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Editorial: The Metaphor Is the Message: Limitations of the Media Literacy Metaphor for Social Studies

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In this editorial the authors drew upon metaphor studies to identify limitations of the literacy metaphor, which has become a master metaphor for competency in education, particularly through discussions of media literacy. It considers how the literacy metaphor ignores media forms within media literacy education. Building on the authors' initial editorial as CITE—Social Studies Education editors and drawing on the work of media ecologists, the authors suggest different avenues for media and technology education that view media as environments.

Education has long been concerned with literacy, or teaching students to read, write, and understand written language. Yet in the second half of the 20th century, the proliferation of electronic media technologies led to calls for media literacy, or teaching students to be able to access and evaluate media messages effectively and create media in various electronic formats. Such calls have accelerated with recent concerns over so-called fake news and the explosion of available information due to the internet and social media.

This metaphorical extension of the term literacy has gained popularity as a general analog for competency. The standards movement provided an opportunity for the literacy metaphor to colonize almost every field. Teachers and researchers use varied phrases to describe and identify meaning making through literacies, including new literacies, gaming literacy, computer literacy, financial literacy, information literacy, digital literacy, artifactual literacy, critical literacy, cultural literacy, and technological literacy.

Literacy even invaded the social studies with terms like financial literacy, civic literacy, geographic literacy, and historical literacy. While this list is not exhaustive, it demonstrates the popularity of the literacy metaphor across disciplines and scholarship.

Similarly, social studies education has adopted the term *media literacy* to name the need for citizens to be able to critique, interpret, and create media communications effectively (National Council for the Social Studies [NCSS], 2009, 2016). The NCSS position statement on media literacy states as follows:

At the core of learning is Literacy — the ability to access, analyze, evaluate and produce communication. Media literacy expands the traditional concept of literacy to include the forms of communication that dominate the lives of our students. If our students are to be literate, we must teach them the skills and habits of literacy for print and non-print mediated messages. (Sperry & Baker, 2016, p. 183)

In the NCSS conception, understanding electronic media is conceptualized in terms of literacy, or the ability to interpret messages. While much of the work that falls under the media literacy banner is needed, *literacy* may not be the best metaphor for invoking a broader media *education*.

The Literacy Metaphor

In their book *Metaphors to Live By*, Lakoff and Johnson (1980) argued that metaphor is the core driver of meaning making in both language and thought. Humans, they asserted, make meaning at a fundamental level by taking a source domain, an area of experience in which they have solid understanding, and mapping it onto a target domain, an area that is new or less understood. In this process, humans come to understand new and unfamiliar concepts in terms of old and familiar ones. This process is necessary for humans to understand new phenomena. However, such metaphors, if never challenged nor complicated by other ones, may also conceptually limit understanding of new experiences.

Regarding sensory experience, reading is in many ways a private and individualized process. Readers generally read at their own pace, and because reading requires focused attention, people tend to minimize external stimuli as their visual sense predominates. Reading is an intensive process requiring years of training that rewires the brain (Wolf, 2007). Formal education arose at least partly in response to the challenges of creating a literate workforce for a modern, industrial society.

In educating for literacy, attention is historically given to the decoding process. In essence, when literacy is applied uncritically to understanding electronic media, a comprehension-centric framework based upon the decoding focus of literacy is imposed upon the experiences people have with electronic media technologies. The focus of exercises, then, becomes decoding the meaning of messages in electronic form, analogous to the decoding process of print literacy.

The literacy metaphor frames media education in ways that have severe limitations for electronic media, chiefly because the sensorimotor experiences and processes of engagement with electronic media technologies are vastly different from print. No complex process of decoding is required, for example, with radio or television (Postman, 1985). No training is required; the material simply washes over the consumer. Social studies scholars have, thus, long been concerned with the lasting impact of problematic or inaccurate historical representations in movies (Marcus et al, 2018).

For example, the protagonist of the 1994 film *Forrest Gump* advances a “conservative racial politics” that washes over viewers and leaves behind antiblack racist imprints of the Black Panther Party (Wang, 2000, p. 98). In a print review of the movie, Wang (2000) critiqued these messages. How many viewers, though, stopped the film to reflect on or critique the portrayal of Black Panthers as equivalent to White supremacists (e.g., George Wallace), as indifferent to domestic violence against women, or as absurdly angry and violent? Problematic messages that go unexamined can still leave lasting impressions.

New media and social media have altered some of these variables, but although these new technologies remediate both print and screen, their sensory focus is centered on the telegraphic discourse (Strate, 2014) and the multisensory presentation of television. The central focus of most media literacy instruction involves interpreting and comprehending representations within media. This approach has utility; educators should help students understand media messages.

Particularly with screens, the human sensorimotor system perceives the stream of stimuli similar to being present for the actual event (McLuhan & McLuhan, 1988). This pseudo-intimacy cultivated by screen viewing is arguably one key reason why U.S. politics have become more polarized as more of human social experience becomes electronically mediated. Screen technologies generally allow less time for analytical reflection, as the pace of stimuli moves faster than individuals often can control, and the sensorimotor experience of viewing and listening encourages more instantaneous, emotional reactions as opposed to more reflective, analytical ones.

A literacy metaphor asks students and teachers to attend to decoding the message, but typically diverts our attention from the particular dimensions of the media forms themselves. In other words, we take the medium out of media education.

Our argument is distinct from what is sometimes called New Literacy Studies (see Gee, 2015; New London Group, 1995). Advocates argue

against a simplistic decoding understanding of literacy, stating that literacy is a practice with ideological dimensions that are socially and culturally rooted. We agree with this assessment. They also make a case for expanding the conception of literacy to include multimodal texts outside of print literacy. We draw a distinction here.

Because they use the term literacy to describe a process of understanding things like screen media, they may unwittingly limit their ability to recognize how other media such as screens have experiential elements that are fundamentally distinct from the analytic process of print literacy, regardless of the sociocultural particulars. One can acknowledge literacy as a social process and that the interpretation of messages will vary by culture and context, while also recognizing that the human perceptual system is focal in identifying and interpreting stimuli regardless of sociocultural factors. Not every way of being, knowing, and interacting with the world is best classified as some form of literacy, as some scholars assert (Lankshear & Knobel, 2008). If the goal is to foster competent users and creators of media, the distinct perceptual dimensions of media forms must be explored, understood, and incorporated into media education. This process begins with a critical analysis of the literacy metaphor.

Some scholars have, at least implicitly, acknowledged how the internet as a media form requires different methods than traditional print literacy. Researchers in the Stanford History Education Group (SHEG) developed what they call *civic online reasoning* methods aimed at encouraging students to evaluate the trustworthiness of information on different types of websites (McGrew et al., 2018). This research implicitly recognized the array of text and videos online as existing in a media form different from the text found in books.

Internet companies largely replaced older information organization architectures consisting of card and digital catalogues and publishers with algorithmic search engines. Whereas the print era primarily required vertical reading of print pages, the internet requires a new skill called *lateral reading* where users leave a website to learn more about the information source to evaluate its trustworthiness (Wineburg & McGrew, 2017). This skill was less necessary when librarians and publishers held more responsibility for quality control, but more necessary as the search engines and hyperlinks direct users through multiple sources at a rapid pace.

Educator Michael Caulfield has contended that decoding sources online, the central purpose of media literacy, can be counterproductive (Warzel, 2021). Misinformation spreads online in large volumes and at rapid velocities. Traditional media literacy education asks students to engage deeply with the information they come across, but this approach is unrealistic when considering the nature of social media, hyperlinked websites, and search engines. Trying to understand the propaganda on, for example, a White supremacist website, risks misunderstanding more than encourages understanding.

Caulfield contended that the dominant mode of media literacy teaches students

that, in order to protect ourselves from bad information, we need to deeply engage with the stuff that washes up in front of us... you'll get imperfect information and then use reasoning to fix that somehow. But in reality, that strategy can completely backfire. (Warzel, 2021, para. 4)

His SIFT method encourages students online to stop, investigate the source, find better coverage, and then trace claims, quotes, and media to the original context. This approach is designed to help internet users make judgments in 30 seconds online. It accounts for the nature of the internet as a media form. We do not see a historical or contemporary reason to extend the literacy metaphor to this skill, particularly when the approach is much closer aligned to a different area of study with its own metaphor: media ecology.

New Metaphors for Teaching About Technologies

Neil Postman (2006) explained the media ecology metaphor as “a medium is a technology within which a culture grows; that is to say, it gives form to a culture’s politics, social organization, and habitual ways of thinking” (p. 62). When media is conceptualized through the biological metaphor of bacterial cultures, it no longer appears to be simple transmitters of messages. It becomes easier to recognize that media are also the environments that provide contexts for social behavior.

While media ecology is likely not the best metaphor to replace media literacy as a term for the practice of media education, the metaphor can help media educators rethink media literacy along dimensions of embodied experiences. Media ecologists center the ecological metaphor, emphasizing the study of how media forms influence both individual and social dynamics within a society (Video 1).

Video 1 The Metaphor Is the Message

<https://www.youtube.com/watch?v=53d5Plu1iAM>

The sensory, experiential dimensions of electronic media should be part of media education, and the literacy metaphor may be part of the reason why differences across forms of media have been largely neglected. Finding new ways to talk about media technologies may begin with contracting the use of the literacy metaphor in media education. In this essay, we, for example, use the term *media education*. Whatever terms are employed, the sensory and emotive aspects of our use of media technologies require more pedagogical attention, given the ubiquity of media use in the culture.

These arguments apply not only to media technologies specifically, but also to technologies more broadly. Some avenues for inquiry or research may help explore these dimensions. The following explorations can apply to both media and technologies as both can be viewed as mediums that create new environments that structure the situations in which people act (Postman, 1992). From these explorations, new terminology may also emerge. The following examples are drawn partly from foundational scholars in media ecology, with our own elaborations.

Figure/Ground

McLuhan et al. (1978) pulled figure/ground analysis from the gestalt psychologists from the early 20th century. Figure/ground analysis describes how human perception changes depending upon the variables in a given situation. The figure, or foreground, is focused upon and everything else is ground, or background. A figure/ground pedagogy suggests a pedagogy of perception (Mason, 2016), in which students learn to identify and reflect upon the ways their perceptions change with exposure to various media forms.

Because screen media provides a multisensory cascade, teachers can bring the sensory features to the foreground of perception by isolating the perceptual dimensions, such as the spoken language or music (see Mason, 2015). This result could be achieved by shutting off the screen while listening to the commercial's music and spoken words to consider these aspects in isolation. Teachers can also mute the sound and ask students to focus only on the changing images or written text. In either case, isolating perceptual elements will increase students' ability to understand how multimedia images play upon their perceptions in ways that are often not reflectively conceptualized.

Another technique is to transpose content from one medium to another. A teacher could type out the spoken words of a short portion of screen media, particularly something that is visually compelling like an advertisement. Class discussions could help students explore how the spoken language remained largely in the background until transposed into another medium. This approach could emphasize the point that with screen media images will usually dominate the viewer's perceptual field.

One technique for moving items from ground to figure is to imagine what society would be like without them (McLuhan & McLuhan, 2011). An extension of imagining life without a technology would be an inquiry assignment in which students live without a technology for a short period of time. Teachers could ask students to conduct media blackouts of particular tools, such as social media or mobile devices, for a short period of time (Damico & Krutka, 2018). Students could be encouraged to reflect on the changes this removal facilitated in their behavior, such as how they modified their social interactions. A related exercise would be to have students keep an inventory of media use, allowing them to reflectively conceptualize how their life worlds are structured in various ways by media technologies.

Tetrads

This playful way to investigate the multiple connections between media technologies and society was created by Marshall and Eric McLuhan (See McLuhan & McLuhan, 1988). According to the McLuhan "laws of media," every technology can be examined for four societal features: What it enhances or intensifies, what it obsolesces or makes irrelevant, what it retrieves or brings back from obscurity, and what it reverses into when pushed to its extreme.

One example is the camera, which enhances aggression when pictures are unwanted, obsolesces privacy, retrieves the past, and reverses or flips into the public domain when pushed to its extreme (McLuhan & McLuhan, 2011). Tetrads can be complex and mind-boggling but are a whimsical way of beginning an inquiry into new media technologies. Our next example offers one possible way to teach some of the same ideas in the tetrads to students.

Superhero Extensions

Marshall McLuhan (1964) contended that technologies, like prosthetics, are extensions of human bodies and senses, but as they add, they also amputate other physical attributes or senses. The prosthetic metaphor offers a powerful way to view how humans are affected by their use of technologies. One way to teach this abstract way of seeing is to ask students to create a superhero based on a technology. While typical superheroes have extrasensory powers that they often use for physical combat, these superheros can also provide cover from rain (e.g., an umbrella superhero) or warm food (e.g., a microwave superhero). In this assignment, students author comics that attend to the following topics:

- Choose a technology (e.g., Smartphone, spoon, or algorithm)
- Create a superhero name (e.g., Smart Phonium, Spoonster, or Algorithmic)
- Draw the superhero with the technology as an extension of their body
- Author a comic story that explains the origin story of the superhero
- Explain what senses the technology extends (i.e., their super power)
- Explain what the superhero loses (i.e., their flaw or kryptonite)
- Include the superhero's rival as the technology they seek to replace (e.g., Telefonio, Hand Man, or Intellectio)

These comics, or stories, can take many forms, but students may require feedback to ensure the extensions and amputations are accurate to the technology and their effects. Students will share their completed comic stories, and the class can discuss how each technology encourages changes in human behavior and how humans might achieve the best possible relationship with technologies.

Technoskeptical Questions

Another ecological approach educators and students can use to develop deeper understandings of technological changes and their effects includes critical, technoskeptical questioning. In other words, technoskepticism in education is a kind of critical thinking that addresses the effects of technology that frequently go unrecognized (Krutka et al., 2020). Importantly, it involves special attention to technologies as causal or contributing factors to historical change, sometimes rapid and direct but also collateral over the long term.

Postman (1998) offered five critical ideas about technological change, and the following questions were developed so educators might use them with students [a].

1. “All technological change is a trade-off”: Advantages and disadvantages can obviously be identified for any technology, yet Postman contended some technologies are viewed as “unmixed blessings,” which creates a “dangerous imbalance.” He argued that “we always pay a price for technology.” Educators can ask, “What does society give up for the benefits of the technology?”
2. “Every new technology benefits some and harms others”: Technologies facilitate differential outcomes that can disproportionately affect groups by identity (e.g., race or religion), organizational type (e.g., small-scale vs. large-scale business interests), or ideologies (e.g., liberal democracy or authoritarianism). Winners and losers in technological change often align with, and even amplify, existing inequalities in society (Benjamin, 2019; Heath & Segal, 2021; Noble, 2018). Educators can ask, “Who is harmed and who benefits from the technology?”
3. “In every technology there is a powerful idea”: All technologies have a bias or belief about the world that impacts people and their lives. Postman explained that the “telegraphic person values speed, not introspection” (i.e., electronic communication); the “television person values immediacy, not history” (i.e., media consumption); and the “computer person values information, not knowledge, certainly not wisdom” (i.e., internet computing). In other words, technologies need humans to think or behave in certain ways to fulfill their function and spread. Educators can invite students to imagine technology could be a living organism and ask, “What does the technology need?”
4. “Technological change is not additive; it is ecological”: New technologies are not only additions to the world, but they change many other things, too. Like a drop of dye in water, a new technology is part of the world, not just an addition to it. The changes can be hard to predict and impossible to take back. For example, the invention of standardized tests “redefined what we mean by learning and have resulted in our reorganizing the curriculum to accommodate the tests.” Standardized tests were not simply added to schools; they made schools different. Educators can ask, “What are the unintended or unexpected changes caused by the technology?”
5. “Media tend to become mythic”: Humans get so accustomed to older technologies that we start to see them as part of the natural world. Postman argued individuals should view even familiar technologies as “a strange intruder.” He meant that people should become more aware of what technology does to us and for us. Educators can ask, “Why is it difficult to imagine our world without the technology?”

Social studies educators can use these questions in isolation or together to engage in ecological thinking about old and new technologies.

Conclusion

In this editorial we call attention to the language that frames instruction and its consequences. We cannot reconsider how educators teach about media without first recognizing that literacy is a metaphor that exerts influence on how educators think about and enact curriculum. In theory and practice, the media literacy frame diminishes the medium by drawing attention solely to the message. Social studies educators, in fact all educators, benefit from also seeing media as environments. This article is an appropriate medium from which to make an argument that requires ongoing discussion, reflection, and response.

Note

[a] The technoskeptical questions were developed by Dan Krutka and Scott Metzger from a separate research project that has yet to be published by the submission of this editorial.

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