

# Chapter 81

## Training Teachers for a Virtual School System: A Call to Action

**Michael K. Barbour**  
Wayne State University, USA

### ABSTRACT

*Online learning at the K-12 level is growing exponentially. Students learning in supplemental virtual schools and full-time cyber schools, using a variety of delivery models that include and sometimes combine independent, asynchronous, and synchronous instruction, in almost every state in the US. In some instances the knowledge, skills, and abilities required by teachers in this technology-mediated environment is consistent with what they learned about face-to-face teaching in their teacher education programs, while in many instances, the two are quite different. Presently the lack of empirical research into effective K-12 online teaching limits teacher education programs. However, teacher education programs still need to better prepare pre-service and in-service teachers to design, deliver, and support students engaged virtual schooling.*

### INTRODUCTION

In the opening to her chapter on education and how the next generation of students should learn, Greenfield (2003) asks “What should we be teaching the next generation to equip them for citizenship in the mid 21st century and beyond?” (p. 148). The North American Council for Online Learning

(NACOL, later the International Association for K-12 Online Learning) and the Partnership for 21st Century Skills (2006) believed that “virtual schools provide access to online, collaborative and self-paced learning environments, settings that can facilitate 21st century skills” (p. 2). They later described twenty-first century learning as including skills such as creativity, problem solving, communication and analytical thinking. If these are some of the skills valued in the new economy

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and the environment provided by virtual schools is consistent with the kind of work setting our students will have to compete and excel in, one approach to re-organizing K-12 schools is through the use of virtual schooling.

However, according to Friedman (2006), students are “shaped in large measure by school systems that have had, from the dawn of the industrial age, a main purpose to produce employees for boxed positions in corporate [organizational] charts” (p. 304). Moreover, we have been preparing our teachers for the same kind of school system. In this chapter, I describe the current state of K-12 online learning in the United States. Then I discuss the nature of teaching in a K-12 online learning environment. Next, I describe how teaching in an online environment differs from traditional face-to-face teaching. Then, I examine the existing literature on teacher education and professional development related to virtual schooling, with an emphasis on the limited research into K-12 online teaching, and how the paucity of published, empirical research hinders the ability of teacher education programs to develop effective training. Finally, I describe the small number of teacher education initiatives that have begun to address the issue of preparing pre-service and in-service teachers to design, deliver and support virtual schooling.

## **THE STATE OF K-12 ONLINE LEARNING**

The use of distance education in the K-12 environment stemming from a need to provide equal educational opportunities to rural areas is common throughout North America (Haughey & Muirhead, 1999). The use of distance education at the K-12 level has been in place since the beginning of the twentieth century, beginning with a correspondence model at the Calvert School of Baltimore in 1906 (Moore & Kearsley, 1996). Over the past 100 years, the model of distance education has evolved from these initial correspondence models

to educational radio to instructional television to audiographics (Clark, 2007). In the past two decades, web-based or online delivery has become the dominant form of K-12 distance education delivery, with these online learning programs being organized into formal virtual or cyber schools, at least in North America (Barbour, 2009).

Clark (2000) defined a virtual school as “a state approved and/or regionally accredited school that offers secondary credit courses through distance learning methods that include Internet-based delivery” (p. i). While others distinguished between a virtual school (i.e., an entity where students took all of their courses from) and virtual schooling (where students take one or more courses through an online learning program) (Barker, Wendel and Richmond, 1999); Clark (2001) has become the more accepted definition in the literature. In the United States, the first school to begin using K-12 online learning was the private Laurel Springs School in California around 1991. This was followed by the Utah eSchool in 1994-95, along with the Florida Virtual School and Virtual High School Global Consortium in 1996-97. In 2000-01 the for profit company K12, Inc. introduced the first full-time cyber school (Watson et al., 2009).

At the turn of the millennia, Clark (2001) estimated that there were between 40,000 and 50,000 virtual school enrolments. A decade later, Watson, Murin, Vashaw, Gemin and Rapp (2010) indicated that there were over 1,500,000 K-12 students enrolled in online courses in 48 states, and the District of Columbia. In 2006 Michigan became the first state in the US to require that all students complete an online learning experience in order to graduate from high school (a move that has been followed by other states). For example, the State of Florida requires that all school districts provide virtual schooling opportunities for any student who requests it, while New Mexico requires that students complete an Advanced Placement, an advanced or honors course, a dual-credit course offered in cooperation with an institution of higher education or a distance learning course in order

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