Touch, Type, and Transform:
iPads in the Social Studies Classroom

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Ms. Wei is a third grade teacher in a Title 1 school in Tampa, Florida. Over her decade of service as an educator, she has observed how the increasing diversity of the student population has created thriving communities of multicultural and multi-lingual learners in area schools. The county services 22,000 Limited English Proficient students who collectively speak over 100 different languages. Haitian students have been among a growing Caribbean population in Florida, and state standards for third graders include developing geographic awareness of the Caribbean region.
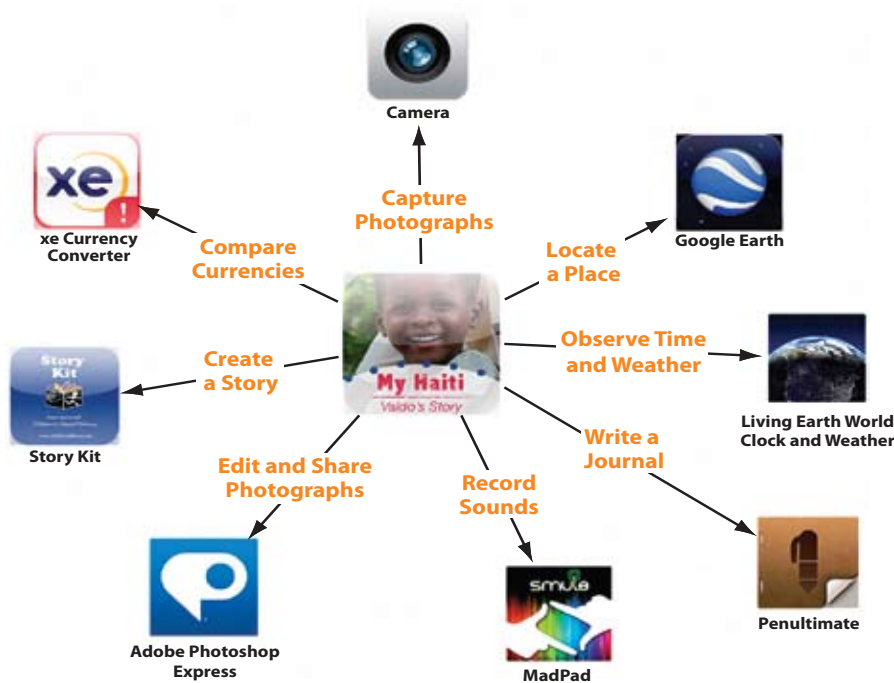
Ms. Wei has 15 students in her class, and most started the year as struggling readers. After a few months of school, all but two children have been making noticeable gains. In fact, three students in her class were recently identified as gifted. The two students who continue to perform below grade level expectations are both English Language Learners who arrived with their families from Haiti this past summer. The two young girls are quiet and shy, and Ms. Wei noticed that they tend to isolate themselves from their classmates.

Ms. Wei brainstormed ideas to foster engagement of the girls while also enhancing the social studies content in her classroom. Recognizing that every culture has a heritage of challenge, triumph, and perseverance, Ms. Wei hoped that by studying the geography of the Caribbean, students might understand the universality of the human experience,

practice communicating across cultural lines, and work together to promote equity. To foster relevant connections to the content, Ms. Wei wanted to facilitate students' discovery of culturally-based similarities and differences between their lives and the lives of children in Haiti. She recently acquired three iPads for her class, and had already introduced her students to how to use the devices responsibly and navigate their way to apps she selected to align with learning objectives and students' individual needs. Ms. Wei identified an app that she thought would interest her Haitian students by connecting with their cultural identities while addressing important learning objectives in geography and economics for the class. She selected *My Haiti: Valdo, A Child's Story HD*, which is a photo story app introducing children to a young Haitian boy and his life. Through the app, the students could experience how a child

in a developing country lived, what his home looked like, the forms of transportation he used, the type of school he attended, and other details of his life.

The third graders were excited to be learning about the culture of two of their classmates. The app introduced them to Creole, and the children learned to count to 10 and speak other common phrases, like "I am ... years old" or "Where is the bathroom?" The children's excitement and engagement grew, and one of the Haitian girls had a big smile on her face the whole time the other students were trying to say the words. Other students kept asking the two girls for help with their pronunciations and translations—propelling them to the role of class experts. The iPad served as a conduit for fostering classroom community building as well as promoting social studies learning goals. Using the iPad, the students in the class made a rapid trajectory from novices to masters of the device and the content. The class would culminate their exploration of the geography of the Caribbean by writing stories that depicted the effects of the 2010 earthquake on the region, using multiple apps to support their creativity, collaboration, and communication. The learning experience facilitated by the iPad captured child voices while

Camera — Capture Photographs

Google Earth — Locate a Place

xe Currency Converter — Compare Currencies

Story Kit — Create a Story

Living Earth World Clock and Weather — Observe Time and Weather

My Haiti — Vaido's Story

Adobe Photoshop Express — Edit and Share Photographs

MadPad — Record Sounds

Penultimate — Write a Journal

fostering student-centric construction of knowledge.

Using Multi-touch Technology to Enhance Learning

New innovations in computing and Internet-based technologies have increased both the availability and accessibility of digital social studies resources. Chief among these are multi-touch technologies, including the Apple iPad. Schools and districts eager to integrate digital technology more cost effectively have been quick to embrace this new computing device.[1]

While we applaud these efforts to integrate more technology into the classroom, especially for low performing students who might not otherwise have access to this technology, we believe it is essential to consider the manner in which multi-touch technologies are used to enhance student learning. We have used Apple iPads with teacher education students, experienced teachers, and social studies students in grades K-12. Below we detail the advantages of multi-touch technologies and suggest strategies for integrating this type of technology into social studies classrooms. The aim here is to engage learners in using these technologies in a manner that is decidedly less didactic

and more interactive.[2]

Overview

The iPad offers the advantage of being a highly portable device with Internet access via either a wireless or 3G/4G network. While students may initially be clumsy navigating between apps or using the onscreen keyboard, they quickly become proficient with the intuitive interface. In comparison to other mobile devices, the screen of the iPad has an expansive viewing surface with a 9.7" widescreen display, which is conducive to sharing and group work. In Ms. Wei's classroom, she found that the device acted as a central focal point for discussion, rather than a distraction during group activities.

The sophisticated interface offers more than just portability and continuous access to digital content. The iPad has the ability to store a range of applications (apps) available for multi-media-rich learning experiences, including interactive texts, PDF files, videos, and podcasts. Infused with diverse learning resources for individualized and personalized instruction, the multi-touch device supports up to 10 hours of use, making it ideal for field work, real time recording of observations, and interactive access

to resources, such as e-books and online references. When teachers integrate the iPad into collaborative learning experiences, students may take advantage of social media and web 2.0 resources and participate in social knowledge construction as they confront authentic, complex problems. Built-in cameras allow video and photographic documentation. Additionally, the use of video calls via free services such as Skype improve connections across sites of learning and facilitate real world access to global information through informal and formal online networks and engagement with experts and other learners worldwide.

Considerations for Teaching with the iPad

While mobile devices like the iPad offer affordances for educators,[3] teaching with iPads requires new skills for teachers and students. The challenge is not insurmountable, but necessitates significant attention. "App fluency" refers to the ability to use multiple applications (apps) to create a final product. Currently, there are over 90,000 apps available for iPad users. Individually, very few of these apps "support truly innovative teaching and learning, in the sense that they represent resources that extend what educators and students could otherwise do."[4] By bundling several apps together as Ms. Wei did, teachers can leverage the iPad to create new and innovative learning experiences. Students, in turn, must learn a new form of literacy as they move between apps and engage in both personalized and collaborative learning experiences. The new literacy skills involved with iPads go beyond traditional conceptions of literacy to include remixing media and content, collaborating with peers at a distance, sharing and communicating findings clearly and efficiently, and understanding which apps best fit their learning goals. It is also important to consider how the capabilities of the iPad will be enhanced by other computing tools in the classroom, including desktop or laptop computers.

Teaching with an iPad requires consid-

erable planning on the part of social studies teachers to capitalize on the potential learning benefits of integrating the device in the classroom. One potential barometer for the successful integration of iPad technology is to first consider whether or not the teacher could accomplish the same aims without the technology. For example, teachers could use iPads to have students take notes on teacher lectures using the Evernote app, but this would not be using the technology to its fullest potential. Instead teachers could have students view pre-recorded lectures or documentaries prior to coming to class and remix portions that stand out to them as most significant. Students could share their new understandings using collaborative whiteboard apps and finally create a new multi-media product to highlight the concepts under study. Like other web 2.0 technologies, iPad apps can be leveraged to design learning situations that go beyond basic rote memorization to encourage more personal learning experiences for stu-

dents and support the development of a "key 21st century skill—the idea that knowledge is socially constructed and negotiated."[5]

Currently, there are few research studies documenting the impact of integrating iPads for learning in the social studies. This may be due in part to the relatively recent development of this tool and its adoption by schools. However, initial reports have been positive. For instance, Friedman and Garcia demonstrated how the Explore 9/11 app helped students better understand an important event in history while appealing to multiple learning styles.[6] The Explore 9/11 app includes an audio walking tour, personal interviews, digitized primary sources, and background information, which the teacher used to guide student understanding. When they compared this to a more traditional, paper-based lesson, it appeared that the iPad-based instruction prompted closer attention to the primary sources and brought the history to life for students.

Teaching with Authentic Assessment: Creating Historical Graphic Novels

Many schools are working with iPad apps to create individualized learning activities and personalized assessments. While some of these have been marketed by textbook companies, teachers can create their own authentic assessments of student understanding using iPad apps. Educational media specialist Nathan Stevens outlines the steps students and teachers can take to create graphic novels.[7] This activity can easily be adapted to a social studies classroom to assess student understanding of a historical or current event. The first step is to turn photographs into cartoon images using the ToonPAINT app. Students could select a variety of images from digital libraries, including the Library of Congress's American Memory collection, the National Archives, and Documenting the American South. Once the students have converted the images into cartoons, they can then insert them into comic pages

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RECOMMENDED RESOURCES

Below are a few of the growing number of resources where teachers may locate recommendations on apps to enhance classroom instruction in the social studies.

APPitic , **http://appitic.com/:** Apple Distinguished Educators (ADEs) have compiled this directory of apps that are selected for their potential to transform teaching and learning. The apps have been tested in a variety of grade levels, instructional strategies, and classroom settings.

Apple, **www.apple.com/education/apps/:** With so many educational apps on the App Store, Apple has provided this resource, which organizes apps for learning into content areas, such as History and Geography.

Appolicious, **www.appolicious.com/:** Appolicious uses an algorithm to search for and track apps, creating "Hot Apps"—lists of those titles receiving the most attention. Appolicious "Price Cuts" lists showcase apps recently put on sale by their developers. Members of the Appolicious community also share, review, and curate lists of apps, generating recommendations based on apps they own and rate highly.

iPodsibilities, **www.ipodsibilities.com/iPodsibilities/Home.html.** Meg Wilson is a middle school special education teacher who blogs on the use of iPods, iPhones, and iPads in the classroom.

She also provides app reviews to help teachers navigate through the hundreds of thousands of options in the app store.

iEAR, **www.iear.org/.** I Education Apps Review is a community of educators, administrators and app developers. Volunteer "educator" app reviewers provide their feedback on the overall educational value of applications that have been marketed for educational use. Each application receives a "Grade Level" attached to it and a grade for "Purpose," "Program Functionality," and Educational Value. The reviewers also specify whether they recommend the application for personal use and/or school use.

Teach with Your iPad, **http://teachwithyouripad.wikispaces.com/.** This wiki, maintained by Nathan Stevens (Assistant Coordinator of the College of Education Media Center at North Carolina State University), provides a detailed introduction to the iPad, including hardware, accessories, and applications. The "iPad apps" section is organized by subject area, type (e.g., audio apps, communication apps, etc.), grade level, and activities and provides a detailed summary. The "iPad activities" section includes step by step directions for using the iPad with students.

using the ComicStrip app. After adding their images, students can overlay thought or conversation bubbles. The final step is to insert the comic strip pages into a PowerPoint presentation using the Quickoffice app. Students can then save, share, and print their graphic novels. This activity enables students to create new media and demonstrate their understanding of concepts under study. Not only are students able to be creative, but they must communicate their knowledge clearly. The graphic novel requires students to carefully choose images and draft text to capture the story of what matters. This authentic intellectual work could lead to deeper, more enduring learning. Teachers can assess students' progress by evaluating their finished products and, if necessary, remediate misunderstandings.

Conclusion

The release of Apple's iPad was met with great enthusiasm by educators and schools. Yet, if this new technology is retrofitted to traditional teaching activities its full potential will go unrealized. The presence of iPads alone will not generate transformative educational experiences in the social studies; however, the appropriation of the device into school settings may help redefine learning spaces. Social studies teachers who creatively integrate the iPad into instruction to foster communication with the global community and design intentional and purposeful collaborative learning experiences with the device may take learning to new levels of engagement. The functionality offered by the iPad, with its mobility and ubiquitous applications, may be the spark to ignite a movement toward innovation that empowers and enriches students' authentic, high quality learning experiences. 🖼

Notes

1. Jane Stancill, "iPads Make Inroads in Triangle Schools," *The Raleigh News and Observer* (December 18, 2010), www.newsobserver.com/2010/12/18/869111/ipads-make-inroads-in-trian-gle.html; Pearson, "Pearson Maximizes the Power of the iPad for Virginia Students" (Pearson, 2011), www.pearsonschool.com/VABeyondTextbooks.
2. Chris Dede, "A Seismic Shift in Epistemology," *EDUCASE Review* (2008): 80-81.
3. Karen Melhuish and Garry Falloon, "Looking to the Future: M-learning with the iPad," *Computers in New Zealand Schools: Learning, Leading, Technology* 22 (2010): 4, outline five affordances for education of mobile technology: "Portability, affordable and ubiquitous, situated, 'just-in-time' learning opportunities, connection and convergence, and individualised and personalised experiences."
4. Orrin Murray and Nicole Olcese, "Teaching and Learning with iPads, Ready or Not?" *TechTrends: Linking Research and Practice to Improve Learning* 55 (2011): 45.
5. Ibid., 43.
6. Adam Friedman and Emily Garcia, "'The people with the real experiences.' The impact of a mobile technology application on primary source use in a United States history classroom" (Paper presented at the annual conference of the College and University Faculty Assembly of the National Council for the Social Studies, 2011).
7. Nathan Stevens, "Creating a Graphic Novel," http://teachwithyouripad.wikispaces.com/Creating+a+Graphic+Novel.

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