**Featured Article**

# Teaching/Learning in Second Life: Perspectives of Future Nurse-Educators

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**Abstract**
**Background:** Innovative teaching/learning strategies that simulate real world situations are needed. The virtual world of Second Life (SL) provides an opportunity for nurse-educators to develop meaningful, simulated learning experiences that are transferrable to the real world of nursing practice.
**Methods:** Students enrolled in a graduate nursing education course were invited to complete pre- and post-activity surveys regarding perceptions and experiences related to using SL as a teaching/learning strategy.
**Results:** The simulated role play experience in SL helped 10 of 11 students to apply concepts regarding the lived experience of marginalized persons. Seven described a meaningful learning experience; 11 reported a sense of presence and connectedness. Barriers and challenges related to technology, self-efficacy, and communication within the virtual world were identified.
**Conclusion:** With careful planning, the use of SL as an innovative teaching/learning strategy for nursing education was validated.

Nurse-educators are facing unparalleled challenges to address the changing demographics and learning styles of today's learners and the ever evolving, complex requirements of the practice environment. In addition, many of today's traditional-aged college students have been raised in a multicultural, multiethnic, global world. This generation has grown up with technology in all areas of life: Communication, music, entertainment, and education (Benner, Sutphen, Leonard, & Day, 2010; Billings, 2007). These factors, coupled with the knowledge explosion and complexity of new information technologies, have nurse-educators reevaluating the relevance of current teaching strategies. Innovative educational strategies are needed to better prepare nurses to succeed in complex health care environments where quality and safety are paramount.

Virtual reality software and environments such as Second Life (SL, Linden Labs, San Francisco, CA) hold potential as part of the solution by providing an innovative and interactive platform for educational experiences that simulate real-world situations. This platform offers opportunities to utilize the virtual world to expose nursing students to learning in a new way. The purpose of this small, exploratory study was to trial the use of SL with graduate nurse-educator students, and to obtain insight regarding this innovative teaching/learning methodology.

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## Second Life

### A Virtual World

A virtual world is defined as "a computer-based simulated environment created with two- and three-dimensional [3D] graphical representations of physical space" (Shen & Eder, 2009, p. 230). SL was created as a "Massively Multiplayer Virtual World" gaming platform by Linden Labs. It offers a 3D, immersive experience to participants via an Internet connection and free, downloadable software. Multiple experiences take place in virtual worlds that actually replicate real world activities such as lectures presented with PowerPoint, theatrical plays, museum visits, professional seminars, and continuing education sessions, as well as numerous opportunities for socialization and recreational activities. To engage in these experiences, SL users create avatars (an online graphical representation of a person) to facilitate participation in virtual environment activities.

> **Key Points**
> - Second Life is a place that fosters collaboration, research, education, and learning between nursing students and educators, practicing nurses, and other health care professionals.
> - When introducing Second Life as a teaching/learning strategy, it is important to provide ample orientation and support to students.
> - Learning activities within Second Life may afford students the opportunity to achieve a sense of immersion while participating in a unique, simulated learning experience.

### Uses in Higher Education and Health Care

SL has gained the attention of higher education, libraries, and health care systems as an alternate means of exposure to information, learning tools, and support groups (Skiba, 2007). A directory maintained by Linden Labs lists 152 educational institutions with a presence in SL (http://wiki.secondlife.com/wiki/Second_Life_Education_Directory; accessed May 5, 2013). Examples include Kansas State University, Washington State University, Ball State, and the University of Arizona. In addition, health systems such as Mayo Clinic and Kaiser Permanente also have a virtual presence in SL (Kapp & O'Driscoll, 2010).

In academia, SL is used because of the unique pedagogical opportunities it offers (Rzewnicki, 2007). SL may improve online and distance education by adding a "real-life" component to the relationship between participants (posing as avatars) who may never meet in person. There are endless opportunities for designing customizable learning environments that promote discussion between students and/or faculty, simulation experiences, consultation with experts, and building of meaningful relationships (Skiba, 2007).

Many virtual world research papers address the affective domain or the technical learning domain; that is, student likes and dislikes, attitudes and satisfaction, and advantages and challenges of learning in the virtual world (Chow, Andrews, & Trueman, 2007; Deutschman, 2009; Kapp & O'Driscoll, 2010). Student reports regarding virtual world learning have been varied in the literature: Some reported high levels of satisfaction with learning activities within virtual spaces, whereas some commented that they liked the ability to move about and fly when in the virtual world, and others enjoyed the sociability of the sites. Many reported satisfaction with the ability to learn at their convenience through the use of activities that were available to them any time (Chow et al., 2007; Kapp & O'Driscoll, 2010). Devisch (2008) found that students perceived the use of SL as an educational game that was informative and engaging, and taught real-life skills and concepts that were transferrable to real life.

## Methods

In an effort to further explore the interactive educational possibilities of SL, a small exploratory study was designed to examine perceptions and experiences of using SL as a teaching/learning strategy. Newman's theory of Health as Expanding Consciousness (2008) and Roger's Theory of Innovation (2003) provided the theoretical basis for this study that explored new ways of engaging students in meaningful learning. After obtaining institutional review board approval, a convenience sample of students who enrolled in a university graduate nursing education course titled Inclusivity in Nursing Education ($N = 15$) were invited to complete a pre-activity survey.

Twelve of the 15 eligible students chose to participate and completed the pre-activity survey. Students then participated in a 3-hour, face-to-face orientation to the virtual world of SL. Each student was randomly assigned an avatar created by the instructor. The avatars represented a cross-section of marginalized persons commonly encountered in real life to facilitate experiential learning about stigmas, stereotypes, and biases. During the study, the students were asked to visit a variety of "social" and "educational" sites in SL while role playing the assigned avatar. They visited health-related sites, night clubs, coffee shops, and higher education classroom spaces. The study took place over a 4-week period, and the students averaged 8 to 10 hours in SL per week. The students were aware that the instructor's avatar would participate periodically in the SL learning activity to provide guidance and for observational purposes. Eleven students completed the post–activity survey. Surveys were conducted anonymously using Survey Monkey.