

Book Review

Transforming Education with New Media

Transforming Education with New Media: Participatory Pedagogy, Interactive Learning, and Web 2.0. Peter DePietro (2013). Peter Lang, New York. 2013. 200 pp. \$38.95. Soft Cover. ISBN 978-1-4331-1794-7

Mustafa Polat
University of Arizona

Abstract

Peter DePietro's *Transforming Education with New Media: Participatory Pedagogy, Interactive Learning, and Web 2.0* covers multiple aspects of integrating technology in education, ranging from social media to cloud services. He supports his assertions with case studies carried out in his own classes. Although the text can, at times, seem more like a personal reflection than a theoretical work, *Transforming Education with New Media* is a valuable contribution for educators, administrators, policy-makers and even parents who wish to familiarize themselves with various applications of technology in the educational field.

In his introduction to *Transforming Education with New Media: Participatory Pedagogy, Interactive Learning, and Web 2.0*, Peter DePietro states that online platforms and new media technologies provide apparently infinite possibilities and opportunities in terms of human connection and dissemination of information. Consider the following: According to the technology news site Mashable, Facebook has more than one billion active users and more than 250 billion photos are uploaded every day. Similarly, the microblogging site Twitter has more than half a billion users, and almost half a billion tweets are posted daily. Mobile platforms such as iOS and Android offer 500 million separate applications, many of which are oriented to the social Web, enabling users to exchange messages, visions, facts, fictions, contemplations, accusations, exclamations, and declarations around the world.

DePietro stresses the theoretical benefits of massive digital connectivity and availability of information for curriculum development in higher education. Research continues on new ways of integrating digital tools into the classroom experience, thereby making it more productive, effective and enjoyable. Courses from prestigious institutions such as Harvard and M.I.T. are now available online through Massive Open Online Courses (MOOCs). Additional course materials are publicly available through iTunes

University. Education, according to DePietro, is “easily available, democratic, and immersive” thanks to technological innovations (p. 1). The main question to be asked, however, is whether it is “worthwhile” or not. Do we, as educators, need to integrate all the elements offered by new media platforms and social media resources into our teaching? The need to discuss the quality of new media and other innovations continues to be important. *Transforming Education with New Media: Participatory Pedagogy, Interactive Learning, and Web 2.0* is based on DePietro's examination of new media and pedagogy, as well as case studies of integration of online tools and social media in his own courses.

Chapter 1 of *Transforming Education with New Media* serves as an introduction, in which DePietro defines and explains Web 2.0 and then relates it to education: “[T]his new education engages students with technology like never before, and it provides unique and effective ways for students to interact with information. Thus students learn differently. Web 2.0 can produce Education 2.0” (p. 1). At this point, DePietro asserts that “in the history of education, advancing to a new level: the second level [or Education 2.0] because of new media was inevitable” (p. 2). He also interrogates the term new media, however, by asking what is new about it and whether every new medium is, in fact, “new”. Technology ages so rapidly that theory of application must be dynamic, in order to match the ongoing evolution of the tools. Successful pedagogy must also be evolutionary as well.

DePietro mentions as a case in point the rise of tablet computers, which became a mainstay at the time *Transforming Education with New Media* was written but had not existed a few years before. Tablet computers were initially designed for socializing and entertainment; using them for educational engagement, therefore, seems awkward. In order to make effective decisions regarding the use of new media, DePietro suggests, “it is important to remember that the tools are only as good as the theories that support them; how follows why, sort of like form follows function in the design area” (p. 6). Educators and decision makers must be careful to balance the how and why of new technological applications, a process similar to finding a balance between theory and practice, or style and purpose.

In Chapter 2, DePietro elaborates on the relationship between how and why, and explains why we should not embrace new technologies without first learning how they work and affect us. Individual differences need to be taken into careful consideration while integrating new technologies, as their purpose and meaning is created by the learners themselves. DePietro challenges the assumption that all digital natives, or XYZ-generation students have similar interests and capabilities. Educators need to be aware of individual differences and the benefits of teaming and grouping different students so that meaning can be created in a context of community and working collaboratively. It is also essential to convey the message to students that “what is produced with the tools is more important than the tools themselves-usually” (p. 14).

Chapter 3 introduces and defines tool literacy as a significant part of the meaning-making process. DePietro reiterates the balance of practice and theory; instruction should emphasize why as much as how in order to inform meaningful, rather than unthinking,

use of classroom technology. A combination of proficiency, understanding, and curiosity is key to the successful use technologies in a variety of areas. Not all teachers need be familiar with every media tool; instead, DePietro suggests mutually beneficial partnerships among instructors. Nonetheless a kind of general tool literacy is essential to all instructors. DePietro also underlines the role of meaning in human learning experience, suggesting educators “teach students to create new media works that reflect their human experiences, use themes that are relevant to contemporary times, enrich our universal repository of knowledge, and help us make sense of our new media world and ourselves using new media” (p. 25).

Chapter 4 starts by distinguishing between reaction, defined as verbal involvement, and interaction, participation via devices. Interactive learning occurs when both verbal involvement and participation via technology are achieved mutually. DePietro states that robust interactive components in new media platforms are key both to entertaining and informing learners, but “the challenge –in the Wild West of new media where things come, go, and change constantly– may be to find that component” (p. 29). After recounting his own experience using text messages for learning purposes in class, DePietro ends the chapter by stating, “interactive learning is transformational” (p. 35).

Chapter 5 underlines the significance of participatory pedagogy. Web 2.0 tools and new media devices enable students to “collaborate with instructors to reinvent the fundamentals of classroom instruction: from establishing course flow, to organizing class modules, to determining how course materials are presented” (p. 37). With the assumption “active is more successful than passive,” DePietro supports his ideas with a case study in which “students took an active role in shaping their own educational experiences” (p. 46). At this point, he refers to the term cognitive prosthetics, defined as tools that make students better thinkers, a concept that DePietro claims is both revolutionary and basic.

Chapter 6 delves into social media and collaborative learning. DePietro emphasizes the fact that social media are expanding even if it is currently difficult to find research that justifies their popularity and instructional value. DePietro lists several ways to use social media tools and platforms in classrooms and illustrates these methods with a second case study about an examination carried out using Facebook as a delivery platform. This case study illustrates how social media can be used for instructional and assessment purposes. The chapter goes on to focus on the importance of setting boundaries and avoiding digital noise by creating specific user accounts for educational purposes.

Chapter 7 briefly introduces the concept of media systems as foreground and background communication streams. DePietro suggests that these background streams, or backchannels, have both pros and cons. He references research on multitasking that indicates it is not always favorable to productive learning. Students who are focused on a single task at a time can complete their work earlier than those who are expected to multitask in an environment containing a lot of aural, visual, and cerebral stimuli.

Chapter 8 discusses the use of microblogging in the classroom. Accordingly, this chapter's case study focuses on engaging students with Twitter despite its "inherent and obvious limitation on discourse" (p. 73). DePietro explains why communication via Twitter or other new media is not inferior to, but merely different from, communication using older media technologies. One potential concern about this chapter's case study stems from DePietro's focus on avoiding digital "noise" by creating dedicated Twitter accounts: this potentially lessens the authenticity of students' use of the tool. DePietro collects information related to students' attitudes toward Twitter and closes the chapter by stating that we should "embrace the new, and let the old inform how we use the new" (p. 83).

Chapter 9 is not directly related to how or why to use certain tools, but emphasizes a very valid point related to the presumptions about student connectedness. DePietro states that students might assume that teachers are connected to the network around the clock. According to DePietro "it is imperative to define when students can communicate with instructors, when instructors are available to provide information pertinent to coursework" (p. 86). In order to deal with this potential disjunction, he explains a model called results-oriented instruction in detail.

Chapter 10 is short and focuses on wikis. There is a widely-held belief that wikis offer interactive content of a theoretically democratic and unfiltered nature. The findings of the related case study, based on major wikis like Wikipedia, suggest otherwise: "digital democracy can sometimes be digital autocracy" (p. 100). These and other wikis do not seem to permit users to change their content before a reviewing process or, sometimes, even after it.

Chapter 11 underlines the necessity of taking financial realities into account while making decisions about the use of technology both in- and outside the classroom. Although some educational institutions are "missing the boat" (p. 106) in integrating technology into teaching; on the other hand, it is also possible to overreact in the opposite direction, creating a variety of technological disparities. Therefore, "educators must work extra hard on the balance between the real and perceived need for tools" (p. 109).

Chapter 12 focuses on mobile education, which DePietro considers to be similar to e-learning or online courses. He asserts that mobile education and its associated learning process can be productive only when "the logic of technology is understood and the fundamentals for using device are learned" (p.120). Making online course materials available all at the same time is ineffective, as students may receive course materials out of context. Finally, DePietro notes that concerns such as adequacy, preference, and reliability should be taken into account when promoting mobile education.

Chapter 13 touches on the significance of interdisciplinary collaboration. DePietro provides a case study based on collaboration through text messaging that supports the concept of "expanding the interdisciplinary idea exchange with new media technologies" (p. 141).

Chapter 14 focuses on the power of games to “entertain, motivate, educate, tell stories, resolve conflicts, solve problems, and even assist in healing personal ills, such as substance addiction and depression” (p. 143). This chapter presents the last case study in the book, which focuses on game-based learning. DePietro concludes: “this case study showed that games in education, when designed to serve pedagogy, work. And, in terms of advancing student engagement with course material, games in the classroom are powerful” (p. 158).

Chapter 15 discusses cloud-based computing services. DePietro interrogates the reliability of the cloud as a platform for transforming education. He observes that simply storing data in a cloud-based service does not, in and of itself, make scholars tech-savvy. DePietro also notes the difficulties raised by the ambiguities of cloud data storage and related issues of data privacy and ownership.

Chapter 16 serves as both summary and conclusion. DePietro revisits his ideas from previous chapters and summarizes his thoughts on the balance between theory and practice. He reiterates the need to consider both the how and why of using new media and the importance of distinguishing between the real versus perceived value of adopting new media platforms. DePietro notes “Web 2.0, social media, websites, wikis, interactive forums, e-learning systems are all part of the educational process today” (p. 183). He also references Jean Piaget to remind the reader that the principal goal of education in the schools should be to create men and women who are capable of doing new things, not simply repeating what other generations have done. This leads to DePietro's own conclusion: “technology does not educate students, we do [and] new media will transform education in a significant way” (p. 186).

Transforming Education with New Media is a thought-provoking discussion of the effectiveness of technology in the classroom. The text can seem like a personal reflection, however, as it draws much of its substance from DePietro's own experience and research. Nonetheless, *Transforming Education with New Media* is a valuable contribution and is recommended for educators who are seeking a starting point for their own integration of technology into teaching. Similarly, it would be of value to administrators, policy-makers and even parents who wish to familiarize themselves with various applications of technology in the educational field.