

The Role of Assessment in Instruction

Teachers make decisions about students—decisions that have serious effects on students' lives. For teachers to have confidence that the decisions they make are fair, they must base those decisions on information that is valid and reliable.

Assessment is the systematic process of collecting and interpreting information to make decisions about students. High-quality assessments not only provide valid and reliable information about student achievement, they also assist educators to determine the effectiveness of their instructional strategies. The higher the quality of the information you collect, the higher your confidence level will be when you are making important decisions about students, and the better you will sleep at night!

The Process of Assessment

All assessments begin with a purpose. Classroom assessment is a formal process that involves a deliberate effort to gain information about a student's status in relation to course content and objectives. This process includes a wide range of procedures and has the ultimate goal of obtaining valid and reliable information on which to base educational decisions.

In 1999, Brookhart identified planning, teaching, and assessment as the three interactive components of educational instruction. Planning involves the establishment of instructional objectives and learning outcomes, which leads to decisions about the types of learning activities that will provide students with appropriate

opportunities to achieve the required outcomes. The desired learning outcomes and instructional activities then guide the assessment techniques. Finally, the assessment results direct, and even modify, the teaching approach. **Figure 1.1** illustrates this relationship, which Brookhart (1999) describes as effective when the assessment instruments provide accurate, meaningful, and appropriate information.

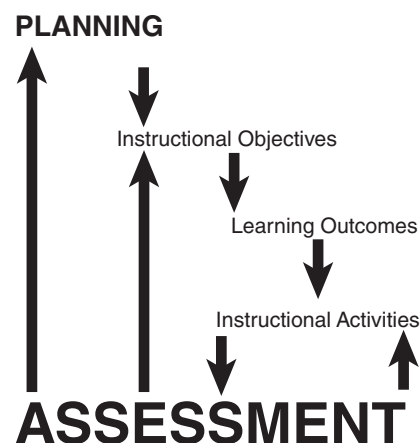
While the main goal of classroom assessment is to obtain valid and reliable information about student achievement, assessment procedures also assist in appraising the effectiveness of the instruction. A well-designed assessment plan helps you to optimize your teaching by identifying your own strengths and weaknesses. The results of a classroom test based on such a plan provide answers to the following questions:

- What is the level of the students' achievement?
- Are the course objectives realistic?
- Is the difficulty level of the content appropriate?
- Are the instructional methods effective?
- How well are the learning experiences sequenced?

In addition to being the primary indicator of student achievement and the effectiveness of an educational program, student assessment is also an integral part of the learning process. Effective assessment is a continuous process that provides valuable feedback for students and thus reinforces successful learning and offers information about additional learning needs. While a poorly designed assessment interferes with learning, an assessment that is well designed not only promotes learning but also enhances teaching by assisting both the student in learning and the teacher in teaching (Miller, Linn, & Gronlund, 2009). Well-developed classroom assessments contribute to effective student learning by helping students identify their strengths and weaknesses to guide their future study.

You probably have heard a student say, "There is no way I can pass this test." If students believe that they will not be able to pass their classroom exams no matter

Figure 1.1 Interaction of planning, teaching, and assessment in educational instruction



what they do, their self-confidence is undermined. When tests are perceived as unfair or too difficult, many students protect their self-esteem by giving up rather than failing repeatedly. Educators can counteract this syndrome by ensuring that students have a clear understanding of what is expected of them to demonstrate success, offering them learning opportunities to achieve the expectations, informing them about how their learning will be assessed, and providing them with feedback to guide future learning.

Ethical Responsibilities

Educators have an ethical responsibility every time they assess students. Nurse educators also have a responsibility to the healthcare consumers whose care will be entrusted to the students who graduate and enter nursing practice. It is therefore imperative that your assessments be trustworthy so that you obtain high-quality information. While you may not be happy about some of the decisions you have to make, you will be comfortable with those decisions if they are based on trustworthy assessment instruments.

Teacher-made tests play a central role in student assessment. In light of the influence that decisions based on these tests have on the lives of students, elaborate care must be taken when testing and grading. Fundamental to the development of valid assessments is the recognition that classroom test preparation deserves the same priority as the preparation of classroom instruction. Consider the amount of group effort invested in the development of a course in a nursing program. Endless meetings and discussions are held to develop objectives, outcomes, and content outlines and to plan learning activities that afford students the opportunity to attain success in the course. Yet test development is often a solitary process: Individual faculty members contribute pieces to the final product without seeing the whole picture until the test is completed.

What Clements and MacDonald identified in 1966 stills holds true today: Ethical responsibility for student assessment requires teachers to ensure that each assessment tool:

- is appropriately designed, and
- actually measures what it claims to measure

In addition, Clements and MacDonald pointed out that, when interpreting the results of assessment instruments, teachers must seriously consider the following:

- The emotional and social impact on students
- The consequences of the evaluation on a student's academic life

Assessment and Self-Efficacy

One of the most important responsibilities of a teacher is to promote every student's self-efficacy. To promote self-efficacy, which can be described as the "I can do it" attitude, teachers need to believe that every student can be successful. Admission to a nursing program is certainly a selective process, and every admitted student has

the potential for success. It is the obligation of the program's faculty to assist every student to become successful.

In the process of promoting student self-efficacy, it is essential to recognize that a student's sense of accomplishment is diminished if a task is too easy and is defeated if a task is too hard. When tests are perceived as trivial, students perceive schoolwork as trivial and can adopt the attitude that the process of learning is one of passive recall. We cannot expect students to be successful, to have the "I can do it" attitude on high-stakes examinations such as the National Council Licensure Examination (NCLEX), if they are accustomed to taking poorly constructed classroom exams that are perceived as too easy or too difficult.

It is unrealistic to believe that a postprogram review course can teach students to be successful on a national examination. The best approach for fostering a realistic sense of self-efficacy is to expose students throughout their entire nursing program to well-constructed tests that require them to think critically and to apply their acquired knowledge.

How many exams do students take over the course of a nursing program—20, 30, 40? It is certainly not unusual for students to answer more than 2,000 multiple-choice items during a nursing program. By presenting them with well-written exams that assess higher-order thinking, nursing programs can challenge students' critical thinking ability and provide them with the best preparation for passing NCLEX. Chapter 15, "Preparing Students for the Licensure Exam: The Importance of NCLEX," offers suggestions for increasing your students' self-confidence.

Assessment Inadequacy

Although most teachers recognize and strive to fulfill their assessment role, many experience conflict originating from feelings of inadequacy. These feelings of assessment inadequacy are understandable. While assessment is integral to instruction and learning, classroom assessment and grading are generally acknowledged as the weak links in modern education. Despite the widespread use of classroom achievement tests and the important role they play in the instructional process, teachers of all disciplines, at every level of education, lack the understanding of assessment methods. Surveys of teacher preparation (National Council of State Boards of Nursing [NCSBN], 2008; Penn, Wilson, & Rosseter, 2008; Schoening, 2009; VanBever, 2010; Worrell et al., 2014) report that teachers often lack the educational preparation essential for the educator role, which includes the development and use of classroom assessments. Schoening (2009) points out that, despite the fact that classroom assessment is an integral part of a teacher's responsibility, many nurse educators have not received the basic instruction in the process of assessment and grading that is necessary for fair student evaluation.

Nursing education is facing a particular dilemma with the assessment competency of faculty. In 1980, Fitzpatrick and Heller identified that the number of nurse educators with the necessary preparation in education was dwindling. That trend has continued for more than 35 years.

The National League for Nursing (NLN, 2013b), the American Association of Colleges of Nursing (AACN, 2015), and the National Advisory Council for Nursing Education and Practice (NACNEP, 2010) have all identified the need for increased

enrollment in schools of nursing to address the growing shortage of nurses in the United States. The AACN, the NLN, and the NACNEP all documented that, while we need to increase enrollment, the inverse is occurring. Substantial numbers of qualified applicants are being denied admission to nursing programs. The critical factor identified for limited student enrollment is the shortage of faculty at nursing schools across the country.

Both the NLN (2013a) and the AACN (2015) support the doctoral degree as the preferred preparation for nurse educators. The NLN (2013a) recommends several strategies to increase the number of nurse educators prepared at the doctoral level (pp. 4–5). However, because of the growing shortage of qualified nurse educators, expert clinicians, rather than educators, are increasingly filling nurse faculty positions. Although these faculty members have valuable clinical expertise, the role of nurse educator requires specialized knowledge and preparation.

A variety of proposals have been advanced to promote the interest and expertise of Master's prepared nurses in the educator role (Benner, Sulphen, Leonard, & Day, 2009; Bond, 2017; Ganley & Sheets, 2009; Penn et al., 2008). An NLN recommendation from its 2002 Position Statement that is particularly pertinent to the discussions in this book is the following:

Schools of nursing should support lifelong learning activities that help educators maintain and expand their expertise in teaching and education as well as their clinical competence and their scholarly skills. (p. 4)

The NLN, taking action on its own recommendation, has developed a variety of resources to enhance the educational expertise of nursing faculty. A number of continuing education offerings are available through the NLN website. The NLN also encourages continuous quality improvement by recognizing nursing programs that are committed to improving the educational environment. Each year the NLN Centers of Excellence in Nursing Education Program publicly acknowledge programs that excel in one of three areas:

1. Enhancing student learning and professional development
2. Promoting the pedagogical expertise of faculty
3. Advancing the science of nursing education

Recognizing the need for expertise in the nurse educator role, the NLN also sponsors a certification program for nurse educators. The certified nurse educator (CNE) examination is based on the Core Competencies of Nurse Educators (NLN, 2012) and is administered as a prerequisite for CNE certification. The NLN provides a range of opportunities to help nursing faculty continuously improve their proficiency in the role of educator. Visit their website (<http://www.nln.org>) frequently to keep up to date on what is being offered.

The AACN is also taking a proactive approach to promote excellence in academic nursing. The mission of the AACN, as stated on their website (<http://www.aacn.nche.edu>), is to “serve as the catalyst for excellence and innovation in nursing education, research, and practice.” The AACN website includes a faculty tab that provides a variety of resources, including links to webinars, conferences, curriculum guidelines, and funding opportunities.

Assessment Competency Standards

As public and professional awareness of the need for assessment competence increases, several professional organizations have developed standards to provide guidelines for the assessment skills that educators should possess. The 2014 edition of the *Standards for Educational and Psychological Testing* was developed jointly by the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME). The intent of this document is to “promote sound testing practices and to provide a basis for evaluating the quality of those practices” (p. 1). These standards represent a consensus on the skills required of teachers that enable them to use educational and psychological tests appropriately. An ad hoc committee of the NCME published the *Code of Professional Responsibilities in Educational Measurement* in 1995 to “promote professionally responsible practice in educational measurement” (p. 2). Both documents provide valuable guidelines for fair and ethical assessment in higher education.

The *Standards for Teacher Competence in Educational Assessment of Students* was developed jointly by the American Federation of Teachers (AFT), the NCME, and the National Education Association (NEA, 1990). This collaboration between teaching and measurement specialists defined seven assessment competencies that are critical to the role of educator (**Box 1.1**). Although these standards were specifically written for K–12 classroom teachers, they provide a discussion model for professional competence and fairness in assessment in higher education (Brookhart, 1999).

Unfortunately, the assessment abilities of many teachers are often inconsistent with the standards adopted by professional organizations. The assessment content presented in *The Nurse Educator’s Guide to Assessing Learning Outcomes* is consistent with the most current professional standards and provides you with a foundation for achieving competence, or improving your abilities, in student assessment.

Box 1.1 Teacher competence standards

Teachers should be skilled in:

1. Choosing assessment methods appropriate for instructional decisions.
2. Developing assessment methods appropriate for instructional decisions.
3. Administering, scoring, and interpreting the results of both externally produced and teacher-produced assessment methods.
4. Using assessment results when making decisions about individual students, planning teaching, developing curriculum, and school improvement.
5. Developing valid pupil grading procedures that use pupil assessments.
6. Communicating assessment results to students, parents, other lay audiences, and other educators.
7. Recognizing unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information.

Source: American Federation of Teachers, National Council on Measurement in Education, & National Education Association. (1990). *Standards for teacher competence in educational assessment of students*. Washington, DC: National Council on Measurement in Education.

Need for a Systematic Approach to Assessment

A systematic plan is defined as a procedure that is based on a coordinated approach. It ensures that no steps are omitted from a process. The only way to ensure that all steps are completed in a complicated process is to follow a system. The nursing process provides an example of a systematic method applied to a complex process. Certainly, there is no process more complex than the practice of nursing. Widely adopted by the profession, particularly in nursing education, the nursing process provides a systematic approach that ensures the comprehensive application of nursing care.

A comprehensive assessment plan involves several interacting processes. To maintain the plan's integrity, a methodical procedure, which is based on the principles of assessment, must be designed and adhered to. In fact, having a defined methodology not only ensures that all steps are followed; it also ensures that objectivity is maintained throughout the assessment process. In fact, following a systematic procedure for each component of the overall plan ensures that your assessment plan is both comprehensive and objective. The *Nurse Educator's Guide to Assessing Learning Outcomes* is designed to help you develop a system that will streamline every aspect of your assessment plan. The guidelines ensure that your plan is practical, comprehensive, and grounded in the principles of sound assessment.

Assessment Instruments

As defined in Standard One of the *Standards for Teacher Competence in Educational Assessment of Students* (1990), when planning assessment strategies, it is important that you choose the assessment technique appropriate for the particular behavior being assessed. Brookhart (1999) describes the following four categories of assessment instruments:

1. Paper and pencil (or computer administered)
2. Performance assessments
3. Oral presentations
4. Portfolio assessment

A multidimensional approach is essential to assess all aspects of a behavior. This is especially true when assessing psychomotor skills, affective behavior, or higher-level cognitive ability such as critical thinking. For a variety of reasons, teacher-made, multiple-choice, paper-and-pencil classroom tests are widely used in all educational settings, particularly in nursing education. This edition of *The Nurse Educator's Guide to Assessing Learning Outcomes* evolved from the first three editions, and so it focuses on the role of the multiple-choice format for classroom tests and elaborates on suggestions for constructing measurement instruments in several formats that were introduced in the previous editions. This edition of *The Nurse Educator's Guide to Assessing Learning Outcomes* provides you with strategies for developing well-constructed classroom exams in a variety of formats that provide valid and reliable results.

Summary

Assessment is fundamental to the instructional process. However, the assessment part of the instructional process often does not receive the attention it warrants for several reasons. The most important one is the need for faculty to recognize the integral role of assessment in the instructional process.

This edition of *The Nurse Educator's Guide to Assessing Learning Outcomes* is designed to help you develop a systematic plan for assessment of learning outcomes in the classroom. It provides a review of the theories and principles of assessment. Assessment issues are addressed and practical guidelines are presented to assist you in developing classroom exams that reflect the standards of assessment competence. The information presented in the following chapters will help you improve your overall assessment program, whatever assessment format you choose to implement.

Learning Activities

1. Consider an assessment program that you have experience with and describe an actual or potential ethical conflict associated with that program.
2. How does the “I can do it” attitude influence a student’s success on both classroom and standardized exams? Identify two approaches you can use to promote the “I can do it” attitude in the classroom or clinical setting.
3. Discuss the impact of the nursing faculty shortage on the shortage of nurses in the healthcare settings across the country.
4. What suggestion would you propose to increase the number of nursing faculty prepared at the doctoral level?
5. Review the *Standards for Teacher Competence in the Educational Assessment of Students* (refer again to Box 1.1). How do standards 1 and 2 apply to classroom and clinical assessment in nursing education?
6. What do you consider to be your assessment weaknesses? What approach will you take to improve your expertise in this area?

Web Links

American Association of Colleges of Nursing

<http://www.aacn.nche.edu>

American Educational Research Association

<http://www.aera.net>

American Federation of Teachers

<http://www.aft.org>

American Psychological Association

<http://www.apa.org>

Association for the Assessment of Learning in Higher Education

<http://aalhe.org/>

Carnegie Mellon: Enhancing Education—Assessment

<http://www.cmu.edu/teaching/assessment/index.html>

Educational Resources Information Center
<http://www.eric.ed.gov>
 Internet Resources for Assessment in Higher Education
<http://www2.acs.ncsu.edu/upa/assmt/resource.htm>
 National Council of State Boards of Nursing
<http://www.ncsbn.org>
 National Council on Measurement in Education
<http://www.ncme.org>
 National League for Nursing
<http://www.nln.org>

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