

Nursing Student Outcomes of Distance Education: What is the Evidence?

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Background

- Learning does not automatically occur with new educational strategies
- In the online environment learners co-create with the teacher the stage that results in successful learning outcomes (Palloff & Pratt, 2001)
- What constitutes a learning outcome is not always clear
- Many outcomes are indirect

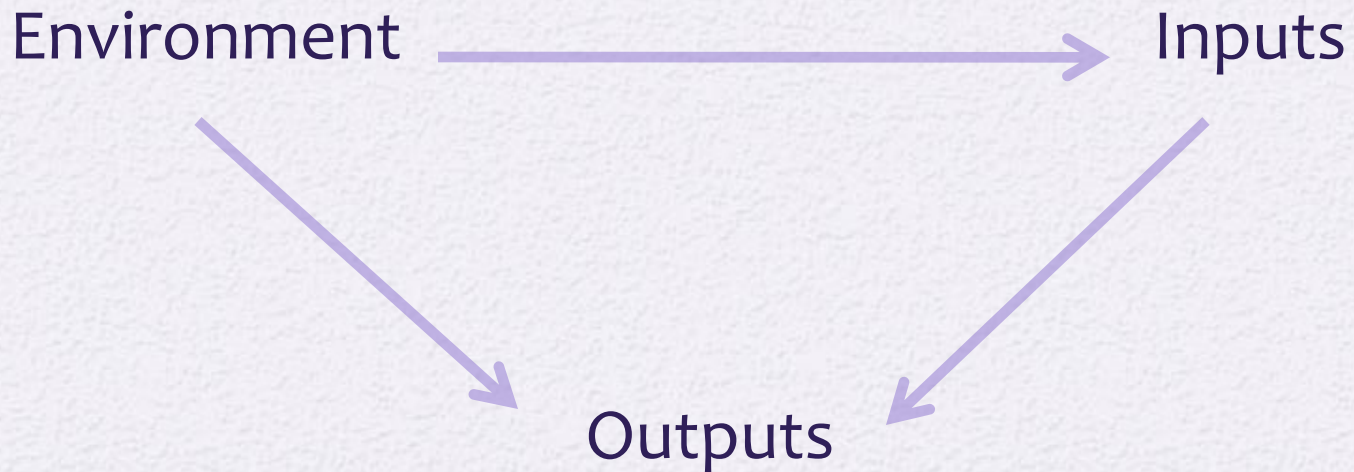
Purpose & Research Question

- To describe the state of the qualitative and quantitative nursing research on student outcomes of distance education
- Research Question: What are the student outcomes of distance education in the published nursing education literature?
 - Outcome refers to “the students’ performance on an outcome measure at any particular point in time” (Astin, 1993, p. 42)



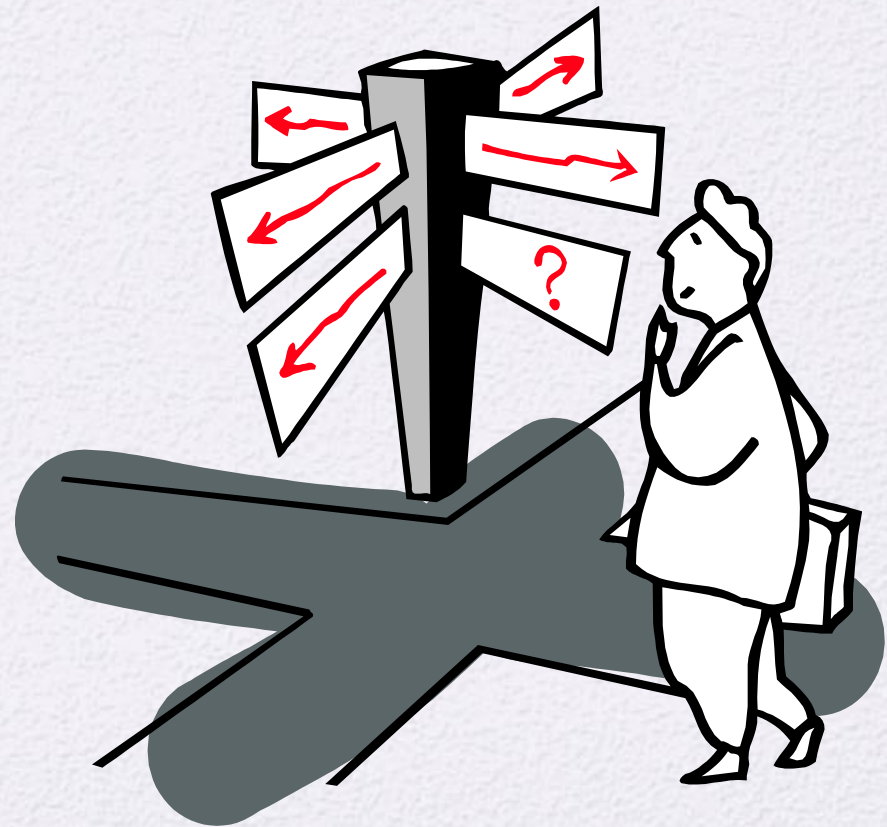
Theoretical Framework

Astin's Input-Environment-Output (I-E-O) Conceptual Model (1993)



Method

- Integrative Review from 1999 to 2009
- Search strategy
- $N = 33$ articles
 - 28 research studies
 - 4 Dissertations
 - 1 integrative review



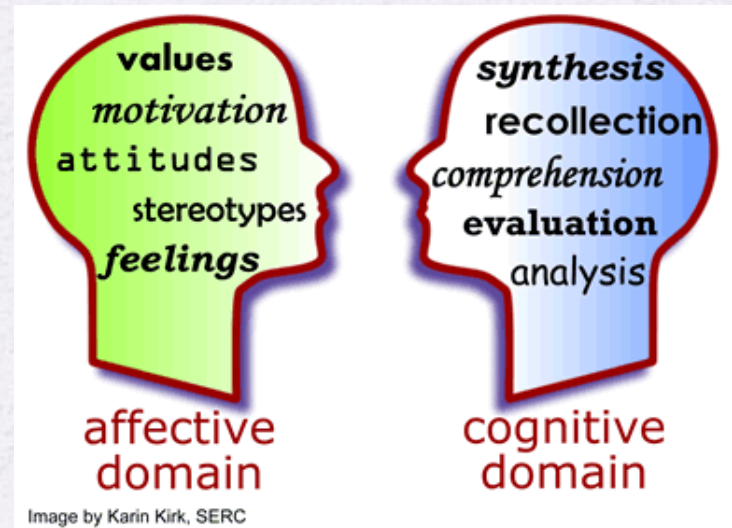
Findings

- 24.2% used qualitative methodologies
- 75.8% used quantitative research methods
- Origin
 - 94% North America
 - 6% Australia and Hong Kong
- 6% received external funding
- 66% reported no theoretical framework



Outcomes

- **Cognitive**
 - relate to knowledge, reasoning, and logic
- **Affective**
 - less tangible student qualities, such as feelings, attitudes, values, beliefs, self-concept, and social and interpersonal relationships
(Astin, 1993)



Cognitive Outcomes



- student learning
 - test scores, final examination grade, project grade, and course grade, either in the online course only, or in comparison to a face-to-face course
- the learning process
 - how students learned in the online class or how their learning changed because of their online class experience
- technology proficiency
 - the effect of the web-based course on the learner's computer skills

Affective Outcomes



- personal and professional growth
 - self-development students experienced as a result of online learning
- student satisfaction
- connectedness
 - the relationship between the faculty and the learner or the student and other students in the class

Methodological Implications

- a lack of methodological rigor: limiting external validity
- limitations included:
 - researcher-developed instruments
 - lack of theory
 - convenience samples
 - single site data collection

Implications for Nursing Education

- purposeful distance learning course design is critical to ensure student success.
- identify measurable student outcomes, both cognitive AND affective prior to course.
- identify indirect and direct methods of assessment to ensure outcomes.
- a support network is essential for student success and satisfaction.

Conclusions and Future Research

- examination of student outcomes with a variety of delivery formats, such as hybrid or blended approaches
- clarify the role of students' satisfaction in the learning process and as a learning outcome.
- examination of environmental variables as more programs adopt distance learning as a pedagogical approach and to facilitate student retention.
- methodological rigor and reliable and valid measurement of meaningful learning outcomes.



"Someday, in the distant future, our grandchildren's grandchildren will develop a new equivalent of our classrooms. They will spend many hours in front of boxes with fires glowing within. May they have the wisdom to know the difference between light and knowledge."

Plato

Thank You!
Questions?
