

# Chapter 3

## Ensuring Virtual Success: Graduate Preparation to Teach Online in the K-12 Context

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### **ABSTRACT**

*Very few academic programs in pre-service teacher education include opportunities for current and future K-12 educators to develop the necessary skills to teach in an online setting. While limited research has been done related to the preparation of teachers for online instruction, the evidence-based best practices in the field of instructional design and technology can inform graduate curriculum development in this area. This chapter presents a current review of academic programming and trends related to preparing K-12 educators to be effective teachers in online and blended learning environments. Additionally, essential skills and knowledge for teaching online in the K-12 context will be explored and recommendations made for curricular planning to meet these necessary competencies.*

### **INTRODUCTION**

Though online and blended forms of instruction have demonstrated consistent growth in K-12 contexts around the world for the past two decades, the preparation of educators to teach using such delivery modes has consistently lagged behind this growing trend. In the early days of K-12 online programs, Kearsley and Blomeyer (2004) offered a prescient insight regarding the need for online teaching proficiency to be addressed through academic curricula, stating that, “Ultimately, teachers may receive adequate training to teach online as part of their basic preparation (i.e. schools of education); however, this is not likely to be

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true in the near future” (p. 52). Kennedy and Archambault repeated this call to action in 2012, claiming that, “Teacher education programs need to recognize this need and begin preparing candidates for 21st century teaching and learning environments, providing them the necessary skills and dispositions for the ever-evolving field of education” (p. 198). Additional scholars have more recently highlighted the need for pre-service teachers (PSTs) to be prepared to teach in online and blended environments (OBL) (Barbour, 2019; McAllister & Graham, 2016; Moore-Adams, Jones, & Cohen, 2016).

In March of 2020, the COVID-19 pandemic shifted this unmet need to a matter of urgency. Schools around the world transitioned to virtual delivery of instruction in a matter of weeks, with most teachers have little to no prior experience (Koenig, 2020). Barnett (2020) emphasized the impact on educational systems, describing the emergence of two eras—Before COVID (BC) and After COVID (AC). Educators at all levels were impacted by this sudden shift to emergency remote teaching (Hodges, Moore, Lockee, Trust, & Bond), including pre-service teachers, teacher educators, and practicing K-12 educators. At this After-COVID juncture, the imperative exists to prepare educators at each level—pre-service, in-service, and teacher educators—to effectively design and implement online and blended learning solutions. This chapter addresses the current state of pre-service teacher education for online and blended teaching, as well as proposes content and strategies to facilitate the development of this critical, and now ubiquitous, educational delivery approach.

## **Current Preparation of K-12 Educators to Teach Online**

While technology integration skills and knowledge have become expected outcomes throughout teacher education programs around the world, opportunities for pre-service teachers to prepare to teach in online and blended K-12 learning environments are not commonly available in graduate teacher education programs. Over the past decade, an increasing number of states in the U.S. began requiring K-12 students to take at least one online course prior to graduation in order to become familiar with the educational modality (DeNisco, 2013).

A number of scholars have conducted extensive reviews regarding the preparation of PSTs to develop and facilitate OBL from both curricular and content perspectives (Barbour, Siko, Gross, & Wadde, 2013; Ferdig, Cavanaugh, DiPietro, Black & Dawson, 2009; McAllister & Graham, 2016; Moore-Adams, Jones, & Cohen, 2016). As noted by Barbour (2019), much of the scholarship related to this topic is focused within the U.S. context, with growing international contributions from around the world (Barbour, 2018a). Given that caveat, the following curricular strategies have been identified in the literature in supporting the development of PST skills and knowledge related to OBL.

A recent survey of teacher education leaders indicating the most common provision of preparation approach is an instructional design for online learning course at the graduate level (33.5%). Such courses were identified as standalone, but were also commonly included as part of a graduate certificate program in online teaching (23.7%) (Graziano & Bryans-Bongey, 2018). Innovative examples of online teaching and learning opportunities within teacher education have been offered as potential models for more than two decades (Cifuentes & Shih, 1999; Shepherd, Bolliger, Dousay, & Persichitte, 2016). Additional opportunities are offered through add-on endorsements for online teaching, each comprised of sets of courses, ranging from 6 to 20 hours and often requiring an online teaching field experience. One interesting note is that six states in the U.S. require PSTs to have experience as an online teacher, or learner, or both (McAllister & Graham, 2016).

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