

AN INTEGRATED APPROACH TO INTERACTIVE ADVERTISING AND NEWS DESIGN
PEDAGOGY USING THE INFORMED DESIGN AND RESEARCH-INFORMED
DEVELOPMENT MODELS

Michael Hanley
Ball State University

Jennifer Palilonis
Ball State University

Vinayak Tanksale
Ball State University

Bios:

Michael Hanley is an Assistant Professor of Advertising at Ball State University, specializing in advertising, branding, media strategy and new media. He can be reached at mhanley@bsu.edu.

Jennifer Palilonis is an Assistant Professor of Journalism at Ball State University, specializing in visual communication, graphics reporting and multimedia design. She can be reached at jageorge2@bsu.edu

Vinayak Tanksale is an instructor of computer science at Ball State University, specializing in interactive design and programming. He can be reached at vjtanksale@bsu.edu.

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Abstract

This study investigates how the informed design and research-informed development models affect the pedagogical learning outcomes and design solutions of university students creating interactive advertising and news content for television and the iPhone. An interdisciplinary group of three professors and 34 undergraduates from Advertising, Broadcast News, Computer Science, and Journalism Graphics employed a research-informed development process to create interactive design products and collect feedback from target audiences about the interactive advertising, news content, and interface designs and functionality. Students used the feedback from target audience focus groups to revise and improve the design work before each of three rounds of audience usability tests.

Extended Description

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During the 2008 spring semester at a Midwestern university, three professors collaborated with an interdisciplinary team of 34 undergraduate students in a course to develop four interactive advertising and three news products for use on a television news broadcast and the iPhone. The group consisted of students and faculty from Advertising, Broadcast News, Computer Science and Journalism Graphics, representing two colleges and three departments.

Recently, there has been increased recognition of the educational value provided by design activities in which students create external products that they share and discuss with others (Soloway, 1994; Papert, 1993; & Resnick, 1998). The literature reveals that pedagogically solid design projects involve authentic, hands-on tasks; use familiar and easy-to-work materials; possess clearly defined outcomes that allow for multiple solutions; promote student-centered, collaborative work and higher order thinking; allow for multiple design iterations to improve the product; and have clear links to science and engineering concepts (Crismond, 1997).

Most problem solving in classrooms is directed toward a given set of possible answers and does not challenge students to solve open-ended problems. And yet, most technological design problems are not well defined and difficult to solve. This provides the opportunity for teachers to introduce constructivist pedagogical practices to engage and challenge students in their own learning. The informed design process provides a way to use design as a pedagogical strategy.

Informed design is a pedagogical approach to design developed and validated through the National Science Foundation-funded New York State Curriculum for Advanced Technological Education Project (Burghardt & Hacker, 2003). Informed design methods are common in educational environments, particularly involving technology. For example, Hofstra University hosts a number of informed design resources through the Center for Technological Literacy. These resources are intended to help educators build learning tools for students in the areas of mathematics, science and technology. Informed design activities require that “students reach design solutions informed by prior knowledge and research, as opposed to trial-and-error problem solving where conceptual closure is often not attained (Center for Technological Literacy, 2008).”

The interactive television and iPhone advertising and news course adopts this ideology and expands on it by integrating focus group sessions into the development process so that students can incrementally apply the perspective of the target audience to the development process. In addition to being a very rich, collaborative informed design learning environment for students, the course employed a research-informed development model as a tool for collecting feedback from actual target audiences about the interactive advertising, news content, interface designs, and functionality. In other words, at various stages during the development process, students presented their interactive design outcomes via focus groups to a sample of individuals aged 18-65 who provided immediate feedback about the usability, quality and overall value of their work. Students took that information back to the classroom to revise and improve their design work before the next round of audience usability tests. As a pedagogical tool, the research-informed development model provides an engaging and innovative teaching method that uses actual usability data that will provide the interactive advertising and television and

mobile device industries with valuable insights and tools for the future of interactive television advertising and news.

For advertising and journalism graphics majors, whose primary foci are creative development, layout and design, illustration and graphics reporting, informed design is a seemingly logical but seldom used method. Rather, most communications design programs are developed with a more traditional pedagogy: professor gives assignment; student completes assignment with professor's standards in mind; professor administers grade; class moves on to the next project. This method, while effective in its strategy for providing students with a great deal of feedback on a larger number of projects, suffers from one major flaw. When communications design students graduate, they will, without exception, always be developing and designing for a mass audience. Yet, in the traditional pedagogical model, the audience is completely absent from the learning process.

The research-informed development process provides creatives, designers, illustrators and graphics reporters with valuable feedback from their audiences that directly affect their work. They are no longer working with one professor's taste in mind, but with the opinions of, in our case, more than 50 individuals, most of whom had very strong ideas about what they like and dislike regarding aesthetics, functionality, navigation, and the presentation and composition of advertising and news content. Likewise, this method is extremely liberating for professors because it allows us to step outside our traditional roles as distributors of knowledge and into more exciting roles as mentors, advisers, collaborators and partners in the learning and development process.

This course resulted in the completion of four interactive television advertisements and three news broadcasts. Students, in their end-of-course analyses, reported how challenging and liberating the process was for them, mainly due to the intellectual and technical challenges they faced and were able to overcome during the process.

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