

# Chapter 12

## Clinical Skills Development in the Virtual Learning Environment: Adapting to a New World

**Erini S. Serag-Bolos**

*Taneja College of Pharmacy, University of South  
Florida, USA*

**Carol Motycka**

*College of Pharmacy, University of Florida, USA*


**Liza Barbarello Andrews**

*Rutgers University, USA*

**Chelsea Phillips Renfro**

*University of Tennessee Health Science Center,  
USA*


**Jennifer Beall**

 <https://orcid.org/0000-0002-9709-5741>  
*College of Pharmacy, Samford University, USA*

**Brittany L. Riley**

*School of Pharmacy, Marshall University, USA*


**Kelly A. Lempicki**

 <https://orcid.org/0000-0002-4623-7308>  
*Midwestern University, USA*

**Chasity M. Shelton**

*University of Tennessee Health Science Center,  
USA*

**Deepti Vyas**

 <https://orcid.org/0000-0002-2412-1873>  
*School of Pharmacy, University of the Pacific,  
USA*

**Aimon C. Miranda**

*Taneja College of Pharmacy, University of South  
Florida, USA*

**Kimberly Won**

*School of Pharmacy, Chapman University, USA*

## **ABSTRACT**

*The rapid transition to distance learning in response to the unexpected SARS-CoV-2/COVID-19 pandemic led to disruption of clinical skills development, which are typically conducted face-to-face. Consequently, faculty adapted their courses, using a multitude of active learning modalities, to meet student learning objectives in the didactic and experiential settings. Strategies and considerations to implement innovative delivery methods and address potential challenges are elucidated. Furthermore, integration of a layered learning approach may allow for more broad perspectives and allow additional interactions and feedback, which is especially necessary in the virtual environment.*

## **INTRODUCTION**

The novel coronavirus disease 2019 (COVID-19) pandemic caused by SARS-CoV2 precipitated a tremendous and tumultuous wave of unexpected changes, including immediate curricular challenges among academic health professional programs and the need to adapt to a permanently altered healthcare practice landscape. The rapid transition to virtual learning environments posed many challenges, especially related to clinical skills development in both the didactic and experiential settings. This challenged academicians to expeditiously adapt curricula to meet student needs while maintaining accreditation requirements. Since the peak of the COVID-19 pandemic, it has become increasingly clear that the healthcare environment to which learners enter has morphed more permanently than expected to include more telehealth and a greater focus on social determinants of care. The objectives of this chapter are to elucidate innovative ways to teach clinical skills in the virtual environment through active learning and simulation. Lessons learned are also discussed to further develop and enhance such pedagogy in the virtual setting.

## **BACKGROUND**

Health professional degrees culminate in licensure exams, which are required for clinicians to enter the workforce. Respective accreditation bodies provide guidance to ensure that graduates are practice-ready. While programmatic structure varies among disciplines and programs in course format, duration, schedule, faculty model, and number of campuses served, a common thread is the use of active learning and simulation to enhance critical thinking and develop hands-on clinical skills in various settings (Bonwell & Eisen, 1991). The scope of this chapter encompasses various health professions that require training in clinical, technical, and communication skills including athletic training, audiology, dentistry, medicine, nursing, pharmacy, physical therapy, physician assistant, and social work.

Accredited programs require satisfactory completion of a minimum number of clinical hours to ensure that graduates are practice-ready in real-world settings. However, the different accreditation bodies that guide various health disciplines define and quantify simulation in various ways (Table 1). The COVID-19 pandemic has posed multiple challenges that require adjustment, necessitating faculty to become ever more resourceful to rapidly adapt to virtual learning. From a faculty perspective, the amount of time needed to modify existing course materials for the virtual learning environment represented an unexpected expansion of the faculty workload. The ability to involve adjunct faculty members in this process

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