Digital Discovery: A Model for Integrating Digital Interactives During Social Studies Lessons

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The Internet offers a wide array of resources for social studies teachers. Digital interactives, in particular, offer promise. They combine images, sounds, videos, and animation and are organized around specific themes or historical subjects. Verizon’s Thinkfinity and the Public Broadcasting Service’s Learning Media websites are two leading collections of this style of resource. With an efficient search and thoughtful planning, teachers can use digital interactives to create more engaging and exciting learning experiences for their students. This article proposes a four-step model that can be used to assist teachers in finding these resources and integrating them into social studies lessons. The model invites teachers to determine curricular needs, search the digital landscape, establish entry points, then build the digital interactive-enhanced lesson.

Key Words: Technology, Instruction, Lesson Planning, Digital Interactive, Internet Resources, Gaming

Introduction

Mr. Irving teaches in an elementary school in large suburban district in the United States of America. Mr. Irving cares about his students and wants to help them build the skills they will need to thrive in 21st century America. Though he recognizes that many of these skills will require proficiency with emerging technologies, he is frequently frustrated by the difficulty of integrating technology during his instruction. In many ways Mr. Irving’s lessons are indistinguishable from lessons that have been taught for decades, despite the proliferation of technology in American life.

The museum educators, curators, and new media departments at large institutions like the National Museum of American History, the National Archives, and the Public Broadcasting Service have thought about how to help teachers like Mr. Irving. The evolving web has afforded these institutions new tools that allow them to share their resources. Institutions frequently combine these resources into professionally-produced collections of images, videos, written content, and animations that invite users to manipulate web content to achieve a critical understanding of a social studies theme or skill. These collections are called digital interactives. With thoughtful integration during instruction, digital interactives from these organizations can assist teachers in creating more engaging and effective lessons.

During a teacher internship in the new-media department at the National Museum of American History, I enjoyed a unique opportunity to assist in the creation of digital interactives for teachers. One of my duties in this position was to sift through web resources from content providers across the country and link them to the museum’s searchable research database, titled
History Explorer. My exploration uncovered dozens of extraordinary resources that I had never seen before, despite my background as a classroom teacher. This experience caused me to consider the disconnect that often exists between digital content creators and classroom teachers. Though institutions like the National Museum of American History devote time and energy to promoting the resources they create, many teachers do not take full advantage of the opportunities these resources offer.

Two factors may explain this. First, many teachers might be unaware of these resources and the potential they hold to transform instruction. Second, teachers who know these resources are available might perceive them as being too difficult to use regularly in their classrooms. These barriers to technology use were described by Venkatesh, Morris, Davis and Davis (2003), who suggested people should view a technology as being both useful and relatively easy to use in order to integrate it fully in their work.

The aim of this article is to address these barriers by demonstrating the utility of digital interactives as enhancements to classroom instruction and presenting a four-step model for social studies teachers seeking to include digital interactives from the web during classroom instruction. The model is intended to help bridge the gap between the organizations that produce digital interactives and classroom teachers by explaining both the potential utility of digital interactives and a process for using them in the classroom. It may also be helpful for teacher-educators and professional development designers assisting pre- and in-service teachers integrate digital interactives in their lessons.

Digital Resources in Social Studies Classrooms

Social studies educators have long valued the Internet’s potential for community building, civic participation, and the improvement of social studies education (Friedman, 2006). Over the last decade, teachers have harnessed the capabilities of the web using a variety of resources, including WebQuests (Bates, 2008; Dodge, 1995), online access to primary sources (Ferster, Hammond & Bull, 2006), and Web 2.0 style interaction with digital media (Holcomb, Beal & Robertson, 2009). While exploration of the literature reveals the efficacy of incorporating the internet in social studies lessons and projects, many teachers fail to fully capitalize on the burgeoning potential for dynamic instruction made possible by web-based resources (Shiveley & VanFossen, 2009).

Social studies teachers are more likely to use the Internet to build their own background knowledge or to find lesson plans for their courses than to promote higher order thinking or technology integrated and discipline specific projects (VanFossen & Waterson, 2008). Teachers continue to underuse technology despite increased access to resources like interactive whiteboards, digital projectors, and expanded web content (Bucknemeyer, 2010). When social studies teachers utilize technology in their lessons, it is frequently to reinforce the instructional strategies they were already using.

Much of this problem is attributable to inadequate pre- and in-service teacher preparation to use emerging technologies. Teacher educators are growing more comfortable using technology during their instruction. However, their study found that teacher-educators are more likely to model instructional technology than to explicitly teach it as part of the pre-service curriculum (Bolick, Berson, Friedman & Pordeli, 2007). Even though scaffolded and collaborative in-service professional development shows promise as a model for assisting in-
service teachers learning about instructional technology (Wright, 2010), this type of development is rarely offered (Hixon & Bucenemeyer, 2009). Without adequate preparation, some teachers miss opportunities to enhance their instruction using digital resources.

**Social Studies Digital Interactives**

Like other forms of web content available to teachers, digital interactives offer social studies teachers a dynamic resource that can help them create more meaningful and authentic learning opportunities in their classrooms. Digital interactives are distinct from other web-based resources because they are designed to encourage student engagement (Lamb & Johnson, 2010). Organizations creating digital interactives encourage users to manipulate audio, video, text, or animation to solve a problem or practice a skill. The *OurStory* web module provided by the National Museum of American History illustrates the capabilities of digital interactives. Specifically, the *OurStory* site encourages the development of reading and discipline-specific historical thinking skills among users through digital interactives designed to accompany popular children’s history books (Coquillon & Wei, 2011). See Web-Based References for links to websites identified in this manuscript.

![Diagram](Figure 1. A model for finding and incorporating digital interactives during social studies instruction)

If our example teacher, Mr. Irving, sought to generate student interest during the introduction of a lesson on Manifest Destiny and the American West, he might integrate the *Sod House* digital interactive, available from the *OurStory* site, into the instruction. This resource invites users to build a prairie home by correctly answering questions about the lives of western settlers. This style of web content is engaging, accessible, and easily incorporated into a lesson plan. The use of well-designed digital interactives like the *Sod House* resource allows teachers like Mr. Irving to effectively integrate technology into their classrooms, which creates more stimulating and authentic lessons, stimulates student critical thinking, and helps teachers meet their curricular needs (Cheng, Basu & Goebel, 2009; Wijikumar, 2005).
Unfortunately, finding the right resources to enhance specific lessons presents a challenge for many educators. Teachers can capitalize on the potential of digital interactives by conducting a web search to find digital interactives then arranging their instruction around the capabilities offered by the digital interactives they find.

**Determine your Needs**

Teachers can begin by identifying areas within their curriculum that could be improved with digital interactives. Searches are more efficient when organized around specific social studies units. A U.S. history teacher, for example, might consider searching for topics like immigration, Manifest Destiny, or the industrial revolution. A geography teacher, however, might search for themes like climate or human movement. Organizing searches around themes produces more relevant digital interactives than general searches, which often produce too many results; and lesson-specific searches, which may not produce enough results.

**Search the Digital Landscape**

Most social studies teachers have experienced the particular frustration that accompanies cursory Google searches for lesson ideas. Most general searches do not produce high quality results, or end in invitations to join monthly subscription sites for teaching materials. Teachers can make their searches more efficient by utilizing one of two clearinghouse repository sites that feature free digital interactives for teachers. These sites, Verizon’s Thinkfinity and PBS’s Learning Media, offer teachers the ability to refine their searches into grade level bands and specific types of digital resources. Teachers also can visit the web presence of specific institutions, museums, or organizations that hold resources that complement Social Studies curriculum. For example, the Smithsonian’s History Explorer, National Postal Museum, and National Geographic Education sites contain dozens of classroom-ready digital interactives. Finally, teachers also might consider becoming a member of an on-line learning network for teachers that includes categorized resources for social studies like Edmodo or Classroom 2.0. These networks allow teachers to share the locations of engaging digital interactives and tips for integrating them during instruction.

Though an improvement from Google searches, each of these strategies requires teachers to be tenacious in their search and willing to modify their instruction to effectively integrate the digital interactives they find. Despite the challenge, each site includes a wealth of resources that can be used by social studies teachers during their lessons. If an elementary teacher like Mr. Irving utilized Thinkfinity to conduct a search on the Judicial Branch, he would be rewarded by finding the Supreme Decision digital interactive, which invites students to assist Supreme Court Justices in determining the outcome of a civil liberties case. In this digital interactive, students see and hear cartoon Justices debating the constitutionality of banning students from wearing potentially offensive or dangerous clothing to school. Students then must compare this case to the First Amendment and advise the Supreme Court in making a ruling. Performing a thorough search utilizing clearinghouse repository websites is an essential stage in integrating digital interactives during instruction.

**Establish an Entry Point**

Determining the entry point in a lesson plan is an important step in utilizing digital interactives because it encourages teachers to consider how each digital interactive can help students achieve lesson objectives. Digital interactives should be considered an enhancement, not
a replacement, for effective instruction. Though digital interactives are becoming more complex, teachers must build context around the digital interactive they select and help students to unpack what they learned by engaging in the activity.

Teachers need to evaluate each resource they intend to use to determine if it should be used to introduce a new topic, provide practice for a skill, or summarize a concept. By conceptualizing the goals the digital interactive will achieve within a lesson, teachers will ensure their instruction is driven by curricular needs. For example, in the Image Detective digital interactive, students practice analyzing primary source images. Capitalizing on this interactive requires teachers to prepare their students by teaching about primary sources and how historians use them to build narratives before the students use the interactive. This might lead an educator to include the Image Detective interactive to reinforce a skill during the middle portion of a lesson or as a skill summary during a lesson closure. Mr. Irving, who discovered the Supreme Decision digital interactive, would need to decide between using the resource to introduce the role of the Supreme Court in the Judicial system at the beginning of a lesson or using it as a lesson summary or assessment.

**Build the Digital Interactive Enhanced Lesson**

Teachers should end their search by arranging their selected digital interactives in their lesson plans. The integration of digital interactives can be streamlined by making sure classroom computers have updated versions of Adobe Flash, Shockwave, and Java before the teaching day. It is also important to devote class time to modeling how to use digital interactives for students. By demonstrating how the digital interactives work, teachers can ensure their students enjoy meaningful learning experiences with them.

Teachers can maximize the positive elements of digital interactives by including the content and skills they practiced as part of a broader theme or unit. Some larger digital interactives include extending and refining activity ideas for teachers. The Van Valen Gold Rush Journey resource, for example, invites students to read the journal of a western immigrant’s journey and synthesize their experience with what they learn about Manifest Destiny from primary sources. The resource also includes digital forms that allow teachers to assess student learning before and after they complete the digital interactive. Teachers can maximize the impact of digital interactives on their students’ understanding and critical thinking by helping their students to build background knowledge before they complete a digital interactive and by planning activities to extend and refine what students learn.

During this final phase, the Mr. Irving would need to model the use of Supreme Decision for students and ensure that each student had headphones to hear the character dialog in the interactive. He also would need to determine how the Supreme Court digital interactive fit into the broader curricular unit by planning activities that build background information about the Supreme Court and debriefing activities that extend and refine the content and skills they learned by completing the digital interactive. If he chose to utilize the Supreme Decision digital interactive as a closure activity following a lesson on the legislative branch of American government, Mr. Irving would need to ensure students understood critical vocabulary words like justice and amendment before they began. He also might consider extending and refining his students’ learning by inviting them to examine contemporary court cases.
Conclusion

Digital interactives are powerful, but underutilized, forms of web content available to social studies teachers. Non-profit institutions, like the National Museum of American History, offer teachers an expanding collection of powerful resources for classroom use. Teacher training and professional development, unfortunately, frequently sidesteps preparation for utilizing web resources like digital interactives during classroom instruction. Teachers can catch up on what their training and professional development might miss by conducting a four-step web search to find and integrate digital interactives in their lessons. By arranging explorations around content themes, using clearinghouse websites to conduct searches, and integrating interactives in instruction by assigning them specific objectives in lesson plans, social studies teachers can fully capitalize on the range of digital interactives available to them on the internet.

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