

# Student Achievement and NCLEX-RN Success: *Problems That Persist*

JO ANNE CARRICK

*Cohort 8*

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ADVANCEMENTS IN THE SCIENCE OF MEDICINE AND A GREATER EMPHASIS ON PATIENT SAFETY HAVE LED TO AN INCREASE IN COMPETENCY REQUIREMENTS FOR THE GRADUATE NURSE ENTERING PRACTICE AT THE BASIC LEVEL. These trends have contributed to greater rigor in the NCLEX-RN® licensure exam and higher passing standards (Wendt & Kenney, 2007). Despite efforts by nurse educators to predict success on the NCLEX-RN exam, addressing the needs of students at risk for failure is an ongoing problem (DiBartolo & Seldomridge, 2008). THIS ARTICLE USES TWO THEORIES, SYSTEMS THEORY AND THE STUDENT'S APPROACH TO LEARNING (SAL) THEORY, TO ANALYZE THE COMPLEXITY OF LEARNING AND IDENTIFY EFFECTIVE INTERVENTIONS. BASED ON THIS ANALYSIS AND EVIDENCE FOUND IN THE LITERATURE, STRATEGIES TO ADDRESS THESE PROBLEMS ARE IDENTIFIED.

**Systems Theory: Teaching and Learning** In systems theory, the whole is greater than the sum of the parts. Systems theory diverges from the reductionist, "snapshot" view of complex systems and provides a framework for seeing interrelationships and dynamic patterns. Interrelationships are viewed as circular or continuous, rather than linear, and acknowledge multiple interrelated effects rather than a single cause and effect (Senge, 2006). For example, with systems theory, a nursing program is more than faculty and students; it is a system of interdependent processes used for teaching and learning.

Senge's systems diagram shows how reality can be seen as a circular process. Filling a glass of water could be described as a linear process; a person turns the faucet on and fills the glass. But from a systems perspective, this act is circular, with more steps, influences, and interrelationships. While turning the faucet on and filling the glass, our mind monitors the gap between our thirst, the flow of water, and the level of the water in the glass. Five variables now comprise this water-regulation

system: the faucet, the water flow, the desired water level, the current water level, and the gap between the desired and the current level (Senge, 2006).

**THE NURSING EDUCATION SYSTEM** In a systems diagram for nursing education, the faucet represents the curriculum and teaching methodology. Flowing from the faucet are curriculum delivery processes to prepare students for the nursing role. Embedded in these processes are course content, sequence patterns, emphasis, and teaching approaches. (See Figure.)

The nursing curriculum is developed to follow the format and content blueprint of the NCLEX-RN exam and to meet the standards of the profession and accrediting agencies. Curriculum delivery is based on theory and research in teaching and learning, both in education and the clinical practice of nursing. Gaps in the process are twofold in nature: relevance of the curriculum (content) and the effectiveness of curricular delivery (teaching process). Faculty characteristics and expertise add further complexity to this system because they affect the development of

**ABSTRACT** While most nurse graduates are successful on the NCLEX-RN licensure examination, certain students continue to be at risk for failure. To understand the complexity of at-risk students and NCLEX-RN failure, systems theory was used to analyze the interdependency of the nursing education system and the nursing student learning system. From this perspective, these problems relate to flaws in perceived learning gaps and student outcome measures. Predicting NCLEX-RN success is further complicated because students leave the teaching system prior to taking the exam, making them vulnerable to other influencing variables. The student's approach to learning (SAL) theory was used to aid in identifying effective strategies. The literature supports this theoretical approach, which targets changing the teaching and learning environment. However, there is limited research on the nursing student's approach to learning, on the benefits of innovative student-centered learning environments, and the most effective use of NCLEX-RN assessment products.

