

## Chapter 8

# Nursing Education Innovations and Obstacles During COVID–19: Lessons Learned and How That Information Will Be Used Post–Pandemic

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### ABSTRACT

*The COVID-19 pandemic created a paradigm shift in the way educators employ active learning strategies. In this chapter, the authors discuss how engaging and innovative learning strategies were developed to teach baccalaureate-level nursing students during the COVID-19 pandemic. The initial focus is on the teaching and learning strategies created for first-semester students who are developing foundational nursing skills and concepts. The discussion transitions to complex strategies developed for fourth-semester students, solidifying critical thinking and clinical judgment skills. Highlighted are active learning strategies used in the classroom, skills lab, and simulated clinical environment. These promote clinical judgment and present practical direction for adapting technology to provide an engaging learning environment. Throughout the chapter, the authors use several strategies to showcase how a nursing program responded to COVID-19 restrictions, including active learning and technology strategies, and how they can be applied across a curriculum using varying levels of technology.*

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## **INTRODUCTION**

The COVID-19 pandemic changed the face of education globally, and particularly nursing education. In March 2020, the first confirmed cases in the United States of the novel coronavirus forced most educational institutions to change their practices. Many nursing programs were required to remove students from all in-person clinical and classroom activities, and conduct the remainder of the academic semester remotely. Faculty were challenged with providing meaningful and innovative classroom and clinical activities to meet course outcomes. This chapter will discuss instructional strategies developed in response to the COVID-19 restrictions, some of which merit continuance after the ease of pandemic restrictions. This chapter also explores how educators can 1) engage learners inside the classroom using non-traditional methods, 2) develop learners' clinical skills outside of the traditional lab space, and 3) maintain safety while keeping students and faculty engaged during simulation.

## **BACKGROUND**

Before the pandemic, innovative learning strategies, such as simulation in the classroom and virtual reality, began gaining popularity in baccalaureate nursing programs (Aebbersold, 2018). However, the mainstay of many programs remained traditional hands-on learning conducted in a face-to-face format. This format is particularly adept at teaching psychomotor skills, which are vital to success in professional practice roles such as nursing (Tabatabai, 2020; Van Horne & Murniati, 2016; Tharayil et. al., 2018). As face-to-face instruction was interrupted due to the COVID-19 pandemic, innovative learning strategies were thrust into the curricula. Many nursing programs quickly implemented screen-based or virtual learning strategies in the classroom, skills, and simulation labs. Hodges et al. (2020) referred to this initial transition to the online learning environment as emergency remote teaching, described as a temporary shift from one educational delivery mode to another due to an immediate crisis.

During emergency remote teaching, courses that were intended to be delivered face-to-face were delivered in an alternate format, but without the typical planning or development time that goes into online learning delivery (Hodges et al., 2020). Also, according to Hodges et al. (2020), the typical planning and development time for a fully online course is six to nine months before course delivery. During the COVID-19 crisis, lead times for nursing programs to transition from face-to-face to remote delivery ranged from one day to a few weeks. Many faculty and students experienced a need for additional education and support for technology; however, the systems that provide those resources were severely stressed due to the scale of need across campus. In turn, faculty were required to rely on accrediting and other leading nursing organizations and publications for guidance on best practices and strategies for transitioning to online learning (Mariani et al., 2020).

A primary concern for nursing educators was how to effectively harness technology and adapt instruction to effectively teach clinical judgment to their students. In healthcare, clinical judgment is the ability to respond to patient cues with appropriate clinical decisions and is regarded as an essential skill for safe and effective nursing practice (Victor-Chmil, 2013). Preparing students to exercise sound clinical judgment begins in the first semester of their nursing program with the development of critical thinking and clinical reasoning. Critical thinking is the intentional, logical thought process intended to respond to and improve patient outcomes (Papathanasiou et. al., 2014). Essentially, critical thinking is knowledge-based. Clinical reasoning is the application of critical thinking to a clinical situation (Pa-

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