Objectives and Outcomes: The Fundamental Difference

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COMPREHENSIVE INITIAL AND ONGOING EDUCATION IS ESSENTIAL FOR ALL REALMS OF NURSING PRACTICE, EDUCATION, AND RESEARCH.

Whether the process takes the form of inservices for established nurses, academic sessions for nursing students, multidisciplinary professional research presentations, or patient teaching, education is a vital part of the nursing role. Traditionally, nurses have been taught to start all educational or teaching/learning sessions by stating the objectives, a practice that provides a clear understanding of the purpose of the session and serves to clarify the teacher’s expectations. The learner’s changed behavior is evaluated after the completion of the session to demonstrate that learning took place. As stated by Rankin and Stallings (2001), “Objectives describe behaviors that the learner will perform to meet a goal” (p. 240).

Our current, economically driven health care environment focuses on outcomes of care. In response, nursing education has interposed outcomes of learning for objectives of teaching (Morin, 2007; Partusch, 2007). The educational literature has also long spoken to outcomes rather than objectives. The central focus is to redirect the teaching/learning process and bring about a closer link to the learner. This also aligns better with professional practice, where outcomes promote quality improvement (Glennon, 2006).

This shift in thinking, from objectives to outcomes, has been cited as a paradigm shift and, indeed, there are theoretical differences. Many nurse educators who are not fully aware of the underlying impetus for the change wonder why wording has changed in courses that have no change in context or content (Morin, 2007). Some see this trend as a linguistic game, with the word outcome substituted for the word objective in order to maintain political correctness (Schwarz & Cavenen, 1994). Prideaux (2000) called this phenomenon “the emperor’s new clothes” in medical education.

Relevance How we frame what we, as nurses, teach and what our recipients (other nurses, professionals, students, or patients) learn should be more than just a linguistic exercise. It affects the teaching/learning process and ultimately affects application to patient care. Because of its importance and societal contribution, the framing of the teaching/learning process needs theoretical thought.

Reviewing the standard definitions of the words objective and outcome further reveals the essential difference between the two concepts. An objective speaks to the process and the goal. Therefore, it is teacher and student focused. An outcome, a final product or end result, speaks to the goal, so its focus is the student, because learning is the goal for the student.

The obvious reason that objectives or outcomes still exist and persist in education is that they are thought to be parsimonious enough to capture the complexity of the teaching/learning process. Many educators believe they have the simplicity and practicality needed for mapping out and evaluating understanding of what is to be learned.

Historical Development For many years, objectives were presented as the essential foundation of any educational endeavor in nursing education and were elevated to the position of “guiding light” for both the process of teaching and the end result of the learning. Objectives were used for all activities that took place within a classroom, course, session, or curriculum (DeYoung, 2003). “Well defined learning objectives...are stated so that expectations are clear to the student” (de Tornay & Thompson, 1982, p. 150). Education has used objectives for student learning since Tyler’s (1949) landmark book encouraged educators to develop objectives to frame their teaching (Reilly & Oermann, 1999).

According to Prideaux (2000), Tyler intended to keep objectives broad in nature; they were modified by others to conform

ABSTRACT This discussion focuses on the difference between educational objectives and outcomes. Both terms are used in nursing education, many times for the same purpose, yet they are expressions of different educational paradigms. A historical view of the development of objectives and outcomes is provided as well as a description of each. The discussion concludes with a demonstration of formats for developing educational outcomes.
to behaviorism and standardization. The form in which objectives emerged was usually a three-part statement that included the behavior, condition, and standard of the teaching/learning process. Educators adapted objectives and even prepackaged them for educators to avoid errors in their development (Prideaux). The criteria that heralded a good objective were specificity and measurability, and these have been carried over to outcome development.

Action verbs outlined by Bloom and colleagues were used in composing objectives to specifically describe expected behaviors of the learner. Bloom’s taxonomy (Bloom, Englehart, Furst, Hill, & Drathwohl, 1956) uses behavioral terms to divide learning into leveled achievements, from knowledge acquisition (understanding) to the synthesis (creating) of new ideas (Krathwohl, 2002). Behavioral terms were further categorized into three domains (cognitive, psychomotor, and affective), underscoring the presence of the art, science, and practice of nursing. Gagne (1970) also described objectives as the second event in the nine steps to instruction, thus reinforcing the need for them.

Objectives presented a method to logically organize a teaching session or course and provided criteria for evaluation that allowed for grading justification (Novotny & Griffin, 2006). Using objectives served its purpose well, organizing the teaching/learning process while the discipline of nursing was in its growing stage of intense curriculum development (Parker, 2005). Developing and meeting objectives were important; objectives were used by educators and accrediting organizations to evaluate an individual’s or organization’s teaching effectiveness (Billings & Halstead, 2009).

Anderson et al. (2001) suggested that a higher learning domain, metacognition, be included to encompass aspects of critical thinking spurred by reflection. Metacognition is used along with the terms factual, procedural, and cognitive to encompass all aspects of knowledge acquisition. Investigation of methods to enhance metacognition is needed in nursing education to foster appropriate knowledge development and deal effectively with the information-driven health care environment. Teaching methods to increase metacognition, such as concept mapping, have been shown to be successful (August-Brady, 2005).

**Paradigm Shift** As the health care environment changed to a forum regulated by cost expenditure versus human risk, outcomes became more important. In the clinical arena, outcomes are evaluated in terms of dollars and cents, health achievement, patient safety effectiveness, or educational productivity, and the question is asked: Does the outcome justify the resources used? Outcome-based education (OBE) began in the 1980s and grew in popularity in the 1990s (Spady, 1988; Harden, Crosby, Davis, & Friedman, 1999). It has its historical roots in competency-based education, which originated in the 1960s (Schwarz & Cavener, 1994). Harden, Crosby, and Davis (1999) used the term performance-based education, where the emphasis is the product and focus is always the end result. Spady described OBE as “a way of designing, developing, delivering, and documenting instruction in terms of intended goals and outcomes” (p. 2).

Nursing education has adopted outcome expectancy, or OBE, which considers the learning experience as delivering the product or knowledge needed by the student, patient, or nurse. The process is no longer the priority in the learning; this, hopefully, has opened the door to many creative teaching methodologies. The outcome, what the student, patient, or colleague will cognitively, skillfully, or affectively demonstrate by the end of the experience or lesson, is most important.

It is important to note that the paradigm shift removed the focus from the teacher and extended the responsibility of learning to the learner. One criticism is that this paradigm shift has the potential to squelch learning for pure knowledge and personal growth, and sometimes, not always, implicates that the outcome must be directly applicable. Morin (2007) provides a good explanation of the current general understanding of the difference between objectives and outcomes, stating that “outcomes reflect the students’ performance in relation to objectives” (p. 251).

In a simple analogy, OBE can be compared to a vacation. An outcome-based trip would choose the destination first, then research the modes of transportation to get to the chosen point. A vacation planned on objectives would plot the specificities of the route as well as the mode of transportation.

**Operationalization of the Paradigm** So how do we operationalize the difference between behaviorally written objectives and learning outcomes? The differences are slight in language but can represent a large change in conceptualization, depending on the educator’s understanding and the educational culture in which they are used.

Both objectives and outcomes use behavioral terms and extend the principles set forth by Tyler (1949) and others (Bloom et al., 1956). The lead-in sentence is usually altered in a teaching/learning session from “the student will” for objective writing to “at the end of this session, the student will be able to” for outcome formatting. As Prideaux (2000) states, “It is difficult to explain the difference between a significant and worthwhile objective and a well-written and well-defined outcome.”
Outcomes and objectives are both still expected to describe the learner, the behavior, and the content.

Changing from objectives to outcomes is truly more of a conceptual than an operational change. Some nurse educators have just switched words and not thought processes. Others believe that neither objectives nor outcome gives us the freedom needed to encourage learners to think critically. Neither captures the “aha” moments of learners or the creativity that is encouraged in the class and clinical arenas. The current learner-centered paradigm of nursing education calls for a more fluid framework than either objectives or outcomes can provide. Outcomes are slightly less restrictive in the learning environment, a positive move toward an educational process that is more emancipatory (Freire, 1970; Schreiber & Banister, 2002).

**Future Paradigms** Because people rarely learn something using just one learning domain, the use of objectives in nursing education was rightfully questioned by forward thinkers such as Diekelmann (1997) and Bevis and Watson (1989). Also, the idea that learning or knowledge acquisition can be always demonstrated in behavior is not realistic. Diekelmann, Bevis, and Watson understood that all learning is not displayed in behavior, and that by predetermining learning with objectives or outcomes, we may be squelching the depth and breath of the learning experience. The notion that a piece of information can be categorized in a knowledge level from simple recall to synthesis makes it simplistic. Objectives and outcomes tend to keep learning linear and isolated in categorizations hinged on observable behaviors. In the behaviorist paradigm, the behaviors the student displays that are the testimonial that learning took place may not capture the thought processes or thinking ability of the learner.

It is difficult, at best, to package the human intellect into a modifiable mold for convenience in grouping, evaluating, and justifying what is being taught or presented, or what the learner carries forth from the experience. Nursing education, as a practice discipline, is even more fraught with categorization difficulties because it has an application component displayed in the practice. The application of knowledge does not always coincide directly with the theoretical portion sequentially because of the holistic nature of the profession. The nursing art of caring and caring for is much greater than the educational parts when they are separated into components (Dunn, 1991).

Can we ever predict what is learned? Can we assess what is learned from overt behavior? Can we state exactly what we are going to teach? Maybe we can state the concepts or topics that we will focus on in a session, but what we teach is perceived differently by each learner, and what is learned from different perceptions is not always categorically definable. Knowledge is a complex concept in itself, but in order to turn out safe practitioners and to provide ongoing education in the discipline of nursing and to provide safe information to the public, specific knowledge must be mastered at some level of comprehension. That mastery of information (for lack of better description) must be measured, which is what is attempted through outcome development.

**How to Develop Learning Outcomes** So, with all that being said, young educators still need to know how to write learning outcomes as opposed to objectives. Harden, Crosby, and Davis (1999) listed criteria that outcomes should meet: reflect the mission and be clear, specific, manageable in number, appropriate for the level of the learner, progressive, and related.

Nursing education has available several good resources that explain how to write outcomes to meet these criteria. (Examples are provided in the figure.) One, from Florida State University (2007), provides instruction by using the A-B-C method. The “A” stands for antecedent or the learning activity; “B” stands for behavior or the skill or knowledge being demonstrated; and “C” stand for the criterion or the degree of acceptable performance. (Example A in the figure is compared to an objective in Example B.)

**Figure. Writing Outcomes**

**EXAMPLE A**
(A) By the end of this session the learner will be able to:
(B) Demonstrate sterile Foley catheter insertion (C) 100% of the time in clinical.

**EXAMPLE B**
This learner will:
demonstrate (verb) sterile Foley catheter insertion in clinical by return demonstration (content or context).

**EXAMPLE C**
Antecedent / By the end of this session
Learner / the nursing student will
Verb describing behavior / demonstrate
Content / Sterile Foley catheter insertion
Context / in clinical
Criteria / 100% of the time
Other outcome instructions include a slightly different three-step process that includes verb, object, and context (Kahn, 2003). Here the criteria are not stated specifically. Some instructions even provide a template to assist the educator to develop appropriate learning outcomes (Florida State University, 2007). An example of an adapted template, which includes all the mentioned components of a learning outcome, is shown in example C in the figure. To check your outcomes, ask this question: Is it observable and measurable, achievable, and meaningful? (California Department of Health Services, 1998).

Formatting any abstraction always runs the risk of stifling creativity, so a conscious effort must be made to keep the goal of the outcome in mind. What is the product that you want to produce at the end of this learning experience? Until an entirely new paradigm takes hold in nursing education, outcome-based education needs to work for those educators who are currently entrenched in nursing education. Understanding historical development, underpinning philosophies, definitions, and structural mechanisms helps empower educators by developing self-efficacy in the educational process.

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