From Print to Apps: Bridging Traditional Literacies with 21st Century Literacies to Support Learning through Teacher Design and Re-design

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In their relatively brief existence, iPads are increasingly appearing in classrooms, schools, and even entire school districts. Android and Windows tablet devices will follow. School administrators, education technology integration specialists, and teachers are optimistic about anticipated improvements in the quality of teaching and learning that the devices will provide. But before they move textbook funds or other monies toward the purchase of iPads or other tablet devices, or BYOD programs drawing heavily from online tools, and invest time and other resources in teacher development and purchasing apps to install on the devices, educators want assurances that the devices will improve teaching and learning. Such definitive assurances will not be coming anytime soon. The reason is that research, at this very early stage of the transition from print to digital literacies, provides few clear answers about the impact of relatively new devices like iPads.

That said, there is a lot of research and a host of validated theoretical frameworks that clearly support moving from print to multimodal environments, providing access to more information presented more dynamically, and supporting more student collaboration through online communities, to mention just a few affordances. In short, there is clear evidence that moving into the digital realm has huge potential benefits with careful curriculum planning and bridging, rather than abandoning or replacing sound instructional practices and time-tested approaches to engaging students.
Below are tips to keep in mind when making the transition to 21st century digital literacies in support of learning.

For elaborations of these and related topics and specific research, visit www.appsforlearningliteracies.com, the site my colleague Rick Beach and I constructed. You will also find a link to our new e-book: Using iPad and iPhone Apps for Learning with Literacy Across the Curriculum.

1. **Textbooks are not universally inferior curriculum materials.** iPads and apps must bridge qualities of existing textbooks with the new, dynamic qualities of iBooks and other e-Textbook platforms. Textbooks are an integral part of the existing school curriculum defined by their content, structure, and organization; they are usually designed to promote learning. Textbooks, although portrayed as inherently outdated, boring, and lacking in interactivity, are backed by about a century of research supporting features like (a) organization of the top-level structure with coherent prose to make ideas accessible; (b) signaling through headings and subheads to cue important ideas; (c) adjunct aids like marginal gloss, vocabulary keys, advance organizers, review tools, and a host of others features that support comprehension.

2. **Adopting digital curricula as a “replacement” for so-called “outdated” texts is shortsighted.** As teachers, schools, and districts look at multimodal, multitouch devices as replacements for printed curricula, they need to plan very carefully how to both retain effective components while excluding features that do not promote learning. Recently, a rush of Apple Author-produced curricula has appeared on iTunes U from K-12 educators who have decided that they can publish curricula that replaces existing materials. But their “curricular design” is often the result of firing before aiming, aided by the ease of design tools that permit cutting and pasting, dragging and dropping media, and moving elements around rather than considering how information needs to be organized, and how specific modalities support certain learning processes. We elaborate on the needed multimodal affordance designs in the book and will also extend the topic in future blog posts.

3. **Adopting commercially produced digital curricula is not the most effective route.** New digital texts are likely to continue the long-held notion that “experts” working for commercial publishers certainly know more about curriculum design and development than teachers; the complementary meme is that teachers cannot produce such materials. Our caveat from point 2 notwithstanding, neither Apple, nor commercial publishers (who unlike Apple, do have a long history of producing print curriculum materials) are uniquely qualified to produce dynamic, interactive, engaging iBooks that also employ sound principles of instructional and learning design. Moreover, commercial publishers know nothing about your students in your curriculum against the backdrop of your communities. That said, with the right expertise and careful design guided by research, publishers have the potential to produce engaging high quality materials. The verdict is still out.

4. **Step by step – bridging of affordances and modalities is a must.** We take the position that each app, enhanced textbook, or digital version of a previously print-bound curriculum material will, just like other apps, provide both positive and negative affordances and will retain or exclude some positive features of traditional curricula. Bridging between traditional print materials and new multimodal media materials must be systematically applied. For example, in the book we discuss frameworks, planning, and implementation of apps with attention to multimodal affordances against the backdrop of what we know about traditional curriculum, teaching and learning.

5. **Teachers as designers must establish the “value added,” potential of a digital curriculum.** Teach-
ers-as-designers, or teachers-as-critics of commercially published materials will need to systematically evaluate all affordances – not just design features but understand affordances-in-use of apps and, when necessary, re-design the affordances.

In the next blog post on the site we will start to discuss specific aspects of bridging design and the role of teachers as designers.

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