

Chapter 86

Trends of Blended Learning in K–12 Schools: Challenges and Possibilities

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ABSTRACT

Blended learning is a well-known and successful instructional model used in higher education and K-12 schools (International Association for K-12 Online Learning, 2012; Watson, 2012). It is estimated that about 37 percent of school districts in the United States had students enrolled in technology-supported distance education courses during the 2004/2005 school year (Zandberg & Lewis, 2008). An increased student population, coupled with the need to reduce educational costs, has led to a high demand for virtual instruction (Watson, 2010). Blended learning is a hybrid of traditional face-to-face and online learning in which instruction occurs through both classroom and online formats, with the online component being a natural extension of traditional classroom learning (Colis & Moonen, 2001). As such, the process may involve a combination of instructional technology formats (e.g., videotape, CD-ROM, Web-based training, film) and face-to-face instructor-led instruction (Driscoll, 2002). Despite its hybrid nature and the potential it holds for transforming classroom instruction, to date, little research exists that examines trends in blended learning and the challenges and possibilities of utilizing this method of instructional delivery at the K-12 level. Further, even less is known about best practices in K-12 blended learning and instruction (Ferdig et al., 2009). Given these considerations, in this chapter, the authors first explore trends in blended learning in K-12 schools. Subsequently, they examine the benefits and challenges of K-12 blended learning. In the final phases of the chapter, the authors highlight possible solutions to the challenges, discuss recommendation, and identify directions for future research.

DOI: 10.4018/978-1-4666-8246-7.ch086

INTRODUCTION

Recent yearly costs and budget deficits have made it difficult for many school districts to purchase and supply textbooks to students. In 26 states, K-12 schools in the United States received less state funding in the 2012-13 school year than they did last year, and in 35 states, school funding now stands below the levels of that observed in 2008. In support of these statistics, reports indicate that 35 states currently receive less funding per student than they did five years ago. And, as an example of the increase in costs for school funding, Florida's school funding demonstrated an increase of approximately \$273 per pupil in 2013 despite reduction in funding to the state at a rate of \$569 per-pupil over the past four years, 2008-2012 (U.S. Census Bureau, 2010).

As a result of these shifts in school and state funding, resources such as "Open Educational Resources" (OER) have emerged as a pathway for the delivery of engaging, customized, and up-to-date content at a faster and more cost effective rate. However, with the increasing population of students in K-12 schools, as well as the shortage of teachers, certain courses remain unavailable in schools. As an instructional model that allows students to enroll in courses or recover course credits from missed or failed classes (Watson et al., 2012), blended learning provides a feasible alternative.

Blended-learning involves integration of various event-based activities, such as face-to-face classrooms, live e-learning, and self-paced learning (2003). Given the flexibility involved, the International Association for K-12 Online Learning (iNACOL, 2012) estimates that more than 1.5 million students in K-12 schools took one or more online courses in 2010 (Wicks, 2010). Moreover, in the year 2012, 31 states including Washington, DC had instituted statewide full-time online schools at the K-12 level (Watson et al., 2012). Further, states such as Alabama, Florida, and Michigan offered full or part-time online

Table 1. State Virtual Schools and Course Enrollments in the United States

States	Number of Course Enrollments in 2011-12
Florida	303329
North Carolina	97170
Alabama	44332
Georgia	20876
Michigan	19822
Indiana	17627
South Carolina	15833
New Hampshire	15558
Texas	12419
Utah	12190
Louisiana	9179
Montana	6797
Virginia	6460
Wisconsin	5151
South Dakota	3822
Mississippi	3382
West Virginia	3376
Arkansas	3000
North Dakota	3000
New Mexico	2802
Illinois	2795
Connecticut	2049
Hawaii	1844
Kentucky	1700
Colorado	1575
Iowa	1437
Vermont	769

Source: HS population: <http://nces.edu.gov/program/stateprofiles>

delivery options to students in grades K-12 (see Tables 1 & 2).

With the rapid increase in student and teacher access to the Internet over the past ten years, blended-learning as an instructional model has become a more reasonable option for K-12 schools. For instance, in 2009, 97% of teachers had one or

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