UNIVERSITY OF MISSOURI-ST. LOUIS COLLEGE OF NURSING

COMPREHENSIVE PROGRAM ASSESSMENT
March 30, 2007

UNIVERSITY OF MISSOURI-ST. LOUIS
COLLEGE OF NURSING

COMPREHENSIVE PROGRAM ASSESSMENT

INTRODUCTION

The University of Missouri-St. Louis College of Nursing celebrated its twenty-fifth anniversary in 2006-07, having admitted its first students in 1981. College faculty and staff members, students, and clinical agency partners have participated in a series of activities throughout this year designed to foster reflection on where the College is now and directions for the future. The Comprehensive Program Assessment has been undertaken in conjunction with the College's Strategic Planning efforts in order to provide an integrated approach to planning for the future. This Comprehensive Program Assessment provides data from 2001 forward and includes selected materials under consideration for the College's Strategic Plan as they relate to the Comprehensive Program Assessment.

History of the College

The College of Nursing has a long history of cooperative relationships with schools of nursing in the University of Missouri system and clinical agencies in the St. Louis metropolitan region. The College opened with a baccalaureate completion program that provided registered nurses with diploma or associate degrees the opportunity to complete the coursework necessary for a Baccalaureate of Science in Nursing degree. In 1992, the College opened a Masters of Science in Nursing degree program following several years of a cooperative relationship around an MSN program with the University of Missouri-Kansas City School of Nursing.

In 1993, a proposal was made for a merger between Barnes College of Nursing and the University of Missouri-St. Louis. Barnes College (BC) was a single purpose degree-granting institution associate with Barnes Hospital and offered a generic baccalaureate nursing degree. The merger was approved by the Missouri State Board of Nursing. Student academic requirements were negotiated so BC students would attain a degree from UM-St. Louis. Student policies, records, admission procedures and other processing items were transferred to UM-St. Louis services. Several BC faculty members sought and were granted tenure track appointments. A ranking system for non-tenure track (clinical track) faculty was developed and all clinical faculty were ranked using the newly developed and jointly adopted guidelines. The faculties of the two programs formed cooperative and combined committees to address organizational and procedural issues related to the merger.

The programs officially merged in August of 1994, with the agreement that the school of nursing, now housed administratively at UM-St. Louis, would be known as "Barnes College of Nursing at UM- St. Louis." For the 1994-95 academic year, operations and location of the BSN program continued at the BC campus. Students were officially UM-St. Louis students and were given access to all services offered by the university. Students took nursing courses at the BC facilities and general education courses on the UM-St. Louis campus. In the fall 1995, the program from BC was physically relocated on the UM-St. Louis campus. Over the years the faculty and staff moved into the current Nursing Administration Building on the south campus,

educational programs were revised, facilities were updated, and faculty and staff have changed.

In 1994, the Barnes College of Nursing joined with the schools of nursing at the University of Missouri-Columbia and Kansas City to open a cooperative PhD program. By 2003, each of the three campuses was operating its PhD program independently although collaboration has been maintained through selected shared courses and faculty members' participation on doctoral student committees across the campuses.

In 2005, the Barnes-Jewish Hospital exercised a clause in the original merger agreement and retrieved the name "Barnes" so that it could change the name of the Jewish Hospital College of Nursing to the Barnes-Jewish Hospital College of Nursing. The current nursing education entity at the University of Missouri-St. Louis is now designated as the College of Nursing. The College has a new Dean, Dr. Juliann G. Sebastian who joined the College of Nursing in August 2006.

Because this is the College's 25th Anniversary Year, a faculty-staff committee designed a series of events to commemorate the first 25 years. These events are targeted toward different constituency groups, including students, faculty and staff members, community members, and employers of the College's graduates. Additionally, the Dean initiated a 25th Anniversary Symposium series with internationally known speakers addressing nursing education, clinical practice, nursing research, and institutional assessment. The purpose of these symposia was to provide opportunities for broad discussion of trends and challenges in the field as preparation for College strategic planning. Faculty and staff members provided input into the topics and speakers selected for the symposia. Clinical agency representatives and faculty from all schools in Missouri as well as the colleges and departments on the UMSL campus have been invited to each symposium. Events for the College's 25th Anniversary Celebration Year are listed in Appendix A.

Faculty and Staff Profile

Thirty-seven full time faculty members are employed in the College of Nursing, with six tenured faculty members (including the Dean), and four tenure track faculty members. Searches are currently underway for two additional tenure track faculty members. One of those is for the Mary Ann Lee Endowed Professorship in Oncology Nursing and the other is for a doctorally prepared family nurse practitioner. Twenty-seven non-tenure track faculty members are employed in the College of Nursing. Of those, five are doctorally prepared, one holds a Juris Doctorate, and six are enrolled in doctoral programs (PhD, EdD, and JD). On average additional 28 adjunct faculty members are employed each semester. Among the faculty are a Clinical Coordinator who serves as liaison to clinical agencies and secures student clinical placements, and a Retention Coordinator who provides student academic support. A table profiling faculty members in the College of Nursing is located in Appendix D. As of Spring, 2007, the College has appointed three graduate research assistants (1.25 FTE) and two graduate teaching assistants (.5 FTE). The student:faculty ratio in the clinical sections of the pre-

licensure options within the BSN program is 8:1 and 6:1 in the nurse practitioner clinical courses in the MSN program. This is well within the ratios used by other schools of nursing in Missouri. Of the 25 nursing programs profiled in the February, 2007 issue of Ingram's Kansas City Business Journal, eleven had pre-licensure ratios of 8:1, and nine had 10:1 ratios. Faculty at the University of Missouri-St. Louis College of Nursing adopted an 8:1 ratio for the prelicensure program because of the very high level of acuity of inpatients in hospitals in the St. Louis metropolitan region and the need to provide close student supervision and coaching in these environments. The 6:1 student:faculty ratio for nurse practitioner students is recommended by the National Organization of Nurse Practitioner Faculties (2002).

The College employs twelve staff members and a thirteenth position is being added. One staff member serves as Technical Support Specialist and provides computer support for the College, two provide assistance to faculty and program directors, four serve as academic advisors in the Office of Student Services, one assists the Dean, one is the College's Fiscal Officer, one administrative assistant supports the Fiscal Officer, one supports the Office of Student Services, one serves as the College receptionist. An Admissions Representative is being hired to coordinate student recruitment and manage the databases in the Office of Student Services.   This is a faculty:staff ratio of 2.8:1.

Student Profile

A total of 589 students were enrolled in the BSN program at the beginning of Fall, 2006. Of those, 418 were in the traditional BSN program, 129 were in the RN-BSN program, and 41 were in the Accelerated BSN program. Both the traditional BSN program and the accelerated BSN program are prelicensure programs. A total of 157 students were enrolled in the MSN program in one of the following specialty tracks: family nurse practitioner, adult nurse practitioner, pediatric nurse practitioner, women's health nurse practitioner, adult clinical nurse specialist, nurse leader, and nurse educator. Twenty-six students were enrolled in the PhD program. Enrollment trends in the College's programs are depicted in Appendix E.

In 2006-07, students came from 21 states plus Missouri (personal communication, Westermeyer, 3/20/07). Consistent with the University of Missouri-St. Louis campus, the student body is largely in non-traditional age ranges. Sixty-five percent of the students were under age 30 in 2006-07, 18.8 percent were between 30-39, 10.5 percent were between 40-49, and 5.6 percent were age 50 and older (personal communication, Westermeyer, 3/29/07).

Organization of the College

The organizational structure in place at this time in the College of Nursing is a transitional structure designed to provide leadership and program direction during the College's first year under the leadership of the new Dean. A permanent structure will be developed and put into place by the beginning of the 2007-08 academic year following completion of the College's Strategic Plan. The goal of finalizing the permanent

structure after completing the Strategic Plan is to ensure that the College is organized in a manner that allows for achievement of its mission and strategic priorities. The Transitional Organizational Structure may be found in Appendix F. The College's current and proposed mission and values statements are located in Appendix B. The proposed mission statement is the draft approved at the College of Nursing Strategic Planning retreat on March 2, 2007. Faculty, staff, and students are considering this draft further and a vote by faculty and staff members will occur at the final May 4, 2007 Strategic Planning retreat.

The College uses a shared governance model to secure broad input from faculty, staff, and administration into college decisions. The Faculty Association is the faculty governance body. Faculty members elect a Chair, Treasurer, and Secretary annually. Faculty committees include the College-wide Curriculum committee that provides curricular oversight and coordination for each of the College's programs, the Student Affairs Committee that manages student matters related to admission and progression policies, appeals, and scholarships. The Nominating, Bylaws, and Executive Committees manage other aspects of the Faculty Association. Staff members attend the Faculty Association meetings and participate fully in discussions. Prior to each meeting, the Chair of the Faculty Association and the Dean meet to identify items of importance to faculty and staff and to establish the agenda.

The Dean meets weekly with the Dean's Council, which is composed of the program directors and Associate Dean, the chair of the PhD Committee, the chair of the Faculty Association, a representative of Student Services staff, the College Fiscal Officer, and the assistant to the Dean. The Dean's Council functions as a coordinating body, providing a mechanism for communication across programs and consistency in policy implementation (Dean's Council minutes, 9/6/06). One change that resulted from Dean's Council discussions in 2006-07 was establishment of a meeting with Program Directors and the Associate Dean for group discussion and coordination of faculty assignments.

Once each month, the program directors, chair of the PhD Committee, the Dean and Associate Dean, and the College's Retention Coordinator meet with members of the Dean's Advisory Council, which is a student group established in 2005-06 to provide input to College administration. Student members represent each program and each semester of the BSN prelicensure program. Changes that resulted from student input this year include establishment of a BSN graduate pinning ceremony which will be initiated for the first time in May, 2007, initiation of a student-run electronic newsletter to promote effective College-wide student communication, and establishment of PhD student dinners with 25th Anniversary Symposium speakers.

A College of Nursing Leadership Council is being established as a group of leaders external to the College who will be asked to provide input into College programs, advise about the changing needs within the healthcare community, and assist with fund raising for the College. The first meeting is scheduled for May 3, 2007.

Three faculty task forces have been analyzing College policies and two of these made final reports to the Faculty Association on March 22. A Faculty/Staff Travel Task Force and a Faculty Evaluation Task Force were established in September, 2006 to respond to concerns voiced by faculty during the new Dean's initial conversations with faculty and staff members. Policies recommended by those two task forces will be implemented in the 2007-08 academic year. The Faculty Workload Task Force was established in 2005-06 and delayed its final report until the new Dean joined the College. That report will be provided to faculty and staff in the April, 2007 Faculty Association meeting. The major changes resulting from the work of the task forces are: 1) inclusion of additional data in faculty evaluations and strengthening the focus on faculty development; 2) establishment of a peer review system for providing review and recommendations to the Dean for faculty requesting evaluations at the outstanding level; 3) establishment of goals and priorities related to faculty and staff travel and a system for thinking about travel as an investment in achieving the College and University goals.

The College of Nursing Comprehensive Program Review was conducted by faculty and staff members within each of the College's academic programs. This occurred during program meetings in January-February, 2007. Program reports were collated by the Dean and submitted to an external consultant for editing and substantive review. The consultant's comments were shared with the program directors and used to provide additional detail in the report and will be incorporated into focused discussion at the Dean's Council meeting on April 2, 2007. The Strategic Planning process has been coordinated by a St. Louis consulting firm, Collaborative Solutions, Inc. This process began in January, 2007 and has been aligned with the Comprehensive Program Assessment in order to focus all efforts on continuous quality improvement and provide a mechanism for institutionalizing plans for improvement into the College's Strategic Plan. The lead consultant from Collaborative Solutions met with faculty and staff members in an environmental scanning meeting in January, 2007 and with students in the Dean's Advisory Council to collect data for use in the planning process. The consulting firm also conducted an electronic survey of faculty and staff members, students, alumni, and clinical agency representatives in February, 2007. The purpose of the survey was to solicit input on College strengths and areas for improvement. Key informant interviews were conducted by the consultant with University administrators to obtain their perspectives on future growth opportunities for the College. The consultants consolidated the results of their data collection and used those results to facilitate a College-wide Strategic Planning retreat on March 2. Draft mission and values statements were developed, and five strategic priorities were established. These may be found in Appendix D. Faculty and staff were invited to participate on teams representing each of the strategic priorities to further develop the initiatives that will be implemented to achieve the priorities. The strategic priorities and teams are listed in Appendix C.

The College has an ongoing comprehensive College-wide evaluation plan that includes specifications for evaluating each academic program, the curricula and implementation of the curricula, and student and alumni achievements. Implementation of the plan was intermittent over the last several years during a period of change in the College. Interim Co-Coordinators for Evaluation were appointed in September, 2007.

This will assist with providing a feedback loop for program improvements. The Co-Coordinators have organized and updated evaluation records, revised student surveys, and established systems for data input, data management, and analysis. The next step is to talk with faculty, staff, and students about how to use evaluation data for making program improvements. That step will be a major agenda item in the 2007-08 academic year. The College Evaluation Plan may be found in Appendix F.

Organization of This Self Study

The College's Self Study is organized into the two categories of the Comprehensive Program Assessment: A) Teaching and B) Research. Each of the degree programs is described within the section on teaching, while a comprehensive approach is used for the section on research. Within the sections on teaching and research, text is organized around the questions from the Starting Audit Questions in the Comprehensive Program Assessment manual. Responses to the sub-points under each of the Starting Audit Questions are highlighted by underlined phrases within the text. Appendices provide further information to clarify points made in the report.

TEACHING

Focal Areas

The College's teaching focal areas are its degree programs: BSN, MSN, and PhD. Achieving success in the objectives for the College and each program is the primary consideration for faculty and staff members. The College of Nursing's mission and goals derives from the mission of the University. The current mission of the College of Nursing is to improve the health of people through the generation, dissemination and application of knowledge.   The mission is being revised as part of the Strategic Planning process, but the current mission provides the foundation for all College programs. The current and proposed College Mission and Value Statements are in Appendix B. College goals are to:
1. Maintain high quality, affordable undergraduate nursing education;
2. Enhance and expand nationally competitive graduate nursing education for the St. Louis area;
3. Contribute to the economic development of the St. Louis area;
4. Build partnerships with educational and cultural institutions in the St. Louis region; and,
5. Provide access to higher education through distance learning and educational outreach.

Program objectives for each program are designed to meet the College goals.

Overall Performance

Approximately 2,700 students have graduated from the College's programs since it opened in 1981. Baccalaureate graduate licensure examination rates have consistently been well over 90% over since 2001 (see Appendix H) and board certification rates for master's students, while fluctuating in some specialty tracks, are good (Appendix I). Graduates of the PhD program have secured excellent positions primarily as faculty members.

Performance In The Focal Areas

Baccalaureate Program (Traditional BSN, Accelerated BSN, BSN Completion)

The baccalaureate of science in nursing degree program contains three options. Two of these are prelicensure options available for students who are not already registered nurses (traditional BSN and accelerated BSN) and one is a post licensure option for registered nurses interested in earning a BSN degree (BSN Completion option). The traditional BSN option is for students who begin their studies either as freshmen or as transfer students and complete the BSN prior to eligibility to sit for the licensure exam for registered nurses. This exam, the National Council Licensure Exam (NCLEX-RN®) must be passed before graduates are eligible for nurse registration in any state. Similarly, the Accelerated BSN option is for pre-licensure students, but students admitted to this program are usually those with baccalaureate degrees in other fields. Admission standards are higher than for the traditional BSN program because the program is condensed into 15 months, thereby providing especially academically strong students with an accelerated route to nursing. The third option is the BSN-Completion option, which is for registered nurses with Associate Degrees who wish to earn a BSN. The BSN program objectives are the same for each of the three options, but the curricula and pedagogies vary to meet the unique needs of the student populations. The three options will be compared in this section, with an emphasis on how the student populations' needs differ and are addressed in the options. (Appendix J provides comparisons of the curricula for the three BSN options).

The traditional baccalaureate program option is a four year, upper division major program consisting of 54 credit hours of general education courses and 67 credit hours of nursing courses for a total of 121 credit hours. Students may complete the general education requirements on the UMSL campus, a community college or another college/university of their choice.

During 2005-06 the faculty of the College of Nursing approved a two tier admission process for the traditional BSN program. This change was initiated in order to admit the most well qualified students and increase student retention. In tier one, students applying to the pre-clinical nursing major as freshmen or transfer students with less than 24 hours of credit must meet the following admission criteria: minimum cumulative grade point average (GPA.) of 2.5 on a 4.0 scale, upper one-third (1/3) of high school class rank, and minimum ACT of 21.   In the second tier students are admitted to the

clinical nursing courses (also known as the clinical major) on a competitive and space-available basis. Students applying to the clinical major course must meet the following criteria: completion of all pre-requisite courses, minimum cumulative GPA of 2.5 on a 4.0 scale, minimum cumulative science GPA in Chemistry, Anatomy & Physiology I & II, and Microbiology of 2.5 on a 4.0 scale. Science courses must be completed within the last 10 years and only first attempts of courses are calculated into the GPAs. Faculty included the criteria related to science courses based on an analysis of predictors of student success.

Students may also apply as freshmen to the honors program. Students entering the freshmen honors program for nursing must meet the following criteria: minimum cumulative GPA of 3.0 on 4.0 scale, upper one-fourth (1/4) of high school graduating class, minimum ACT of 24, and admission to the Pierre Laclede Honors College. Applicants with 24 or more transferable college credits from an accredited college or university may apply to the pre-clinical nursing major with a cumulative GPA of 2.5 on a 4.0 scale or if all the general education courses are completed they may apply for admission into the clinical major.

The accelerated baccalaureate option was added in 2000 in an attempt to help alleviate the nursing shortage. It is a 15 month option designed to transition adults with previous baccalaureate or graduate degrees in other fields into nursing. The curriculum is identical to the traditional BSN pre-licensure option. However, the courses in this program are condensed into 15 months, including summers. Higher grade point average standards for admission are important due to the rigor of the course of study. Admission to the accelerated option requires a grade point average (GPA) of 3.0 on a 4.0 scale if the student has a baccalaureate degree in another area as compared to the GPA for traditional students. A student who has not earned a previous degree may be admitted if the student has a cumulative GPA of 3.2 or greater with completion of 62 transferable credit hours from a regionally accredited college or university and the completion of all general education courses prior to beginning the program.

Accelerated students are admitted and begin the nursing curriculum in May. The program is designed to be completed within 15 months with graduation to occur in August. There are 58 required nursing course credits as compared to the traditional and rn completion courses which require 67 and 64 credits respectively. Courses are sequential and proceed from simple to complex. The current curriculum requires the last semester students to experience immersion in clinical practice by working with a nurse preceptor. Students are required to complete 180 clinical hours in the final semester. Students also complete Community Health nursing during the twelve week summer session.

The Bachelor of Science Completion track (BSN-C) was the first nursing program developed and implemented at the University of Missouri-St. Louis (UMSL) campus. It was designed for maximum flexibility for the working registered nurse allowing students to complete the program on a part-time basis. The program has grown to meet the needs of registered nurses and currently offers multiple learning opportunities. The American Association of Colleges of Nursing reported that the number of RNs pursuing

baccalaureate level education has increased (2005). The number of hospitals seeking American Nurses Credentialing Center Magnet status in the St. Louis area also has increased. Designation as a Magnet hospital recognizes the excellent professional clinical practice and working environment for nursing, and is a major attractor for new nursing staff. One of the criteria to receive Magnet status is that two-thirds of the registered nurses must have baccalaureate degrees.

Today, the UMSL College of Nursing provides registered nurses with multiple routes for earning a BSN. They may complete the program online, on the UMSL campus, at the Telecommunication Center at St. Charles Community College, or at hospital satellite sites located in the St. Louis metropolitan area, including DePaul Hospital, Barnes/Jewish Hospital, Missouri Baptist Hospital and Christian Hospital.

Faculty members recognize registered nurses as adult learners who are licensed professionals, often with years of experience. The BSN completion program does not repeat courses and experiences commonly completed as part of a basic associate degree or diploma nursing program. The curriculum is planned to integrate nurses' previous knowledge while promoting analysis and synthesis of new knowledge that addresses research, leadership, assessment, values, and health promotion with family and communities.

The curriculum builds upon nurses' previous knowledge and engages them in new learning opportunities. The program is designed to be completed in six semesters. Learning is facilitated by proceeding from the simple to complex. Such organization enables the learner to apply, synthesize and evaluate their learning outside of a traditional healthcare setting. The BSN completion curriculum begins with an introductory course helping students make the transition to baccalaureate nursing. The emphasis is on aggregates in the community or in society as a whole. The curriculum includes two courses with a clinical component totaling five credit hours and six didactic courses. These are distinct courses from those of pre-licensure track. Clinical experiences are arranged and supervised by the course faculty and occur during the last two semesters.

Learning Objectives

The BSN program faculty and the Faculty Association of the College of Nursing develop and approve the program outcomes for the BSN program. The quality and content of the program outcomes are based on national standards as derived from the American Association of Colleges of Nursing (AACN) *Essentials of Baccalaureate Nursing Education* (1996) and Commission on Collegiate Nursing Education (CCNE) accreditation standards, current trends in nursing education, the Missouri Nursing Practice Act and Minimum Standards for Nursing Education Programs, and the assessed needs of the community. The BSN program outcomes have not been revised recently, so faculty are planning to review the BSN program outcomes and the curriculum to verify they reflect current educational standards and trends in nursing practice.   Nursing course objectives are derived from the BSN program outcomes. Learning objectives (i.e., lesson, module or unit objectives) are developed in concert with course objectives along

with current research and nationally recognized clinical practice guidelines, such as the American Heart Association Guidelines for Advanced Life Support (2005) and the Wound, Ostomy, and Continence Nurses' Society series of Standards for Wound Care (retrieved 3/30/07 from https://www.wocn.org/pdf/WOCN-07OrderForm.pdf). Course objectives flow from the program objectives

Faculty teaching in the BSN program developed program, course and learning objectives that reflect the essential knowledge and skills of a beginning professional nurse. The current BSN program outcomes are delineated below. All faculty involved in courses with a lab or clinical component review the course learning objectives; and the course objectives serve as the basis for evaluation of student performance in the clinical area. At the program level the College of Nursing NCLEX-RN® licensure exam results are reviewed to determine changes in program, course and lesson learning objectives for the traditional and accelerated bsn program options. The NCLEX pass rate is one of the major indicators of success of these BSN pre-licensure program options. The pass rate for first time testers from the College of Nursing for the 2005-2006 FY was 98.31%. This exceeds the average pass rate for BSN program in Missouri and in the nation. Appendix H provides comparisons of College of Nursing NCLEX-RN® test results with the Missouri pass rate and the national pass rate. For the last five years, the College of Nursing pass rate has been higher than the average Missouri and national rates.

For students in the BSN completion option the key outcome indicator of success is graduation, indicating successful completion of coursework and the program of studies. For students in the accelerated BSN option the key outcome indicators are the NCLEX-RN® exam results, graduation, and job placement.

Upon completion of the nursing program, graduates of the three BSN options are expected to have achieved the following program outcomes:
1. Integrate into practice theories and concepts from nursing, the arts, sciences and humanities to provide comprehensive nursing care in a variety of settings.
2. Integrate critical thinking and problem solving in professional practice.
3. Administer competent, compassionate, holistic care to a diverse population of individuals, families, groups and communities.
4. Apply research from nursing and related disciplines to enhance care and guide professional practice.
5. Utilize interpersonal communication, and educational strategies that enhance the quality of personal and professional relationships.
6. Integrate principles of management and leadership in organizing, coordinating, and directing outcome-based professional practice.
7. Assume responsibility and accountability for decisions and actions based on intrapersonal values, ethical and legal obligations, standards of practice and economics.
8. Participate in professional and community organizations to effect societal change.

9. Exhibit motivation and self direction in activities that contribute to personal, professional and intellectual development (UMSL College of Nursing Student Handbook, 2006).

These outcomes relate to <u>needs of students</u> in each of the three program options to either prepare for beginning level professional practice (in the case of the prelicensure students) or to build on knowledge and skills acquired in associate degree programs and from clinical practice (in the case of registered nurses in the BSN-Completion program) to incorporate research into professional practice, expand interpersonal skills and principles of management and leadership that are not included in associate degree programs, and expand capabilities related to analysis of ethical, legal, clinical, and economic dilemmas.

Faculty members use several <u>sources of evidence</u> to establish program, course and learning objectives. Professional standards and national accreditation standards are reviewed. Research and new theoretical literature is incorporated into courses. Evidence used for summative evaluation of the BSN traditional and accelerated options includes the National Council of State Boards of Nursing Professional Nurse Licensure Exam (NCLEX-RN®) pass rate, the Mosby AssessTest, the Health Education Systems Incorporated (HESI) nursing comprehensive exam, student exit survey and alumni surveys. The MosbyAssess Test and HESI exams are two separate testing products that evaluate students' knowledge of specialty content or that test a comprehensive array of nursing content areas. These are used to help students identify weak areas so they can remediate their knowledge base prior to taking the NCLEX-RN® licensure examination. The HESI is an online product that offers content-based exams that test knowledge and critical thinking outcomes of courses. The company also provides comprehensive exams that assess student knowledge at the conclusion of the program. Although NCLEX and HESI exam results have been used effectively to modify the program, exit and alumni surveys returns have been poor and little has been done to use their findings to revise the program. This is changing now with the appointment of two Co-Coordinators for Evaluation in Fall, 2006 and feedback loops being developed for the programs.

Formative evaluations at the end of major clinical courses include the National League for Nursing (NLN) achievement tests and the HESI specialty content exams. Data from course grades, informal student and alumni feedback, campus-wide mid-semester course student feedback, and student course evaluations also are used to determine changes in learning objectives. Faculty members use the results of the mid-semester feedback system to make changes in the course while it is being taught. For example, one faculty member decreased the amount of class time spent on lecture and increased class discussion of case studies based upon midsemester feedback. Other areas that have been strengthened based on feedback include emphases on patient safety, medication administration, pathophysiology, and pharmacology. Faculty receive copies of the NLN or HESI content exam results and make course revisions based the results. For example, in the N3101 Fundamentals course, faculty included additional drug calculation items on exams based on a weakness identified on the HESI exam.

To supplement the learning experience, a Retention Coordinator was hired for the College of Nursing in 2003. This individual has developed programs designed to meet identified needs of students across the curriculum. For example, in the past three years the faculty identified drug dosage calculation skills as a weakness among the undergraduate students. As a course requirement in several clinical nursing courses, students must pass a dosage calculation exam to proceed in the course. Over the past four semesters, the Retention Coordinator has conducted dosage calculation review sessions for students who were not initially successful in meeting the dosage calculation requirements. As a result, no students have been dismissed in the past two semesters due to failing the dosage calculation requirement. Other identified learning needs among nursing students include study habits, time management, test taking skills, and critical thinking. Each of these topics is included in "Success Sessions", which are offered each semester by the UMSL Center for Student Success. Session topics include study habits, time management, and test taking skills and are scheduled throughout the semester. The Retention Coordinator works closely with the Center so their program sessions meet the needs of nursing students.

When faculty members identify a student who is at risk for course failure, they can refer the student directly to the Retention Coordinator via the campus-wide Early Alert System. The system, developed in part by the College of Nursing Retention Coordinator, is electronic and provides a continuous feedback loop between the faculty and the Retention Coordinator regarding the student's response to the referral and any action steps that have been implemented to support the student in the course. For the Fall 2006 semester, there were 118 total referrals from the College of Nursing. Of the 63 students who followed up, 38 percent achieved a course grade of C which is the same rate as those students who did not respond to the referral. Thirty-six percent of the students who followed up with the Retention Coordinator received a course grade of D or F versus 27 percent of those who did not follow up and earned grades of D and F. Although these results were not in the direction that had been anticipated, faculty think expanding the proportion of students who follow up through positive publicity may improve the results.

In the BSN pre-licensure options, the Retention Coordinator administers the Mosby AssessTest at the beginning of the last semester of the program in N4310: Senior Synthesis, the capstone course. Each semester the faculty member assigned to the course also reviews the students' NLN and HESI content exam results to tailor what is emphasized in the course according to the strengths and weaknesses of the class. For the last two semesters, faculty have also conducted 4 days of a voluntary weekend comprehensive NCLEX- RN® licensure exam review for students. Based upon community interest in these weekend reviews, the College of Nursing and the UMSL Continuing Education program will offer its first NCLEX- RN® licensure exam review course to both its students and students from other nursing programs in May, 2007.

To assess the needs of the community, the Dean is planning to establish a Leadership Council comprised of community members interested in nursing education and who will provide information about community needs for nurses. Clinical faculty members receive informal feedback from community and employer sources. The

College of Nursing has attempted to collect data from employers of the graduates, but the response has been poor. Faculty are exploring different approaches to survey graduates and employers, such as use of online survey tools that seem to increase response rates, and focus groups consisting of nursing administrators who hire College of Nursing graduates.

Faculty members adhere to state and national standards in establishing learning objectives as one mechanism for learning from best practice. HESI and NCLEX scores are compared with national scores. National licensure pass rates are compared with other Missouri nursing programs and national rates to help faculty members monitor the BSN program's effectiveness.

Program directors joined the American Association of Colleges of Nursing instructional leadership network in Fall, 2006 as a way to share and network with directors of other nursing programs around the country. Additionally, program directors attend the relevant AACN national program meetings in order to monitor new trends and share best practices.

Curriculum and Co-Curriculum

The curricula of the BSN program options were developed, approved, implemented, and evaluated by the faculty teaching in the program, providing an environment in which working collaboratively is the norm. The program curricula are approved by the College of Nursing Curriculum Committee and the full Faculty Association along with the UMSL Curriculum and Instruction Committee and Faculty Senate. Course objectives, didactic content, learning experiences, and evaluation methods are developed by the faculty whose educational backgrounds and nursing practice experiences are related to the content of the courses. Changes in course description, prerequisites, co-requisites, credit hours, objectives or content are submitted to the College of Nursing Curriculum Committee. Some changes, such as pre-requisites, also require approval of the College of Nursing Faculty Association, the UMSL Curriculum and Instruction Committee and the Faculty Senate.

Faculty members make many efforts to work collaboratively. Didactic course content is coordinated with lab content. Didactic and lab faculty meet to coordinate content and assure congruence with current practice. Curriculum is established by faculty teaching the course and adjusted by faculty consent and input from the Curriculum Committee. As an example, faculty members teaching in the accelerated BSN option are currently reviewing and updating that curriculum to better meet the needs of this student group. Based on information from the American Association of Colleges of Nursing BSN meeting and student comments on course evaluations, faculty members are strengthening the focus on use of simulations for clinical learning. Faculty members teaching courses in the same semester, such as pathophysiology and health assessment, coordinate their course calendars so students cover related material at the same time. Courses are coordinated to avoid duplication of content and clinical experiences. This improvement effort is ongoing. An area of practice that is addressed in two courses (e.g.

Adult Health I and Adult Health II) uses the same text for both courses and is coordinated so that there is no overlap in material. There is collaboration at informal level meetings and program meetings. Many courses incorporate critical thinking and the nursing process. The curriculum committee will work with advanced courses to improve building on pre-requisites by covering the material at a more advanced level.

The College of Nursing also works collaboratively with other UMSL colleges and departments. Developed in conjunction with the Pierre Laclede Honors College, there is an Honors College program for the four-year baccalaureate nursing students that was approved by both units and Faculty Senate. At present the College of Nursing is recruiting students for the nursing honors program, to prepare the best and brightest nurses for the future. Although the curriculum is in place, the College of Nursing will continue to develop, implement and evaluate courses for its honors program.

Curriculum revisions are underway in the two prelicensure options in the BSN program that are designed to address continuous improvement. Historically, the BSN traditional program was structured to provide "seamless articulation" with the local two year community colleges by placing most nursing courses in the upper division. The BSN faculty and the Curriculum Committee are now exploring distributing nursing courses over three to four years to increase student success and better meet the needs of the changing student population. Students report that the upper division concentration of nursing course is too intense and demanding for them. The students say they often have family and work commitments that must be balanced along with attending college. Students have shared this information in the Dean's Advisory Council, via exit surveys, on course evaluations, and in conversations with faculty members in class and clinical practica. College of Nursing administrators have initiated discussions with Melissa Hattman, UMSL-Community College liaison, and Karen Mayes, Director of the St. Louis Community College Nursing Programs to explore the feasibility of this change. In addition, the BSN program faculty is considering offering a course in professional communication and interpersonal relationships in nursing rather than having students take the current interpersonal relationships course that is taught online by another department. The changing student population, increased professional standards, higher employer and public expectations, and the need to produce a responsible, professional graduate nurse are factors influencing this proposal.

Faculty reviewed the philosophy and organizing framework of the CON when the accelerated program was implemented in 2000. A curriculum revision is currently in progress in an effort to respond to the unique needs of this adult student population by maximizing the use of technology in the learning strategies and unique pedagogical approaches to prepare this student population for the future of nursing practice, and particularly the demands for critical thinking and clinical decision making.

Faculty members think it is desirable to provide additional clinical experiences using simulations in the nursing laboratory. Progressive clinical immersion will begin in the second semester with intensive clinical immersion to begin during the third semester. The goal is for students to apply the knowledge attained in didactic courses to the clinical

setting on designated hospital units related to the specialty of the course content, on multiple days of the week. For example, pediatric clinical practice will occur in four-six week blocks with students spending two, eight hour days on the pediatric unit weekly. Concurrently, students will be completing integrated medical/surgical nursing II. The immersion allows students to more fully experience the responsibilities and decision making requirements in today's clinical environment and will prepare them for more independent nursing roles in later nursing courses.

The curriculum revision underway in the accelerated BSN option will integrate health assessment, pharmacology, and pathophysiology as common threads through every didactic/clinical course. Learning is facilitated by proceeding from simple to complex. It is proposed that immersion, or concentrated clinical experiences will increase as the student progresses through the program with the last semester students working 32-40 hours at an acute care facility.

Co-curricular opportunities are provided through seminars and brown bags scheduled for students. The Retention Coordinator and one of the Academic Advisors in the Office of Student Services initiated a monthly luncheon brown bag series entitled, "Nuts With Nurses" to bring students, faculty, and staff together for presentations and discussion of topics related to career trajectories, professionalism, and opportunities in the field. During the Spring semester, 2007, the Retention Coordinator organized a peer tutoring system for students and worked with one of the BSN faculty members to establish a learning community they entitled "THINK".

The learning community is based on work currently being done on the University of Missouri-Rolla campus and is designed to expand the advantages of that concept to the College of Nursing. This is an example of learning from best practice. Other examples include the way in which course content is developed from current research, clinical practice guidelines, practice standards, and other resources that reflect best practice. Course content is reviewed with other faculty members. Use is made of the following: internet information on practices in other nursing programs, electronic mail discussion with faculty members at other nursing schools, review of syllabi from other schools, and informal discussions with faculty from other schools. The Deans and Directors of nursing programs in the St. Louis metropolitan region meet monthly to discuss current issues in nursing education and the state-wide nursing deans and directors meet twice annually. These meetings provide information from other programs. The Dean and Program Directors also participate in the American Association of Colleges of Nursing interest group listserves that facilitate ongoing sharing of ideas on a nation-wide basis. Examples of discussion items on the listservs include faculty workload policies, student learning assessment, and strategies for teaching intravenous catheter insertion.

Continuous improvement is a priority, with programs evaluated regularly based on the College's evaluation plan. The evaluation plan for the College of Nursing is based upon standards from the American Association of Colleges of Nursing and the Commission for Collegiate Education in Nursing. Incorporation of the Missouri State Board of Nursing (MSBN) Minimum Standards into the evaluation plan is underway.

Faculty members continue to refine courses each time courses are taught. Clinical and didactic faculty meet at the beginning of each semester and as needed to coordinate these aspects of the courses. The Curriculum Committee regularly reviews course changes and refers approved changes on to the appropriate college and university bodies as previously describes.

<u>Teaching and Learning Methods</u>

Faculty members employ a wide variety of teaching and learning methods for both the classroom and clinical experience. Teaching and learning methods include: reading assignments in journals, textbooks and the Internet; lecture; creating homepages, overhead transparencies; and Power Point presentations with cartoons, charts, graphs, photographs, and x-rays. Other teaching and learning methods consist of: class discussion; case studies; practice answering NCLEX-RN® type review questions; videos and movies; interactive CDs and DVDs; active learning activities, and games. Faculty members also use computer-based learning methods, such as on-line activities and use of the University's web portal, "MyGateway". Two BSN courses, N3817: Nursing and Health Informatics and N3807: Nursing Research, are taught online.

Clinical laboratory teaching and learning methods include demonstration and return demonstration; models and simulation devices; patient education/teaching projects; nursing care plans; concept mapping; logs, diaries or journals; clinical preparation assignments; pre and post clinical conferences; and care of patients in a variety of clinical prctice settings. With external grant funding, the College of Nursing purchased two Sim-Man adult computerized clinical simulators, a Noelle pregnancy simulator and an IV therapy simulator. Faculty members have created clinical simulations that are used as part of students' clinical laboratory experience. Students have responded enthusiastically to the simulators because the scenarios provide students with situations they may not experience while in school. During the simulation the student can make independent judgments and initiate actions within an environment that does not expose living patients to risk of injury. Based on the successful use of clinical simulation to date, faculty members have concluded that simulation provides advantages in terms of patient safety, ensuring realistic and planned clinical decision making learning experiences, and expanding access to clinical learning experiences. Faculty conclude that the College needs more physical space, simulators, computers and related equipment in order to increase its use of clinical simulators in the future. Not only is this trend evident in the field, but it is a way to enhance student learning and ensure that all students receive certain learning experiences that may or may not be present in actual clinical situations. Further, given the increasing demands on clinical environments and limitations to the number and type of clinical placements that are available, simulations provide effective alternative clinical learning experiences.

Along with reviewing the syllabus, extensive orientation is used for some courses. Instructors provide students with telephone numbers and office hours, so they are readily accessible for answering questions. Current events and topics brought up by students serve as springboards for classroom discussion. A faculty member felt some courses had

been affected adversely by faculty turnover but the situation has improved with other faculty now teaching the courses regularly.

In the accelerated BSN option, faculty members are assigned to teach courses and clinical experiences based upon their clinical expertise. Active and collaborative learning are encouraged. The teaching and learning methods implemented vary according to the course. Application and synthesis of knowledge are promoted in clinical experiences and testing of material. Collaborative and group learning are utilized during the final semester when students complete a community assessment.

Evaluation of learning is done primarily through examinations. At the end of every didactic/clinical course a comprehensive and standardized exam is administered. Standardized examinations from the National League for Nursing and the HESI standardized exams are administered at the end of every theory/clinical course. Faculty believe that one area in which improvement is needed is in assessment of student's writing abilities. Grading papers requires significant time and is challenging with class sizes ranging from 32-48 students.

In the BSN completion option the teaching and learning methods implemented in the curriculum vary according to the course format and content. Adult learning principles are promoted and practiced throughout the curriculum. Formal presentations and professional papers are the primary evaluation methods utilized. Active and collaborative learning is directed through various methods. For example, in the online courses students communicate electronically with the faculty and students. Faculty members are also available by the telephone for specific questions or concerns. Group activities are implemented throughout the programs. Students may provide feedback to their peers on presentations and online discussion board exercises. The faculty assist students with learning how to learn by designing learning experiences that help students become self-directed and think critically; that stimulate them to read, observe, question, analyze, reflect, and synthesize. Intellectual engagement of students is promoted by involving students in constructing their own learning experiences thereby creating knowledge which is meaningful to them and assists them to reach their goals. For example, students conduct community assessments in the community health course and develop impact projects for the synthesis course based upon the results of the assessment. Students are encouraged to focus their projects on the populations with which they have clinical expertise and particular interest.

Technology is used in every course. The expectation is the student will utilize the resources provided for class preparation, homework assignments, library inquiries, and communication. The ITV courses provide students with the ability to review the previous class through the use of technology via video-streaming. This is an excellent tool for busy students juggling multiple work and family responsibilities and who may not be able to attend every class. Faculty may also have required videos that are made available for students to review through video-streaming. Faculty may utilize external links to enable students to have access to a variety research articles. Technology is a tool to aid the learning process.

Courses are designed to advance from general principles to specific examples as a way of striving for coherence in the curriculum. Faculty members review the syllabus and relate it to previous classes. Faculty in Adult Health I and II do not repeat the material taught in Pathophysiology, Pharmacotherapeutics or Assessment because they are familiar with the content of the previous courses and in some instance have taught the course. .Faculty members relate clinical learning to other areas of nursing. For example, an ethical issue that arises during clinical might be discussed in N3804: Legal and Ethical Dimensions of Nursing Practice or the clinical faculty might focus on ethical decision-making in post-clinical conference.

Student Learning Assessment

Student learning is assessed in a variety of ways. As mentioned earlier, HESI comprehensive examinations are used as indicators student learning with the NCLEX-RN® licensure exam pass rate.   Other data that are collected as part of student assessment are the online student evaluation of courses, student exit surveys, one and three year post-graduation alumni surveys, and employer surveys. The survey response rates have been low so plans are being discussed by the Evaluation Co-Coordinators and the Dean's Council to use different approaches to increase the response rates. Discussions also will occur within the Faculty Association and by student representatives on the Dean's Advisory Council during the 2007-08 academic year.   Faculty members examine distribution of course grades, course exams, lab practical exams, HESI content exam scores and NLN scores as evidence of student learning.

Assessment methods are clearly stated in the syllabi. Criteria for written assignments and grading rubrics are provided for evaluation of papers. Faculty members teaching in the baccalaureate program have adopted a program-wide grading scale and policies related to determining course grades in the clinical nursing courses. All clinical nursing courses use multiple choice exams to help students become accustomed to the style of testing employed on the NCLEX-RN® licensure exam.   Faculty have determined that students must have a 76% exam and quiz average in order to pass all clinical nursing courses.   Faculty may include additional assignments as part of the course grade, but students must achieve an exam/quiz average of 76%,

In addition, in the senior year, accelerated students are required to take a standardized NCLEX-RN® diagnostic readiness examination and a computer simulated comprehensive examination. These examinations seek to achieve the following goals:
1. "Assess student progress in achieving a professional nursing knowledge base as measured against a pool of other baccalaureate nursing students;
2. Identify those students with a deficient nursing knowledge base and assist them to develop strategies to improve this knowledge base;
3. To identify those students whose nursing knowledge base precludes their continuation in the College's baccalaureate program;
4. To strengthen students' performance on the national nurse licensure examination" (Student Handbook, 2007, p. 23-24).

If a student earns a below average score on the standardized exam the student is required to complete Kaplan's review course. Students pay for this course themselves. Upon graduation students are required to attend a nursing review course prior to the licensure exam.

Student course evaluations for theory and clinical are completed at the end of each semester. Evaluations are available on-line and are made available to students during the last weeks of the semester. Evaluations are anonymous with the results sent to the dean, program directors, and individual course faculty members. The evaluation process provides students the opportunity to provide faculty valuable feedback. The data are used to improve individual courses and instruction.

In the BSN completion option, adult learning principles are promoted to engage students in active learning through a variety of teaching methodologies. During the final semester students complete a standardized nursing exam from the National League of Nursing and the APT exam required by the University. Students who have chosen to complete the BSN online are mandated to come to campus the day prior to graduation to complete the required testing.

Students are assessed and evaluated by faculty based upon the learning objectives of the course. Peer evaluation is encouraged during formal presentations. Formal papers, presentations, family and community assessments, web-based assignments, are some of the methods that are currently utilized to evaluate student outcomes. Faculty members encourage students to think critically through discussions, on-line and in class, formal writing and verbal presentations. Verbal and written skills are integral to the image of a professional nurse.

At the end of every course students are encouraged to complete course evaluations. Evaluations provide students the opportunity to provide faculty feedback. The evaluation provides a forum that students can share teaching methods they believe to be beneficial to their learning, as well as constructive criticism. Faculty members have receive summary reports of student evaluations for use in making course improvements.

Monthly faculty meetings are scheduled to discuss programmatic issues in the BSN program, to promote communication with faculty, and to discuss concerns/needs of the program. At the end of the academic year the Program Director submits an annual report to the Dean and Faculty Association. The annual report addresses accomplishments and goals for the future. The goals provide direction for the next year and are discussed by the Faculty Association. The Dean incorporates accomplishments and goals from the program level annual reports into a College-wide annual report that she prepares for the Provost and Chancellor.

Faculty members in the BSN completion option evaluate student outcomes using course evaluations, exit surveys, and alumni and employer surveys mailed at one and

three years following graduation. As with the other options, newer approaches will be identified to enhance survey return rates.

Assessment processes are <u>based on evidence</u> found in current literature. Faculty members employ a variety of methods to assess student learning in courses. These methods include: course examinations, written assignments, quizzes, "hands on" skill demonstration examinations for lab courses, evaluations from instructors in clinical courses, and evaluations based on clinical achievement of course outcomes. Success in subsequent clinical courses provides assessment of learning in previous courses. .

When creating course written examinations, faculty members use different approaches. Test items are written with differing degrees of difficulty. Exam items are written by the faculty or test banks from textbooks are used and modified by faculty as needed. NCLEX-RN®-style items are used to help students become familiar with the types of questions on the licensure exam. Item analysis is used after examinations to evaluate internal consistency of the test items and the item difficulty. Problematic test items are deleted from the test bank or revised before being used again. Additional test items are added if students have had problems in a particular area. In addition, faculty members ask other faculty members with similar expertise to review their exam content. This provides a mechanism for ensuring content validity of the examinations.

Assessment processes used in the BSN completion option are similar, but also include peer evaluations by students working together in group projects. Faculty members evaluate students' clinical practice in the community health and synthesis courses.

Results of the NCLEX-RN® examination are a very important part of student learning assessment for the traditional and the accelerated BSN options. The HESI comprehensive exam provides a more detailed assessment of the student's strengths and weaknesses. In the past the College of Nursing used the NLN achievement tests to compare students with those in other BSN programs nationally. The NLN test report to the college lacks the detailed information to explain those areas that are weak and strong. Recently the BSN faculty attended presentations by HESI and Assessment Technologies Institute, LLC (ATI) that described their content-based achievement tests that will provide more detailed analysis of student and program strengths and weaknesses and more remediation support for students. The BSN program faculty made a preliminary recommendation to the Program Director and the Dean to purchase the ATI student assessment system pending evaluation of the cost effectiveness of the ATI compared with HESI. This recommendation was made based on the strength of the remediation books and CDs made available to students using the ATI system.   Faculty members also discuss assessment practices with faculty from other nursing schools in the process of comparing alternative assessment products.

Students in the BSN completion option take the comprehensive NLN examinations prior to graduation in their final semester of study. These examinations were selected because they provide the opportunity for national benchmarking, which is

needed in this option. Students in this option do not need the predictive analysis related to sitting for the NCLEX-RN® examination since they already are licensed.

Master's of Science in Nursing Program

Learning Objectives

The learning objectives for the MSN Program are well organized with five different specialty tracks offered. There is a Nurse Practitioner track offering four different areas of study, the Family Nurse Practitioner, the Adult Nurse Practitioner, the Women's Health Nurse Practitioner and the Pediatric Nurse Practitioner. The Clinical Nurse Specialist can specialize in adult health, women's health or pediatrics. There is also a Nurse Educator Track and a Nurse Leader/Administrator Track in the MSN Program. The Post MSN Certificate Program is also offered for each of the nurse practitioner tracks. Every two years (odd) a Family Nurse Practitioner cohort is started in St. Charles and Mineral Area in addition to the cohort on the University of Missouri campus.

The MSN Program goals are to:
1.   Prepare nurse educators, nurse leaders/administrators, nurse practitioners and clinical nurse specialists ;
2.   Facilitate acquisition of the skills necessary for the enactment of specific nursing roles;
3.   Build a solid foundation for the continued professional growth of the students; and,
4.   Promote attainment of inquiry skills.

The educational objectives for the MSN Program are to:
1.   Demonstrate advanced knowledge, values and skills in a selected area of nursing;
2.   Demonstrate advanced knowledge, values, and skills in a selected functional role;
3.   Apply the process of systematic inquiry (research) to validate and expand nursing practice;
4.   Integrate theory, research, and advanced practice nursing; and,
5.   Demonstrate increased responsibility and involvement in professional nursing activities.

These sequential objectives increase in difficulty as the student progresses through the MSN Program. The MSN program provides the students with the knowledge and skills needed to function in advanced role and serves as the foundation for doctoral education. Outcomes for each course are listed in the MSN student handbook.

The outcome measures listed for each of the major specialty tracks below represent competencies graduates are expected by faculty to possess upon completion of the program. Competencies flow from the MSN program objectives but relate more specifically to the individual specialty tracks.

Nurse Practitioner/Clinical Nurse Specialist
1. Demonstrates competency in the role of management of client health/illness status;
2. Demonstrates critical thinking and diagnostic reasoning skills in clinical decision making.;
3. Assesses, diagnoses ,monitors, coordinates, and manages the health status of clients over time;
4. Communicates the client's health status verbally or in writing, using appropriate format and terminology;
5. Provides anticipatory guidance for expected changes, potential changes and situational changes;
6. Applies principles of epidemiology and demography in clinical practice;
7. Selects and recommends appropriate diagnostic and therapeutic interventions and regimens with the attention to safety, cost, invasiveness, simplicity, acceptability and efficacy;
8. Performs and interprets common laboratory tests;
9. Diagnoses and manages acute and chronic diseases; and,
10. Demonstrates competency in the role monitoring and ensuring the quality of health care practice.

Nurse Educator
1. Describes a personal educational philosophical base that is reflected in and consistent with learning theories and instructional methods;
2. Devises instructional methods that are consistent with adult education principles.
3. Differentiates various learning theories;
4. Relate learning needs, learning theories, instructional methods and evaluative outcomes;
5. Demonstrates effective public speaking that is enhanced by technology;
6. Demonstrates creativity in defining and solving problems;
7. Serves as a student/client advocate;
8. Use a theoretical and research base for nurse educator evaluation;
9. Design methods for nurse educator evaluation;
10. Create various methods for student evaluation; and,
11. Critique each method of student evaluation.

Nurse Leader/Administrator
1. Develop and articulate a vision for nursing practice in an organization in the context of complex health care delivery systems;
2. Employ management skills that facilitate collaborative relationships;
3. Select and use advanced analytical problem solving and communication skills;
4. Make sound decisions that value effectiveness in the use of resources;
5. Think globally using information and communication technology;
6. Advocate for consumers and community partners;
7. Demonstrate creativity in defining and solving problems;

8. Foster and implement team-building strategies that create partnerships and collaboration within nursing and across health care disciplines;
9. Embrace change and manage it effectively;
10. Negotiate and resolve conflict;
11. Effectively market the nursing practice enterprise;
12. Demonstrates effective public speaking;
13. Establish relationships with community groups around the issue of health; and,
14. Assume risk-taking behavior for the purpose of enhancing quality health care.

Each course offered prepares the student for a higher level of nursing. The MSN courses build on the foundations of the courses taken at the BSN level. The MSN courses follow the standards of the American Association of Colleges of Nursing, the National Organization of Nurse Practitioner Faculties, and the National League for Nursing. The course descriptions and objectives are evaluated by the MSN faculty to make sure they conform to the national standards promulgated by these organizations. Course descriptions were revised and approved by both the MSN faculty and the CON Curriculum Committee in Fall of 2006. The core courses at the master's level and the nurse practitioner option have remained the same. Due to increasing technology and the Missouri Hospital Association Grant in the Fall 2006, courses in the Nurse Educator option were developed for an online format. These courses are now available both online and on campus to accommodate students different learning styles. Faculty members serve as role models as well as experts in their areas of teaching for the students.

The exam pass rate of the national certifying bodies in each of the Nurse Practitioner areas indicate how well the students have mastered the material. Nurse practitioner students in the Adult Nurse Practitioner (ANP), Family Nurse Practitioner (FNP), and Pediatric Nurse Practitioner (PNP) specializations may take board certification examinations offered by the American Nurses Credentialing Center or the American Academy of Nurse Practitioners. Pediatric nurse practitioner students may take board certification examinations offered by ANCC or by the National Pediatric Certification Board. Women's health nurse practitioner graduates take the board certification examination offered by the National Certification Corporation. Graduates of the Nurse Leader/Administrator specialization may take the ANCC Nursing Administration examination and graduates of the Nurse Educator specialization may take the Nurse Educator certification exam provided by the National League for Nursing. Pass rates for the nurse practitioner board certification examinations are found in Appendix I. Because the pass rates for the ANP and FNP graduates have varied the most over this period of time, faculty decided it would be helpful to administer the relevant HESI comprehensive examinations to these students prior to graduation. This will be done for the first time in Summer, 2007 and will help students and faculty identify areas of strength and those areas in need of remediation. One hundred percent of graduates taking the board certification examinations for the PNP and WHNP options have passed in at least the last two years.

MSN faculty members are involved in many national nursing organizations which helps to keep the goals and courses offered in the program current on a national level.

Examples of the primary national organizations are the National Organization of Nurse Practitioner Faculties, the American Academy of Nurse Practitioners, and the American Association of Colleges of Nursing. Students in the Nurse Practitioner option are compared to the national pass rates for nurse practitioner programs provided by the testing organizations. MSN students are surveyed after they complete the program at one year and three years after graduation. Surveys request information about how well prepared alumni feel for their current roles and examples of new leadership roles they have assumed, as well as subsequent pursuit of doctoral studies. The outcomes of these surveys are shared with the faculty and used to improve the courses, teaching methods, etc. Faculty members are exploring better ways to compile this information and disseminate it to the faculty.

Curriculum and Co-Curriculum

The curriculum for the MSN program is based on the *Criteria for Evaluation of Nurse Practitioner Programs* (National Task Force on Quality Nurse Practitioner Education , 2002), The *Essentials of Master's Education for Advanced Practice Nursing* (AACN,1996) as well as the *NONPF Advanced Nursing Practice: Building Curriculum for Quality Nurse Practitioner Education* (National Organization of Nurse practitioner Faculties, 2002).

Nurse practitioner tracks are two year full time programs of studies requiring 36-43 semester hours of credit. Students in the Nurse Practitioner or Clinical Nurse Specialist track complete a minimum of 43 credit hours, plus a minimum of 600 clinical course hours in a specialty area. Students in the Post MSN Certificate Practitioner Program complete a minimum of 22 credit hours which includes 500 clinical hours in a specialty area. Academic preparation in the Nurse Practitioner tracks include advanced pharmacology, advanced pathophysiology, advanced health assessment, advanced clinical management and diagnostics. Program graduates are prepared to work in many settings including outpatient facilities, urban and non-metropolitan settings, health care clinics and private primary care practice settings.

Students in the Nurse Educator and Nurse Leader/Administrator tracks complete a minimum of 36 credit hours including 150 clinical hours. The focus is on graduate education of nurses including course work in Values in Health Care, Decision Making, Policy, Organization, Health Care Across the Lifespan, Nursing Theoretical Foundations, Program and Curriculum Development and Instructional Strategies in Nursing. The Synthesis course includes 150 hours of clinical time spent in the student's area of interest. Graduates are prepared to assume managerial and leadership positions in health care delivery systems, schools of nursing , and other private and public settings.

The MSN faculty meets monthly to discuss and make suggestions for curricular updates. The curriculum is decided on and voted on by the MSN faculty prior to going to the College of Nursing Curriculum Committee where it is discussed and voted on before being presented to the Faculty Association.

The MSN faculty works collaboratively to provide the students with the most current and up to date information available. Information is obtained from the research literature, clinical guidelines published by professional organizations and compendia such as the Cochrane Collaboration and the National Guidelines Clearinghouse, and from professional meetings such as the American Association of Colleges of Nursing Masters Program meeting and the National Organization of Nurse Practitioner Faculties meeting.

Selected MSN core courses are taught cooperatively with University of Missouri Columbia and University of Missouri Kansas City allowing students access to a variety of teaching modalities.

The curriculum is designed so students progress from the core courses to more complex courses offered in their area of specialization. Building on this core foundation provides students a broader knowledge base which can be applied in the practice arena.

Current trends in master's education in nursing include the movement of specialization in advanced nursing practice to the Doctor of Nursing Practice (DNP) level and addition of a generalist master's, the Clinical Nurse Leader. The membership of the American Association of Colleges of Nursing voted in 2004 to move specialty advanced nursing practice education to the practice doctorate level by 2015 and to make that level the Doctor of Nursing Practice (AACN, 2004). A number of schools of nursing are likewise partnering with clinical agencies in the development and testing of a new generalist master's, the Clinical Nurse Leader (AACN, 2007). The clinical nurse leader (CNL) is a leader in the health care delivery system in all settings in which health care is delivered and prepared in a generalist masters program. The CNL designs, implements, and evaluates client care by coordinating, delegating and supervising the care provided by the health care team, including licensed nurses, technicians, and other health professionals (AACN, 2007). The Curators of the University of Missouri voted to convert the name of the Nurse Doctorate program that was approved for the three schools of nursing in the system in 1993 to the Doctor of Nursing Practice (July, 2006). The University of Missouri-Kansas City plans to initiate the Doctor of Nursing Practice in Fall, 2007. Faculty members at the University of Missouri-St. Louis are evaluating when to initiate a DNP program and are analyzing the desirability and feasibility of a Clinical Nurse Leader generalist master's program.

Teaching and Learning Methods

Various teaching methods are utilized throughout the MSN program. Online courses through MyGateway, video streaming, DVD's, Power Point presentations, guest lecturers, hands on learning (in labs) , class discussions, case presentations, simulations, polycom and ITV classes are all used to provide students with optimum learning experiences. Tests, papers, and class presentations are evaluation methods utilized to ensure that learning is occurring. Faculty members conduct continuous literature searches throughout the semester to keep current in their course material. The faculty are always available to the students for questions that may arise during the course of the semester. Faculty members revise their courses each time they are taught to facilitate the

learning of the students. In the nurse practitioner tracks, the clinical course instructor maintains a folder for each student with evaluations of the student's progress that follows the student through both clinical courses. Student evaluations are a method of insuring that program objectives have been met and the student is continuing to learn. Coherency in the teaching and learning process is evident by the sequential order of the courses taken by the students.

Clinical practica are key components of the teaching and learning methods used in the MSN program. Many different clinical sites are used throughout the metropolitan St. Louis area and rural areas for the student's clinical experiences. The MSN program will continue and expand affiliations with various clinical settings that will benefit the student's educational growth.

Student Learning Assessment

Student learning is assessed using learning contracts, tests, papers and scholarly presentations. These student assessments are the responsibility of the course faculty as well as the program director. The long term outcomes of the educational experience are determined by evaluations sent to both the students and their employers. These evaluation surveys are distributed at one and three years following graduation. Due to some transitions in the College over the last several years, the results of these assessments have not always been available for faculty deliberations. However, the Interim Co-Coordinators for Evaluation (one of whom is the Interim MSN Program Director) are working with the Associate Dean and Dean to consider new ways to make the information available for a feedback loop to faculty. This discussion will occur with faculty at the beginning of the 2007-08 academic year.

In the MSN program student learning assessments are evidenced based through use of national guidelines from AACN, NONPF, and NLN as the basis for the assessments. The students' assimilation of course knowledge is evident in their clinical practice. Preceptors contribute their observations to students' clinical evaluations.

Some faculty members in the MSN program choose to do presentations at national or local meetings as well as publish articles in their area of expertise. Some of these articles are incorporated by faculty members into their courses. Faculty members learn from nationally recognized nursing researchers the current trends in the field and incorporate research into teaching.

PhD Program

At the national level, the discipline of nursing has a long history of commitment to continuous quality improvement at all levels of nursing education in universities and with regard to research. The American Association of Colleges of Nursing establishes and routinely revises several key documents that address these standards. The "Essentials" series (AACN, 1996, 1998) provide a basis for national accreditation of nursing programs at the baccalaureate and master's degree levels. At this time, AACN does not accredit

doctoral programs but AACN has approved three additional documents to guide these programs. These are the: 1) *Indicators of Quality in Research-Focused Doctoral Programs in Nursing* (2001), 2) *Position Statement on Nursing Research* (1996), and 3) *Essentials of Doctoral Education for Advanced Nursing Practice* (2006). The UMSL College of Nursing has used the *Indicators of Quality* to frame reviews of the PhD in Nursing Program in 1998 and 2006. Additionally, faculty used the 2003 Response to the UM-System's 2004 Program Viability Audit of the PhD in Nursing program report to frame this report. A report about extramural funding that compares the College to other UMSL units and to the nursing programs at UM - Columbia and UM - Kansas City is in Appendix K. A report about publications and presentations is attached in Appendix L. Prior to this review, the AACN Accreditation reports provided the basis for the usual five year review cycles for the College of Nursing. The American Association of Colleges of Nursing does not, however, accredit research-focused doctoral programs in nursing, so no five year review reports have been written for the doctoral program in the past. Instead, doctoral program are accredited with the University through the Higher Learning Commission.

The doctoral program was developed as a collaborative initiative as directed by the Missouri Higher Education Coordinating Board in 1994. At that time, the nursing faculties at St Louis, Columbia and Kansas City negotiated a set of learning objectives, competencies and PhD curriculum which have been implemented. The three cooperative programs were to be reviewed as a single unit which first occurred in 2002. Following this review in 2003, the nursing deans requested that the University of Missouri System reconsider the cooperative nature of the nursing PhD. The UM System determined that each campus would have a separate curriculum using a common framework with separate admission standards, unique faculty and program reviews meeting the standards for other free standing programs on each campus and that these reviews would be campus based. This is the first time the College of Nursing's doctoral program has participated in the five year campus level reviews.

Learning Objectives

The PhD faculty meet regularly to continuously consider what students need and how the curriculum addresses these needs. Program representatives consistently attend the annual AACN sponsored doctoral conference which provides the opportunity to learn about issues other programs are encountering and strategies to address these. On an informal basis, faculty members seek consultation with other university nursing faculty, especially within the University of Missouri System. The doctoral faculty has been meeting once or twice each month during the 2006-07 academic year to review and revise the program objectives and held an all day retreat on January 8, 2007 to further analyze and define the relationship between the PhD program and the College's research enterprise. Many of the areas that have been discussed are included in the AACN *Quality Indicators* (2001) and those will form a basis for ongoing faculty discussion.

In reviewing program data, faculty learned that the program evaluation processes are in need of redefinition and renewed energy with regard to implementation. For example,

the College evaluation plan indicates that program graduates should be surveyed at one and three year intervals. However, faculty members have not systematically implemented that plan. Faculty are also considering increasing the length of time for post program evaluation in the light of recent graduates' electing to seek post doctoral training. Reviewing the program's educational outcomes is now on the program agenda. The doctoral committee established the following criteria for this review:

1. Program outcomes will be worded so they are measurable;
2. Program outcomes will include immediate outcomes upon program completion and long term outcomes at three-five years post graduation;
3. Evidence of program outcomes will be collected, such as alumni publications and grants; and
4. Outcomes will be modeled after the AACN *Quality Indicators* (2001) document.

Curriculum and Co-Curriculum

Numerous examples exist of <u>collaboration</u> within the PhD program. For example, shared curricular decision making by faculty members has occurred and is documented in the 2006-07 PhD Program Committee minutes. Faculty members had worked together earlier to address concerns raised by the Program Viability Audit in 2004. The three substantive area courses, Health Promotion, Health Protection, and Health Systems are shared with the PhD in Nursing programs at the University of Missouri-Columbia and Kansas City. Local collaboration occurs with other institutions of higher education in the St. Louis metropolitan region such as Washington University and St. Louis University. For example, the College of Nursing is a collaborative partner in the Clinical Translational Science Award proposal submitted to the National Institutes of Health in January, 2007. The Interim Coordinator of the PhD program is working with faculty members at Washington University to secure approval for UMSL College of Nursing PhD students to take the three course clinical research biostatistics sequence. Faculty members maintain currency with national trends and <u>best practices</u> through participation in the AACN Doctoral Conference.

Numerous co-curricular opportunities are available for PhD students, with several of these being new opportunities in the 2006-07 academic year. The monthly PhD student brown bag discussions continue to be held and are popular with students and faculty members alike. These discussions provide a forum for students, faculty, and visiting faculty and consultants to present their research, discuss research and career development topics, and foster an atmosphere of a community of scholarship. Dr. Lynn Farr, from the University of Nebraska made a presentation to PhD students at their brown bag luncheon in September, 2006 and Dr. Marcia Stanhope, Professor at the University of Kentucky College of Nursing talked with students about writing training grants.

The number of graduate assistantships has increased this academic year, from one graduate research assistant in Fall/Spring, 2005-06 to 2.5 graduate research assistantships and 1.0 graduate teaching assistantship. Funding support is available for PhD students, including the International Honor Society for Nursing, Sigma Theta Tau International and

external programs such as Fulbright. Faculty members have decided to pursue National Research Service Awards for students; one such award was received by a PhD student in 2001, but there have been no others since that time. One of the current PhD students received a competitive Sigma Theta Tau International award to support her dissertation. Three PhD students received College support for their poster presentations at the Midwestern Nursing Research Society meeting in March, 2007 and will participate in the University of Missouri system Cooperative Research Day in April, 2007.

Teaching and Learning Methods

Faculty members use a variety of teaching and learning methods in implementing the doctoral program. The program is designed to move from simpler to more complex areas of study. Examples include the research methods and nursing theory course sequence. These include seminars, workshops, the dissertation process as a capstone and courses in other Schools and Colleges. In order to improve efficiency, faculty coordinate several courses with the other PhD programs in Missouri. Courses are taught via Centra and Polycom so UMSL students are in class with students from other campuses. Faculty believe that multi-campus courses improve the educational experience for students but have not carefully evaluated whether that assumption is accurate. Faculty members have, when appropriate, included nursing professors from other campuses on UMSL students' dissertation committees. Recently, the UMSL Graduate School removed the mandate that a dissertation committee member be from a non-nursing department. However, faculty members have not yet addressed what the College's policy should be. Faculty members have addressed the informal curriculum; i.e., experiences that are designed to mentor students into the role of a PhD prepared nurse scientist such as making presentations at professional meetings and role expectations for students who become members of a faculty. As noted above, faculty members engage with students for lunches and in social situations to accomplish this. Process activities that are planned include:

1. Reconsidering the educator role as an area of advanced practice in the MSN program and as a basis for entry into the PhD Program;
2. Evaluating the implications of the uniqueness of doctoral education and the fact that it is an active, personalized process;
3. Working with national consultants to assist in reviews of the program. For example, faculty are seeking advice from Sandra J. Edwardson, PhD, RN, FAAN, Professor and Dean Emeritus at the University of Minnesota School of Nursing regarding evaluation and Marilyn Sommers, PhD, RN, FAAN, Lillian S. Brunner Professor in Medical-Surgical Nursing at the University of Pennsylvania School of Nursing regarding strengthening the research culture and productivity; and,
4. Working with others to obtain feedback to improve students' development, including curricular matters.

Student Learning Assessment

Faculty have determined that improvement is needed is in the assessment of student progress and outcomes following program completion. The program does not currently

include a plan for systematically followed graduates after program completion. Following discussion of ways to strengthen assessment of student learning assessment in the PhD program, faculty decided to implement the following improvements:

1. Faculty have developed a draft of desired PhD program outcomes upon graduation, and at intermediate and long term time frames. Exit surveys and surveys at three-five years following graduation will be implemented.
2. The long term three-five year evaluations will account for the lag time between graduation and publication;
3. Faculty have been analyzing alternative forms of the dissertation to reduce this lag time;
4. Because many students in the PhD in Nursing program have positions as faculty members, it may be possible to obtain information about publications prior to admission;
5. Faculty are considering requesting copies of applicants' curriculum vitae to obtain baseline information on scholarly productivity; and,
6. Faculty are identifying indicators of progress during the program using the D forms required by the Graduate School.

One measure of student learning is the length of time between admission to the PhD program in nursing and graduation. The UMSL Graduate School compares the doctoral programs in this regard (Appendix M) and the College of Nursing compares favorably with other programs on campus in this regard.

Quality Assurance

Faculty review of NCLEX-RN® results is an important part of quality assurance of the BSN pre-licensure options. The NLN subject-based, achievement test scores are reviewed to identify strengths and weaknesses of courses. The BSN program director, faculty and the Retention Coordinator reviewed the advantages and disadvantages of the NLN, HESI, and ATI assessment testing systems to improve this aspect of the program and submitted their preliminary recommendation to the Dean. The faculty works collaboratively in other ways to promote quality assurance. Courses involving multiple faculty members provide orientation to the course for all faculty teaching in the course. In courses with didactic and clinical components faculty members meet to discuss student progress. Issues concerning student assessment are also discussed at program and Curriculum Committee meetings. Faculty members teaching in the BSN completion option plan to use NLN data more extensively in the future for program improvements.

The faculty is attempting to learn from best practices by adhering to AACN/CCNE standards and utilizing input from the Curriculum Committee. Faculty members consult with other members of the faculty and talk with faculty from other nursing schools. Faculty members attend workshops and conferences related to baccalaureate program improvements and share what is learned in course discussion. One example is the discussion that is underway among faculty about expanding the clinical simulation laboratory. This was prompted in part by discussions at the AACN baccalaureate conference in Fall, 2006.

Student evaluation comments at mid-term and at the end of the term are reviewed by faculty for making program improvements. Faculty members have created a mid-term evaluation which was specific to their courses for use on MyGateway. Faculty members engage in e-mail discussions with students. Continuous improvement is emphasized by the level meetings (i.e., junior level and senior level) and the Curriculum Committee. As an example, recruitment for the BSN completion option is an area that needs to be improved. The pool of registered nurses in the St. Louis metropolitan region is phenomenal and with improved recruitment the potential for growth is great. Reputation and word of mouth are the primary recruitment strategies currently utilized.

Faculty members who teach in the MSN program attend national meetings to update their knowledge. Dialoguing with key faculty members from other colleges and universities help to keep the MSN faculty aware of current trends in MSN education. By continually evaluating the curriculum according to national standards the MSN program offers the students the best quality education available. The students have the opportunity to use an online system for course evaluation which provides the faculty with more efficient feedback.

Faculty teaching in the MSN program assure that content is delivered as intended through peer review and discussions with other faculty members teaching in the program. Quality assurance processes are systematically reviewed during monthly MSN program meetings.

At the end of the academic year the MSN Program Director submits an annual report to the Dean and the Faculty Association. The annual report is discussed by the Faculty Association to help with establishing goals for the coming year. The Dean incorporates accomplishments and goals into her annual report for the College that is presented to the Provost and Chancellor.

Continuous quality improvement is something that faculty teaching in the PhD program would like to implement in order to assure all constituents that the program is implemented as intended and implemented consistently. Faculty have been engaged throughout the 2006-07 academic year in a review of program processes and address policies that can be strengthened to guide faculty as faculty guide students. Faculty members are continuing to develop a data base that would assist in appraising the effectiveness of policy implementation.

Potential Initiatives

Traditional Baccalaureate Option

The initiatives listed below build on faculty interests in responding to student concerns about the intensity of the clinical coursework, expanding access to simulation as a clinical learning strategy, and continuously improving assessment of student learning. The

recommendation for six additional SimMan mannequins is based on the student:faculty ratio of 8:1 and the maximum class size of 48 students.

1. Revise the traditional BSN program outcomes and curriculum to meet the learning needs of the changing student population, current standards and trends in nursing and nursing education, and community needs;
2. Continue to develop, evaluate and revise nursing courses in conjunction with the Honors College;
3. Develop a more global approach to assessment via the assessment tests provided to students;
4. Evaluate the effectiveness of the UM-St. Louis College of Nursing/Continuing Education RN licensure exam (NCLEX-RN®) review course;
5. Implement a plan to increase the response rates on exit surveys, alumni surveys and employer survey;
6. Establish a College of Nursing Leadership Council composed of community leaders interested in nursing education; and,
7. Expand and renovate laboratory physical space and purchase at least 6 additional adult Sim-Man clinical simulators and related equipment.

Accelerated BSN Option

Potential initiatives for the accelerated BSN option reflect faculty engagement in curriculum revision to better meet the needs of this unique student population, concerns related to enhancing students' writing abilities, and interest in expanding use of clinical simulation as a learning strategy.

1. Continue curriculum revision to be implemented May 2008;
2. Encourage faculty to implement writing intensive evaluation methods into courses;
3. Continue to seek monies to enhance to purchase simulators for the nursing lab; and,
4. Increase the number of faculty to reduce class sizes.

BSN Completion Option

Potential initiatives for the BSN completion option originated in faculty assessment of the potential to expand this option and faculty desire to contribute to growth in the number of nurses prepared at the baccalaureate level, and to encouraging students to move forward into graduate education.

1. Continuous assessment and re-evaluation with changes made as necessary;
2. Increase student enrollment through recruitment;
3. Continued positive reputation with community and community partnerships; and,
4. Increase student interest to continue education in Master of Science in Nursing and/or Doctoral education.

MSN Program

Faculty members aim to maintain and continuously improve the quality of master's education in nursing, while staying abreast of national trends. The potential initiatives below address those goals.

1. Continue to update and revise the program goals and outcomes on an annual basis to stay current with national trends;
2. Conduct a needs assessment for a Doctorate of Nursing Practice (DNP) Program and evaluate the potential for opening such a program initially for Post-Master's entry students. The Post-BSN option would be added after that.
3. It will be important for the MSN program to incorporate a CNL track in the future.

PhD Program

Doctoral program faculty members are focusing their teaching efforts on process improvements. Process improvement areas that the doctoral committee identified include the following:

1. Increase transparency within PhD program committee;
2. Because faculty value this, faculty decided to implement a full evaluation every 3 years and as needed. The most recent complete review of the curriculum was in response to the program viability audit report in January, 2004. Thus, the review in 2007 puts the program on target with this new timeline for evaluation;
3. Reconsider the substantive courses that are offered among the campuses to determine if other courses would be preferable;
4. Include an agenda item for every program committee meeting to address current issues and concerns;
5. Implement day in and day out continuous quality improvement; and,
6. Review practices for the future regarding the new Graduate School policy related to inclusion of outside members on dissertations.

Commitment to Improvement

Faculty, staff, students, and clinical agency representatives all have an interest in and a commitment to the very best nursing education provided to students at the University of Missouri-St. Louis. Using a broad, constituency-based approach to the expansion of the College's comprehensive evaluation plan, and more consciously orienting that plan toward continuous improvement based on evaluation feedback will ensure movement toward the highest levels of excellence. With ongoing improvement incorporated into the College's strategic plan, a focus will be available that will guide the College's future directions.

RESEARCH AND SCHOLARSHIP

Focal Areas

Research activities within the College of Nursing address topical areas such as injury prevention, HIV-related quality of life issues, exercise and fitness, infant touch, nursing informatics, and mental health among elders. Faculty members are working to identify themes that cluster these activities within a couple of primary areas. Because the College is actively recruiting someone to fill the Mary Ann Lee Endowed Professorship in Oncology Nursing, one area that is likely to grow significantly is oncology research. This has the potential to be attractive to some of the current research faculty whose scientific interests may overlap with oncology issues.

Overall Performance

While faculty productivity in publications and presentations is steady at an average of approximately one publication per faculty member annually (see Appendix L), and faculty members successfully secure internal grant funding (Appendix K.1), extramural funding has decreased in recent years (Appendix K.2). This is a key area for improvement in part because of the College's role within a research-intensive university with a corresponding responsibility to contribute to nursing science, and in part because doctoral students need access to active research projects in order to develop as nurse scientists. The College plans to reopen the Center for Nursing Research and will determine how to fund the necessary staff support for such a center. Faculty members are supportive of hiring additional tenure track faculty members who can contribute to building the College's research enterprise. Building the research enterprise is part of one of the five strategic priorities that have been identified so far in the College's Strategic Planning process (College of Nursing Strategic Planning Retreat, 3.2.07).

Performance in the Focal Areas

Research Outcomes

At the doctoral faculty retreat on 1/8/07, faculty members concluded that the College's research mission is to use multiple philosophical and theory-based approaches as well as diverse methodologies. Faculty believe nursing research focuses on the understanding and easement of the symptoms of acute and chronic illness; prevention or delayed onset of disease or disability, or slowing the progression thereof; finding effective approaches to achieve and sustain optimal health; and improvement of the clinical settings in which care is provided. The College's research goals include the following: 1) discover new knowledge and translate knowledge into nursing practice, 2) increase external funding, 3) disseminate new knowledge, 4) foster multidisciplinary research collaboration, 5) develop appropriate research infrastructure and space. A measure of research outcomes is refereed publications and presentations. These are summarized in Appendix L. Faculty identified a need to improve productivity in this area, especially in publications in high quality journals.

Another strategy is to improve research productivity is to recruit additional senior investigators. The College is actively recruiting to increase the size of the research active faculty. Two searches are currently underway. The first is to fill the Mary Ann Lee Professor of Oncology Nursing position and the second is for a doctorally prepared nurse with a background as a family nurse practitioner. The College needs to strengthen research experiences for doctoral students and would like students to participate with faculty on active investigations.

In discussing this report, faculty identified process strategies to attain the above goals. These include:

1. Identifying research themes that can be used to cultivate collaborative faculty research;
2. Fostering a positive sense of team through a spirit of collaboration and cooperation, a willingness to improve, and a commitment to ongoing quality improvement ;
3. Building a culture of inquiry within the foundation of developing and sustaining research endeavors;
4. Establishing an environment conducive to research at all levels because it creates the science for practice;
5. Encouraging faculty participation in a research culture that values variety of research roles; and,
6. Cultivating a sense of inclusiveness among scholars at all levels.

Research Environment

The doctoral committee discussed improving the current research environment. Faculty members recognize a need to hold these discussions and to act on the areas of concern. Faculty members identified the following process strategies:

1. Establishing specific research infrastructure by evaluating the need for additional staff (such as statisticians and grant support staff) and assessing the services currently available and the investments needed to "seed" future work;
2. Developing a good mentoring program for junior faculty members;
3. Fostering collegiality within the context of the professional development; and,
4. Encouraging mutual support by sharing the "ownership" of ideas with others and working interdependently toward both personal and team goals.

Sponsored Projects

The College of Nursing's extramural and intramural funded sponsored projects are summarized in Appendix K. It is clear from the table that the college needs to focus significant attention and develop a focused plan for building the research enterprise.

With the exception of Arts and Sciences, the College of Nursing compares favorably with respect to intramural funding. Given that faculty succeed with securing intramural funding and have steady publication records, the next step is development of a plan to assist faculty with securing extramural funding. Options include providing consultation for faculty members, statistical support, and supporting faculty attendance at research institutes and fellowship programs. Each of these types of supports have been provided to faculty in the 2006-07 academic year and faculty members are defining specifically what they will need to be successful in the future. The intramural project availability within the university and the system is a strength because these are mechanisms that support obtaining pilot data prior to seeking more substantial extramural funding. The methods and processes for obtaining assistance within the College to successfully compete for external research funding are being reviewed, and faculty intend to improve in this area by development of a focused plan for the College.

Furthermore, faculty members have increased collaborations with Washington University School of Medicine and the St. Louis University Schools of Public Health and Nursing to develop multidisciplinary educational and research programs. This results from the recent National Institutes of Health 'Roadmap' initiative and interest in multidisciplinary, multi-institutional training.

Faculty members are convinced that the College of Nursing needs to take certain steps to fulfill its' responsibilities as a Missouri System land grant institution. These include the following:

1.   Using a multi-philosophic approach to research;
2.   Obtaining extramural funding for research projects:
3.   Holding regular discussions regarding the research environment within the College;
4.   Reviewing the National Institutes for Health rankings for funding for schools of nursing and selecting a target; and,
5.   Conducting PhD meetings focusing on quality improvement.

Doctoral Programs

Because there are few current research projects, faculty members have identified a variety of process improvement strategies to strengthen this area. Faculty members plan to:

1.   Increase student involvement in research, including undergraduate students;
2.   Hold biweekly brown bag lunches with doctoral students;
3.   Admit doctoral students only if their research interests are consistent with those of a faculty member;
4.   Review the nurse educator MSN option to determine if it continues to be an appropriate basis for entry into doctoral studies;

5. Include doctoral students in data analysis activities;
6. Encourage participation in undergraduate research;
7. Improve mechanisms for tracking student progress in the PhD program;
8. Analyze the appropriate size of the PhD program given faculty capacity and expertise;
9. Agree upon standards for the doctoral program; and,
10. Use flexible approaches for assisting students to obtain needed resources.

Synergy with Education

The focus of research at the undergraduate level involves becoming familiar with the basic elements of the research process, beginning to critically read and comprehend a research report, and identifying how research findings are used in practice. Faculty members discuss the use of research in courses. Faculty members provide examples of research for students, utilize examples of research presented in textbooks and articles, require students to present and discuss research articles in post-clinical conference, and research articles in assignments.

In the MSN program, students complete an evidence-based practice course and conduct evidence-based practice projects for their final capstone work. Course theory content includes references to and examples from contemporary research in nursing and related fields. Students also learn the most current research-based clinical guidelines and critique research literature as they develop evidence-based clinical practice strategies.

PhD program faculty focused on the need to link research activities and educational outcomes for students. Faculty need to develop a careful strategy for identifying how to merge teaching with research and student outcomes. Strategies that were identified include:
1. Finalizing the College workload policy and determining how to include graduate teaching assistants to support larger classes;
2. Clarifying how the PhD curriculum builds upon and differs from MSN curriculum; and,
3. Promoting student involvement in research, including undergraduate students.

Quality Assurance

Faculty plan to hold ongoing discussions of research initiatives within the PhD Program Committee and the Faculty Association meetings. As the research infrastructure is built, it will include an emphasis on ongoing quality improvement activities related to research and scholarship within the College.

Potential Initiatives

Potential initiatives to expand the research and scholarship within the College of Nursing include:

1. Establishment of a Center for Nursing Research;
2. Development of specific plans for research faculty members to secure funded research projects with support from the College for consultation, statistical support, fellowships or research institutes, mock reviews, or other types of relevant assistant;
3. Hiring senior faculty members in tenure track lines whenever possible;
4. Identification of several research themes around which faculty members can collaborate when appropriate; and,
5. Strengthening research partnerships within the UMSL campus and the UM system, and with colleagues at other research universities in the St. Louis metropolitan region.

Commitment to Improvement

College of Nursing faculty, staff, and administrators are committed to building the research enterprise and to expanding the production of nursing science that can be used for the improvement of clinical practice. Nursing is a clinical discipline and requires ongoing development of the scientific knowledge of the field in order to promote high quality health outcomes for the public and provide stellar learning experiences for students from baccalaureate through doctoral education.

References

American Association of College of Nursing. (1996). *Essentials of Master's Education for Advanced Practice Nursing*. Washington, D.C.:Author.

American Association of Colleges of Nursing. (1998). *Essentials of Baccalaureate Education for Professional Nursing Practice*. Washington, DC: Author.

American Association of College of Nursing. (2001) *Indicators of Quality in Research – Focused Doctoral Programs in Nursing*. (AACN Position Statement). Washington, D.C.:Author.

American Association of Colleges of Nursing. (2004). *AACN Position Statement On The Practice Doctorate In Nursing*. Washington, DC: Author.

American Association of Colleges of Nursing. (3/15/06) *Position Statement on Nursing Research*. Washington, D.C.:Author.

American Association of Colleges of Nursing. (2006). *Essentials of Doctoral Education for Advanced Nursing Practice.* Washington, DC: Author.

American Association of Colleges of Nursing. (2007). *Clinical Nurse Leader White Paper.* Washington, DC: Author.

American Heart Association. (2005). Adult basis life support. *Circulation*, 112, IV-19, IV-34.

National Organization of Nurse Practitioner Faculties. (2002). *Advanced Nursing Practice: Building Curriculum for Quality Nurse Practitioner Education.* Washington, DC: NONPF.

National Task Force on Quality Nurse Practitioner Education. (2002). *Criteria for Evaluation of Nurse Practitioner Programs.* Washington, DC: American Association of Colleges of Nursing.

University of Missouri-St. Louis College of Nursing. (2006). BSN Student Handbook.
St. Louis: Author.

University of Missouri-St. Louis College of Nursing. (2006). Minutes, Dean's Council,
9/6/07. St. Louis: Author.

University of Missouri-St. Louis College of Nursing. (1999). Barnes College of Nursing
Strategic Plan. St. Louis: Author.