

White Paper

Developing a Testing Policy



DEVELOPING A TESTING POLICY: THE FOUNDATION FOR CURRICULAR EXCELLENCE

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To promote curricular excellence, evaluation data are often used to drive the curriculum with the ultimate goal of achieving designated outcomes, such as consistently high pass rates on licensure examinations. The first step in developing a curriculum that is driven by evaluation data is to establish a school-wide testing policy. This policy should address the formulation of a testing committee, the methods used to conduct internal and external curriculum evaluation, the consequences associated with students' scores, and the role students play in the testing process. The purpose of this paper is to describe the composition of a testing committee that is charged with designing a testing policy, and to define the content that should be included in that testing policy.

Testing Committee

The first action that must be taken when developing a testing policy is to establish a testing committee within the health profession school. This committee may serve as a subcommittee of the curriculum committee, or it might function as an advisory committee that is independent of all other committees. Regardless of its position within the school's committee structure, the testing committee should be made up of the school's faculty, and the recommendations provided by the committee should be subject to approval by the entire health profession faculty. Members of this committee can be decided by the faculty with input from the dean or administrator, or the dean or administrator may appoint all members to the committee. However, to promote faculty support, it would be beneficial to use a variety of methods to select committee members. For example, certain faculty members may have an interest in evaluation, and would therefore volunteer to serve on the committee. Regardless of how committee membership is decided, the committee should be representative of the entire faculty and include faculty members from all segments or tracks taught within the curriculum. Committee members should be experienced with the curriculum and with the current health care profession licensure examination. Additionally, members of the testing committee should be comfortable with assisting other faculty in test construction, test item writing, and interpretation of item analysis data. If the school's faculty members do not possess such knowledge and experience, then the dean or administrator should focus faculty development on concepts related to testing. Furthermore, all schools should evaluate their need to bring in an expert to conduct a test construction and test item-writing workshop. Such a workshop should focus on the interpretation of reliability data (as a means of evaluating examinations' consistency of scores) and the interpretation of test item analysis data (as a means of determining the value of each of the test items included in an examination).

The testing committee should be charged with designing, implementing, and evaluating the school's testing policy and revising the policy as needed. Based on recommendations made by the testing committee and the faculty's approval of such recommendations, a testing policy manual should be developed that addresses the testing protocols that have been established throughout the curriculum. This manual should be distributed to all faculty members and reviewed periodically. It should also be reviewed with all new faculty during orientation. It is important for college or university administrators to recognize that faculty members need support and encouragement to implement a testing policy that has been created by the testing committee and approved by the faculty. It is also important that all faculty members support and promote the approved testing policy with students, among the faculty, and with the public. One disgruntled or unsupportive faculty member can sabotage the evaluation process and undermine the purpose of developing a testing policy — that of helping students complete the curriculum, pass the licensure examination, and become successful practitioners in their health care profession.

Internal and External Curriculum Evaluation

The testing policy should address both internal and external curriculum evaluation. Morrison (2005) explained the use of these two components of curriculum evaluation within schools of nursing. Internal curriculum evaluation is described as methods used to measure outcomes that are enumerated in the course syllabi, while external curriculum evaluation is described as methods used to compare a student or group of students to the overall student population. Internal curriculum evaluation methods are derived from within the health profession school and are developed by the faculty, while external curriculum evaluation methods are derived from sources outside the health profession school, such as standardized examinations or the licensure examination. The testing policy manual, which serves as the documented resource used to describe the school’s testing policy, should include testing protocols related to both internal and external curriculum evaluation (Morrison, Nibert, & Flick, 2006).

Internal Curriculum Evaluation

The school’s testing policy should address internal curriculum evaluation protocols to help ensure students are evaluated using reliable and valid instruments that measure their ability to perform within their chosen health care field. Protocols regarding test blueprinting, test item writing, and test item analysis should be addressed in the testing policy. Test blueprinting helps build a valid examination — one that measures students’ understanding of the content and concepts that the faculty intend to evaluate. Methods used to develop and store test blueprints should be addressed in the testing policy. Test item writing, including writing style and developing critical-thinking test items that evaluate the students’ ability to apply content and concepts to solving clinical problems, should also be addressed in the testing policy. Numerous resources are available to help faculty with writing critical-thinking test items (Morrison & Free, 2001; Morrison et al., 2006; Schroeder, 2013). Protocols regarding measurement of an examination’s reliability and analysis of the examination’s test items, including acceptable statistical parameters, should be included in the testing policy (Morrison, Adamson, Nibert, & Hsia, 2004). Finally, acceptable parameters for students’ scores, the consequences associated with failing to achieve acceptable scores, and remediation options available to students who fail to achieve these parameters should be clearly defined in the testing manual. Figure 1 describes the process for implementing internal curriculum evaluation.

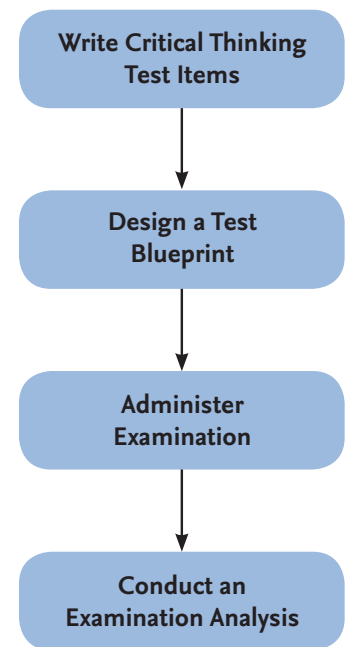


Figure 1. Process of internal curriculum evaluation.

External Curriculum Evaluation

The school’s testing policy should also address external curriculum evaluation. Specifically, the testing policy should describe the process by which individual students are compared with like populations, and the process by which the school as a whole is compared with like populations. Such evaluations are based on data obtained from sources outside the college or university — generally, these data are provided by standardized examinations and licensure examinations. The testing committee should vet the standardized tests and select examinations that have published data regarding their reliability and validity. Specifically, the standardized examinations selected should have a proven track record of consistently or reliably predicting students’ ability to pass the licensure examination on their first attempt so they can enter into the practice of their health care profession. Based on this vetting process, the testing committee should present their recommendations to the general faculty for discussion and approval. These recommendations should include the strategy for implementing the standardized examinations and the consequences associated with students’ scores on these examinations. Although faculty may disagree on some points, and discussions may ensue — perhaps even heated discussions — it is imperative that a consensus is reached among the faculty and that all faculty members agree to support the majority decision (Morrison et. al., 2006; Nibert, 2005).

Licensure pass rates over time should also be used as a measure of external curriculum evaluation. However, if licensure examination pass rates alone are used as a measure of external curriculum evaluation, deficiencies in the curriculum can be identified only after students graduate. Consequently, graduates are vulnerable to failing the licensure examination, and the college or university is vulnerable to poor pass rates, which may ultimately affect the school’s accreditation status. It is recommended therefore that schools use more than licensure pass rates as a measure of external curriculum evaluation (Adamson & Britt, 2009; Daley, Kirkpatrick, Frazier, Chung, & Moser, 2003; Langford & Young, 2013; Lauchner, Newman, & Britt, 1999; Lewis, 2005; Morton, 2006; Newman, Britt, & Lauchner, 2000; Nibert & Young, 2001; Nibert, Young, & Adamson, 2002; Young & Willson, 2012; Zweighaft, 2013). In fact, several authors have related improved licensure pass rates to the implementation of standardized examinations within nursing curricula (Frith, Sewell, & Clark, 2005; Morrison, Free, & Newman, 2002; Schroeder, 2013; Zweighaft, 2013). Figure 2 describes the process for implementing external curriculum evaluation.

Students and Testing

The purpose of evaluation is to drive the curriculum so that students receive the best possible education in their health care profession, become excellent practitioners, and ultimately provide a worthwhile service to the community. To achieve these goals, the testing policy implemented by the school’s faculty should be explained verbally and in writing to each student. The school’s testing policy should be presented during orientation to all new students, and each course syllabus should contain the evaluation protocols related to that specific course. Included in this policy statement should be the consequences associated with students’ scores on teacher-made examinations and standardized examinations, as well as remediation resources and retesting opportunities. Faculty might consider having students sign a form stating that they have received and understand the school’s testing policy, and storing this signed form in the student’s school record.

Although it is relatively easy to determine acceptable scores for internal curriculum evaluation measures, or teacher-made examinations, faculty often struggle with establishing consequences associated with standardized examinations. However, faculty should consider that testing without consequences is likely to yield spurious results. Students have many demands for their time and attention, and if an examination is administered that has no consequences, students are not likely to study for it, nor are they likely to put forth their best effort. In other words, they are not likely to take the examination seriously, thereby rendering the testing process a waste of time and money. Several authors have described establishing benchmark scores for standardized examinations — particularly the HESI Exit Exam, which is administered in schools of nursing — and have found that licensure examination pass rates improved when such policies were established (Buckner, Dietrich, Merriman, & Keeley, 2013; Morrison et al., 2002; Nibert, Young, & Britt, 2003; Sewell, Flor, & Colvin, 2008). However, all benchmark policies associated with standardized examinations should include the opportunity to retest with parallel versions of the examination. No single score on a single examination should determine a student’s progression through the curriculum. Faculty should include in the testing policy not only the required benchmark score, but also how many times students are allowed to retest and what remediation resources are available to assist them in being successful on the retest.

Zweighaft (2013) described the use of HESI Specialty Exams within courses of a nursing curriculum and reported that administration of these examinations was related to higher HESI Exit Exam scores, which were found to be significant predictors of success on the nurse licensure examination. Again, to effectively use such standardized examinations, consequences should be associated with students’ scores. For example, faculty might consider counting the scores on these examinations as a portion of the students’ course grade and/or requiring retesting with a parallel version of the examination if an acceptable score is not obtained on the first testing.

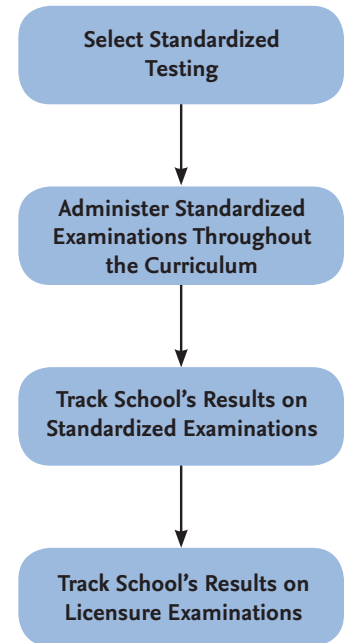


Figure 2. Process of external curriculum evaluation.

Just as consequences associated with scores obtained on standardized examinations affect the validity of findings produced by these examinations, so does maintaining the security for these examinations. Much has been written about academic dishonesty, and high-stake examinations are a primary contributing factor to student cheating (Sportsman, 2012). It is therefore imperative that faculty consider strategies to discourage cheating and encourage academic honesty. Careful attention should be paid to proctoring tests. The Appendix describes the role of test proctors. Additionally, adopting an honor code within the college or university demonstrates the school's commitment to providing an environment that encourages academic integrity. Strategies used to ensure academic honesty and the consequences associated with student cheating should be described in the testing policy, and these strategies and consequences should be provided to students in writing. Furthermore, the consequences associated with academic dishonesty should be uniformly enforced by all faculty members with all offenders, including first-time offenders.

Conclusion

It is the faculty's responsibility to develop a testing policy for their school. The testing policy should be developed by the testing committee, and a manual describing this policy should be created and distributed to all faculty members. This testing manual should describe the strategies used to measure internal and external curriculum evaluation, what benchmark examination scores the students are required to achieve, and the consequences associated with students' failure to achieve these benchmark scores. Likewise, students should be provided with a written copy of the testing policy that describes the testing strategies that will be implemented throughout their curriculum, the consequences associated with scores obtained on these examinations, and the remediation resources and retesting opportunities that are available. Academic honesty and the consequences associated with cheating should be addressed in both the faculty's testing policy manual and the students' testing policy statement. Clearly identifying the school's policy with regard to testing helps promote consistent evaluation throughout the curriculum. Students will know what is expected of them from the time they enter the program — there are no surprises — and they will know what is required to complete the program and graduate. Furthermore, a testing policy enables faculty to provide a systematic method of deriving curricular data which, in turn, drives the curriculum and promotes curricular excellence.

Appendix – Role of the Proctor

- Confirm and document identities of all students entering the testing environment using course roster or sign-in sheet. Ensure adequate spacing between students, and/or use computer screen privacy filters.
- Maintain a physical environment conducive to testing (e.g., adequate lighting, comfortable temperature, minimal interruptions).
- Ensure that students are aware of the time limit on the exam. Proctors may choose to verbally update students on the remaining testing time, or refer them to the time that is automatically recorded on computerized exams.
- Describe the procedures for students needing a bathroom break (e.g., one student at a time, accompanied by one proctor to the bathroom).
- Describe to students what they are allowed to use during the exam (e.g., EKG ruler, calculator, etc.).
- Ensure that students do not have access to cell phones, PDAs, and other electronic and photographic devices during the testing period.
- Supervise the students taking the exam. A proctor must be physically present at all times while the test is active (including viewing of rationales).
- Observe students to make sure they are on task during the exam and not in some sort of distress or are being disruptive to other test takers.

- Observe each student by circulating around the room.
- Quickly respond to student's problems and raised hands.
- Provide no hints (verbal or nonverbal) regarding the correct answer.

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