Chapter 44

Knock Down the Walls, Open the Doors: How Hybrid Classrooms can Improve Education

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ABSTRACT

Hybrid classrooms, or blended instruction, blend the traditional face-to-face instruction model with newer technologies of online learning. 21st Century students crave a more interactive learning environment, but unfortunately, today’s teachers largely lack exposure to Web 2.0 technologies and technological expertise to offer such learning tools to their students. Therefore, teacher preparation programs, state departments of education, and local education authorities must improve the technical skills of teachers. Once teachers have 21st Century skills, they will be prepared to offer a more dynamic learning environment to students, including hybrid learning environments. This chapter will explore the possibility and effectiveness of utilizing hybrid-learning environments at the high school level. This will be accomplished through review of the literature, an evaluation of the educational objectives met through the implementation of hybrid learning, addressing the obstacles to implementation, and suggesting methods of improvement for teacher preparation programs, state departments of education, and local education authorities to improve the technical skills of teachers.

INTRODUCTION

Hybrid courses blend the traditional face-to-face instruction model with newer technologies of online learning (also known as blended instruction). The purpose of this chapter is to explore the possibility and effectiveness of utilizing hybrid-learning environments at the high school level. The potential use of such courses reaches the entire spectrum of high school students – those who are in need of credit recovery to graduate, those who are in the Talented and Gifted Program and seek acceleration; students with special needs who require remediation; and students who are...
not able to attend the traditional classroom, for either medical or disciplinary reasons. Hassell & Terrell (2004) and Picciano & Seaman (2009) identify a number of benefits of online learning environments, including online assessment possibilities, employment skills, preparation for college learning environments, and financial benefits to schools. As technology continues to evolve, and more technologies make their way into the classroom, it is critical that we continue to evaluate the role and effectiveness of technology’s place in the classroom.

At present, there is no standardized assessment for student’s technology abilities. However, this will not be the case for long, as the National Assessment of Educational Progress (NAEP) is currently developing test items for the NAEP Technology and Engineering Literacy Assessment, to be administered in 2014. This assessment will draw heavily from the six technology standards identified by the International Society for Technology in Education (ISTE) for students in 2007; Creativity and innovation; Communication and collaboration; Research and information fluency; Critical thinking, problem solving, and decision making; Digital citizenship; and Technology operations and concepts. Each of these has performance indicators to measure a student’s fluency within each domain. As will be discussed in detail later, hybrid courses will help students meet these standards, thereby being better prepared to perform at a higher level on the 2014 NAEP Technology and Engineering Literacy Assessment.

A second goal is that hybrid environments allow students and teachers to become more familiar with online working environments. As the economy continues to expand to a global workforce, colleagues find themselves in the physical presence of each other less and less. ZDNET predicts that by 2016, 63 million American workers, 43% of the U.S. workforce, will telecommute (Schadler, 2009). Considering this change in the technology, many of our students will use their laptop as their office at some point during their career, requiring educators to develop the skills of collaboration and professional online communication among our students. Hybrid classrooms allow students to develop skills of digital citizenship that will become increasingly important to them as they leave the k-12 learning environment.

Further, those students who chose to continue their education are likely to take at least one online or hybrid course in their post-secondary career. According to the 2010 Sloan Survey of Online Learning, student enrollment in online higher education courses increased by almost one million, with over three million students taking at least one online course during the Fall 2009 semester (Allen & Seaman, 2010). Considering this, it is in the students’ best interest to have some exposure to an online learning environment prior to entering their post-secondary education.

Finally, schools may wish to increase the number of online and hybrid courses to reduce their overhead costs. Hybrid or online classes may allow a teacher to have a part-time schedule, releasing the district from higher salary rates and benefit packages. Further, courses with smaller enrollments, such as AP and upper level foreign language courses, can be taught by a teacher who is not on staff, and perhaps not even in the same region as the students. One teacher can then specialize in this course, and teach the same content in several districts, states, or even countries.

However, prior to implementation of such programs, educators must be exposed to emerging Web 2.0 technologies that will allow them to deliver the same high quality instruction online as their students receive in a traditional classroom. As such, it is critical to evaluate not only the practicality and effectiveness of such learning environments, but also the skills of today’s teachers to implement a hybrid-learning environment. After a review of the literature and an examination of the obstacles to implementation, suggestions are provided to teacher preparation programs, state departments of education, and local school authorities to improve the technological prowess of today’s teachers.