Retention: Processes to Increase Graduation Rates

CLINICAL JUDGMENT: WHAT DOES THIS MEAN AND WHAT CAN WE DO ABOUT IT?

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The ongoing shortage of nurses and other health professionals requires a continued push by education to increase the number of new graduates entering the workforce. This is typically achieved by increasing the number of students admitted to professional programs. As effective as this strategy may be, it often results in untoward consequences, including stretched human, fiscal, and physical resources that impact students, faculty, and partnering clinical agencies. Many schools are opting for improving the retention of students who have already been admitted as a means of increasing the number of graduates each year.

Factors influencing Student Retention

There are three general categories of factors that most often affect students' ability to stay in school: financial, personal, and academic. Retention strategies that target these areas pay major dividends in improving program graduation rates.

> Focus Areas to Improve Student Retention
> • Financial
> • Personal
> • Academic

Financial Factors

Financial aid and the availability of scholarship funds are necessary requirements for many students to stay in school. Identifying a specific process to provide assistance for students who need financial support can be an important on strategy. Although the shortage of financial support is an ongoing problem, students often don't know where or how to apply for scholarships that are available. Depending upon individual advisors to provide students with this info on is an unrealistic expectation. Developing a process so that everyone knows to whom to refer students and what follow-up will be expected, prevents students from "slipping between the cracks" and increases the chances that students will apply for scholarships appropriate for their situation.

Personal Factors

Students en have a variety of personal issues that may negatively influence their academic performance. All faculty have stories of students dealing with divorce, pregnancy, homelessness, violence, mental illness and ad (their own or of family members), and other serious psychosocial problems while they are tackling the challenges of nursing or health professions education. For years, faculty members have helped individual students resolve these types of issues. This assistance has been very important for students who have been helped; however, it adds to the workload of faculty who may or may not be aware of all the necessary resources. In addition, becoming intimately involved with students' personal problems may also result in a role conflict as the involved faculty member serves as the student's evaluator. It is far be for programs to provide a process through which students can be referred to appropriate resources and have adequate support from an expert. Many schools provide counseling and referral services to address these types of issues. One school even hired a social worker, paid for by a grant aimed at retention of students. Most importantly, all faculty members must be aware of the steps necessary to connect students to appropriate help.

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Academic Support

Student-Focused Retention Strategies

Providing support for students who may be struggling academically is an important faculty responsibility, and individual faculty members have provided this support for their students. While this may have been effective for some students, depending on individual faculty members for this service has resulted in a "shotgun" approach, and its success has been dependent upon the available time and expertise of the individual faculty and the needs of the students. Again, a more structured academic support system that's open to all students in need is more likely to be effective in insuring individual success and an increase in graduation rates. There are a variety of retention programs reported in the literature that may provide ideas for developing these programs.

> Student-Focused Strategies
>
> • Programs offering study tips, test-taking strategies, and critical thinking exercises
> • Mentoring (instructor, peer, or practicing clinician) on an ongoing basis
> • Integration of case studies or other cal thinking scenarios into course work
> • Individualized NCLEX® exam study plan, using results from standardized tests or other student evaluation information
> • Prescribed internet/computer-based self-study
> • Access to faculty
> • Timely faculty feedback on test performance

The focus of retention strategies may include: 1) providing individual students with new skills and processes necessary to be successful in the program; and 2) focusing on changes in policies, curriculum, or teaching-learning processes to better prepare all students for graduation. A number of schools report developing programs that offer study tips, test-taking strategies, and ways to improve critical thinking. (Baker, 2010; Carr, 2011) Implementation strategies vary. Some programs are voluntary; others require all students to participate. Some are offered at the beginning of the course of study; others are integrated throughout the program. There is little data about the relative effectiveness of these variations; however, anecdotal evidence suggests that structured programs that help students move beyond memorization to application, synthesis, and evaluation of necessary concepts are important to increase retention rates. A central factor in the success of these types of programs seems to be the characteristics of the faculty member who leads the program. Students must see this instructor as a student advocate who encourages them to perform without berating them for their limitations. They must also see the leader as a competent teacher/clinician who has the best interest of the student at heart.

A variety of teaching strategies to encourage development of critical thinking or clinical judgment have been identified as mechanisms for improving students' performance as clinicians. As a result, integration of case studies, simulation, or other critical thinking scenarios into course work can support retention, because these strategies engage the student with the content (Barr, 2010; Carr, S., 2011). Despite the reported success of these strategies, faculty must overcome students' belief that the job of the teacher is to "tell me what I need to know" (translation: "tell me what is on the next test"). Throughout the course of study, instructors must consistently send the message that the "right answer" may not help the student care for a patient. Instead, students must be able to synthesize knowledge into "the right action for a particular situation."

Some students require a one-on-one relationship with another individual to make use of support. For this reason, mentoring programs that couple a student with a more advanced peer, an instructor, or a practicing clinician may encourage students to ask for assistance with difficult academic assignments. Study groups among peers may provide the same support (Robinson & Niemer, 2010).

Several reports suggest that helping students develop an individualized study plan to prepare for their licensing or certification exams can be an effective retention strategy (Barr, 2010). Often these plans are based on students' performance on specified evaluation assignments, such as standardized examinations. After a student completes the designated test, the student and faculty (or mentor) can review the student's performance results and plan remediation strategies that address areas where the student did not do well. Internet/computer-based self-study or other independent study approaches are often prescribed as remediation. This approach seems to be most effective if it is required for all students.

The literature also suggests that access to faculty and the provision of timely feedback to students are also important for their success (Barr, 2010; Poorman, et.al, 2008). Given the multiple responsibilities of faculty, it may not be possible for faculty to be in their offices anytime the student needs them, or to return emails or telephone calls in a timely manner. However, developing AND following guidelines for communication provides students with a sense of structure and the knowledge that faculty is accessible.

Examples of Communication Guidelines

"My office hours are from 2-5 pm on Monday and Wednesday and from 8-10 on Friday. I am away from the office on Tuesday and Thursday with students in clinical experiences."

"I will answer emails received Monday-Friday within 24 hours, and on Monday for emails received over the weekend."

"I am available by cell phone at 444-444-4444 during the week until 9 pm. If I am unable to answer the phone at the time of your call, please leave a message. I will return your call as soon as possible."

"Students will receive test results within one week of taking examinations."

"Students will receive feedback on written papers and case studies within one week of turning in the assignment, unless otherwise notified."

Changes in Policy/Curriculum/Teaching-Learning Strategies

Faculty may also make broad changes in policy, curriculum, or teaching-learning activities to improve student retention rates.

Changes in Policies/Curriculum/Teaching-Learning Strategies

• Determining the correlation of students' scores on selected tests to graduation and success on national licensing and certification examinations

• Making admission and progression decisions based on evidence from school data

• Using aggregate standardized testing data to evaluate curriculum

• Increasing the critical thinking properties of faculty developed tests

• Developing a Test Review Committee to standardize testing policies and provide consistent and evidence-based review of faculty developed tests

Admitting students who are qualified to be successful in the rigorous course of study for nursing and various health professions is important in retention. A university president once suggested that the way to improve retention in nursing and health professions programs was to "admit the smart students." Unfortunately, determining who is qualified for these programs (ie., the "smart student") is often difficult. A number of studies analyze the effectiveness of admission criteria in predicting the success of students. The results of these studies vary, although pre-admission GPA,

GPA in science courses, and math subscores from standardized assessment tests seem to predict student success in a number of studies (Hass, et. al., 2004; Uyehara, et.al, 2007; March & Ambrose, 2010). However, most programs use an array of admission criteria beyond GPA and math proficiency, such as reading comprehension scores from standardized admission exams, in order to make valid admission decisions. Given that the results of predictability studies may not be applicable to all programs, how can faculty make evidence-based admission decisions with as little bias as possible?

The variability of the results of the studies can be explained by the diversity of students in various programs and by the fact that most studies report the experience of only one school and a relatively small number of subjects. To counteract this lack of generalizability, schools should analyze their own data from multiple sources over time. For example, programs should keep an ongoing database of students' scores on admission criteria, grades in various courses, scores on standardized examinations, and success on licensing/certification exams. As the database reflects an increasing number of cohorts from a specific school, the correlation of the results of various database factors with graduation and successful completion of licensing or certification examinations can be made. Making admission and progression decisions based on an ongoing review of school-specific evidence is an excellent approach to making effective admission and progression decisions.

If a program requires students to complete standardized examinations throughout the program or at the end of the program, the aggregate results of these tests can a powerful tool for curriculum evaluation. Most standardized examinations provide benchmark data, which allows faculty to compare their student responses with national data, through a variety of lenses (topic-specific, concepts, or accreditation standards). Evaluating program data against national standards or against previous cohorts from the same school can help faculty spot areas of weakness in the curriculum. Improving these areas can be beneficial to all students in the program and improve retention and graduation rates, as well as success on licensure/certification examinations.

Despite the increased use of standardized examinations, teacher-made tests continue to be an important student evaluation tool. Increasing the extent to which these tests encourage students to think critically and make appropriate clinical judgments is a key building block for student success throughout the program (Morrison, Nibert & Flick, 2006). Faculty members often use test banks as a basis for their teacher-made tests. Recently these test items have been under scrutiny for security breaches; revising these items using principles of good test construction can resolve these problems as well.

Developing a Test Review Committee as part of the organizational structure of the faculty has also been suggested as a strategy for improving retention (Morrison, Nibert & Flick, 2006). This committee should develop standards for test development and test evaluation, as well as requirements for communicating feedback to students. The committee may also review individual test items or provide standards for faculty to use in its review.

Lack of Evidence Regarding Retention

This White Paper suggests that processes to guide retention interventions are a more appropriate use of resources to help students be successful, than random efforts by individual faculty on behalf of individual students. It also provides suggestions for specific retention strategies taken from the literature. These suggestions emphasize processes for students who have been identified as at risk for failure. However, strategies to improve faculty ability to write effective test items that stimulate critical thinking and evaluate the curriculum are also included. It is important to emphasize that, although the goal is to choose evidence-based strategies to improve retention, unfortunately much of the current literature on this topic includes descriptions of one program's effort to improve the success of their students. Pennington and Spurlock (2010) did a systematic review of remediation interventions and their effects on NCLEX-RN pass rates in nursing. They found that the overall quality of the studies included in this review was uneven, but generally

low. They conclude that the problem is not with the individual published reports, but on the state of nursing education interventional research. They note that remediation strategies presented may improve the first time test taker's pass rate on the licensing exam. It doesn't however improve the quality of the instruction. The same conclusion can likely be drawn with regard to other health professions education.

The findings of Pennington and Spurlock (2010) lead to two recommendations for those reading this White Paper. First, recognize that remediation strategies reported in the professional literature may or may not be strongly reflective of evidence. In today's educational environment, remediation processes will continue to be necessary. After choosing an approach that seems appropriate for their students, faculty must implement ongoing evaluation of the intervention to be sure that it is effective in their environment, and must make changes identified by the evaluation. Secondly, it is important to remember that design and implementation of the curriculum may be as responsible for a poor retention rate as the abilities students bring to the educational environment. As a result, in-depth and consistent evaluation of the curriculum is also critical to student success.

Key Words: Attrition, Retention, Progression Policies

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