



# Activating Digital-Media-Global Literacies and Learning

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by Heidi Hayes Jacobs

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If we are looking for a clear sign that our notion of school needs to be upgraded, we need to look no further than the contrast between the lives of our students in school with their lives outside of school. Or we could look at our own lives. Outside of school most of us interact with a global social network on a smartphone with no concern for time zones. When we walk into a school, however, most of us are back in 20th-century buildings operated on a 19th-century schedule.

In this contrast lies our direction.

Our curriculum, the nature of most of the assessments we value, and the schedules that frame our interactions with students do not look significantly different from what they looked like 20 or 30 years ago. Small shifts are taking place. In a few independent schools, there are even signs of the seismic. Yet in most schools we still hold dearly to curriculum from the last century, even while we noodle around with new tools.

The good news is that, to some extent, the transition to what we've come to call a 21st-century education (by which we really mean an early-21st-century education) is occurring. Changes are seeping into our classrooms through SMART Boards, websites, and social media. Although we

hear often about teacher resistance to change, in my work around the United States and overseas, I do not see resistance from teachers in most independent schools. They do not question the need to move toward modernization. Rather, they ask how they can best make the transition.

My response to them is what I'll reiterate here: In order for our schools to become fully engaged 21st-century schools, we need to concentrate on deliberately shifting and upgrading curriculum, assessment, and instruction. By "upgrading," I mean the strategic replacement of dated practices with contemporary approaches that achieve the sort of deep learning that research says matters most. In particular, we can — and should — make this transition through the integration of new literacies: digital, media, and global.

## **A Word Problem**

Oddly enough, one of the first challenges schools face when discussing programmatic changes is the need to reconsider how we're using a ubiquitous word in education reform: technology.

As a term, "technology" is too often used as a broad brushstroke that suggests a school is a modern one. But such an all-encompassing definition can actually impede the evolution of a school. Having SMART Boards, tablets, smartphones, and high-tech media centers does not make a school a 21st-century learning environment. One-to-one laptop programs do not necessarily mean that students are engaged in relevant and timely content. Cherry picking apps to include in a given assignment, if not connected to a larger vision of what a 21st-century school should be, can become a distraction, a teaching diversion, an obstacle to change.

In his provocative and engaging Substitution Augmentation Modification Redefinition (SAMR) Model, educational consultant Ruben Puentedura defines the employment of the word "technology" in schools through a continuum from "slight improvement" to "transformational:"

*Substitution* — in which a computer technology is used to perform a task done previously without a computer.

*Augmentation* — in which computer technology improves upon some existing educational process.

*Modification* — in which computer technology allows for significant task redesign of an existing educational process, with the potential for deeper learning.

*Redefinition* — in which computer technology allows for new functional tasks that were previously inconceivable.

It doesn't matter how many computer-related devices we have in school. What matters is how we employ technology toward a large learning goal — toward a new vision of education. When I suggest the cultivation and integration of digital, media, and global literacies, I do so because I

think it will lead us to the best use of technology for deeper learning. These new literacies should infiltrate curriculum, assessment, and instruction. Their cultivation needs to be a seminal focus of our professional development, modeled by teachers, and employed by school leadership. In traditional print literacy, it is understood that a teacher needs to be a highly competent language maker and user in order to prepare students well. Indeed, one can't get hired as a teacher without this skill. Similarly today, each teacher needs to work to become a connected educator who employs the three literacies in his or her professional practice — to be both a model and guide for students.

## **Digital-Media-Global Literacies and Learning**

The best way to formally infuse these literacies — digital, media, and global — into our learning settings is by strategically upgrading long-existing practices with contemporary approaches. This is not to say that I advocate throwing out all traditional strategies, for the new literacies sit on the shoulders of traditional print literacy. If a child cannot read a book, then he or she cannot read a computer screen. I'm saying that changes in our practice require conscious, deliberate effort.

In particular, we need to understand not just how to approach these literacies in our teaching but also understand how their intersections provide opportunities for a higher level of teaching and learning — especially regarding project-based learning and assessment.<sup>2</sup> The intersections provide some of the best opportunities for actionable curriculum design and instructional delivery.

## **Digital Literacy**

There are four actionable capacities that support the digitally literate learner. As with traditional print, a child needs to develop<sup>3</sup> the following:

**Accessing Capability** — Students need the skillsets to access the Internet and other digital tools. Akin to how phonemic awareness allows students to access language, the abilities to keyboard and to use touch and voice-activated entry points are central to launching a learner into digital learning. On the primary school level, consistent policies for handling a tablet and knowing fundamental terms such as icon, settings, and browser can be taught alongside traditional words. Many of our upper school students currently rely on a “hunt and peck” approach to typing rather than keyboarding, which is an inhibiting factor to fluid coding skills.

**Selection Capability** — A sophisticated reader knows how to select quality books. Similarly, a sophisticated Internet researcher knows how to select quality sites and sources. Rather than toss our students into a sea of apps and websites and wish them luck, our task is to help them organize, sort, and categorize apps and websites through tagging. This allows learners to identify, vet, and assign different labels to their apps and websites. When a student interacts with print text and organizes it — the text becomes “theirs.” I encourage teachers and students to identify meaningful tags in order for students to really own their learning.

**Curation Capability** — The concept of the information curator is borrowed from the important work of museum curators, who select and present the best examples of art or history. In education, curation describes the act of building a quality teacher-built website full of pertinent links with which students can deepen and extend their learning. With so many free website tools (Wix, Weebly, Yola, Wiki), it is easy for students to see that the classroom website is an extension of the classroom's four walls. I would encourage each teacher to create a clearinghouse to help organize their selected and tagged apps for curriculum courses and units. On our own clearinghouse ([www.curriculum21.com/clearinghouse](http://www.curriculum21.com/clearinghouse)), we have literally hundreds of recommended curriculum-friendly resources from teachers worldwide that have been vetted and tagged. The ongoing curation of a classroom website with a clearinghouse should be considered essential. It extends the classroom's four walls and makes learning available 24/7.

**Creation Capability** — In its mission the Partnership for 21st Century Skills identifies one of the essential four C's of learning as "creativity."<sup>4</sup> The capacity to select digital tools for creating solutions to problems is the highest of capacities. Whether having each student create a digital portfolio of his or her work using LiveBinders, using Conduit to create his or her own app, or employing Wolfram|Alpha to carry out statistical investigations, we want our students to employ tools to create solutions to problems. To do this we need to design assessment projects requiring creative product and performance solutions and teach learners how to identify and use these tools.

## **Media Literacy**

When considering how to develop media-literate learners, it is useful to draw from a classical definition of literate: the ability to comprehend meaning through reading and listening and the ability to express oneself through writing and speech. Drawing from the language used in New Zealand's national curriculum, I apply the terms receptive and generative to modern media formats.<sup>5</sup>

Receptive capacities require that learners can make meaning from a variety of multimedia formats and do so critically. Much of modern media — television, film, or a computer screen — encourages passivity. To be media literate, however, our students need to engage actively, to know how to analyze both the media source and its content. "As a media literacy educator, I maintain that while our students may be media savvy, most are not media literate," writes Frank W. Baker, the 2013 recipient of the Jessie McCause Award from the National Telemedia Council for outstanding contributions to media literacy. "They tend to believe everything they see, read, and hear; they do not possess healthy skepticism."<sup>6</sup> Baker has created the Media Literacy Clearinghouse, which provides resources to aid teachers in promoting rigorous analysis of all media formats.

A significant concern is the ease with which students employ their browser to search for information and select the first site that pops up on the screen. In the same spirit of developing informed media users, we need to help students learn how to "read" a website to determine the validity of its perspective and the veracity of the information and include that understanding in any website reference they may make. The notion of common use or the purchased ranking of a

website semantic search is lost on learners who have not been coached on how to refine the use of search engines.

Google has created a set of lesson plans, *Google Search Literacy Lesson Plans on Searches*,<sup>7</sup> to assist teachers.

Generative capacities refers to the technical and creative skills needed for students to express themselves through an array of media formats. To do so students must learn how to create visual images, moving images, and audio messages through a range of readily available applications and hardware. Twenty years ago a conversation on media making would have centered primarily on filmmaking and audio recording, but now there is an extraordinary array of creative media-making applications available to classroom teachers. Students can employ the software built into their laptops or tablets, such as *Movie Maker*, *iMovie*, or *GarageBand*. There are easy-to-use tools such as *FlixTime*, *Animoto*, *Glogster*, *Softpedia*, *UJAM*, *Blendspace*, *GoAnimate*, and *Stupeflix* that also allow students to generate media products that can serve as assessment products.

For students to be effective media makers, teachers need to beef up their own skillsets in order to coach students and set up media rubrics to ensure quality products. The Jacob Burns Film Center (JBFC) in Pleasantville, New York, is a 27,000-square-foot facility solely dedicated to developing media-literate teachers and students. Its mission is to be “at the center of an international movement to raise a generation of students equipped and inspired to comprehend, analyze, and create with the tools of 21st-century communication: image, sound, and story.” Of particular interest is the JBFC Learning Framework, a cumulative model with six stages of progression on a K-12 continuum. Researchers Emily Keating and Holen Sabrina Kahn describe the model as a “group of overarching learning outcomes and concepts for that particular developmental stage, which address components of visual storytelling, global connections, perspective, context, structure, and the subjectivity of the viewer.”<sup>8</sup>

### **The Media-Literate Teacher**

I find that the Jacob Burns Film Center (JBFC) professional development offerings include refreshing titles that many independent school educators would find of interest. For example:

*Fact, Fiction, and the Space Between: The Art of the Real* — focusing on documentary filmmaking

*The Joy of Writing: See Hear Feel Film* — for third-grade teachers laying groundwork for media studies

*From Viewing to Doing, Reel Change* — to assist teachers wishing to integrate multimedia into their classrooms

*From Viewing to Doing: Stop Motion Animation* — a step-by-step program employing tools found on laptops

## **Global Literacy**

To help students cultivate global literacy, the Global Competence Matrix is an excellent field-tested framework based on the work of a task force commissioned by the Council of Chief State School Officers (CCSSO) and the Asia Society. A free downloadable book with detailed examples is available on the Asia Society website.<sup>9</sup> In particular, the following four capacities are accessible and applicable to all subject areas and age groups.

A student who is globally literate has the competence to:

*Investigate the World.* The study of geography is making a comeback, as we work with our learners on recognizing the relation between people and place. Certainly, Google Earth offers us a dynamic tool for seeing multiple views of the planet. An example of how students might investigate world demographics is through the world cartograms created at [www.worldmapper.org](http://www.worldmapper.org). Rather than accurate maps of global land masses, these maps are deliberately distorted visual renditions of the globe based on statistics.

*Recognize Perspectives.* Engaging our students in reading about concerns of people worldwide is essential for global literacy. To this end, a remarkably agile tool is [www.newspapermap.com](http://www.newspapermap.com), by which a student can go to any country in the world, open up a local newspaper, and have the option of translating it into more than 30 languages.

*Communicate Ideas.* To understand global differences and similarities, students need to connect with other students around the world in real time. Skype in the Classroom is one resource for successful point-to-point interactions. Google Hangout also provides opportunities to connect with 10 global locations simultaneously.

*Take Action.* An outstanding example of how students can take action globally is the international Student News Action Network. The service was created by students and faculty at the Washington International School (District of Columbia) with support from TakingITGlobal and schools worldwide that participate as news bureaus. Another approach to taking action, as many independent schools do, is to travel with students to international sites where the students can engage in real service and shared learning.

## **Making the Commitment to Transformation**

How do we formally make meaningful transformations to curriculum and teaching? Educators Janet Hale and Mike Fisher note in *Upgrade Your Curriculum: Practical Ways to Transform Units and Engage Students* three possible entry levels to assist teachers with replacing dated practices with contemporary approaches: (1) a unit of study; (2) a unit of study's instructional delivery plan; and (3) a series of lessons that support the instructional plan.<sup>10</sup> The appeal of their

suggestion is that it provides some flexibility as to how to engage teachers in upgrading their lessons into 21st-century lessons and, at the same time, points to a formal commitment to the process of focusing on digital, media, and global literacy.

The intersection of the three literacies can be found most often in project-based learning opportunities in which teachers deliberately weave the three literacies together. My experience is that teachers have found it most productive, when creating a new curriculum unit, to look for the ways in which the three literacies intersect and overlap each other.

A quick example. When a sixth-grade teacher in Massachusetts is working with her students on a unit called Aftermath: Natural Disasters, she deliberately elected to upgrade the unit design when studying wildfire activity, focusing on:

- Research with the digital tool ArcGIS Interactive Mapping.
- Using Movie Maker to create a documentary about worldwide wildfire breakouts and containments strategies.
- Having students Skype with a fifth-grade class in Australia, the most wildfire-prone country in the world, to learn about their experience with wildfires.

The technology here has a clear and real purpose. The students' resulting video documentary reflected not only information about wildfires but also strategies to reduce the possibilities for wildfires in their own area. These sixth-graders are under the tutelage of a contemporary teacher who is working at her ability to expand learning possibilities.

It's always enjoyable to project out 20 years and imagine what schools will look like — and how we can best teach our children to thrive personally and professionally. But the first step is to ensure that we've brought our schools up to the present. When the question emerges: What is it we want our students to know and be able to do in the years to come?, I would counter that we are limited by what we know and are able to do now. Pushing ourselves to upgrade our own skillsets — then employing them to help our students strengthen their own digital, media, and global literacies — is a critical way to prepare ourselves for the bigger conversation about the future.

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## Notes

1. Ruben Puentedura, "Frameworks for Educational Technology: SAMR, the EdTech Quintet, and the Horizon Report," Retrieved from [www.hippasus.com/rrpweblog/archives/2014/04/27/FrameworksForEducationalTechnology\\_SAMRAndTheEdTechQuintet\\_CAIS.pdf](http://www.hippasus.com/rrpweblog/archives/2014/04/27/FrameworksForEducationalTechnology_SAMRAndTheEdTechQuintet_CAIS.pdf), 2014.

2. For a more detailed investigation, see Heidi Hayes Jacobs, "Curricular Intersections of the New Literacies," *Leading the New Literacies*, Solution Tree, Bloomington, IN, 2014.
3. More at Heidi Hayes Jacobs, "Six Curriculum Actions for Developing Digitally Literate Learners," *Mastering Digital Literacy*, Solution Tree, Bloomington, IN, 2014.
4. Partnership for 21st Century Skills. Retrieved from [www.p21.org/about-us/our-mission](http://www.p21.org/about-us/our-mission).
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7. Google Search Literacy Lesson Plans are available at [www.google.com/insidesearch/searcheducation/lessons.html](http://www.google.com/insidesearch/searcheducation/lessons.html).
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9. Tony Jackson and Veronica Boix Mansilla, *Educating for Global Competence: Preparing Our Youth to Engage the World*. Retrieved in free downloadable: <http://asiasociety.org/files/book-globalcompetence.pdf>, 2013.
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