CONNECT!ONS Med!aLit moments

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In This Issue…

Theme: Media Literacy and Risk Assessment

Media literacy training helps consumers of all ages make reasoned, reflective decisions of all kinds in a society where media frequently supply our sources of information. Media literacy instruction helps us understand how media can affect us emotionally, how they can color our perceptions, and how they can shape our choices.

Based on our years of experience in the field, many children don't believe that the media influence them at all. Yet research shows that media are a primary socializing agent in society. They act as teachers--they teach children to have fun eating junk food, and teach teenagers what it means to be attractive. Media literacy teaches us to respond by thinking "out loud" about our choices, especially the values and preferences that are important to us. *If I continue playing Grand Theft Auto, will I lose out on time to meet new friends? Do I really like the "gangsta" style of this game? Will it make me stressed and anxious if I keep playing it? Does the violence in this game show me who I am or want to be?*

Media literacy instruction also teaches us how to question information that comes to us through the media. A current voiceover ad by Norton Anti-Virus says "Will you allow online hackers to do with your hard drive what heavy metal bands did to hotel rooms in the '80s?" The voice of authority conveyed in this ad and others like it teach us to imagine that distant hackers are lurking in cyberspace, just waiting for the perfect opportunity to destroy our livelihoods and snatch our identities. Yet, according to Steven Levitt and Stephen Dubner, authors of *Super-Freakonomics* (William Morrow, 2009), nearly half of identity-theft victims are targeted by someone they know, and 90% of those thefts take place offline. Media literacy training helps us ask whether the information offered in advertisements is useful or whether it has been distorted to sell a product.

Even when delivered as objective news, media can adversely affect our decision-making skills. As coverage of the recent Toyota recall makes apparent, the emotional impact of images, anecdotes and personal testimony can make risks appear larger than they are. According to federal data, about 22,000 people were killed in vehicles made by Toyota or Lexus during the decade ending in 2008. Accelerator problems may have played a role in an additional 19 deaths during the same period. And yet the media spotlight trained on these incidents has led many consumers to question the safety of any Toyota vehicle, if not the safety of any vehicle undergoing a recall (Hamilton, "Most Accidents Caused by Drivers, Not Defects," NPR, February 12, 2010).

In showing us how media construct a whole world of risk for audiences, media literacy education demonstrates that a wider range of choices is available to us. And yet the world we live in is not without risk. Armed with media literacy skills, we dare to make decisions based on the best information we have. *Media literacy education makes wise choices possible.*

Research Highlights

Media Literacy and "Mean World Syndrome"

In 1968 media scholar George Gerbner argued that media do not have specific effects on individuals, but still present broad, underlying assumptions about the "facts" of life which audiences come to accept as a mainstream set of cultural beliefs, values and practices. If his arguments were correct, heavy media exposure could override individual differences in perspectives and behavior. Gerbner designed a study which measured television exposure and recorded general attitudes towards life in modern society, and found that respondents who watched 4 or more hours of television a day were more likely to feel that the world was a violent and dangerous place. Gerbner dubbed this effect the "mean world syndrome," and subsequent content analyses by Gerber documented that news media, especially television news, consistently convey the image of a world fraught with danger.

In 1993 the American Psychological Association concluded that media violence can have the following effects on viewers:

- Increased aggressiveness and anti-social behavior
- Increased fear of becoming a victim
- Increased de-sensitization to violence and the victims of violence
- Increased appetite for more violence in entertainment and real life

(from Summary Report, APA Commission on Violence and Youth, July 1993)

The second and third effects relate most directly to the "mean world syndrome." In addition to finding that frequent exposure to media violence can lead viewers to believe that their neighborhoods and schools are violent places, the APA documented a feedback effect in which viewers stayed at home to watch television because they felt it was unsafe to leave their homes at night. And exposure to media violence can lead to greater acceptance of violence directed towards others--even an unwillingness to help people who are hurt or in danger.

One recent example of the mean world syndrome at work is the case of Paul Offit. Offit, the co-inventor of a rotavirus vaccine recently included in the Centers for Disease Control list of recommended infant vaccines, has written a 2008 book challenging popular beliefs that vaccinations cause autism and other chronic conditions. Offit's critics have accused him of being a shill for the pharmaceutical industry, and transformed him into an Orwellian figure leading government attempts at "forced vaccination" (Wallace, "An Epidemic of Fear," *Wired*, November 2009). In a mean world, human nature itself becomes suspect, and a scientist's interest in the evidence used to back up claims looks more like self-interest.

The campaign against Offit has also been taken online. For example, anti-vaccine activist Jenny McCarthy, a former Playboy centerfold whose son was diagnosed with autism, directs concerned parents to the "University of Google" for sites which challenge Offit's research and offer evidence linking autism with vaccinations (Wallace, ibid.). So, if the mean world syndrome can predispose us to suspect that most people cannot be trusted, we're also likely to

find content online to confirm our suspicions. While the validity of Gerbner's theories continues to be debated, it is abundantly clear that media literacy skills remain essential to successful decision-making in our society today.

For a 50-minute documentary explaining the significance of Gerbner's work for contemporary audiences, visit the Media Education Foundation website at www.mediaed.org

Report on New and Emerging Technologies in K-12 Education

The New Media Consortium, which has published annual "Horizon" reports on new technologies and emerging trends in teaching, learning and creative expression in higher education settings since 2004, released a Horizon report last year on new technologies in K-12 education. Among the trends and challenges identified by the report, several highlighted the importance of assessing the skills associated with new technologies. According to the authors, access is no longer a defining issue in the 21st century: "The digital divide, once seen as a factor of wealth, is now seen as a factor of education: those who have the opportunity to learn technology skills are in a better position to obtain and make use of technology than those who do not" (p. 6). K-12 educational institutions are challenged to find ways of assessing these skills, however. Assessments of work that includes blogs, podcasts and videos are still in development, and translating them into the metrics measured by standardized tests is "not at all straightforward" (p.4). The authors also report a growing need for formal instruction in new forms of literacy, including media, visual, technological and information literacies.

The report identifies collaborative environments and online communication tools as technologies that 20% or more of K-12 schools are likely to adopt in one year or less. A number of developments have set the stage for widespread adoption. Educators have been conceptualizing methods of assessment for these technologies over the last few years, as evidenced by the skills maps published by the Partnership for 21st Century Skills. According to the authors, many schools interested in these technologies have already been working to protect student work and keep students in safe online spaces while expanding intellectual access to high quality sites. And a constant stream of systems is in development which offer common workspaces for teachers and students which are also increasingly integrated, well-protected, and convenient for teachers to create and administer.

The report selected cloud computing as a promising technology with a two to three year horizon for adoption in mainstream educational institutions. A "cloud" refers to a group of networked computers that distribute processing power, applications and large systems among many individual devices. Cloud computing promises to significantly expand school access to new technologies: "Schools are beginning to take advantage of ready-made applications . . . that have traditionally required site licensing, installation and maintenance of individual

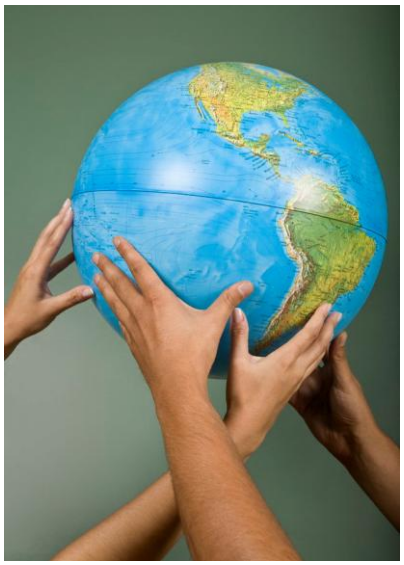
software packages" (p.20). Moreover, cloud-based applications are being used in schools to create banks of "virtual" computers on school campuses. Students and staff no longer need to own the latest laptop or desktop machine. A handful of basic machines with broadband access and the capacity to support a web browser ". . . are all that is needed for access to virtually unlimited data storage and programs of all kinds" (ibid.).

The report places "smart" objects in a four to five year adoption horizon. Smart objects have been in use for over twenty years in the form of bar codes for point of sale purchases, passport tracking, inventory management and similar applications. By now, small, square, two dimensional "QR" codes (originally produced in Japan) can be generated online, printed out, and attached to any object. Once there, they can be read by most camera-enabled mobile phones. The decoded information could be anything, from song lyrics to a URL. Today teachers are experimenting with using QR codes to deliver homework assignments, or asking students to use QR codes in class projects.

Other smart objects are "smart" by virtue of the miniature sensors embedded within them. One of the more exciting smart objects now in beta testing is the Siftable, a sensor-activated device created at the MIT Media Lab (http://www.sifteo.com). Small and block-like, Siftables combine a sensor and a computer in a single object. They include a display and the ability to sense their own location and orientation as well as the proximity of other Siftables. They can play music, form words, and perform other actions. In effect, Siftables are a computer interface composed of building blocks.

One of the key trends identified in the Horizon report is a shift in the way we think of learning environments. In this conceptual evolution, isolated physical spaces such as classrooms have started to lose ground to community-oriented, interdisciplinary and online collaborative "spaces." Smart objects clearly have the potential to continue driving the de-centralization of learning environments. To read the Horizon K-12 Report, visit the New Media Consortium website at http://www.nmc.org. To read more about a project using mobile phones as smart objects, see the article in this newsletter on the development of the personal environmental impact report.

CML News



CML Participates in Qatar Digital Literacy Forum

In February 2010, the Qatari communications regulator ictQatar, in association with the London-based International Institute of Communication, convened and chaired a forum on Digital Communications Literacy in Doha, the Qatari capital. IIC Director General Andrea Millwood Hargrave chaired the event. A wide range of Arab and Western entities were represented at this forum, from the Al Jazeera Network to Vodafone and BBC Children's Network. Tessa Jolls, CML's Director, was an invited speaker to the forum panel titled "The Educator's Role."

Dr. Hessa Al-Jaber, ictQatar Secretary General, demonstrated her agency's commitment to media literacy education in her opening remarks: "Media literacy is the ability to use a range of media and to be able to understand the information received. But the ability to understand the information received is not enough. Being able to process this information critically, questioning, analyzing and evaluating the information, is essential." In her presentation defining digital communications literacy, Lesley Osborne of the Australian Communications and Media Authority commented about the usefulness of the term "media literacy" for regulators. According to Osborne, terms such as digital media literacy, digital literacy, and literacies for the 21st century are essentially interchangeable, and form a subset of the broader umbrella concept of media literacy; and the ACMA uses the term digital media literacy to reflect its 'converged' regulatory responsibility for internet, broadcasting and telecommunications.

After the conclusion of the educator panel, Jolls was invited to an individual interview with ictQatar Publications Manager Brian Wesolowski. When asked about the new teaching methods Jolls outlined during the panel, she replied, ". . . students are not computers where data is stored. That data is available online. What is important is to help students interact with information, make meaning from information, think critically about the information—so that's why a process of inquiry is so important." When Wesolowski also

	asked how instruction for 21st century skills could be implemented in Qatari schools, Jolls responded, "It's very important to have a vision and also to train teachers. Teachers cannot possibly deliver a 21st century education if they have not experienced it for themselves. Professional development is really at the heart of educational reform." Watch the Jolls interview and access other presentations: http://www.youtube.com/user/ictqatar#p/u/23/L9PMubppBZ8
CONSORTIUM for MEDIA LITERACY *Uniting for Development*	**About Us…** The Consortium for Media Literacy addresses the role of global media through the advocacy, research and design of media literacy education for youth, educators and parents. The Consortium focuses on K-12 grade youth and their parents and communities. The research efforts include nutrition and health education, body image/sexuality, safety and responsibility in media by consumers and creators of products. The Consortium is building a body of research, interventions and communication that demonstrate scientifically that media literacy is an effective intervention strategy in addressing critical issues for youth. http://www.ConsortiumforMediaLiteracy.org

Media Literacy Resources

Teaching Tip: When talking to students about media, make a list of all the job descriptions that go into creating a commercial or TV show – writer, director, producer, marketing personnel, sponsor… In understanding that *someone* is making choices in regards to media production, the constructed nature of media becomes clearer.

Measuring Environmental Impact, One Phone at a Time

Could "carbon footprints" be measured in a way that would encourage people to think more reflectively about their individual contributions to climate change? Well, there may be an "app" for that. Last year researchers at UCLA, with the help of AT&T and the Nokia Research Center in Palo Alto, added key applications to GPS-enabled phones to turn them into sensors which can measure greenhouse gas emissions.

Much of the technical resources for this project were provided by the Center for Embedded Network Sensing at the UCLA Samueli School of Engineering and Applied Science. CENS designs and deploys networks of small, self-directed wireless sensors which can enable researchers to identify events and phenomena which might otherwise be unobservable. These networks are being used for applications as diverse as water quality monitoring to analysis of structural data during seismic events. In the area of health, CENS networks have been used to monitor the distribution of pathogens and contaminants in urban environments. Finding ways of turning cell phones into 'smart' objects capable of sensing carbon emissions was a natural extension of the Center's research and development goals.

The Personal Environmental Impact Report project was first tested by the Go Green Foundation of San Francisco. In February of last year, Martin Gutierrez, executive director of the foundation, distributed 25 phones to high school students at San Francisco's Urban School. These 'smart' phones used a number of methods to track students' travel patterns indirectly. Each 30 seconds the phones recorded the students' locations, and sent the data to PEIR servers. Using these datasets, the servers issued an activity classification of "still," "walking," or "driving." CENS also used a "map matching" function which could help determine whether students were walking on a sidewalk or travelling at walking speed on a jammed freeway nearby. In addition, PEIR servers plugged the data they received into real-time web-based information sources on weather, road and traffic conditions, and then used the Emissions Factors Model, a special formula developed by the California Air Resources Board, to calculate an estimated count of CO2 emissions produced by students who were driving or riding in a car.

To engage students, CENS added an application which generated a web-based report using maps and charts to show details about trips and trends over time—a personalized traffic and emissions report. These maps are an informal media literacy component of the project as students are constantly using them to analyze and interpret lifestyles, values and points of

view from the images generated by their own travel patterns.

And the program has motivated students to make lifestyle changes. Julia Evans, a 17-year-old senior at the time of the test demonstration, said she started riding her bike around her home in Burlingame when she realized how much carbon she was using for short trips. "Instead of driving, I'm biking more because I'm subconsciously connecting this phone in my pocket with how much energy I'm using" (Kim, "Program Helps Kids Find Their Carbon Impact," San Francisco Chronicle, April 6, 2009).

In addition, CENS provided an application that allowed students to publish their individual and collective results to Facebook, and the Go Green Foundation is using this application to encourage friendly competition among students and schools. In June of last year, the foundation teamed with the Alliance for Climate Education with the goal of bringing 5,000 students into the program from schools across the Bay Area. Last fall, two public schools and three private schools in San Francisco competed with each other over a period of six weeks to reduce total carbon emissions by 239,000 pounds.

For more information about CENS and the PEIR program, including their own expansion goals, visit http://research.cens.ucla.edu. Other features of the site include a short YouTube video explaining the program, and links to middle school science curricula utilizing CENS data streams.

For more information about the Go Green Foundation, visit http://www.gogreenfoundation.com

Here's a short list of other educational technologies profiled in the Horizon report:

Ning (http://ning.com), PageFlakes (http://pageflakes.com), and Moodle (http://moodle.org) allow teachers to easily set up workspaces that include web feeds to pull in relevant resources, chat spaces, forums, profiles, shared documents, calendars, music and more.

Edmodo (http://edmodo.com) is a private microblogging platform that can give students and teachers a sheltered place to discuss and manage assignments, while YackPack (http://yackpack.com), an interface designed specifically for school use, enables live voice chat and text messaging as well as archiving of all sessions.

For research assignments, students can use delicious (http://delicious.com) and Diigo (http://www.diigo.com) to organize web links according to subject. The Zotero widget (http://www.zotero.org) goes one step further, keeping bibliographic notes, summaries and reader notes for web materials in much the same way an index card would. With Elgg (http://elgg.org), teachers can create a class- or school-wide student network where research links, discussion, notes, media files, and other information can be shared in a protected environment.

Med!aLit Moments

Public Health PSAs: Prepare for Pandemic or Pass the Kleenex?

In 1976, an epidemic of swine flu was expected in the United States, and the federal government took bold action, releasing public service announcements over television airwaves and vaccinating 45 million Americans, an unprecedented number at that time. The epidemic never came, but three elderly Pittsburgh residents died soon after receiving their vaccinations at the same clinic. Though scientists believe the deaths were coincidental, some news reports suggested the vaccine had killed them. "Press frenzy was so intense it drew a televised rebuke from Walter Cronkite for sensationalizing coincidental happenings," writes Dr. David J. Sencer, then-director of the U.S. Centers for Disease Control (McNeil, "Don't Blame Flu Shots for All Ills, Officials Say," New York Times, September 28, 2009). In 1976, the CDC did not hold news conferences, and it took five days to respond to the deaths in Pennsylvania.

Fast forward to the spring of 2009: A global pandemic of H1N1 swine flu takes off suddenly. Though the initial fatality rate is low, the rate could easily climb depending on the ways in which the virus mutates over time. The US government orders 250 million doses of H1N1 vaccine. A small but influential movement of anti-vaccine activists has raised concerns about infant and child vaccinations. To stave off rumors which could circulate easily on the Internet and on 24-hour television news outlets, the CDC creates a "flu.gov" website, posts updates on Facebook and Twitter, and assembles a media "war room" in its Atlanta headquarters. News conferences are held there almost daily, all of which are posted to the CDC website (McNeil, op. cit).

In 2010, the communications of health agencies deserve study because those agencies must make creative decisions about how to frame messages about health risks in a media environment which can encourage panic as well as complacency and even denial. In this MediaLit Moment, your students will have the chance to compare two health-related PSAs to understand the purposes for which they were created, and to recognize the differing points of view they present with regard to comparable risks.

Have students compare two public service announcements to demonstrate their understanding of purpose and point of view.

AHA!: Different strategies for talking about health risks can really change the end product!

Key Question #5: Why was this message sent?
Core Concept #5: Most media messages are organized to gain profit and/or power
Key Question #4: What values, lifestyles and points of view are represented in, or omitted from, this message?
Core Concept #4: Media have embedded values and points of view

Grade Level: 8-10

Materials: computer with broadband access and data projector to display YouTube videos at the following URLs:

http://www.youtube.com/watch?v=ASibLqwVbsk
http://www.youtube.com/watch?v=zT9fxhrjoQc

The first link is for two 1976 PSAs produced by the CDC in anticipation of a swine flu epidemic. The second PSA, which shows the spread of the virus from person to person, is generally the best for comparison. The second link is for a PSA produced by the UK Department of Health at the height of the H1N1 epidemic. This is a humorous PSA which shows how easily any germ can be spread in public spaces.

Activity: As always, show videos more than once. As students give you their reactions, make sure to ask them "What?" questions to compare the content and techniques of the two ads. What happened? For example, the CDC message shows one infected person travelling to a variety of destinations, while the UK Department of Health ad shows one infected person in an enclosed space (an elevator). Also ask, What made the first ad scary? What made the second ad funny?

Questions about purpose come next. Why did the two agencies produce these ads? What were these agencies hoping that people would do in response to them? And ask why the ads were presented in such different ways. Why did the CDC produce a scary ad, and why did the British government decide to make their ad funny? What messages were they trying to send about the risks involved in spreading swine flu virus?

Next, divide the class into pairs or small groups, and explain that they'll be adding something to their ads or changing them slightly to show what they know about the purpose behind them. Work to ensure that a roughly equal number of groups choose each PSA. Give your students the choice to write a title for their ad, or to write a different ending or "tag" line for the announcer. Their lines can be goofy or even make fun of the ad itself, but they still have to demonstrate the purpose of the ad. When students have finished their work, share and discuss the alternative versions of the ads as time allows.

Extended Activity: Key Question #3 for Producers: Is my message engaging and compelling for my target audience?
Ask students to come up with their own concepts for an influenza PSA, and ask students to consider the following as they prepare their PSA concepts:

Michael Osterholm, director of the Center for Infectious Disease Research and Policy at the University of Minnesota said that criticizing the government for its aggressive response to the threat of the H1N1 virus is like criticizing officials for building dikes in New Orleans to withstand a Category 5 hurricane when only a Category 3 storm comes ashore (Stobbe, "Is the Swine

Flu Epidemic Over?", AP, February 5, 2010).

Ask students if they were health officials who were uncertain of the threat of mortality posed by the virus, but knew that it *could* be devastating, what kind of PSA would they produce?

And ask students to consider this information as they decide on strategies for getting the attention of their audience:

In late September 2009, swine flu cases rapidly increased across the country. The H1N1 vaccine became available in mid-October, and people waited in lines--sometimes for hours--at clinics offering the vaccine. By mid-December, the epidemic seemed to be waning. By the end of January 2010, only a fifth of Americans had received the vaccine, according to data released by the CDC. A poll taken in late January by the Harvard School of Public Health also found that most Americans had assumed the pandemic was over and thought the threat was overblown (McNeil, "Most American Think Swine Flu Pandemic Is Over, a Harvard Poll Finds," New York Times, February 6, 2010). When this newsletter was published, some health experts still expected a "third wave" of H1N1 in fall of 2010.

In 1976, vaccines were enthusiastically welcomed. Many parents or grandparents still remembered children dead of smallpox, measles and polio. Today, anti-vaccine activists reach a wide audience on the Internet, and many concerned parents believe that vaccines may cause health problems in children. Among parents surveyed in the Harvard poll, many cited fear of side effects as a reason why their families did not receive the vaccinations.