Chapter 9

Authentic Tasks Online: Two Experiences

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ABSTRACT

This chapter presents an exploration of the design and methods of two instantiations of authentic learning tasks in online learning environments. The first case employs a service learning orientation involving a distance learning project taught to students in four sites in two countries, while the second case is of a multimedia-based learning environment employing a scenario to engage students in realistic, simulated learning activities. The two approaches are examined through reference to characteristics of authentic tasks. The chapter demonstrates a range of possibilities for the instructor interested in more informed design of technology-based learning environments in higher education, and in particular, the design and creation of authentic learning tasks.

INTRODUCTION

The rise of internet-based education programs has lead to much concern over the quality of the courses offered online. Through learning management systems that model information-based modes of delivery, courses often revert to more transmissive modes (Beetham & Sharpe, 2007). Online learning has strongly perpetuated conventional expository methods of teaching. Many of the pitfalls of online instruction can be attributed to the faulty and somewhat regressive assumption that online courses could be taught following the same principles of face-to-face instruction (cf. Reeves, Herrington, & Oliver, 2004). Simply transferring content and form from one mode of teaching to the other has typically generated online courses where students learn from media as opposed to learning with them (Reeves, 1998). While learning from is not inherently negative, this paradigm has
had a tendency to produce courses that copy more traditional, expository methods of instruction and presentation to online media.

BACKGROUND

The emphasis on learning from media in online classrooms has largely lead to unidirectional content transfer with limited student engagement. Traditional teaching often typifies passive students and fictitious content, scenarios and examples. In many online courses where students read, watch, and listen to a variety of media, they are denied the opportunity to engage with authentic contexts. Learning concepts (especially abstract concepts) is greatly dependent on context and experience (Gagné, 1984; Mezirow, 2000). Inquiry-based models such as those of project-based learning (Han & Bhattacharya, 2001) emphasize context, and focus on student activity and interaction. Providing authentic contexts for engagement in online environments can be quite difficult for teachers, especially when dealing with ill-defined problems. Nevertheless, much work has been done to leverage the potential of online environments in order to create authentic environments paying particular attention to context and audience (Reeves et al., 2004). Among these possibilities is the use of real-world scenarios in order to provide context and setting to meaningful engagement in an online setting.

Some academics contend that for a task to be authentic, it needs to be real. For example, Savery and Duffy (1996) nominated two guiding forces in developing problem-based scenarios: firstly, that the problems must raise the concepts and principles relevant to the content domain, and secondly that the problems must be real. However, research has provided principles to guide the development of realistic and complex learning environments that are not real but cognitively real, that is, the tasks that are created for students are not real tasks performed in a real workplace setting, but they are ‘cognitively real’ (Smith, 1986; 1987). Authentic tasks require the creation of real products and artefacts, and are more worthy of the investment of time and effort by students than decontextualised exercises and tasks.

TWO EXPERIENCES

In this chapter, we discuss these two alternatives to enhance the authenticity of the online classroom. First, we review an experiential e-learning model based on service-learning focused on pre-service teachers and multicultural education. Next, we describe a scenario-based model focused on mathematics and pre-service teachers. We finalize the chapter with a comparison of the two approaches based on the characteristics of authentic tasks. Our aim is to demonstrate a range of possibilities for the instructor interested in promoting authenticity in an online environment.

Experiential Learning: E-Service

Within the domain of education, pre-service teachers are usually involved in some form of experiential activity before graduating. The practicum is usually a sustained internship where students assist a more experience teacher to learn about the practice of teaching in an authentic context. This is but one type of experiential learning. It is a long-term and intense experience that occurs parallel to the academic environment. Opportunities such as this exist in other areas of study such as engineering or design, in the form of volunteer work or internships.

Furco (1996) provides a useful set of criteria to define experiential learning models, depending on the emphasis on service and/or learning, and who benefits from the service experience, the student and/or the community. Volunteer activities are those where students work for no financial benefit, for example, where students provide some of their time to a community organization