The Complete Guide to Nursing Education: From Nursing School to Professional Practice

Nursing students can use virtual simulation to practice procedures they might not have the opportunity to do in clinics. This helps students develop their skills, increase confidence, and improve patient safety.

Nursing education is shifting away from traditional [NR 305 Week 4 Project Course Milestone](#) skills labs and into high fidelity virtual simulation. This new technology is enabling nurses and nursing students to practice at their own pace, avoid scheduling conflicts, and focus on the topic they want to explore.

Enhanced Learning

For nursing students, virtual simulation is a critical piece of the puzzle for learning and development. It allows them to practice their technical skills and gain muscle memory prior to working with real patients. It also gives them an opportunity to make mistakes safely and receive immediate feedback.

For example, students can practice performing an IV or inserting a nasogastric tube in a virtual simulation before they do so with a [POLI 330N Week 1 Assignment Current Event](#) patient in the hospital. These are procedures that are difficult to learn in the classroom and can be dangerous if performed incorrectly.

One study compared the learning effects of HFS and VS to help improve students' clinical judgment and prioritization during virtual simulations of field maternity care and preterm rupture of membranes (PROM). Students who did a vSim first and then an HFS had higher scores for reflective thinking than those who engaged in the other order of simulation. This is believed to be because vSim helps to improve students' understanding of the problem-solving process through prompt feedback and personalized reflection logs.

Increased Self-Efficacy

In a simulation training environment, nursing [NR500 Scavenger Hunt Second life](#) students have the opportunity to practice procedures and skills under expert guidance. This technique is consistent with the deliberate practice model and increases self-efficacy, which translates into better performance in clinical placements.

For example, a VR simulation can allow nursing students to perform invasive interventions in a safe setting without fear of harming the patient. Practicing these procedures in simulation decreases the chances of errors during actual clinical placements.

In addition, simulation gives nursing students the freedom to learn and practice a variety of things they cannot experience in hospital or clinic settings, such as making decisions, calling other healthcare providers, documenting without a co-signer, and interacting with staff members. These skills are important for developing leadership and communication skills in nurses that they can take [NR 501 Week 2 Reflective Essay](#) with them to the workplace.

Less Clinical Placement Stress

Virtual simulation can help decrease clinical placement stress for nursing students. By incorporating simulation into the curriculum and providing a detailed dashboard that highlights student progress, educators can help ensure that students are on track to meet program goals and NCLEX pass rates.

In one study, prelicensure nursing students who used simulation to replace clinical hours during the COVID-19 pandemic found that the experience helped them feel confident and competent when they entered their clinical rotations. However, it is important to note that participants in this study reported difficulty with the English language and unfamiliarity with vSim, suggesting [NR 351 Week 4 Professional Paper worksheet assignment](#) that improvements in realism and engagement are needed for a positive simulation learning experience.

Another study found that the addition of clinical virtual simulation improved knowledge retention and clinical reasoning, as well as satisfaction with learning and self-efficacy among nursing students. Students also rated higher on reflective thinking and overall satisfaction with their practicum when the simulation was done first than when it was performed last.

More Effective Assessment

Unlike traditional clinical placement, virtual simulation offers an opportunity to assess students' knowledge and skills without sacrificing patient safety. The use of VS allows faculty to monitor students' understanding, identify learning gaps and provide feedback in real time.

One study compared the effect of VS to high-fidelity simulation (HFS) on nursing students' problem-solving process and clinical reasoning in a maternity course. The results showed that the group that experienced VS first had better problem-solving skills than the group that received HFS.

VS can be used to teach complex topics that would be difficult to practice on patients, such as managing multiple patients and recognizing symptoms of a stroke. It can also be used to address specific issues nurses often encounter in the workplace, such as nurse-to-nurse bullying or stress management strategies. Aebersold recommends that faculty consider using simulation not as a stand-alone activity, but as part of a comprehensive curriculum development strategy. A number of resources are available to help with this including the NLN's Six Step Curriculum Development Strategy for Healthcare Education and the NLN Simulation Innovation Resource Center.