falling off a cliff" (Zmuda 2010), what was our role and responsibility in moving this urgent conversation forward?

If we could gather wide, diverse opinions from the school library community (including academics, practitioners, vendors, and others), and gather those results in a free e-book, we hypothesized that this could be a powerful pivot point. As e-book publishers, school librarians could be active agents, bolstering community energy, creating a forum for sharing best practices and big ideas, and starting a larger conversation about school librarians’ futures.

In moving forward, we divided the book up into "future of" categories:

- Gaming
- 21st-Century Learners
- Who and When Do We Teach?
- Reading
- Emerging and Multiple Literacies
- Networks and Organizations
- The Physical Library
- The Virtual Library
- Collaboration
- Collection Development
- Librarian Coursework and Professional Development

To welcome all voices, essays were limited to six hundred words, the approximate equivalent of a single-page print article. This, we hoped, would encourage new voices to submit and be brief enough that more-experienced authors could fit our project into their busy publishing schedules. To encourage diverse and new viewpoints, we pledged that all submissions would
be published as long as they met the word count, and the single editorial rule: “Everybody in, nobody out, unless you’re mean.” We encouraged people to use an authentic, personal voice and to tell a story, not build a case or craft a position paper.

Gathering Shards

Buffy was the project’s social-media lead. When her announcement launched the project, many colleagues reposted, re-blogged, or re-e-mailed the call for submissions. Within a few hours, the project had reached far beyond our individual social circles. In the meantime, I created the project’s Google Site containing:

- General information about the project’s goals and timeline
- A permissions form for submissions by minors (While we had hoped that students might submit essays, they did not.)
- Submission guidelines, including formatting guidance
- Ten Google Forms, one per submission topic
- Ten Google Docs, one per submission topic

Using the Forms, contributors would submit their contact information, agree to the Creative Commons license, and submit their essays. Notifications auto-informed us whenever new submissions were received. Every few days, I would review the Forms submissions and transfer the essays into the Docs, sequencing them. These rough chapters were linked from the project site, and I would tweet out the latest submission with a link to the chapter. This helped our authors see that we had received their work. In many cases, they publicized their submissions, which helped keep momentum going throughout the submission period.

You can view the site at <https://sites.google.com/site/ebookschoollibs>.

Receiving Submissions

Nothing could quite prepare us for the next few weeks. Our first submissions were received within twenty-four hours of launch, and our last entry snuck in the night before our scheduled publication. We were stunned by each submission’s authentic voice and unique perspective on school librarianship. Some essays, like that of Shannon Hyman, concentrated on a specific portion of a single lesson (“Should you need to be 16 to drive?”). Others, like that of Scholastic Library Publishing’s Evan St. Lifer, took a bird’s-eye view of school libraries. Submissions came in from as far away as Cyprus, New Zealand, and Australia, and from as close as my graduate classrooms.

Putting It Together

Because we “built” the manuscript as essays were received, it was relatively easy to finalize formatting for publication. (Our only frustration was forgetting to request a standard citation format!) We chose Smashwords.com as our host site for several reasons: free content hosting and distribution, automatic formatting of the book in numerous e-book and digital formats, and no need for special software. (We submitted a Word document.) You can learn more about the mechanics of the process (from gathering submissions in a Google Form to formatting for publication to the hosted e-book) at <http://www.smashwords.com/books/view/98070>.
Copyediting was a communal responsibility. We called upon our contributors, asking them to copyedit their work and that of the authors immediately preceding and following theirs. Finally, on a late weekend night before the AASL conference, we published an announcement on e-mail lists and social networks: School Libraries: What’s Now, What’s Next, What’s Yet to Come was available for free download at <www.smashwords.com/books/view/96705>.

Launch

Buffy’s social-media network, along with posts to relevant e-mail lists, announced that the book was available. Although we launched at 11:30 p.m. on a Saturday night, downloads began within minutes. For the first three days, there were at least 1,000 daily downloads. Now, nearly eleven months after publication, downloads have reached 8,500. With an authoring team of sixty had come a marketing and publicity team of sixty!

Within days, we were at AASL, startled to hear people talking about the book. People had, as we had hoped, downloaded it and perused it en route to the conference. Preconference attendees received a copy of Melissa Johnston’s essay on professional development. Professors told us they planned to incorporate the e-book into their courses. One told us that an alumna had printed it out for her administrator, saying, “See? It’s not just me who wants a more vibrant library. Everybody here does, too!” Laura Fleming, who had written about her work with the transmedia project Inanimate Alice <www.InanimateAlice.com>, saw an uptick in the site’s hits.

In the weeks that followed, the enthusiasm did not wane. One district used our crowdsourced e-book for professional development; another considered it as a potential model for their own e-book. Kafi Kumasi’s Wayne State students worked with young adults and librarians to create their own Smashwords book <www.smashwords.com/books/view/155184>. We were delighted that this collaborative labor of love was not vanity publishing; it was having impact.

Conclusion

Those who create stained glass have felt the rush that comes from assembling glass of disparate sizes and colors into a beautiful window—a rush that comes from realizing that the creation has more impact than any of its smaller parts. Many of us felt this collective power of creation as the book took flight in unexpected and delightful ways.

Standing inside a church, we feel the sunlight, dipped in color, on our faces. We are different because of the windows. And, similarly, when we look outward, with the glass as a colored lens, we see the world differently. On behalf of all who created School Libraries: What’s Now, What’s Next, What’s Yet to Come, thank you for helping us feel the light and see the world in new ways.

Kristin Fontichiaro teaches at the University of Michigan School of Information. She is editor of Navigating the Information Tsunami: Engaging Research Projects that Meet the Common Core State Standards, K–5 (Cherry Lake 2013) and coeditor, with Debbie Abilock and Violet H. Harada, of Growing Schools: Librarians as Professional Developers (Libraries Unlimited 2012).

Works Cited

We live in the midst of high-risk complex systems like global warming, a global economy, and global conflicts among civilizations and religions. The pace of change is faster than it has ever been. To succeed in this world our children need 21st-century skills. Reading is most certainly one of these.
But today reading keeps new company as it sits alongside digital tools that are transforming learning, innovation, and the production of knowledge. Furthermore, today a new “school system” exists outside of school in homes and in popular culture, a system where a new paradigm of 24–7 digitally fueled learning exists in direct competition with schools (Gee 2004). For many young people this paradigm is the source of the sorts of 21st-century skills that are not even on offer in many public schools. In this article I will argue that school libraries of the future will need to supply young people, especially those from less affluent homes, with digital tools, not as standalone entities by themselves, but as part and parcel of rich social activities and mentorship.

Let me give but one example out of many possible of this new paradigm of out-of-school learning (Gee and Hayes 2010, 2011). The Sims is the best-selling series of video games in history, a set of games where players build families and communities. Players can buy houses, clothes, and furniture in stores, or they can make items themselves with design tools that come with the game or by using other tools like Adobe Photoshop. Players can also create albums with pictures of their “Sims” (their artificial people) accompanied by text.

Some players leave the game to join interest-driven sites on the Web where they specialize in designing landscapes, houses, clothes, or furniture, which they then share with other players to use in their games. Enthusiasts also give each other challenges to play the game in a certain way (Gee and Hayes 2010). For example, one player who called herself “Yamx” gave other players the following challenge on one of many interest-driven sites devoted to the Sims:

**Sims 2: Nickel and Dimed Challenge**

This challenge was inspired by, and is named for, the book *Nickel and Dimed* by Barbara Ehrenreich (which has nothing whatsoever to do with Sims, but is nevertheless highly recommended). The idea is to mimic, as closely as possible, the life of an unskilled single mother trying to make ends meet for herself and her kids.

**The Goal:**

Raising your kids successfully until they’re old enough to take care of themselves. If you can get all children to adult age without anyone dying or being taken away by the social worker, you’ve made it. (x3Carli 2010)

Ehrenreich’s 2001 book is about how hard it is to be poor, how much struggle and intelligence it actually takes. Simulating the life of a poor single parent is by no means easy in the Sims. The game is a commercial entertainment game and since being poor is not fun, living a life of poverty in the game is difficult. So Yamx wrote a long “manual” that stated the rules of the challenge and how players could adapt their game play and the technology of the game to better represent the life of a poor single parent. She and the others had to think carefully about how the rules of play would work and how the Sims as a piece of simulation software worked. They debated these matters as a group and made changes as they were needed. Players who “won” the challenge had to use the album function that comes with the Sims to write a sort of graphic novel about the story of their family and about how the rules of the game and the Sims as technological simulation interacted with that story.

Challenges like this are played by people of all ages. In the one above, many mothers and daughters played the challenge together. In most cases today video games are part of a larger social system where players of all ages join an interest-driven passion-fueled space on the Web, spaces I have elsewhere called “affinity spaces” (Gee 2003, 2004, 2007; Gee and Hayes 2010). In these spaces players take the game further to engage in challenges in a game like the Sims, to explicate the physics in a game like Portal, to work out the statistical underpinnings in a game like World of Warcraft (an activity called theory crafting), or to redesign (“mod”) the game in a game like Half-Life, in the act sometimes designing whole new games. Games today are a combination of software (the “little g game”), and social and learning activities around the game (the “meta-game”). The two together I call the “big G Game” (Gee and Hayes 2011).
Where Do School Libraries Fit In?

Before digital media appeared on the scene, good libraries served, as they still do today, as a great social equalizer for reading. The sheer number of books to which a child has access is a strong predictor of how good a reader that child becomes (Krashen 2004). Affluent children often have a great many books at home. Less well-off children have had to rely on the library at school and down the street. The quality of these libraries correlates with children’s scores on comprehension tests, including NAEP (National Assessment of Educational Progress) assessments, often called the “Nation’s Report Card” (Lance 2004; McQuillan 1998).

Poor children are still behind in reading, so quality libraries are still crucial. But poor children are now also falling behind in new and important 21st-century digital media skills. Access to digital media—including, to the surprise of many, video games—is now crucial too. Just as with books, the more the better, but with one very important proviso. What is crucial for a child is not just having access to digital media, but also having access to good mentoring around that media.

Susan Neuman, a former Deputy Secretary of Education, and her colleagues have shown, in a study on digital media in libraries, that children from well-off families benefit more from digital media than do children from poor families (Neuman and Celano 2006). Well-off parents mentor their children to use such media to challenge themselves, persist past failure, and engage in challenging reading related to their digital interests. This is a form of mentorship librarians of the future will need to offer to many children whose parents are not with them at the library or who do not get such mentorship at home.

What Are the Benefits to Students?

Just as many different kinds of print media exist, many different kinds of digital media also exist. Video games are rich with possibilities. Good video games are first and foremost complex and challenging problem-solving spaces. While people often think all video games involve shooting and killing, many involve a wealth of other things.

Civilization, Age of Mythology, and Rise of Nations force players to think on a large scale about history, development across time, and civilizations. SimCity, The Sims, Sim City Societies, and even Animal Crossing for very young children ask players to build and sustain cities and communities. Games like Yu-Gi-Oh and Pokemon engage young children with complex language, numeracy, and strategic thinking. Age of Mythology players regularly read and write about mythologies...
across the world. Some gamers write strategy guides for the games they play—technical writing at its best—and share them on the Web.

A massive multiplayer game like the popular World of Warcraft requires players to engage in intricate collaboration and even to organize themselves into the equivalent of today’s high-tech “cross functional teams.” On such teams each member must be a specialist capable of understanding and integrating with each other team member’s different specialty. Constance Steinkuehler at the University of Wisconsin has argued that World of Warcraft players even engage in “scientific thinking” when they test out game theories, strategies, and new tools—some of which they design themselves—and discuss their innovations with each other on discussion boards (Steinkuehler and Duncan 2008).

In Spore, designed by the game genius Will Wright, players spend as much time designing creatures, towns, cities, and terraforming planets as they do playing the game. In fact, thinking like a designer is the central “game mechanic” in the game, as it is in Sony’s Little Big Planet. Furthermore, educators are developing learning games for 21st-century content and skills, games such as David Shaffer’s “epistemic games” at the University of Wisconsin. In Shaffer’s games—played partly on screens and partly in the real world—young people act, think, and learn like urban planners, engineers, arbitrators, or science journalists (Shaffer 2007).

But, remember that what is really at stake for higher-order learning is what I call the “Big G Game,” that is, the game as a piece of software integrated with all the social activity around it organized for participation, production, and proactive learning. Games are digital invitations to rich social interactions. In the case of reading we expected libraries to stock the books that disadvantaged kids could not own. Today, they are the perfect places to stock not just the games but the big G Games—the skills and mentoring around digital media—that disadvantaged kids aren’t getting. Indeed, this rich environment was always and still is important for books as well—not just stocking the books but also providing disadvantaged kids with the hive of social activities around books, leading to higher-order literacy and learning. Most school librarians already do their best to provide a rich book-related milieu; extending this rich environment to include digital media is also essential. Otherwise, we will open up a large digital gap to go with the reading gap we are already trying to close. School and public libraries are good places to remediate both gaps at one and the same time.

James Paul Gee is the Mary Lou Fulton Presidential Professor of Literacy Studies at Arizona State University.

Works Cited


I admit it. I am a book stalker. Whether it’s riding the train, waiting in an airport terminal for a delayed flight, or walking through the hallways at school, I’m always stealing glances at the books people are reading. Part of my fascination is professional, looking to learn about titles I may have missed. Part of my fascination is a personal curiosity about people’s reading lives and preferences.

One of the sadder side effects of the trend toward e-reading is the dampening of my stalking habits. E-readers aren’t nearly as transparent. It’s much easier to start a conversation with “What do you think of that latest John Green book?” than “How do you like your Nook Simple Touch?” Despite all of the benefits of e-reading, I can’t help but wonder if some of the impromptu social benefits of reading have been lost.

At the same time, we might champion the very thing that frustrates the stalker in me: e-books give readers privacy in new ways. As librarians, we have commitments to the rights of readers and part of that commitment includes the privacy of reading choices. In that regard, e-readers are a boon.

Or are they? I remember the first time I heard that e-books may not, in fact, offer the kind of privacy that we would hope for. I was listening to a lecture by Ted Strifhas, author of The Late Age of Print, focusing on the way Amazon might be using reading data from Kindle devices. Strifhas pointed out that the Kindle offered the ability for readers to highlight and annotate text. While this might seem like a relatively benign feature, similar to what readers of paper books can do, Strifhas pointed out that the same pathways that download your Kindle books upload your personal annotations. There is no way for us to control what Amazon does with this information. A recent Wall Street Journal article, “Your E-book is Reading You” (June 29, 2012) reported that 18,000 people had highlighted the same passage in the second book of Suzanne Collins’s Hunger Games series. What is Amazon’s commitment to reader privacy? Amazon declined to comment about the ways it uses data for the article.

Questions abound: Do our readers know that they are yielding their personal information as they jot notes in the virtual margins? Although we can protect their library records in certain ways, how can we protect them from Amazon?
As more and more students bring these devices to school, do we have a professional responsibility to share these insights with students?

I’ll confess, until I heard Striphas speak, I had thought of e-books as simply books presented on a device. However, as this example demonstrates, e-books are far more than paper books with the cover torn off. Although the affordances of e-books are many, at the same time, we are finding out new limitations and cautions that are worth sharing.

Since learning these insights about e-books, I’ve been watching the field a bit more carefully. As many of you know, all e-books are not created equal. In fact, more than a single category books on a device, there are many types of e-books. Along with this comes new ways of categorizing these resources. One way to organize them is based on the level of extra features an e-text adds to the book. Some e-books offer little more than the print text, while others are a virtual circus of enhanced features. Preliminary research from the Joan Ganz Cooney Center indicated that these “enhanced e-books” offer little in the way of increasing literacy learning for young readers, and may actually detract from understanding the text (Chiong, Takeuchi and Erickson, 2012).

Recent research also suggests that gender may play a role in the benefits of e-books in literacy. A small study from Southern Methodist University suggested that middle school boys who are reluctant readers reported higher reading self-concept and reading engagement after reading e-books (Miranda, Williams-Rossi, Johnson, and McKenzie, 2011). Interestingly, researchers reported e-books as having the opposite effects on girl readers. What do these insights mean for the way we select and use these resources with students?

In a more personal observation, I’ve wondered how gender and technologies play out in other ways as well. For example, I’m also fascinated by e-book apps. I recently conducted a professional learning class with elementary and middle school teachers. We inquired together into the intersections between technology and picture books. For part of this work, I downloaded a bunch of picture book apps, most of which were recommended through major reviewing media. We had a great time playing with all of the apps and trying to think about how they would fit into literacy learning of our students. But one question, posed by a colleague, stayed with me long after that workshop. My colleague noticed that most of the apps we listened to featured female voices reading the texts. We wondered, together, what this might mean for students interacting with these apps. What might it say about who counts as a reader and as a reading mentor?

Although this was a small group of apps, chosen somewhat randomly, we wondered what the overall makeup of readers on e-book apps might be. Just as we know that more diversity in literacy mentors makes a difference, we wondered if considering vocal diversity in selecting apps would enrich the experiences of students as they learn from these new technologies.

E-reading opens up both opportunities and quandaries. We are still at the start of learning how these technologies affect comprehension, literacy, and reading lives in general. Much of our focus has been on getting these technologies into student hands, and rightfully so. But as we continue to increase access for students, we also have to take these subtleties into account. For many reasons, e-reading offers exciting benefits. Still, as with any technology, we have to think about what we might be giving up in addition to the new possibilities it opens.

And as for me, I’m still keeping an eye out for book covers, wishing that new e-readers will somehow allow me to continue my book stalking ways. At the same time, I hope that future e-reading devices, and the school librarians that provide access to them, continue to expand the social aspects of reading while honoring privacy, diversity, and the rights of readers of all ages.

Elizabeth Friese is an educational researcher studying the role of school libraries in developing youth literacies. She is interested in youth reading and writing, creativity, and digital composition. She teaches courses in children’s literature, writing pedagogy, and digital literacies.

Works Cited

A recent study showed that school librarians are more likely to use social-networking tools for personal, professional, and classroom use than teachers and principals.

LEARNING FOR LIFE (L4L) IN THE
Socially Connected School Library

Karen Gavigan
kgavigan@mailbox.sc.edu

Long gone are the days when a socially connected school library was a facility with a hard-line telephone and the faculty coffee pot.

In contrast, today’s school libraries are buzzing with social-networking activities provided through the use of computers, e-readers, and other mobile devices. Nationwide, many school librarians are providing students and faculty with opportunities to use Web 2.0 in appropriate and effective ways. A recent study showed that school librarians are more likely to use social-networking tools for personal, professional, and classroom use than teachers and principals (Whelan 2009). The school librarians using these tools are assuming leadership roles to provide students and teachers with authentic learning experiences in social media. The AASL “Position Statement on the Role of the School Library Program” is “the school librarian provides leadership in the use of information technologies and instruction for both students and staff in how to use them constructively, ethically, and safely” (2012).

Another role of 21st-century school librarians is to ensure that participatory learning, such as social networking, is based on state and national standards. For example, the following AASL Standards for the 21st-Century Learner support the use of social networking and collaborative relationships in schools:

3.1.2: Participate and collaborate as members of a social and intellectual network of learners.

3.1.4: Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.

4.1.7: Use social networks and information tools to gather and share information.

4.3.1: Participate in the social exchange of ideas, both electronically and in person. (2007, 6, 7)

The standards further state a common belief on which the standards are based: “Today’s students need to develop information skills that will enable them to use technology as an important tool for learning, both now and in the future” (2007, 2). By following these AASL standards, school librarians can create collaborative learning communities that help students become responsible digital citizens and lifelong learners.
The following Web 2.0 social networking and communication resources are just some of the ways school librarians are connecting libraries, classrooms, students, and teachers worldwide:

- Blogs
- Book review sites such as aNobii, Goodreads, LibraryThing, Shelfari, and weRead
- Cloud storage sites such as Dropbox and Google Docs
- Nings
- Online communities for educators such as Classroom 2.0, edWeb.net, Tapped In, TeachAde, and WeAreTeachers
- Skype
- Social learning networks for teachers and students such as Edmodo
- Social-networking sites such as Facebook and Myspace
- Twitter
- Video-sharing sites such as SchoolTube, TeacherTube, and YouTube
- Wikis

Many of these tools, such as Facebook, Skype, Twitter, and YouTube, are already being used frequently and successfully by students outside of school with their networks of friends and family. School librarians can capitalize on the popularity and power of social networking by integrating these types of collaborative technologies into school settings.

Whether blogging, Facebooking, texting, or tweeting, today’s learners are fully engaged in social media in their daily lives. Social networking is an excellent medium for providing students with authentic learning experiences in school libraries and classrooms.

School librarians can capitalize on students’ out-of-school experiences by providing them with a socially connected library that incorporates Web 2.0 resources and expands students’ opportunities to communicate (as lifelong learners) in today’s digital world.

Karen Gavigan is an assistant professor in the School of Library and Information Science at the University of South Carolina. She is the chair of the AASL Standards and Guidelines Implementation Task Force.

Best Websites for Teaching and Learning

<www.ala.org/aasl/guidelinesandstandards/bestlist/bestwebsites>

AASL’s “Best Websites for Teaching and Learning” accolade honors websites, tools, and resources of exceptional value to inquiry-based teaching and learning as characterized in the Standards for the 21st-Century Learner. One of the categories for the list of award-winning websites is Social Networking and Communication.

Digital Learning Day

<www.digitallearningday.org>

AASL, in collaboration with the Alliance for Excellent Education and other organizations, sponsors national Digital Learning Day in February. Digital Learning Day celebrates innovative digital teaching practices that make learning more engaging for today’s learners.

TED-Ed: Lessons Worth Sharing

<http://ed.ted.com>

TED is a nonprofit organization whose videos “Ideas Worth Spreading” have generated a lot of buzz in the education world. The organization’s newest site “TED-Ed: Lessons Worth Sharing” allows teachers and students to use TED tools to combine online video with lessons and then share them with the world.

Transliteracy and the School Library Program

AASL 2012 Fall Forum

<www.ala.org/aasl/conferencesandevents/fallforum/fallforum>

What better way to learn how to effectively use social media in your school than to learn about best practices from school librarians across the nation? AASL 2012 Fall Forum, October 12-13, is designed to help school librarians develop strategies for integrating transliteracy skills—including digital social networks—into subject areas across the curriculum.

Works Cited


Learning a particular social-media platform isn’t enough; students need skills in creating multimedia content, evaluating the metacontext of a platform, and participating in a community for a certain purpose.

PRODUCING AND CONSUMING CONTENT:
Participating in the Online Social Culture

Darcy Pattison
cbcknowledgequest@cbcbooks.org

In considering social media in the classroom, teachers and school librarians are faced with a technical challenge. As 21st-century learners are immersed in social media, they must learn to navigate multiple platforms while maintaining the attitude of inquiry, critical thinking, and discussion—sharing information and, ultimately, acting in the real world. Yet, each new platform appears to require new ways of working. How do we focus student’s energy on the content of social media, rather than the particulars of using one platform?

Students as Producers of Content
Limited Skill Set Required

We often talk about differences among social-media platforms, but first we need to recognize they all have one thing in common. They all communicate by means of the same types of content: text, audio (voice or music), photos, video, or a combination of media. In the simplest terms, we have limited choices of how to communicate online: by auditory, visual, or audio-visual means. This limited set of choices is actually good because it means a skill set, such as editing photos, can carry across multiple platforms. This reality also helps us teach better because students need limited skill sets across a limited number of communication methods.

Students need effective strategies for dealing with social media. The main strategy is for students to see themselves as both producers and consumers of content.
Likewise, students need to understand when one medium is better than another for communicating a message. It’s pointless to write an essay if a photo can communicate the same thing at a glance. Why take the time to create a video, when writing a simple business letter will do the job?

Social-media lessons should help students develop skills in creating each type of content. Remember that just as some children are auditory, visual, or kinesthetic learners, they will have preferences in how they communicate. Past experiences may also give them strengths and weaknesses in one area or another. But effective online communication means flexibility of media.

**Content + Social-Media Platform**

Producing content for social media comes down to an analysis of the communication goals and the strengths of each social-media delivery platform. Here are some typical questions:

- What is your communication goal? It might be to entertain, inform, or educate.
- What is the best medium for this task? For example, Pinterest specializes in photos; YouTube, in video. Twitter demands short text, only 140 characters long; podcasts let you talk or play music at will; blogs combine photos, video, and text in any proportions.
- When a social-media platform supports various media, what are the strengths of that social platform? Presentation of photos and video is Facebook's strength, but short text can be used effectively, too.

One essential skill is the ability to analyze a social platform. For example, Denver math teacher Sara Cougill says, "Facebook is a completely different medium from Pinterest in my online life, serving different purposes. If you want to know what I’m doing, check Facebook. If you want to know what I’ve been thinking about lately, check my Pins on Pinterest <http://pinterest.com/saracougill/pins>" (2012).

Students should also learn that different platforms have different audiences. For example, LinkedIn focuses on making connections for the purpose of business, while Facebook is a better choice for making and maintaining social connections.

Finally, students should learn to study a particular social-media platform. While many students jump in and start playing around, the way a platform really operates may not be obvious. They need to read tutorials, especially the official tutorials, but also the popular tutorials from the geeks who have studied this platform in depth.

For example, for a couple years publicity gurus said that an author of children's books should have a Facebook Fan Page. Recently, Facebook revealed that only about 16 percent of Fans ever see a Facebook Fan Page post because of an algorithm called Edge Rank. An Edge is any interaction between a person and Fan Page: reading a post, commenting on a post, liking a post, or sharing a post. The type, the frequency, and the recency of your interactions determine whether you’ll see a particular post. These statistics question the effectiveness of a Fan Page when it takes so much time to develop a strong Edge Rank. In other words, students’ assumptions about a social-media platform may be incorrect, and they need to study it to discover its hidden pitfalls and best practices.

**Students as Consumers of Content**

Likewise, as consumers of content, students need to evaluate the messages received via social-media platforms. Students need to consider:

- Who is it from?
- What is the purpose of this communication?
- What are they asking me to do?

**Critical Thinking**

Key to using social media is the ability to stand back and evaluate the credibility of a source of information, apart from the actual content. While developing this
critical attitude toward traditional media is important, the attitude is even more crucial in the context of using social media because information didn’t go through the vetting process of formal publication. Can the student corroborate the information from multiple sources? How recent is this information? Are the author’s credentials appropriate? In other words, the ability to step back, to become aware of the metatext or metacontext is more important than ever.

Collaborative Thought and Action

Using social media also allows for collaboration in thinking.

For example, wikis, group blogs, surveys, or even Facebook groups (private or public) are platforms for creating, curating, and disseminating a group’s knowledge. Students need to see these collaborative efforts as vehicles for making real-world decisions and solving real-world problems. For example, a wiki about the school’s senior prom might prove an interesting assignment in problem solving and encouraging community involvement. Parents could sign up as chaperones; students could suggest bands; teachers could post dress codes; or committees could collaborate on decorations and refreshments.

Helping Students Pull It All Together

Online learning takes place in the midst of a plethora of communication purposes. Learning a particular social-media platform isn’t enough; students need skills in creating multimedia content, evaluating the metacontext of a platform, and participating in a community for a certain purpose. Only then will 21st-century learners be equipped to make informed decisions about their online activities.

Darcy Pattison is an author of both picture books and novels, and has been published in eight languages. Her books include Desert Baths (Sylvan Dell 2012), Prairie Storms (Sylvan Dell 2011), 19 Girls and Me (Philomell 2006), Searching for Oliver K. Woodman (Harcourt 2003), The Journey of Oliver K. Woodman (Harcourt 2005), and The Scary Slopes (Stone Arch 2011). Kirkus Reviews, Bulletin of the Center for Children’s Books, Child magazine, Nick Jr. Family Magazine, and various state awards’ reading lists have recognized her work for excellence. As a writing teacher she is in demand nationwide to teach her Novel Revision Retreat. She is the 2007 recipient of the Arkansas Governor’s Art Awards’ Individual Artist Award for her work in children’s literature.

Helping Students Pull It All Together

Online learning takes place in the midst of a plethora of communication purposes. Learning a particular social-media platform isn’t enough; students need skills in creating multimedia content, evaluating the metacontext of a platform, and participating in a community for a certain purpose. Only then will 21st-century learners be equipped to make informed decisions about their online activities.

Darcy Pattison is an author of both picture books and novels, and has been published in eight languages. Her books include Desert Baths (Sylvan Dell 2012), Prairie Storms (Sylvan Dell 2011), 19 Girls and Me (Philomell 2006), Searching for Oliver K. Woodman (Harcourt 2003), The Journey of Oliver K. Woodman (Harcourt 2005), and The Scary Slopes (Stone Arch 2011). Kirkus Reviews, Bulletin of the Center for Children’s Books, Child magazine, Nick Jr. Family Magazine, and various state awards’ reading lists have recognized her work for excellence. As a writing teacher she is in demand nationwide to teach her Novel Revision Retreat. She is the 2007 recipient of the Arkansas Governor’s Art Awards’ Individual Artist Award for her work in children’s literature.

Helping Students Pull It All Together

Online learning takes place in the midst of a plethora of communication purposes. Learning a particular social-media platform isn’t enough; students need skills in creating multimedia content, evaluating the metacontext of a platform, and participating in a community for a certain purpose. Only then will 21st-century learners be equipped to make informed decisions about their online activities.

Darcy Pattison is an author of both picture books and novels, and has been published in eight languages. Her books include Desert Baths (Sylvan Dell 2012), Prairie Storms (Sylvan Dell 2011), 19 Girls and Me (Philomell 2006), Searching for Oliver K. Woodman (Harcourt 2003), The Journey of Oliver K. Woodman (Harcourt 2005), and The Scary Slopes (Stone Arch 2011). Kirkus Reviews, Bulletin of the Center for Children’s Books, Child magazine, Nick Jr. Family Magazine, and various state awards’ reading lists have recognized her work for excellence. As a writing teacher she is in demand nationwide to teach her Novel Revision Retreat. She is the 2007 recipient of the Arkansas Governor’s Art Awards’ Individual Artist Award for her work in children’s literature.