Chapter 10
Using Web 2.0 Tools to Start a WebQuest Renaissance

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ABSTRACT

Technology is part of the modern world and students must have authentic experiences using it as part of their compulsory education. The challenge, however, is that models for embedding technology into classroom instruction can be vague, misleading, or promote the use of technology for technology's sake. In this chapter, the authors open with a discussion of WebQuests. They then explain how WebQuests can be redesigned using Web 2.0 tools – mainly apps that run on digital devices – in a way that develops students' inquiry skills and digital literacy abilities. The chapter concludes with examples of these enhanced WebQuests that teachers can use as a scaffold when developing their own versions.

INTRODUCTION

The potential advantages provided to teachers and students by the Internet and digital tools is unprecedented. From products that can be created using a variety of software programs to information that can be accessed from electronic databases, teachers now have the opportunity to craft meaningful learning experiences for their students. The challenge, however, is providing teachers with the support they need to leverage those digital tools and archives of information into innovative lessons. This chapter's goal is to provide examples based on Cherner and Fegely's (2017) framework to integrate current digital technologies into classroom instruction. To do so, the chapter will first offer background information about the emergence of technologies and how they evolved in the Digital Age. Next, the authors discuss three different frameworks used as guides for lesson planning. The first two frameworks – Dodge's (1995) framework for WebQuests and Hunter's (1982) lesson plan model for mastery learning – are both well-established models teachers use for lesson planning. Those frameworks provide a foundation

that Cherner and Fegely's (2017) framework evolves. In this chapter, the authors compare Cherner and Fegely's (2017) framework to those put forward by Dodge (1995) and Hunter (1982) by explaining how advanced digital tools can be integrated together to provide students an authentic learning experience that promotes student-driven inquiry. The chapter closes with practical examples of Cherner and Fegely's (2017) framework along with analysis before concluding with implications for future research.

BACKGROUND

The advent of the World Wide Web in 1990 ushered in the first epoch of the Digital Age, now commonly referred to by its retronym, *Web 1.0.* This early iteration of the Internet cultivated consumption over creation, and the average Web 1.0 user (Cormode & Krishnamurthy, 2008) logged on at home or work to access information via static webpages, communicate over email, and comment using digital guest books. In the classroom, teachers approached the Internet as an enormous archive of information from which students could pull and cite data for essays and projects. Typically, students logged onto the Internet and searched for reference materials in the school's computer lab, similar to the way they searched the stacks for materials in the school's library. After retrieving the necessary information, students exited the online realm to complete the assignments using traditional technologies, such as pen and paper and word-processing programs.

Early educational uses of the Internet were, in this way, substitutional rather than transformational (Puentadura, 2010). With little guidance or precedence, teachers shoehorned the Internet into traditional instructional practices that focused on positivistic products such as essays that correctly identified, regurgitated, and/or discussed historical events, scientific findings, or rationales. Teachers were not leveraging the Internet in dynamic ways; rather, they were using it as a replacement for paper-and-pencil materials. The landscape began to shift, however, when Bernie Dodge introduced the WebQuest in 1995.

In his seminal article, Dodge (1995) presents the WebQuest as a lesson-planning technique that facilitates a guided, student-centered approach to learning through inquiry. To structure the WebQuest, Dodge outlines six stages that are shown in Table 1.

The *Introduction* presents and describes the chosen topic to students by identifying the purpose(s) of the WebQuest and making relevant connections between the WebQuest, instructional unit, and students' lives. The *Introduction* concludes with an essential question that is open-ended (Lent, 2009). At the conclusion of the WebQuest, students will respond to the question and, because it is open-ended, there is no single "correct" or "right" answer to it (Ostenson & Gleason-Sutton, 2011). Rather, each response

Table 1. The six stages of Dodge's WebQuest

Stage	Description
Introduction	Hook the students into the lesson by highlighting connections and presenting the essential question
Task	Clearly and concisely describe the desired end result
Process	Define student roles, identify necessary tools, and describe each required step
Resources	Identify and explain available resources
Evaluation	Outline evaluation criteria and process
Conclusion	Summarize learning and pose rhetorical questions to deepen thinking

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