Editorial: 15 Years after Martorella's Sleeping Giant: A Year of Special Themed Issues

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Abstract

The year 2012 marked the 15th anniversary of Peter Martorella's (1997) short but influential article, "Technology and the Social Studies—or: Which Way to the Sleeping Giant?" The College and University Faculty Assembly of the National Council for the Social Studies marked its anniversary with a symposium reflecting on the article and its aftermath. In 2014, Contemporary Issues in Technology and Social Studies Teacher Education will publish articles by social studies researchers who describe the evolution of technology integration in the field of the social studies and future research in this area.

In 1997 Peter Martorella's influential article, "Technology and the Social Studies—or: Which Way to the Sleeping Giant?," appeared in *Theory and Research in Social Education*. Since then, it has been cited by numerous social studies researchers (e.g., Berson, Lee, & Stuckart, 2001; Bolick, Berson, Coutts & Heinecke, 2003; Bolick, McGlinn, & Siko, 2005; Crowe & van t'Hooft, 2006; Diem, 2000; Doolittle & Hicks, 2003; Freitas & Solé, 2003; Friedman, 2006; Friedman & Heafner, 2007; Friedman & Hicks, 2006; Lee, Doolittle, & Hicks, 2006; Lee & Hicks, 2006; Mason et al., 2000; Milman & Heinecke, 2000; Waring, 2007).

This frequent reference to his work is perhaps testament to the enduring nature of Martorella's argument about "how little the social studies curriculum has been affected by the technology changes sweeping the nation" (p. 511). This year, more than 15 years later, *Contemporary Issues in Technology and Social Studies Teacher Education* will focus on the state of the field, considering whether Martorella's sleeping giant is still an apt metaphor for describing the integration of technology in social studies teaching and learning.

Five Illustrative Themes

When Martorella's brief article was published it resonated with social studies researchers, in part, because of the context of the times in which he wrote. His article appeared as the social impact of the Internet was just beginning to be understood. Martorella (1996) himself was concerned about what he viewed as the movement from a gathering to a "degathering society" brought on by intense technological change: "...moving away from a pattern of collecting individuals at designated locales for activities such as work, entertainment and recreation, voting, medical care, and shopping. The consequence of this shift is an emphasis on decentralization and smaller institutional units" (p. 35). As researchers studied the impact of newly emerging technologies on the field of the social studies, they sought frameworks in which to situate their work and to articulate their findings.

Martorella's metaphor of the "sleeping giant" depicted what he saw as a widespread reluctance to leverage technology for educational change in social studies education. In response, he outlined a path forward—a curricular framework for situating the Information Age and its concomitant social and cultural changes within the social studies. Arguing that "our best evidence is that social studies largely has been on the sidelines as the Information Age rapidly unfolds," Martorella insisted that the social studies was the most appropriate place to situate "a dialogue centered around the profound social consequences of technology trends, both for our nation and the world" (p. 512).

To help illustrate how technology should be included in the K-12 social studies curriculum he outlined five themes: "computer as alter ego," "computer as citizenship educator," "computer as workplace," "computer as school," and "computer as data gatherer." In listing these themes Martorella portrayed technology as both the content and conduit for social studies learning. Across his five themes Martorella emphasized social studies as democratic education and included related questions in his "discussion theme examples" (see Table 1).

Table 1Martorella's (1997) Themes and Examples

Illustrative Themes	Discussion Theme Examples[a]
Computer as alter ego	"Should the federal government support the development of clones and intelligent agents that mimic our capabilities and needs?"
Computer as citizenship education	"What computer-related skills are required for accessing and interpreting data for political decision making?"
Computer as workplace	"If the trend continues, how will schools and educators' roles change in a degathering society?"
Computer as school	"As construction, transportation and maintenance costs skyrocket, should school boards consider alternatives to traditional school buildings, such as virtual schools?"
Computer as data gatherer	"Who should be denied access to databases and under what conditions?"
[a] See Martorella (1997), p. 513	

Importantly, Martorella's (1997) examples for a K-12 social studies curriculum that "includes analysis of technology issues" (p. 513) alluded to an issues-based curriculum, built on open dialog and discussion in the classroom. Martorella paired technology with a concept-based approach to social studies education, which was consistent with his early work focused on concept learning and designs for instruction (see for example Martorella, 1972).

Martorella concluded his 1997 article with a challenge. "With respect to the impact of technology on the social studies curriculum over the last quarter century, the news is not encouraging" (p. 513), he said, and "the larder of exemplary software lessons and units that have accumulated...consists largely of fragmented items in search of a conceptual home" (p. 513). For Martorella, the conceptual home could be found in the social studies, with its emphasis on democratic education; the dramatic changes brought about by technology demanded it. He had earlier written, "Our society has undergone fundamental changes in its character and composition, and social, economic, and political forces already in motion portend continuing dramatic changes" (Martorella, 1996, p. 35).

The Sleeping Giant Metaphor

In understanding Martorella's work and the current state of the field of technology integration in the social studies, it is important to discuss the metaphors we hold and their meaning. This discussion would have been important to Martorella, who did considerable work related to conceptual learning and in 1988 published an article focused on the use of metaphorical language to understand international relations. According to Eisner (2001), "Imageless thought is empty" (p. 361). The metaphors we routinely refer to about schooling and teaching actually have consequences. "Images are the bedrock on which we build our theoretical palaces," Eisner argued, and these images "deserve analysis and critical appraisal" (p. 361).

In reference to the integration of technology in the classroom, Tapscott (1988) referred to students and teachers as either "digital natives" or "digital immigrants." Bolick (2008) argued that technology might be a Trojan horse of school reform. Both conjure up vivid images that serve to create a conceptual frame of reference. Martorella (1997) chose to refer to technology as a "sleeping giant." If, as Martorella (1988) wrote, "metaphors provide us with rich images to remember and relate information" (p. 47), how was he using his metaphor? What sort of theoretical palaces was he trying to build?

The metaphor of the sleeping giant conjures up many images. Consider the following:

- Admiral Yamamoto's character in the movie *Tora! Tora! Tora!* declares, "I fear all we have done is to awaken a sleeping giant and fill him with a terrible resolve" after Japan bombed Pearl Harbor in 1941 (although no historical evidence survives to confirm this).
- In the 2012 election the Latino voter was seen as a "sleeping giant," perhaps creating a tipping point in immigration reform in our country (e.g., Llorente, 2012; Preston & Santos, 2012).
- Twisted Sister's rock anthem *Wake Up (The Sleeping Giant)* channels teen angst and struggles against authority figures, including parents and schools.

These metaphors all evoke similar themes of a powerful, untapped but, perhaps, dangerous force that once awakened may be destructive, uncontrollable, or paradigm

changing. For Martorella, technology represented the paradigm shift. He wrote, "Our society has undergone fundamental changes in its character and composition, and social, economic, and political forces already in motion portend continuing dramatic changes" (p. 35). By evoking the sleeping giant metaphor, he was advocating for a similarly fundamental change in the character and composition of social studies education.

It is significant then, that over the last 17 years so many social studies researchers have continued to chronicle the sleeping giant of technology integration in the social studies. These researchers have documented what appears to be an undeterred reticence in the social studies away from technology rich approaches to instruction in favor of more traditional approaches.

Special Themed Issues of the CITE-Social Studies

In November 2012 a group of social studies educational researchers took part in a symposium at the annual conference of the College and University Faculty Assembly of the National Council for the Social Studies focused on the theme of Martorella's sleeping giant article. The participants were asked to respond to the following prompt:

Referring back to the original work of Martorella, including his curricular themes and keeping in mind the contemporary context of technology integration in the social studies, provide an illustrative example from your own research and/or practice to describe:

1) the evolution of technology integration in the field of the social studies and/or 2) promising new practices. Offer some discussion about how your work informs future directions for our field.

A list of the accepted 2012 CUFA symposium paper titles follows: (Where applicable we also provide the bibliographic information for published work.)

- "Teacher and Student Use of Internet-based Primary Sources" by Adam Friedman
- "Technology and Disciplined Inquiry in the Social Studies" by Kathy Swan & Mark Hofer
- "Revisiting the 'sleeping giant' metaphor. Is it still sleeping and is it still really a giant?" by David Hicks, Stephanie Van Hover, & Mathew Walker
- Curriculum and Technology in Dialog: Geospatial Tools' Impact on History Teachers' Content and Methods" by Thomas Hammond
- The Development of Digital History" by John Lee
- "ICT4D for Societal Transformation" by Michael Berson & Ilene Berson

Berson, I. R., & Berson, M. J. (2013). Exploring pathways toward global sustainability through information and communication technologies for young learners in developing nations: Marvels and misapplications. In J. E. Davis & R. A. Diem (Eds.), *Sustainability, growth, and globalization: A social science perspective* (pp. 69-83). Charlotte, NC: Information Age Publishing.

• "Digital History: Is it really democratizing the doing of history?" by Cheryl Bolick & Trey Adcock

Bolick, C.M., Lathan, J., Adcock, L., Bartels, J. (In press). Revisiting lies my teacher told me: A critical examination of digital history textbooks. In William Russelle (Ed.), *Digital social studies*. Information Age Press.

Building on the work done in that symposium, the social studies section of the *CITE Journal* will continue the retrospective look at Peter Martorella's work and the challenge he proposed to our field. Over the course of this year, we will invite symposium authors to submit manuscripts that continue the discussion. The authors will present a range of experiences and research related to this topic. We also invite our readers to submit articles or formal commentary and to participate in webinars focused on updating Martorella's work. (Commentaries will be peer reviewed and, if accepted, published as a new paper in the journal. To be published, a response to a paper or to other commentaries, should advance the discussion and make a substantial contribution to the conversation.)

Through this work we hope to advance understanding of the state of social studies education. We also present this work in anticipation of the publication of new guidelines for using technology to prepare social studies teachers. This special focus provides perhaps a critical first step in our quest to develop a community of scholars who will work toward making schooling and our images of school more harmonious.

Discussion: Charting a Way Forward

Now, more than 15 years after Martorella's original call to wake the sleeping giant of technology in the social studies, the Information Age has moved in directions few could have imagined in 1997. For instance, today "66% of those ages 18-29 in the United States own smartphones" (Rainie, 2012), providing instant and handheld access to robust computing technology. The manner in which we use the Internet has also changed. Social networking sites and the ability to create new media and post it for wide audiences has changed the nature of our access to information. Yet Martorella was remarkably prescient when it came to the manner in which the Internet would evolve to allow more interactive uses. Tapscott and Williams (2008) wrote, "Whether people are creating, sharing, or socializing, the new Web is principally about participating rather than passively receiving information" (p. 37).

Importantly, the interactive uses of technology in the classroom today parallel Martorella's view of the potential for technology to change society *and* instruction. For example, in his 1997 text, *Interactive Technologies and the Social Studies: Emerging Issues and Applications*, he wrote, "Perhaps most exciting will be the evolution, not of technologies, but constructivist instructional theories. Multimedia, designed to encourage interactivity, exploration, and creativity, may become the norm" (p. 68).

Contemporary changes in the form and function of the Internet have enabled new forms of instruction in the social studies classroom much as Martorella envisioned. Web 2.0 technologies, including wikis, weblogs, digital documentary making, and digital history tools support student interaction around similar interests and provide opportunities for deeper, more authentic learning experiences in the social studies.

For instance, digital history "democratizes" access to archival resources (Bolick, 2006) and provides new opportunities for interdisciplinary scholarship and publication in

multimodal environments (Lee, 2002). Handheld technology and cheaper hardware and software have solved much of the digital divide in infrastructure (Zickuhr & Smith, 2012). Yet, despite the increasing accessibility, we have yet to see the development of new constructivist instructional theories as Martorella envisioned.

It is important, then, for social studies educators to reconsider the metaphor of the sleeping giant and whether the myriad applications of technology in the social studies have found a conceptual home. Perhaps the sleeping giant is really pedagogical in nature—not technological. Emerging technologies require new roles for both teachers and students (Greenhow, Robelia, & Hughes, 2009) and, according to Dede (2008), represent a "seismic shift" in pedagogy, especially toward "constructivist and situated teaching approaches" and assessment "based on sophisticated performances showing students' participation in peer review" (p. 81).

How does this pedagogical shift change our discussion of technology integration in the social studies? We might ask questions such as whether or not technology has set us back pedagogically or moved us forward. Where, for instance, do we place MOOCs, online instruction, 1:1 laptop or iPad initiatives, and drill and practice courseware. More specific to the social studies, has technology simply reified the signature pedagogy of the lecture or chalk talk (now on a Smart Board) or has it moved us to more democratic, reflective, and inquiry-oriented forms of instruction?

The research presented in the 2012 symposium provided glimpses of tentative steps toward more authentic instruction in the social studies, yet there still seems to be a digital divide. This digital divide has less to do with access to technology and more to do with the tenacious divide in access to technology-mediated instruction that is authentic and focused on discipline-based thinking (Manfra & Lee, 2012). Many have drawn attention to systemic issues hindering the integration of technology-rich and authentic social studies instruction, including the pervasiveness of standards-based assessment.

This phenomenon recalls the work of Maxine Greene (1978) and her discussion of the various institutional hindrances that new teachers face. She wrote, "Confronted with structural and political pressures, many teachers (even effectual ones) cope by becoming merely efficient" (p. 28), and they focus on factual information rather than "create a situation in which knowledge can be sought and meanings pursued" (p. 32). Greene suggested that the only possible path forward is to engage in critical reflection.

The dangers of submergence are multiple, as we have seen. Teachers suffer in many ways what they experience as conditioning or manipulation by their superiors or by the "system" itself. To reflect upon the situation, even the bureaucratic situation, is to try to understand some of the forces that frustrate their quests for themselves and their efforts to create themselves as the teachers they want to be. (p. 34)

Apparently, the issues social studies researchers must confront as they reconsider the metaphor of the sleeping giant are both pedagogical and structural. These issues are just as persistent and important today as they were when Martorella (1996) wrote, "These trends are fueled by rapid advances in emerging technologies and they have profound implications for the nature of schooling and teacher education in the next century" (p. 35).

In This Issue

The first article of this special volume by Adam Friedman is titled "Computer as Data Gatherer' for a 'New Generation:' Martorella's Predictions, the Past, the Present, and the Future of Technology in Social Studies." It expands our discussion of the context in which Martorella wrote. Exploring this vantage point can perhaps provide readers with a better understanding of how to apply Martorella's ideas today. Friedman also describes the learning potential inherent in more recent technologies, especially mobile devices. Based on his analysis of the integration of these technologies in the social studies, he calls on us to engage in collaborative research projects focused on student learning outcomes.

In the second article, "Technology and Disciplined Inquiry in the Social Studies," my coeditor Kathy Swan and Mark Hofer focus on opportunities to integrate technology in the social studies to create robust learning opportunities for students. Focusing mainly on their research with student-created digital documentaries, these authors explore the opportunities afforded by technology to engage students in authentic intellectual work.

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