ARTICIPATION IN CURRICULUM DESIGN AND EVALUATION of program outcomes has been identified as a core competency for nurse educators (Billings & Halstead, 2009; Southern Regional Education Board, 2002). Facing declining NCLEX-RN® pass rates, faculty at an associate degree nursing program at a public community college in Mississippi responded to the National League for Nursing ([NLN] 2005b) call to transform nursing education by undertaking an intensive critique of its curriculum and program outcomes. Based on this analysis, a conceptual framework was created to guide curriculum revision, development, and implementation. The framework provides structure for ongoing and systematic curriculum review and revision.

Review of the Literature A review of the literature revealed the need to move from a teaching-centered to a learning-centered approach to teaching. Learning-centered institutional design is reflective of a number of principles: the need to bring about substantive change in participants; the full engagement of learners and the mindset that students bear primary responsibility for personal choices; multiple learning options to appeal to students’ preferred learning styles; the enhancement of collaboration; educators as learning facilitators; and measurement of success through the documented improvement and expansion of learning. Learning-centered curricula focus primarily on student learning with a goal-based emphasis and the evaluation of learning based on the achievement of predetermined criteria for course and program outcomes (Billings & Halstead, 2009; O’Banion, 1997).

As students in the program were considered nontraditional, with an average age of 28.2 years, it was deemed important to appeal to the special needs of adult learners as discussed in Knowles’s model of adult learning (Billings & Halstead, 2009). Knowles emphasizes that learners and faculty are co-creators in the learning environment and learning experiences, with collaboration and goal achievement hallmarks of the model. Billings and Halstead point out that adult learners are self-directed, concerned with obtaining information relevant to problem solving and the achievement of goals. Because many students in the program are younger than the average age, it was important to monitor their performance with the new curriculum. Since implementation, there has been no significant difference in grades and retention for the nontraditional and traditional students.

Conceptual Framework Prior to the development of a conceptual framework, faculty used Delphi methodology to create a philosophy for the nursing program. A questionnaire was prepared using statements based on the previous philosophy, which had a teaching-centered focus, asking for quantitative and narrative responses as well as comments. The results were consolidated and returned to faculty for a third round of responses. The Curriculum Revision Steering Committee wrote the philosophy based on these results. It was reviewed at several faculty meetings for discussion, revision, and final unanimous approval.

The process of curriculum review coincided with publication of the NLN Excellence in Nursing Education model (2006), which reflected concepts being explored in the curriculum revision process. Faculty used the NLN model to create a guiding framework for the program with learning the center of the program's purpose. Ironside (2005) discussed the need to shift from the memorization of content by students to a focus on engage-
ment and application of knowledge. Thus, learning was considered a gradual process of behavioral change. With the total experience of the learner paramount to excellence in education, learning was seen as affected by the student, faculty, available resources (including the college and clinical learning environments), and the program curriculum. (See Figure.)

The Guiding Framework with Learning at the Center

STUDENTS Learning is impacted by student characteristics, including diversity and active participation in the program of study. Admission standards reflect prior successes and achievements in educational evaluation and should be correlated to success in completion of the program and in passing the NCLEX-RN (Daley, Kirkpatrick, Frazier, Chung, & Moser, 2003). The nursing program's current admission process was competitive and awarded scaled points for ACT score (1 to 5 points with the minimum ACT being 17); for grade point average (1 to 4 points with the minimum GPA being 2.0); and for grade earned in each already completed support course required by the program (0 to 5 points with a "C" or better requirement). In addition, because of the mission of the community college system, points for residency are awarded (1 to 4 points).

Admission standards were reviewed through the curriculum critique and participation in a colleague's dissertation study (Gilmore, 2008). The review included analysis of scores on a commercial standardized assessment test, admission criteria, and NCLEX-RN scores. Changes in admission standards were made based on this review.

Progression standards and retention methodology partially address the student's ability to complete the program and achieve learning outcomes. As faculty reviewed this component of the conceptual model, a review of the literature revealed the need to formalize a retention program for students (Hopkins, 2008; Shelton, 2003; Sutherland, Hamilton, & Goodman, 2007). Faculty for each course in the program create and evaluate a retention plan at the course level each semester.

In fall 2008, one full-time-equivalency faculty member was assigned to serve as a success coach for students who met the following criteria: repeating a semester of nursing; failing a content test; or attaining less than the established benchmark on standardized exams. Self-referral was also allowed. It has been found that working with the success coach is a positive experience for students. A mentoring relationship that is not based on evaluation or assigning grades is associated with enhanced retention (Sutherland et al., 2007).

Relationships and the creation of a nurturing student-learning environment are important for the retention of students, especially minority students (Melland & Volden, 2001; Sutherland et al., 2007). Mandatory student-faculty conferences are used to focus on students’ academic and clinical performance and explore psychosocial issues students may be experiencing. Referrals are made to available resources to address needs identified by students.

Because the process of academic advisement and registration has been largely automated, the nursing adviser has assumed a more expansive role. With a background in psychology and counseling, the adviser conducts one-on-one conferences with students who have identified psychological issues including anxiety, test anxiety, and life skills management. Working with the success coach, the adviser has conducted formal workshops to address issues common to nursing students.

Faculty instituted a preceptor course to promote a strong relationship between students and practicing clinicians. They also reaffirmed a progression requirement, the “Criteria of Responsible Behavior,” which had long-standing usage prior to the curriculum review. Students must meet specific guidelines related to responsibility and accountability to be eligible for progression. Criteria focus on students’ responsibility for their own learning, health, performance in the clinical setting, working with others, and for practicing within the legal/ethical standards of nursing.

Since spring 2009, incoming students have participated in a three-day workshop held prior to the first day of class. Matteson-Kane and Clarren (2003) created a program to retain prenursing majors until entry into the nursing program could be achieved. This workshop incorporates many of their recommendations and focuses on items considered to be essential to success in the nursing program as reported in a Mississippi Office of Nursing Workforce study (2004). Students are exposed to financial, academic, and psychosocial resources; stress management; study techniques for comprehension and application; and a basic math review. In addition, students are exposed to skills such as hand-washing and bed-making, with performance evaluated by faculty just as all skills are evaluated within the program. Students also complete an application-level test using the Blackboard platform (the software used for testing) on the program’s philosophy and the material covered in the prenursing workshop.

Collaboration and active participation impact student learning (Bowles, 2006; Cross, 2002; Fenton & Watkins, 2008; Ironside, 2004; Lyons, 2008; O’Banion, 1997; Riddell, 2007). The program embraces the concept of students and faculty learn-
ing together with active learning the basis for most instructional design. Strategies to promote engagement of students in their learning include case studies, small-group discussions, peer presentations, simulation, gaming, and preparatory activities, such as worksheets, readings, and website review.

Although active learning had been incorporated into the program for many years to a small degree, students and faculty experienced some discomfort with the infrequent use of lectures as a teaching tool. Both students and faculty have been provided professional development opportunities and resources to assist their learning to learn in this manner. Students are taught how to study for class and the skill of reading for application. Faculty have participated in workshops specific to active learning strategies and student engagement.

Not only is learning participatory, but students are given opportunities to provide feedback on curriculum changes via focus group meetings held each semester with the program head. Students serve as committee members on certain program committees and as officers in the Organization of Student Nurses. In addition, the college is in the process of resurrecting a student government organization.

Graduation standards were reviewed to ensure program requirements met college requirements for graduation. In addition, non-nursing courses were examined and found to be comparable to similar programs in the state; thus, they were deemed essential to meeting the program outcomes.

Capitalizing on diversity was the component of student learning that provided the greatest challenge for faculty. To
address providing nursing care for members of diverse cultures, faculty integrated multiple modalities. Students earned points for nursing seminar grades if they participated in the college’s Multicultural Student Organization. Using simulation experiences, faculty created scenarios that involve non-English-speaking clients.

The program began an unstructured undertaking of “growing our own” faculty through the identification of minority students who show the potential to excel as nursing educators. These students are encouraged to continue their education and achieve a graduate degree. To date, four of those minority students have returned as faculty.

**Faculty** The Delphi methodology used to create the philosophy demonstrated that faculty believed in Boyer’s theory of multiple scholarships, including the scholarships of discovery, integration, application, and teaching (1990). This definition was adopted by the college in collaboration with the Institutional Effectiveness Office. Because community college faculty do not typically engage in scholarship of discovery in the strictest research sense, faculty determined that this definition is exemplified by participating in external research studies and analyzing internal program data. Thus, the term *utilize research* is used to describe expectations for faculty and students in the scholarship of discovery. This term also overlaps with the scholarships of teaching, integration, and application and became the basis to incorporate evidence-based practice for nursing and for education into the curriculum. Embracing research utilization has led to in-depth analysis of predictors for success, including progression, retention, graduation, and NCLEX-RN success for the program’s students.

Faculty clinical competency impacts the learning environment and reflects the scholarship of application and integration, as well as teaching. Because of the need for faculty to function expertly as clinicians, faculty are allowed two release days per semester to work in a clinical setting. In addition, with the introduction by the parent institution of a four-day class week, several faculty have chosen to use their day off in a part-time clinician role.

To further maintain competence, faculty may determine their own schedules within the time constraints required by the college; for advanced practice nurses, this flexibility allows for acquiring hours needed for recertification in their specialty areas.

Beginning in fall 2009, at the request of clinical affiliates in meeting accreditation requirements, faculty competency began to be evaluated using skills and testing measurement. The competencies performed are reflective of those completed by the staff nurses in affiliated institutions and incorporate basic skills such as IV initiation and cardiopulmonary resuscitation. Faculty conducting clinicals in a specialty area, such as telemetry or labor and delivery, have the option to participate in the competency testing for the staff nurses on those units if they so choose.

Academic expertise is considered the scholarship of teaching and is multifaceted. The program uses as a guide the NLN Core Competencies for Nursing Educators (2005a), which address facilitating learning, development and socialization of the learner, efficient use of assessment and evaluation strategies, participation in curriculum design and evaluation of program outcomes, functioning as a leader and change agent, seeking continuous growth and improvement in the educator role, and engaging in scholarship. Required to earn 1.0 continuing education units per year, faculty construct a professional growth plan that address at least one of the core competencies. Faculty are also financially supported in attending national workshops on preparing for Certified
C U R R I C U L U M R E V I S I O N

Nurse Educator (CNE) examination. To date, six have earned the CNE credential.

RESOURCES In the curriculum review process, physical, fiscal, and human resources were evaluated by the program administrator, the Curriculum Revision Steering Committee, and faculty. Such evaluation is now a routine part of an annual evaluation conducted by the administrator and a faculty team.

CURRICULA To determine best practices involved in moving from a teaching-centered to a learning-centered philosophy, the Professional Development Committee coordinated workshops for faculty. Teaching methods, active learning, and testing at the application level were some of the topics discussed during inservice programs. Endowment monies were used to hire a nationally known consultant, who reviewed the curriculum and provided workshops on test-item writing and the role of the instructor in clinical experiences.

Program outcomes were thoroughly reviewed by faculty and aligned with faculty beliefs about nursing, standards of practice, and accreditation requirements. Clinical affiliates and the Nursing Advisory Committee provided input at the beginning of the process to express their needs and view of the “ideal” graduate; they were consulted all during the process and their input was incorporated as appropriate.

With the understanding that evidence-based practice is paramount to curricula creation, all aspects of the curriculum are based on reviews of the literature. Faculty use personal digital assistants (PDAs) to provide real-time access to information on medications, nursing interventions, and disease processes (Courey, Benson-Soros, Deemer, & Zeller, R., 2006; Greenfield, 2007). The preceptor experience for students is enhanced in the last semester of the program (National Council of State Boards of Nursing [NCSBN], 2005). And student use of research findings in clinicals is encouraged (Tanner, 2006). Based on Fenton and Watkins’s description of learning-centered strategies and assessments for improving teaching and learning (2008), learning activities that promote student involvement and engagement in their own learning were developed by faculty and included in the student syllabus.

The literature consistently shows the need for students to use the skills of reflection, recognition and appraisal of assumptions, inquiry, analysis, drawing inferences, and contextual judgments (Riddell, 2007). To promote clinical decision-making, the curriculum promotes the use of simulation, standards of care, and critical thinking activities (American Nurses Association [ANA], 2001, 2004, 2005; Joint Commission, 2008; NCSBN, 2006; Newton, 2000; Riddell, 2007; Tanner, 2006).

Faculty also embraced the need to move from a content-laden curriculum to a concept-based curriculum (Diekelmann & Smythe, 2004). Concepts are considered those foundational aspects of entry-level practice and include items such as oxygenation, communication, and basic needs. Using strategies described by Giddens and Brady (2007), faculty identified concepts integral for inclusion in the program that are reflected in the philosophy of the program. These are organized to promote the flow of material from simple to complex, building upon prior learning.

The curriculum was designed to promote intra- and interprofessional care of the client. Learning activities were designed to promote exposure to practicing registered nurses. A grant, written in conjunction with a local public university, was funded to facilitate dual enrollment in the associate degree and baccalaureate of nursing program, providing the opportunity for participants to differentiate the functions of graduates at various levels of educational preparation. Simulation activities are conducted with students enrolled in the practical nursing, health care assistant, and respiratory care programs with plans to expand health disciplines as manikin capacity is increased.

An adequate nursing curriculum prepares graduates not only to pass the NCLEX-RN, but for the role of employee and to meet societal needs for safe, comprehensive nursing care. Clear competencies for each of these aspects are provided in the curriculum via course and program outcomes. NCLEX-RN success is promoted by aligning the entire curriculum with the NCSBN NCLEX-RN® Detailed Test Plan (2007); daily objectives for class and clinical are coded to correspond with specific activity statements and related activities on the plan. Students are given a syllabus that includes the coding and are required to review the specified items on the test plan in preparation for class.

Regarding the role of the employee, the “Criteria of Responsible Behavior” strongly reflects habits and actions conducive to satisfactory work performance. To meet societal needs, nationally accepted standards of care are used, including the ANA Standards of Ethical Practice (2001) and social context of nursing (2003); Joint Commission National Patient Safety Goals (2003), the Mississippi Competency Model, and the NCSBN practice analysis (2005).

Conclusion The development of a conceptual model to facilitate curriculum review, revision, design, and implementation proved beneficial, serving as a guide to ensure inclusion of
elements deemed important by faculty as derived from personal beliefs and literature review. The conceptual model provides the framework for systematic review of the curriculum every three years, with the time frame based on the NCSBN practice analysis and resulting NCLEX-RN test plan. It will provide the guiding framework for ongoing assessment, revision, and development.

References

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