Chapter 5

Practical Guidelines for Creating Online Courses in K–12 Education

Wayne Journell
University of North Carolina at Greensboro, USA

ABSTRACT

Online learning is the future of K-12 education. However, few online K-12 instructors have been formally trained in online pedagogy. This chapter describes best practices in creating online courses for K-12 students. Many aspects of online learning are the same regardless of the age of the students taking the courses, but adolescents often experience online instruction differently than university students or adult learners. Although far from comprehensive, this chapter describes basic guidelines and offers recommendations for K-12 educators wishing to create engaging online learning opportunities for their students.

INTRODUCTION

Online education, already a staple of American higher education, is increasingly becoming a fixture in American K-12 schooling (Watson, Murin, Vashaw, Gemin, & Rapp, 2013). Whether through virtual high schools, state-based online programs, or district-created online courses, it is estimated that by 2016 over five million K-12 students will be taking online courses as part of their pre-collegiate curriculum (Picciano, Seaman, Shea, & Swan, 2012). Yet, the literature base on “best practices” for quality online K-12 instruction has not kept up with this growth.

The purpose of this chapter, then, is to provide practical advice to prospective and practicing K-12 online instructors on how to establish a solid infrastructure for virtual courses and create engaging learning experiences for students. Although grounded in research and theory, much of what I recommend in this chapter comes from my own experiences as a K-12 online educator and current experiences as a university faculty member who trains teachers for online instruction. In 2002, as a high school social studies teacher working in a technology-rich district, I was asked to create an online U.S. Government course for the district’s new e-learning initiative. For the next four years,
I taught that course approximately 12 times, both during the school year and over the summer. Since entering academia, I have maintained an interest in K-12 online education, conducting research on K-12 online instruction and regularly offering a graduate course entitled *Theory and Practice in Online Education* which is designed to prepare preservice and practicing K-12 teachers for online pedagogy (Journell, Beeson, Crave, Gomez, Linton, & Taylor, 2013), and most recently, I authored a book on strategies for K-12 online teachers (Journell, 2013).

A few notes, however, about the recommendations made in this chapter. First, the strategies I present are designed for secondary students. Although online learning is beginning to trickle down to the middle and elementary grades, research shows that the vast majority of K-12 online learning continues to occur at the high school level (Watson et al., 2013). Secondly, the recommendations that I make in this chapter are primarily for district administrators interested in creating online learning programs or for novice K-12 online teachers who are moving their content into an online format. Although experienced online teachers may gain a few tips from reading this chapter, the chapter is designed for those relatively new to online instruction. Finally, this chapter offers many strategies and introduces several tools for teaching online courses. In an attempt to make this information more accessible, I have included a summary of relevant information and, when appropriate, a listing of relevant websites and screencasts at the end of each section.

**INITIAL CONSIDERATIONS**

The recommendations in this chapter rest on the notion that attempting to recreate one’s face-to-face instruction online by simply transferring what works in the classroom to an online format is not a best practice. Such an approach is often taken by novice online instructors who have little training in online pedagogy, but it typically results in a text-heavy online experience that does not take advantage of the digital aspect of virtual instruction. In other words, the common perception of an online learner as someone sitting at his or her desk reading large amounts of text in isolation and then submitting work to a faceless instructor is incorrect. I would argue that this type of online learning is inappropriate for students of any age, but it is especially detrimental for adolescents.

It is essential for teachers to remember that K-12 students often have different learning needs than college undergraduates and adult learners (Ormrod, 2008) and, therefore, K-12 online courses should cater to those needs. Determining the exact learning needs of adolescents is a complex endeavor, and a nuanced discussion of adolescent learning theory is beyond the scope of this chapter; however, it is important for teachers to keep in mind a few basic assumptions when they design online courses. Of particular interest to online instruction are the following research-based beliefs (e.g., Beamon, 2001; Bransford, Brown, & Cocking, 1999; Lambert & McCombs, 1998):

- Learning should be developmentally appropriate.
- Content should be provided to students in multiple formats.
- Learning is most meaningful when students can apply what they learn to their own lives.
- Authentic tasks provide a richer learning experience than rote memorization of facts and formulas.
- Adolescents are social beings who learn best when allowed to discuss ideas and content with others.

Research also suggests that adolescents have different motivations for learning than undergraduates and adult learners (e.g., Pajares & Urdan, 2002), and the intrinsic nature of online learning often seems to contradict with these learning and