The Journey to Curriculum Revision
This guide for curriculum development & revision was developed for faculty as they engage in the process of redesigning their nursing curriculum. Curriculum development & revision is an ongoing process with the majority of the work requiring collaboration and reflection by current nursing faculty with support from the academic institution. If a complete revision of the curriculum is the goal, this guide will assist faculty to ensure important considerations are made within the process. The challenge is how to develop knowledge that is necessary, without exacerbating a bloated curriculum; and how to shift the focus from covering content to teaching students to think like a nurse.

The 21st century has seen a dramatic change in the development of nursing curricula. Many of the programs of nursing have determined the need to move from the old way of nursing instruction, which included a focus on formal abstract theories and less focus on how this abstract knowledge-technology would be used in clinical practice (Benner, Tanner, & Chesla, 2009). In many associate and baccalaureate programs of nursing, abstract theories were the central focus of the curriculum and its framework.

Theory remains very important to the professional practice of nursing. In fact, its learned application is important to guide nursing practice with interactions with individual patient and family responses, manifestations of clinical problems the patient is experiencing, decision making and clinical reasoning including critical synthesis. Through the use of nursing process-nursing’s scientific method, the nursing curriculum prepares the student with the knowledge, skills, and attitudes needed to provide safe, evidence-based, patient-centered care. Theories should not be the central focus of the curriculum, but instead provide the underlying explanation for ways of doing.

Nursing education programs are obligated to challenge long-held traditions and design evidence-based curricula that are flexible, learner-responsive, inter-collaborative, provide a diverse experience, and use current technology. Unlike initial development, curriculum revision is not one-time event. Instead, curriculum revision should be reviewed as a process to ensure a quality program. The program's systematic plan of evaluation (SPE) should be used to provide a methodology for the collection of data that is used by faculty and the institution to evaluate and revise the curriculum. An example of the NLNAC's tool for curriculum evaluation is noted in Figure 1. An example of the CCNE (2009) essential curriculum standards is noted in Figure 2.

When considering curriculum revision, the program faculty should consider factors that occur within the nursing program and academic institution that may influence the outcome of curriculum revision. These factors include:

- type of program;
- institutional policies;
- human factors such as the number of faculty and staff;
- physical resources such as classroom space,
- types of course delivery,
- clinical sites;
- student characteristics;
- financial resources.

In addition, when considering revision, the academic program of nursing should consider the influence of the community served, the population demographics, available healthcare systems, and economic influences.
Ideally, the curriculum is developed in accordance with the mission, goals, and expected aggregate student outcomes. The curriculum reflects professional nursing standards and guidelines and the needs and expectations of the community of interest. Teaching-learning practices are congruent with expected individual student learning outcomes and expected aggregate student outcomes.

This guide presents ten detailed components that need to be considered when engaging in curriculum revision. These ten components provide a means for organizing the work and direct faculty in the collection and analysis of information needed for your curriculum revision process.

The ten components are:
Component #1: Explore together what knowledge, skills, and attitudes are expected of the new graduate of the program. What would a graduate of your program look like by the faculty? These knowledge, skills, attitudes should be incorporated into the curriculum.

Component #2: Identify the major concepts related to the knowledge (cognitive), skills (psychomotor), and attitudes (values, beliefs) of your graduates.

Component #3: Review the institutional and nursing program's mission/purpose/philosophy/goal statements to assure alignment with the knowledge, skills, and attitudes of your new nursing graduate.

Component #4: Develop program student-learning outcomes and level to the sequence of the course and the overall program.

Component #5: Review and redesign the organizational structure or approach for delivery of the curriculum.

Component #6: Develop the courses with applicable course student learning outcomes and/or measureable competencies, apply to the level of the course, and consider essential content (objectives, competencies, concepts) for each course.

Component #7: Identify teaching/learning activities/experiences that provide opportunities to meet the student learning outcomes and facilitate formative assessment throughout the course.

Component #8: Develop rigorous evaluation methods to assess achievement of learning operationalized using course student learning outcomes and measureable competencies. Correlate to levels of achievement established for program student learning outcomes, and program outcomes.

Component #9: Refer to the state board of nursing requirements and/or the accrediting body's standards to be aware of how redesign is impacted by statutes, regulations or standards. Submit any substantive changes to these agencies.

Component #10: Analyze the program's current student characteristics to determine if changes in admission requirements, prerequisite courses, or other aspects need to be adjusted. Compare to the community demographics to assure that learning strategies facilitate learning at optimal levels for potential students at risk.

Please note that these components are not necessarily performed in the order presented and may be considered concurrently. It is recommended that all faculty be involved in all aspects of the curriculum redesign.

It is essential for the faculty to collaborate on the development, revision, and enhancement of curriculum with a tone of collegiality (Kramer, 2005). In fact, the work demands it due to the role that faculty play in the achievement of optimal outcomes that impact the student's learning.
**PROGRAM EVALUATION**

**Standard 4:** The curriculum prepares students to achieve the outcomes of the nursing education unit, including safe practice in contemporary health care environments.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Expected Level of Achievement (or program terminology)</th>
<th>Frequency of Assessment</th>
<th>Assessment Method/s</th>
<th>Results of Data Collection and Analysis Including actual level/s of achievement</th>
<th>Actions for Program Development, Maintenance, or Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>4: 4.1</td>
<td>The curriculum incorporates established professional standards, guidelines, and competencies, and has clearly, articulated student learning and program outcomes.</td>
<td></td>
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<tr>
<td>4: 4.2</td>
<td>The curriculum is developed by the faculty and regularly reviewed for rigor and currency.</td>
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<tr>
<td>4: 4.3</td>
<td>The student learning outcomes are used to organize the curriculum, guide the delivery of instruction, direct learning activities, and evaluate student progress.</td>
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<tr>
<td>4: 4.4</td>
<td>The curriculum includes cultural, ethnic, and socially diverse concepts and may also include experiences from regional, national, or global perspectives.</td>
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Figure 1 continued

<table>
<thead>
<tr>
<th>PLAN</th>
<th>IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>Expected Level of Achievement (or program terminology)</td>
</tr>
<tr>
<td>4:4.5 Evaluation methodologies are varied, reflect established professional and practice competencies, and measure the achievement of student learning and program outcomes.</td>
<td></td>
</tr>
<tr>
<td>4.6 The curriculum and instruction processes reflect educational theory, interdisciplinary collaboration, research, and best practice standards while allowing for innovation, flexibility, and technological advances.</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Criteria</th>
<th>Expected Level of Achievement (or program terminology)</th>
<th>Frequency of Assessment</th>
<th>Assessment Method/s</th>
<th>Results of Data Collection and Analysis Including actual level/s of achievement</th>
<th>Actions for Program Development, Maintenance, or Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:4.7 Program length is congruent with the attainment of identified outcomes and consistent with the policies of the governing organization, state and national standards, and best practices.</td>
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<tr>
<td>4:4.8 Practice learning environments are appropriate for student learning and support the achievement of student learning and program outcomes; current written agreements specify expectations for all parties and ensure the protection of students.</td>
<td></td>
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<tr>
<td>4:4.9 Learning activities, instructional materials, and evaluation methods are appropriate for the delivery format and consistent with student learning outcomes.</td>
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</table>
**Figure 2  CCNE (2009) Accreditation Standard III, Program Quality: Curriculum and Teaching-Learning Practices**

<table>
<thead>
<tr>
<th>Standard III Criteria</th>
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</thead>
<tbody>
<tr>
<td>III-A. The curriculum is developed, implemented, and revised to reflect clear statements of expected individual student learning outcomes that are congruent with the program’s mission, goals, and expected aggregate student outcomes.</td>
</tr>
<tr>
<td>III-B. Expected individual student learning outcomes are consistent with the roles for which the program is preparing its graduates. Curricula are developed, implemented, and revised to reflect relevant professional nursing standards and guidelines, which are clearly evident within the curriculum, expected individual student learning outcomes, and expected aggregate student outcomes.</td>
</tr>
<tr>
<td>III-C. The curriculum is logically structured to achieve expected individual and aggregate student outcomes.</td>
</tr>
<tr>
<td>III-D. Teaching-learning practices and environments support the achievement of expected individual student learning outcomes and aggregate student outcomes.</td>
</tr>
<tr>
<td>III-E. The curriculum and teaching-learning practices consider the needs and expectations of the identified community of interest.</td>
</tr>
<tr>
<td>III-F. Individual student performance is evaluated by the faculty and reflects achievement of expected individual student learning outcomes.</td>
</tr>
<tr>
<td>III-G. Curriculum and teaching-learning practices are evaluated at regularly scheduled intervals to foster ongoing improvement.</td>
</tr>
</tbody>
</table>
Component #1: Explore together what knowledge, skills, and attitudes are expected of the new graduate of the program. What would a graduate of your program look like by the faculty? These knowledge, skills, attitudes should be incorporated into the curriculum.

Cognitive: What do you want your graduates to know?

Affective: What do you want your graduates to think or care about?

Behavioral: What do you want your graduates to be able to do?

Figure 3

<table>
<thead>
<tr>
<th>General Statements Regarding Knowledge, Skills, and Attitudes that a Graduate should have:</th>
<th>How would this be demonstrated or measured?</th>
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</table>
Component #2: Identify the major concepts related to the knowledge (cognitive), skills (psychomotor), and attitudes (values, beliefs) of your graduates.

One common approach for redesigning nursing curriculum, is for faculty to identify concepts related to practice of nursing rather than to the discipline of nursing; to identify what important roles the nurse fulfills? There is no magic list of concepts to choose. Faculty identify the concepts explored in the literature and in practice that will structure the framework for the curriculum.

The current trend, for organizing a nursing curriculum around practice, is through use of student learning outcomes defined by nursing and/or industry standards for care, practice, and education. Both nursing accrediting bodies (NLNAC, CCNE) focus on outcomes of student learning related to nursing practice. To determine student learning outcomes, the faculty first decide what concepts best characterize the nursing graduate. The concepts would be derived from current practice using the literature and experts in the science of nursing. Faculty must work together to analyze all the concepts derived from their search.

The task is to choose concepts that reflect what faculty believe are crucial to student learning; that represent the type of outcomes they believe best prepares their graduates for practice; and reflect the mission and philosophy. Careful consideration and thoughtful reflection are necessary throughout this process.

These concepts will represent the foundation on which the program student learning outcomes and methodologies for achievement are established. Examples of concepts that have been used include Caring, Collaboration, Diversity, Quality Improvement, Safety, Evidence-based practice, Patient-centered care, Uses emerging technologies, and Professionalism (IOM & QSEN).

Questions for Faculty:
- What is the role of the nurse in practice?
- What are the important sources of information to consider in addressing this component?
- What discussions have taken place at the program’s Advisory Committee meetings that address local expectations of the academic program?
- What research, conducted or reviewed, reveals current and future trends in nursing practice?
- Do you collaborate with or have an agreement with a transfer school that includes expectations related to performance of the programs graduates?

In addition to the nursing education literature, some sources to consider to determine the knowledge, skills, and attitudes of new graduates in contemporary nursing practice include:
- American Nurses’ Association: Standards of Practice and the Code of Ethics
- National Council of State Boards of Nursing: NCLEX Test Plans and the Practice Analysis
- Essentials series from the American Association of Collegiate Nursing
- National League for Nursing: NLN Educational Competencies Model
- National Association of Practical Nurse Education and Service, Inc. (NAPNES)
- Institute of Medicine Reports
- Quality and Safety Education for Nurses (QSEN)
• National Quality Forum
• The Joint Commission

**American Nurses Association**
Code of Ethics with interpretative statements
Nursing Scope & Standards of Practice
Standards of Nursing Informatics
Standards of Practice (pediatrics, psychiatric-mental health, administration, school nursing, faith/community)

**Institute of Medicine**
Cronenwett, et al, (2007) notes that “all nursing education must embrace the need for change”. To be successful in their first jobs, students must experience working on a team, delegating, prioritizing, managing conflict, and critical thinking. The Institute of Medicine (IOM) calls for addressing 5 major concepts:
- patient-centered care
- teamwork/collaboration
- evidence-based practice
- quality improvement
- informatics

**Quality and Safety Education for Nurses (QSEN.org)** Robert Wood Johnson Foundation
QSEN takes the IOM studies and applies the findings to nursing education. QSEN adds safety as a 6th concept.

**Centers for Disease Control (www.cdc.gov)**

**National Council of State Boards of Nursing:**
The NCSBN has been working on the transition to practice, which identifies areas of education to be addressed as the nursing graduate transitions into practice.
- Communication
- Safety
- Clinical reasoning
- Prioritizing/organizing
- Utilize research
- Role socialization
- Delegating/Supervising

**NCSBN Documents (www.ncsbn.org)**
*Transition to Practice Regulatory Model*
*Regulatory Model for Transition to Practice Report*
*Prelicensure Education white papers I & II*
*Practice Analysis*
*NCLEX Test Plans*

**The American Organization of Nurse Executives:**
http://www.aone.org/aone/resource/guidingprinciples.html
The new graduate should be aware of the various aspects of the healthcare system at all levels.
Agency for Healthcare Research and Quality (www.AHRQ.gov)

Patient Safety and Quality: An Evidence-Based Handbook for Nurses to provide evidence-based practice guidelines.

The healthcare system and organizational factors are concerns for nursing that can impact safety and quality in patient care. The curriculum should provide students with opportunities to consider the healthcare environment and its importance on patient care be covered.

The Joint Commission (www.jointcommission.org)

Support and resources are available from the Joint Commission on the clinical microsystem that a curriculum should familiarize the nursing student within the program. This introduces the three levels in the healthcare environment that the student nurse must learn:

- The patient-nurse environment
- The clinical microsystem
- The larger healthcare system


Based on survey research this group developed a list of 36 competencies essential to safe and effective nursing practice broken into 6 categories. They recommend these as a starting point for establishing shared goals among hospital and nursing school leaders for enhancing new graduate nurse preparation (Berkow, Virkstis, Stewart, & Conway, 2009):

**Clinical Knowledge**
- Understanding of the principles of evidence-based practice
- Knowledge of pathophysiology of patient conditions
- Knowledge of pharmacological implications of medications
- Interpretation of physician and interprofessional orders
- Compliance with legal/regulatory issues relevant to nursing practice
- Understanding of quality improvement methodologies

**Technical Skills**
- Conducting patient assessments (including history, physical exam, vital signs)
- Documentation of patient assessment data
- Conducting clinical procedures (e.g. sterile dressing, IV therapy, etc.)
- Utilization of clinical technologies (e.g. IV Smart Pumps, medical monitors, etc.)
- Administration of medications
- Utilization of information technologies (e.g. computers, EMRs, etc.)

**Critical Thinking**
- Recognition of changes in patient status
- Ability to anticipate risks
- Interpretation of assessment data (e.g. history, exam, lab testing, etc.)
- Decision-making based on the nursing process
- Recognition of when to ask for assistance
- Recognition of unsafe practices by self and others

**Communication**
- Rapport with patients and families
- Communication with the interprofessional team
- Communication with physicians
- Patient education
- Conflict resolution
- Patient advocacy

**Professionalism**
- Ability to work independently
- Ability to work as part of a team
- Ability to accept constructive criticism
- Customer service
- Accountability for actions
- Respect for diverse cultural perspectives
Management of Responsibilities
Ability to keep track of multiple responsibilities

Ability to prioritize
Delegation of tasks
Completion of individual tasks within expected timeframe
Ability to take initiative
Conducting appropriate follow up

Figure 4 Exercise on researching Concepts

<table>
<thead>
<tr>
<th>Major Concepts to Base Individual Student Learning Outcomes</th>
<th>Source of the Concept</th>
<th>Definition of Concept</th>
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<tbody>
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</table>
Component #3: Review the institutional and nursing program's mission/purpose/philosophy/goal statements to assure alignment with the knowledge, skills, and attitudes of your new nursing graduate.

Questions for Faculty:

- Is the mission/purpose/philosophy/goals of the nursing program current? See Figure 5
- Do they need revision based on the information explored in the previous tasks?
- Is the nursing mission, etc. aligned with that of your parent institution?
- Does the mission indicate education of students who will pass NCLEX? If so, how does your curriculum align with the NCLEX test plan? See Figure 6

<table>
<thead>
<tr>
<th>Parent Institution’s Current Mission/Philosophy/Purpose/Goal Statements</th>
<th>Your Program’s Current Mission/Philosophy/Purpose/Goal Statements</th>
<th>Do they align? Do they need to be revised?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
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<tr>
<td>Philosophy</td>
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</tr>
<tr>
<td>Purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goals</td>
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</tbody>
</table>
Does the program’s mission fit into the wider social context of the community? Does the mission share about serving the local community? If so, you will need to consider the demographics and major health care problems reported by your local health department and integrate these into the coursework. What are the service learning requirements of the curriculum?

Does the mission share having a curriculum that encourages both personal and professional growth? If so, is there a focus on professional organizations? Does the program offer a student nurses association or group affiliated with nursing?

Does the mission indicate use of an adult learning theory? If so, how do your teaching strategies reflect the use of adult learning theory?
Component #4: Develop program student-learning outcomes and level to the sequence of the course and the overall program.

Structured assessment of student learning outcomes can help answer important questions about our students, our courses, and the overall program. These queries might include questions about the learning ability of an individual student, the effectiveness of a single course, the development of learning across courses, the outcome of the overall program, and its impact on the academic institution. Precision in determining what we want to know helps us to focus the level of our analysis, determine appropriate methods for measurement and guide us on sampling, aggregation of data, interpretation of results and use.

This guide describes four levels of learning assessment at the college level and methods to help faculty implement them within the academic setting. The objective is to collaborate with the faculty on the process of assessment and measurement of general education competencies and the discipline of nursing learning outcomes. Faculty will determine vital benchmarks needed to structure the process for measurement. These benchmarks include the specified level of learning associated with all courses in the program, the percentage of students proposed to achieve learning at that level and the tool to be trialed for repeated measures of outcomes.

Figure 7 Levels of Assessment
These are simple explanations of the levels of assessment.

Level 1: Measurement of Individual Student Learning & Achievement of Course Outcomes within the Course

Measurement of individual student learning occurs within the course using graded assignments created for the purpose of issuing an overall grade. The score that is reported is the student grade.

Level 2: Measurement of Student Learning Across Courses

Using measures collected at the course level, (Level One) the quality of student learning achieved by each student can be evaluated over time and across courses. When compared to benchmarks, courses can be improved to enhance student learning.

The benchmark score that is reported is an overall score related to ratings on a rubric that measures an overall outcome. The measure is related to the level that describes the student’s learning in courses over time and is used to drive changes in course sequence, learning activities etc.

Level 3: Measurement of Student Learning Between Courses

Using measures collected at the course level, (Level One) the quality of student learning is evaluated between the different sections of the same course.

The score that is reported is the overall score rated on a rubric that measures an overall outcome. The measure is related to the level of the student’s learning in relation to other sections of the same course. It is used to drive changes or adopt improvements to enhance student learning between the same course or sections of it.

Level 4: Measurement of Program/institution Outcomes

This measure involves a rating score that measures overall achievement of the program’s outcomes. It is used to drive changes and improvements at the institutional level when compared to institutional goals and benchmarks (NCLEX passing, Placement, etc.).

Questions for Faculty:

- How do you write student learning outcomes and competencies the student will achieve as a result of the program of study?
- What outcomes do you want the student to achieve as a result of exposure to the curriculum? How are these measured?
- What competencies (knowledge, skills, & attitudes) demonstrate the outcome has been met? How are these evaluated?
- What competencies (knowledge, skills, & attitudes) will your graduate have achieved at the time of graduation? What artifacts should be retained as evidence of achievement?
- Which major concepts have you identified that need to be incorporated into your student learning outcomes?
Figure 8 Writing a Measureable Program Student Learning Outcome

<table>
<thead>
<tr>
<th>Program Student Learning Outcome</th>
<th>Measureable Statements or Competencies to use at the course level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure of a Learning Outcome Statement=</td>
<td>Possible Format&quot;</td>
</tr>
<tr>
<td>• an action word that identifies the performance to be demonstrated</td>
<td>Format #1: To (action verb) (object) (target) (modifiers)</td>
</tr>
<tr>
<td>• a learning statement that specifies what learning will be demonstrated</td>
<td>Format #2: The (target) (action verb) (modifiers) (object)</td>
</tr>
<tr>
<td>• a broad statement of the criterion or standard for acceptable performance</td>
<td>Example: At the end of the course, students will be able to write a research paper in the appropriate scientific style.</td>
</tr>
</tbody>
</table>

Questions for Faculty:
- Are there any major concepts missing?
- Are there any you want to revise?
- Are there any you want to add?
- Are there any you want to eliminate?
- Can you identify supporting documentation for your outcomes?

Associate and Baccalaureate Programs: Can you map each of the outcomes/competencies that you have identified to the NLNAC standards? For Baccalaureate programs: Can you map each of these outcomes/competencies to the *Essentials*? What other standards for curriculum are appropriate for the framework? See Figure 9
Figure 9: Example of Mapping Institution, Program, Student Learning Outcomes, and Essentials

**STUDENT LEARNING OUTCOMES**

1. Communicate effectively
   - Writing
   - Oral Communication

2. Develop effective skills of inquiry and analysis
   - Quantitative literacy
   - Information literacy
   - Creative inquiry

3. Learn to apply and integrate knowledge
   - Application and modification of content and connections within disciplines
   - Integration of knowledge across disciplines
   - Application of learning to new situations within and beyond the campus

4. Become culturally aware, engaged citizens
   - Knowledge of local and global issues and trends
   - Knowledge of cross-cultural and multicultural patterns of diverse groups and society
   - Competence to communicate across cultural and linguistic boundaries
   - Knowledge and skills required for ethical reasoning

Gain depth of knowledge in a discipline

**DIVISION OF NURSING STUDENT LEARNING OUTCOMES**

1. Use critical thinking skills to decision making and effective oral and written communication in the application of the nursing process to individuals, families, groups, and communities

2. Apply evidence-based knowledge from nursing theories and research, and concepts from liberal education, including the humanities and behavioral, mathematical, natural, and physical sciences into the practice of professional nursing

3. Demonstrate leadership and management skills in the practice of professional nursing

4. Implement teaching plans appropriate to the developmental and learning needs of diverse clients, groups, and communities

5. Apply the nursing process to assess internal and external factors influencing patient health

6. Demonstrate knowledge of professional nursing standards and the American Nurses Association Code of Ethics in the caring practice of professional nursing

**NURSING COURSES WHERE OBJECTIVES SUPPORT PROGRAM STUDENT LEARNING OUTCOMES**

<table>
<thead>
<tr>
<th>Division of Nursing</th>
<th>Nursing Courses Where Objectives Support Program Student Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Communications (5) Natural Sciences (5) History (5)</td>
</tr>
<tr>
<td>Mastered</td>
<td>Communications (5) Math (5) Social Behavioral Sciences (5) English Humanities Religion (5)</td>
</tr>
</tbody>
</table>

**AACN ESSENTIALS FOR BACCALAUREATE NURSING**

- Essential I: Liberal Education for Baccalaureate Generalist Nursing Practice
- Essential II: Basic Organizational and Systems Leadership for Quality Care and Patient Safety
- Essential III: Scholarship for Evidence Based Practice
- Essential IV: Information Management and Application of Patient Care Technology
- Essential V: Healthcare Policy, Finance, and Regulatory Environments
- Essential VI: Interprofessional Communication and Collaboration for Improving Patient Health Outcomes
- Essential VII: Clinical Prevention and Population Health

1 Measured by Written Communication VALUE Rubric
2 Measured by Oral Communication VALUE Rubric
3 Measured by Quantitative Literacy VALUE Rubric
4 Measured by Information Literacy VALUE Rubric
5 Measured by the Creative Thinking VALUE Rubric
6 Measured by the Integrative and Applied Learning VALUE Rubric
7 Measured by the Critical Thinking VALUE Rubric
8 Measured by the Teamwork VALUE Rubric
9 Measured by the Problem Solving and Analysis VALUE Rubric
10 Measured by the Knowledge and Competence VALUE Rubric
11 Measured by the Medical Knowledge and Engagement VALUE Rubric
12 Measured by the Cultural Knowledge and Engagement VALUE Rubric
13 Measured by the Interprofessional Knowledge and Engagement VALUE Rubric
14 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
15 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
16 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
17 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
18 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
19 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
20 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
21 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
22 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
23 Measured by the Interdisciplinary Knowledge and Engagement VALUE Rubric
**Component Five**

Component #5: Review and redesign the organizational structure or approach for delivery of the curriculum.

This guide identifies the program student learning outcomes as the final intent of the curriculum. The program learning outcomes should be congruent with the mission statement and philosophy of the parent institution as discussed prior. These should be congruent with the course outcomes.

**Questions for Faculty:**

What is the overall framework for delivering content? (How is the content organized?)

What is the overall framework for sequencing courses? (How are the courses sequenced?)

Is the course content integrated across populations or are they separated? That is, do you have specialty courses for mental health, pediatrics, obstetrics, and gerontology or is content taught across populations in the same course?

There have been several organizing structures or approaches used within US programs of nursing both at the associate and baccalaureate level. These include:

- the medical model
- a nursing theory
- simple to complex (Blooms)
- the health stages approach
- competency-based approach
- a concept-based approach

Each of these methods has benefits and limitations. Faculty must decide on the approach that best represents the faculty's philosophical beliefs on how students best learn nursing in the program.
Example:

**Medical Model**
Content delivered using:
- National prevalence of diseases, conditions
- Major diseases, conditions of a local nature
- Eliminate diseases that are “rare”
- NCLEX-RN test blueprint and practice analysis

**Course Sequencing and Structure**
Using a simple to complex approach is a common method used by nursing faculty. This method refers to the cognitive level where students increase their thinking at higher levels while interacting with increasingly complex situations as they proceed through the courses. For example:

**Use of Cognitive Leveling as a Structuring Framework**

REMEMBERING → UNDERSTANDING → APPLYING → ANALYSING → EVALUATING → CREATING

Direct Care → Inter-collaborative Care → Coordination of Care

Individual → Individual/Families/Groups → Individuals/Families/Groups/Communities/Populations

Standard Medical Terminology & Pathophysiology → Well-defined, Stable Health Alterations → Acute, Unstable Health Alterations → Multiple, Complex Health Alterations

**Concept Based:**

The courses are arranged to first present basic concepts of nursing practice then to present more complex concepts, culminating with leadership as an integrating concept. The courses are structured to provide opportunity for students to apply theory to clinical practice and the integrate knowledge, skills, and attitudes necessary for students to develop a professional identity. Theory and clinical are scheduled simultaneously in each course. The patient population is the adult. Teaching strategies focus on this prototype using case studies, scenarios, and examples based on the adult. Exceptions are noted where appropriate, such as when addressing pediatric content and maternal/child populations.

**Increased Focus on Management of Care in the 2010 NCLEX-RN Test Plan.**
Consider teaching the following across the curriculum.

- Delegation
- Prioritization
- Organizational structure and the delivery of nursing care
- Critical thinking, decision making, and problem solving
- Quality improvement
- Pharmacology
- Nutrition
Questions for Faculty:

- Is the curriculum internally consistent; that is, can you track major concepts and student learning outcomes throughout all the courses in the curriculum?
- Do the course descriptions reflect course content with a nursing focus?
- Do the course topical outlines reflect the course student learning outcomes?
- Does the content incorporate the current NCLEX test plan?
- Do all faculty align their content to the NCLEX test plan?
- Does faculty align the concepts to the curriculum using a blue print?
- Do faculty use trends from prior years’ NCLEX reports to revise curriculum and teaching/learning strategies?
- Do all faculty use the NCLEX test plan in their teaching plans?
- Is all the NCLEX content integrated throughout the curriculum?
- How do you incorporate updates to your curriculum?

<table>
<thead>
<tr>
<th>Aspects to Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify the Organizing framework for delivering content:</td>
</tr>
<tr>
<td>Outline the Organizing framework for sequencing courses:</td>
</tr>
<tr>
<td>Provide examples of Teaching special populations of patients:</td>
</tr>
<tr>
<td>Develop Final descriptions related to the organization and sequencing of content and courses:</td>
</tr>
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</table>

Figure 11 Example of Curriculum Placemat
COMPONENT SIX

Component #6: Develop the courses with course specific student learning outcomes and competencies, level the courses, and consider essential content for each course.

Program student learning outcomes represent the desired traits of the graduate. They are extremely important because they provide guidance for developing course activities in the next component: teaching/learning activities and evaluation methods. Faculty are encouraged to develop learning outcomes that they can use to provide relevant learning activities, and suitable formative and summative evaluation of student learning from the first nursing course through the final nursing course. There is no wrong way to do it, only more efficient ways.

- Write course descriptions, topical outlines, and learning outcomes/competencies at a level appropriate to the location or sequence of the program.
- Decide on what content to teach in each course using whatever structure was decided.
- Sequence courses based on how you structured the program, approach to teaching, and student characteristics.

When leveling course outcomes, faculty should ask themselves, “What knowledge, skills, attitudes, and behaviors will the student demonstrate to indicate progression to the final student learning outcomes?” This part of the systematic process in curriculum design or redesign requires careful deliberation. Once faculty have agreed on the student learning outcomes for the nursing program, those outcomes are then leveled from course to course. That is, each course addresses some or all of these outcomes, but at an expected level of achievement by the student and the course is determined by the end of that course. It is important to ensure that all course outcomes reflect the agreed upon major concepts. This provides internal consistency and integrity of the curriculum.

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<thead>
<tr>
<th>Aspects to Address</th>
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<tbody>
<tr>
<td>Identify Content to delete?</td>
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<tr>
<td>Any General Education Content to add based on updated concepts, individual student learning outcomes?</td>
</tr>
<tr>
<td>Nursing courses to add?</td>
</tr>
<tr>
<td>Based on 2010 NCLEX-RN test plan changes: Include leadership and teamwork concepts earlier in the curriculum?</td>
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</table>
Component #7: Identify teaching/learning activities/experiences that provide opportunities to meet the student learning outcomes and facilitate formative assessment.

Faculty should design the program and course instruction so the learners are engaged in the learning of nursing using ways of doing similar to those behaviors they will be expected to demonstrate and perform that is documented to measure achievement of those outcomes/competencies.

Questions for Faculty:
- What are the philosophical beliefs associated with teaching/learning?
- How do teaching/learning activities result in students meeting course student learning outcomes and competencies?
- Do the teaching/learning activities encourage active, meaningful learning and critical thinking?
- Will you need to develop/revise assignments to meet new outcomes?
- Are your strategies evidence-based, i.e., evidence they were effective with students in the past? Evidence from the literature?

Figure 12

<table>
<thead>
<tr>
<th>Course Student Learning Outcome and Competencies</th>
<th>Cognitive Level of Outcome</th>
<th>Teaching/Learning Activity</th>
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<table>
<thead>
<tr>
<th>Teaching/Learning Activities</th>
<th>Should we do this?</th>
<th>If so, how do we make it happen?</th>
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23
ACTIVE LEARNING STRATEGIES FOR THE CLASSROOM

The following list of teaching strategies can be very helpful in planning lessons where constant formative assessment is used to determine student mastery of content while teaching. This is by no means an exhaustive list and but there should be enough here to get you going in a new direction!

Muddiest Point

Based on the premise that most lectures can be improved, this method is to ask students to write down the concepts that were least clear to them. Those least understood concepts that total a pre-determined threshold would be addressed by the professor in future lectures or by an additional handout clarifying the subject matter. Advantages: Requires students to organize and filter their understanding of several topics to select one that was least understood. It requires minimal time to read the results. Disadvantages: This method should be used only occasionally as it focuses on a negative aspect of learning rather than a positive one.

Directed Paraphrase

This method promotes simulation of actual work or life-related experiences. Students are asked to summarize the key concepts from a class or lecture and formulate a written discussion of those concepts to an imagined, specific recipient. The differentiation between this method and a simple summarization is use of role-play by the students.

Examples:

1. A nursing student might be directed to paraphrase the concept of drug clearance by the liver to a worried patient.

2. A nursing student might be directed to paraphrase a point of scope of practice to another nursing student.

3. A nursing student might be directed to paraphrase an ethics concept so that it is readily understood by a teenager.

Advantages: Students are challenged in brevity and choice of language when writing the paraphrase. Students become well prepared for similar situations in the work environment.

Disadvantages: Some students may see this method as informal. This can be avoided by detailed phrasing of the initial question.

Minute Paper
Students are asked to spend about a minute to write down the main idea of a topic or class. The Minute Paper is commonly used to determine if the main idea of the instructor’s lecture is captured by the students. An instructor may request the inclusion of a question students may have on the subject matter, or, ask students to comment on interesting, disturbing, or surprising aspects of a lecture or class. Advantages: Minute Papers offer immediate feedback and, possibly, positive reinforcement to the professor. There is creative variability in the use of Minute Papers.

Students must use organizational skills to chunk the information and rank the concepts.

If questions are used, the assessment becomes integrative. Use of Minute Papers requires minimal time.

Disadvantages: May be time-consuming to review for large classes. Forming teams to answer question(s) may alleviate this issue.

**Characteristic Features**

Characteristic Features is an assessment technique that requires students to differentiate between characteristics that do or do not define one or more topics. Using a grid structure, the instructor lists several characteristics in the left-hand column. In the columns to the right, the instructors gives topic headers, and the students are to enter a plus, “+” or minus, “-” sign to designate whether the characteristic in the left hand column is or is not applicable to the topic header.

Example:

Advantages: Characteristic Features measure students’ use of analysis to identify central concepts. Scanning results is simple and can be done quickly.

Disadvantages: Grid creation may be time-consuming. Students may score highly due to random selection rather than content knowledge.

**RSQC2 - Recall, Summarize, Question, Comment, and Connect**

Students take two minutes to recall and list in rank order the most important ideas from a previous day’s class. Then they take another two minutes to summarize those points in a single sentence in order to "chunk" the information. Next, students are asked to write one major question that they want answered. Finally, students identify a thread or theme to connect this material to the course's major goal. As an option, students may add a comment regarding their confidence in or wariness of the specific course content.

Advantages: RSQC2 requires students to organize information and to comprehensively assess how it applies to the overall foundation of the course.

Disadvantages:
RSQC2 is time-consuming to evaluate. It also forces the professor to evaluate the course structure.

**Transfer and Apply**

Students are asked to take course theories learned and to transfer the knowledge to applications and situations they have experienced.

Advantages: Because transference of learned material is a challenging cognitive achievement, Transfer and Apply provides students practice in mastering the task.

Evaluating the results may be done rather quickly.

Disadvantages: Creatingrubric to assess Transfer and Apply may be time-consuming.

**Anecdotal Records**

Anecdotal Records are written observations of instructional experiences within a predefined set of content standards.

Advantages: Anecdotal records facilitate review of assessment and curriculum by providing observations of student learning.

Disadvantages: This method requires planning, preparation and may be time consuming during class time.

**Concept Tests**

Concept tests are a technique used where the instructor asks questions about key concepts and offers students several possible answers. Students are asked to select an answer and to indicate immediately, either by show of hands or by clicker, the answer selected. If the majority of the class has not mastered the concept, students are then asked to discuss with their neighbor the reasons supporting their choice. A second assessment is given by the instructor to re-assess knowledge.

Example:

Advantages: This classroom assessment works well in large classes. Students require little training for Concept tests. It takes minimal class time to perform the tests and to analyze results.

Disadvantages: Formulating the questions and possible answers for the Concept tests can take time initially. There is a cost involved in the clicker system.

**Concept Maps**
Concept Maps are a visual tool allowing students to see the relationships between general and specific concepts. Concepts are given in a hierarchical design, with links between defining the nature of the relationships.

Advantages: Effective for assessing students’ understanding of complex relationships.

Disadvantages: Instructor prep time can be significant for creating fill-in Concept Maps.

See also: Flowcharts or Diagrams

**Quizzes or Exams**

These are locally developed instruments designed by faculty to measure knowledge in single or multiple components of a course.

Advantages: The content is easily modified to adapt to specific outcomes. Results are meaningful for both student evaluation and learning outcomes. Embedding Learning Outcomes into the quiz or exam is uncomplicated. Feedback may be rapid.

Disadvantages: Creating quizzes or exams may be time-consuming. Determining reliability and validity require extensive knowledge in measurement.

**Rubrics**

A rubric is a scale designed for scoring student work against a pre-defined set of criteria.

A rubric is typically in table format with two or more criteria and two or more levels of performance to be measured.

Analytical rubrics specify individual criteria and evaluate these standards independent of one another.

Holistic rubrics measure performance across multiple factors as a complete product.

Advantages: Assessment is objective and consistent. Rubrics clearly document and communicate expectations.

Disadvantages: Using rubrics may be limiting to student creativity as students strive to follow a predefined outline. Rubrics are time-consuming to create.

**Essays**

Essays are a written evaluation of a topic utilized to demonstrate a student’s ability to plan, research, analyze, organize, and synthesize information. Students develop stronger communication skills through essay writing.

Advantages: Effective for assessing students’ understanding of multiple concepts.
Disadvantages: Grading is time-consuming.

**Case Studies**

Case studies are actual issues and problems that students analyze to formulate alternative solutions for the situations. Numerous case studies in various disciplines have been developed by academic institutions and are available for purchase and use by other schools.

Advantages: Case studies demonstrate analytical and synthetic thinking well. In addition, students benefit from relating other knowledge to topic.

Disadvantages: The learning experience is dependent on student knowledge from multiple areas.

**Problem Solving**

Problem Solving uses the same approach as Case Studies, but may leave more developmental problem solving to the student. For instance, the student must develop the experiment or tests to obtain data.

Advantages: This technique displays analytic and synthetic thinking well and is authentic if real world situations are used.

Disadvantages: Problem-solving assessment is difficult to grade due to multiple methods and potential multiple solutions.

**Speech**

Oral speech is a method used to emphasize a student’s organizational and verbal communication skills. Students may be required to analyze an issue or situation and verbally present the findings or students may be asked to memorize passages to recite verbatim.

Advantages: Students improve skills in public speaking and organization.

Disadvantages: Some students may be insecure about public speaking.

**Oral Interview**

An oral interview provides a portrait of a student's understanding about a specific concept or set of related concepts. The interview may consist of a question and answer session or a task or problem-solving exercise.

Advantages: Appropriate for all disciplines.

Disadvantages: Several hours may be required to develop a reliable questions or problem sets. Interviews are best used when the student has developed a comfortable relationship with the professor.
Debate

A debate is an oral speech contest between competing sides about a specific topic or proposition. Debates increase student abilities in knowledge, speaking skills, reasoning skills and analysis.

Advantages: Students are required to organize thoughts and formulate clear and concise arguments in a short period of time. Depending upon the number of students involved, the debate process may emphasize teamwork.

Disadvantages: Students from collective cultures may be uncomfortable with public displays of disagreement.

Product Creation

Product creation requires the student to construct a tangible product. Students exhibit knowledge and practical skills required for the processes and outputs.

Advantages: Students have the opportunity to demonstrate employability.

Disadvantages: Colleges may be limited in resources available for product creation.

Flowchart or Diagram

A flowchart is a visual or graphical representation, primarily through the use of symbols, of the logic or sequence of steps in a process, operation, function, or activity. Students must recall information and also analyze and synthesize organization and structure to develop systematic steps within the process.

Example:

Advantages: Effective for assessing student understanding of complex relationships.

Disadvantages: Instructor preparation may be time consuming to create complex outline of flowcharts.

See also: Concept Map

Team Project

Team projects are collaborative projects produced to cover concepts in one course, multiple courses, such as learning communities, or community projects, such as service learning.

Advantages: Appropriate for assessing students’ knowledge of multiple concepts, as well as multiple levels of understanding and application.

Disadvantages: May be difficult to assess individual student involvement. Additional time may be required due to collaboration with faculty from other disciplines.
Portfolios

Portfolios are collections of students work that demonstrate the progress and level of learning that occurs over a period of time. The variety of work maintained in the portfolio illustrates multiple levels of learning.

Advantages: Analyzing a portfolio of work allows the faculty to assess a broad spectrum of knowledge at one time. In addition, it allows for assessment of several learning objectives simultaneously. Portfolios are useful for a number of disciplines. Portfolios are easily adaptable to measuring different levels of assessment (e.g. course, program, general education).

Disadvantages: May be labor-intensive to assess at the end of a term or program.

Depending upon the course or program, portfolios may require physical storage space for hard copies.

Performances

A performance is an execution of an action or artistic work. Performances emphasize what the student is able to do. Students receive valuable practical experience through active learning.

Advantages: Performances are adaptable. They promote student self-assessment.

Students have the opportunity to demonstrate employability.

Disadvantages: Preparation and assessment for performances can be time-consuming.

Students who are insecure may be dissuaded from participation. Depending upon the discipline assessed, this method may require extensive training of reviewers.

Capstone Project

A Capstone project measures student achievement of a broad knowledge base derived from participation in a program or a specific series of courses.

Advantages: Capstone projects are cumulative and integrative. Assessment of projects provides a setting for department or discipline-specific dialogue.

Disadvantages: Capstone projects can be labor-intensive. Coordination across the departments or disciplines may be challenging.

Reflective Self-Assessment Essay

Students are asked to reflect on their college experiences. They must critically assess their academic growth and development in essay form, providing substantiation for their positions.
When used in combination with Student Portfolios, students can observe development and document progress thoroughly.

Advantages: Student perspective is authentic.

Disadvantages: Reflective Self-Assessment is an indirect method of assessment.

**Satisfaction or Perception Surveys**

Student satisfaction or perception surveys are used to gather data about student priorities and satisfaction. Surveys can be locally created or commercially standardized. Some standardized surveys allow for partial customization to allow the department or school to collect specialized data.

Examples: CCSSE and NSSE on student engagement, Noel-Levitz SSI (Student Satisfaction Inventory), CSEQ College Student Experiences Questionnaire

Advantages: For commercially developed surveys, scores are immediate and data are compared to student populations nationwide.

Disadvantages: Usually the college-wide instruments such as CCSSE are administered not for class-level feedback, but for college-level feedback; therefore, it is hard to use these surveys for class-based review of your own students. It is time consuming to generate questions for locally developed surveys.

**Exit Interviews**

Exit Interviews ask students to reflect upon student learning and their educational experiences. Students are asked about instructional approaches, classroom environments, and perceptions of assignments that best encourage student learning.

Advantages: Provides authentic and immediate feedback useful for assessing program improvement. Interaction with students may provide richer data collection. Interviews allow for clarification and depth of inquiry.

Disadvantages: Best if used in conjunction with other assessment tools.

**Focus Groups**

Focus groups are interactive discussions among a small pool of participants. Students are asked about attitudes towards their educational experience.

Advantages: Focus groups allow for in-depth inquiry, clarification, and follow-up on issues. Useful when combined with quantitative analysis for a broad understanding of issues.
Disadvantages: Data is indirect. Assembling groups of students may be challenging due to scheduling differences. Focus group data may be biased. Focus group moderator must be properly trained to address the group. Requires additional personnel to record and/or transcribe responses.

**Pre-Post Assignment/Test**

At the onset of a course, an assignment or test is administered to measure the baseline level of understanding of one or more concepts. After learning occurs, a similar assignment or test is given to determine the level of learning.

Advantages: Pre-test results offers direction for group learning. This methods provides immediate feedback, if desired.

Disadvantages: Possible tendency to teach to the posttest or assignment.

Component #8: Develop rigorous evaluation methods to assess achievement of learning operationalized using course student learning outcomes and measureable competencies. Correlate to levels of achievement established for program student learning outcomes, and program outcomes.

Evaluation and Assessment strategies should be rigorous and efficient. The emphasis of this component is that assessment testing and clinical evaluation should reflect the program student learning outcomes.

**Question for Faculty:**

- Are the evaluation methods congruent with the course student learning outcomes?
- Are the testing/evaluation measures congruent with the teaching/learning activities?
- Do the testing/evaluation measures reflect the cognitive level of the course student learning outcomes?
- How do you establish reliability and validity of your test scores?
- How do you establish reliability and validity of your performance assessments?
- Is the clinical evaluation tool organized using the student learning outcomes and competencies?
- Are the testing/evaluation measures standardized across the courses?
- Are there specific ways the outcomes on the clinical evaluation tool are measured consistently by all clinical faculty?
- How do you assure consistency in evaluation?
- Are all test items nursing focused and application style?
- Do faculty know how to write application-style test items?
- Does the program require remediation of less than satisfactory performance?
- Does the program provide the full semester or quarter for students to achieve course outcomes?
- Is there a policy related to when and how remediation will be implemented?

**Important information regarding test writing:**

It is recommended that a program-wide testing policy be implemented to ensure all faculty are conducting evaluation methods in a similar manner. Types of items in such a policy might include:

- Test items should reflect the cognitive level indicated in the course student learning outcomes.
- Use a test blueprint to map test items to content. See Example Figure 13 & 14
- Use a test blueprint to collect data and analyze for test improvement
- Use item analysis to determine what to do with questionable items
- Expose Students to Computer testing with at least one 100-question exam for all nursing courses
### Figure 13 Blue Printing Course Objectives

<table>
<thead>
<tr>
<th>Course</th>
<th>Exam #</th>
<th># of Exam Items</th>
<th>Gen Ed Comp</th>
<th>MNT Measure</th>
<th>Student Learning Outcomes</th>
<th>NCLEX Test Plan</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Know/Comp</td>
<td>App</td>
<td>Anal</td>
<td>1 Safe Effective Care</td>
<td>A. Management of Care (18-22%)</td>
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<td></td>
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<td>A2 Safety &amp; Infection Control (8-14%)</td>
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<td>2</td>
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<td>B Health Promotion &amp; Maintenance (6-12%)</td>
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<td>C Psychosocial Integrity (6-12%)</td>
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<td>D Physiological Integrity</td>
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<td></td>
<td>D7 Basic Care &amp; Comfort (6-12%)</td>
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<td>6</td>
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<td>DB Pharmacological &amp; Parenteral Therapies (13-19%)</td>
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<td>1</td>
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<td>D9 Reduction of Risk Potential (10-15%)</td>
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<td>DG Physiological Adaptation (11-17%)</td>
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### Figure 14 Blueprinting to Student Learning Outcome and Unit Objectives

#### Content-Outcome Worksheet

Instructions for TEST DESIGN

- This worksheet will assist the faculty to blueprint their content and outcomes. This worksheet will provide guidance on the minimum number of questions needed to conduct unit and comprehensive final exams based on outcomes and content.

- Once this table is filled out, it represents a blueprint for the number of items required to assess outcomes and content based on time.

- Determine the number of unit exams (A) and the number of items on each exam (B).
- Calculate the total unit items (C).
- Determine the number of final exam items (D).
- Calculate the number of exam items needed (E).
- Determine the total number of lecture hours devoted to content being tested (F).
- Calculate the percentage of lecture devoted to the content in the unit or lesson. Enter in 0.00 format (G).
- Multiply this percentage by the total number of items (E) and enter the value along each unit being tested (H).
- Determine the percentage of weight of questions associated with the outcomes (strictly a faculty judgment). Enter in 0.00 format (I).
- Using the worksheet adjust the questions to assure compliance with the percentage of time devoted to content and percentage of content devoted to the outcomes.

#### A. Number of Unit Exams

<table>
<thead>
<tr>
<th>Content</th>
<th>Lecture Hours</th>
<th>% of Total</th>
<th>Total Number of Items</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
<th>Outcome 3</th>
<th>Outcome 4</th>
<th>Outcome 5</th>
<th>Outcome 6</th>
<th>Base Total</th>
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<tbody>
<tr>
<td>Unit</td>
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<td>0.09</td>
<td>26.88</td>
<td>5.30</td>
<td>5.30</td>
<td>5.30</td>
<td>5.30</td>
<td>2.69</td>
<td>2.69</td>
<td>26.88</td>
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</tr>
<tr>
<td>Unit</td>
<td>4.00</td>
<td>0.09</td>
<td>27.50</td>
<td>5.50</td>
<td>5.50</td>
<td>5.50</td>
<td>5.50</td>
<td>2.75</td>
<td>2.75</td>
<td>27.50</td>
</tr>
<tr>
<td>Unit</td>
<td>4.00</td>
<td>0.09</td>
<td>27.50</td>
<td>5.50</td>
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<td>5.50</td>
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</tr>
<tr>
<td>Unit</td>
<td>4.00</td>
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<td>27.50</td>
<td>5.50</td>
<td>5.50</td>
<td>5.50</td>
<td>5.50</td>
<td>2.75</td>
<td>2.75</td>
<td>27.50</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>390.60</td>
<td>60.00</td>
<td>60.00</td>
<td>39.88</td>
<td>39.88</td>
<td>29.94</td>
<td>29.94</td>
<td>390.60</td>
</tr>
</tbody>
</table>

*Based on the number of hours of exams. Determine how much time is spent on each unit and report in %.

Report the percentage of lecture hours devoted to content associated with the examination.
I tried to think of all the ways a faculty could observe a student for the purposes of evaluating their learning in their class. This is what I came up with, but I would love someone to add if they have ways that are not addressed here. In the measurement of student learning, the best evidence is direct observation of student learning. These are all the ones I could think of…

Legend:

A = Norm Referenced Testing (Faculty created)
B = Norm Referenced Testing (Standardized)
C = Demonstration in class, lab, clinic that was observed/graded by faculty
D = Paper or project observed/graded by faculty
E = Oral presentation observed/graded by faculty
F = Video/audio tape of performance observed/graded by faculty
G = Performance in class, lab, or clinic involving the use of computer or technology that is observed/graded by instructor.
H = Active or collaborative learning exercise observed/graded by faculty
I = Cooperative or preceptor experience during which performance is observed/graded by faculty
J = Written or oral response to attendance at cultural, artistic, or academic activity observed/graded by faculty
K = Concept mapping or clustering observed/graded by faculty
L = Interviews: conduct and write up observed/graded by faculty
M = Peer/panel evaluation
N = Portfolio
O = Self assessment/reflection by student
P = Capstone project observed/graded by faculty
Q = Course Evaluation including questions on student outcomes
R = Licensure passage rate
S = Graduate survey or interview
T = Employer Survey or interview Other: please specify
U=Other: Please specify_______

THE BIGGER PICTURE

These are some examples that we use to show how well our students are learning. These examples can also help us to improve our learning experience at levels higher than the course by measuring the quality of the experience and re-evaluating it in committee. This measurement is collected and provided by the faculty. After the measurement occurs at the course level considering the student’s work and the student is issued a grade, the measurement of the quality is no longer associated with the student but instead represents the holistic learning of the course and its contribution to the program. It represents a measurement of an outcome across and between the courses, one that is part of a continuous process for improvement.
Component #9: Refer to the state board of nursing requirements and the accrediting body standards to be aware of how redesign is impacted by statutes, regulations or standards. Submit any substantive changes to these agencies before implementation.

Questions for Faculty:

Board of Nursing
- What are the curriculum requirements as stated in your nurse practice act as established by your state board of nursing?

Accrediting Organizations
- Is your program currently accredited?
- Are you meeting all the curriculum standard’s criteria?
- Are there new criteria?
- Has the data that has been collected through the tasks of the systematic evaluation plan reveal areas of curriculum that need updating?

All revisions to the curriculum must be in compliance with the standards of these important agencies. Refer to your accrediting organization (NLNAC or CCNE) Curriculum Standard and be cognizant of these as you work through your curriculum changes. If your program is not currently accredited, you may want to be cognizant of these standards so you will be prepared if the decision to become accredited is made in the future.

Figure 16 Example of State Board of Nursing Requirements

| The mission/philosophy and goals are used to plan, implement, and evaluate the nursing program. |
| The curriculum shall include, but not be limited to, content from behavioral, biological, nursing, and physical sciences. |
| Course content should reflect current nursing practice. |
| Nursing courses provide for experiences with patients of all ages and stages of the health-illness continuum. |
| Mechanisms for the recognition of prior learning and advanced placement shall be in place |
Component #10: Analyze the program's current student characteristics to determine if changes in admission requirements, prerequisite courses, or other aspects need to be made. Compare to the community demographics to assure that learning strategies facilitate learning at optimal levels for potential students at risk.

Faculty should review the current prerequisite courses required to enter the to consider if these courses are still appropriate for the revised . Keep in mind that some prerequisite courses are required by the parent institution making adjustments--so be sure to consider the total . Both the state board of nursing as well as accrediting bodies require that nursing programs maintain a reasonable credit hour load.

Questions for Faculty:

- What are the characteristics of your current students? How do you define the at risk student?
- Are there any special characteristics to take into consideration (especially when considering teaching strategies, support courses, and prerequisites)?
- Are those characteristics of the student demographics compatible with your revisions?
- Is English a second language; is English as a foreign language?
- Is the current GPA at a level that will provide the foundation for success?
- Will the current admission requirements select students who will be successful in the nursing program?
- Are the current prerequisite courses appropriate? Should they be revised or removed?
- Will new prerequisite courses be required?
- What has been your retention rate?
- What has been your NCLEX pass rates?
- What has been your completion rate?
- What has been your experience with your stakeholders? Employer survey results? Graduate survey results?
Resources:
Internet Resources:

1. Your state board of nursing website
2. Agency for Healthcare Research and Quality: AHRQ.gov
3. American Association of Colleges of Nursing: http://www.aacn.nche.edu/
5. Centers for Disease Control: www.cdc.gov
6. Commission on Collegiate Nursing Education: www.ccne.org
13. NLN’s Think Tank on Transforming Clinical Education: http://www.nln.org/facultydevelopment/facultyresources.htm
15. Quality and Safety Education for Nurses: www.qsen.org
17. *Patient Safety and Quality: An Evidence-Based Handbook for Nurses* published by the Agency for Healthcare Research and Quality (www.ahrq.gov/qual/nurseshdbk/)

20. The Joint Commission: www.jointcommission.org

Print Resources:


Journal of Nursing Education, 45(6), 212-219.
learning environment. Philadelphia: Lippincott Williams & Wilkins.
EXAMPLES OF ASSESSMENTS
This Report Card will help you to systematically evaluate your curriculum for strengths and areas for improvement based on the NLN Hallmarks of Excellence in Nursing Education, and to assess your nursing program for innovation. If you have more than one program, evaluate each program separately.

Please use the following key to determine your program’s progress in reaching the NLN Hallmarks of Excellence related to curriculum:

<table>
<thead>
<tr>
<th>Rating Key:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = No implementation.</td>
<td>I see no evidence that this happens in our curriculum.</td>
</tr>
<tr>
<td>1 = Under discussion.</td>
<td>This practice is being discussed, but has not been implemented yet.</td>
</tr>
<tr>
<td>2 = Marginal implementation.</td>
<td>There are isolated incidents of this being implemented.</td>
</tr>
<tr>
<td>3 = Partial implementation.</td>
<td>This is being implemented in several courses.</td>
</tr>
<tr>
<td>4 = Full implementation.</td>
<td>This has been fully implemented throughout the curriculum.</td>
</tr>
</tbody>
</table>

### NLN Excellence Hallmarks: Curriculum

#### I. The curriculum is flexible and reflects current societal and health care trends and issues, research findings, and innovative practices, as well as local and global perspectives.

1. There is room for non-required or elective courses in the curriculum.
2. Students are allowed some choice in sequencing of courses.
3. There is time in each course to discuss new trends or developments in health care.
4. The curriculum is regularly examined to incorporate new global and societal health care trends.
5. The curriculum is regularly examined to incorporate new local trends and perspectives.
6. Students are allowed some choices for clinical experiences.

#### II. The curriculum provides experiential cultural learning activities that enhance students’ abilities to think critically, reflect thoughtfully, and provide culturally sensitive, evidence-based nursing care to diverse populations.

1. The curriculum ensures that all students have learning experiences to prepare them to care for people from cultures different from their own.
2. Course assignments require examination of cultural sensitivity in nursing care.
3. Throughout the curriculum, students have increasingly complex assignments that incorporate principles of culturally competent nursing care.
4. Course assignments allow students to examine their own values, biases, and stereotyping.
5. Outcomes related to cultural competence are assessed.
**Rating Key:**

- **0 = No implementation.** I see no evidence that this happens in our curriculum.
- **1 = Under discussion.** This practice is being discussed, but has not been implemented yet.
- **2 = Marginal implementation.** There are isolated incidents of this being implemented.
- **3 = Partial implementation.** This is being implemented in several courses.
- **4 = Full implementation.** This has been fully implemented throughout the curriculum.

### III. The curriculum emphasizes students’ values development, socialization to the new role, commitment to lifelong learning, and creativity.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>1. Students are given permission to think “outside the box” when engaged in learning experiences.</td>
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<tr>
<td>2. Grading rubrics are structured such that students are rewarded for creativity and/or originality of thought.</td>
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<tr>
<td>3. Course assignments/clinical experiences are designed to promote students’ socialization into the nursing role.</td>
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<td>4. Individual learning styles are appreciated and enhanced through a variety of learning experiences.</td>
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<td>5. Learning strategies integrate the generational differences among students to promote positive educational outcomes.</td>
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<td>6. Learning experiences require values clarification and student development in the affective domain.</td>
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<tr>
<td>7. Faculty design learning experiences that focus on career development and student appreciation of life-long learning.</td>
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</table>

### IV. The curriculum provides learning experiences that prepare graduates to assume roles that are essential to quality nursing practice, including but not limited to roles of care provider, patient advocate, teacher, communicator, change agent, care coordinator, user of information technology, collaborator, and decision maker.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning experiences are implemented to assist students in the following role development, including roles of:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. care provider.</td>
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<td></td>
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<tr>
<td>b. patient advocate.</td>
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<td></td>
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<tr>
<td>c. teacher (individual and group).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. communicator (writing and speaking).</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>e. change agent.</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>f. care coordinator.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. technology user (to include electronic records and databases).</td>
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<td></td>
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</tr>
<tr>
<td>h. collaborator.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. decision maker.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### V. The curriculum provides learning experiences that support evidence-based practice, multidisciplinary approaches to care, student achievement of clinical competence, and, as appropriate, expertise in a specialty role.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
<th>Details</th>
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<tbody>
<tr>
<td>0</td>
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<tr>
<td>4</td>
<td>Full implementation</td>
<td>This has been fully implemented throughout the curriculum.</td>
</tr>
</tbody>
</table>

1. Evidence-based practice concepts are taught throughout the curriculum.
2. Students’ work in clinical environments where evidence-based practice is valued.
3. Students have experience with multidisciplinary approaches to patient care.
4. Innovative learning experiences are created to help students develop clinical competence.
5. Students have experience as members and leaders of multidisciplinary teams.
6. Students have substantial learning experiences to prepare them as experts in the full scope of their new role (new graduate nurse, advanced practice roles, educators, administrators, or researchers).
7. Students have learning experiences to achieve clinical competencies to prepare them to meet demands and requirements of entry level nurses in a variety of settings.

### VI. The curriculum is evidence-based. (Programs should ask themselves how the current curriculum is evaluated based on outcome evidence.)

<table>
<thead>
<tr>
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<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>4</td>
<td>Full implementation</td>
<td></td>
</tr>
</tbody>
</table>

1. Research has been used to determine how the curriculum is designed.
2. Current research is used to help faculty determine when to make changes in the curriculum and what those changes will be.
3. Assessment of program and student outcomes is done regularly to provide evidence for curriculum revision, planning, and implementation, including:
   - a. surveys of alumni, graduates, and employers.
   - b. benchmarking (comparing results with similar programs) i.e. financial health of institution, applicant pool, admission, retention, graduation rates, diversity, faculty satisfaction.
4. Formative evaluations of student progress are used as evidence for curriculum revision, planning, and implementation, including:
   - a. course evaluations by faculty.
   - b. student achievement (GPA, on-time progression through program courses, preceptor feedback about student performance).
   - c. staff, student, faculty satisfaction.
   - d. impression of student and faculty performance by clinical agency personnel.
   - e. assessment of student services and other support systems.
   - f. critical-thinking development (i.e. PBDS systems).
   - g. NCLEX readiness.
   - h. satisfaction surveys of families of students.
### Ratings Key:

0 = No implementation. I see no evidence that this happens in our curriculum.
1 = Under discussion. This practice is being discussed, but has not been implemented yet.
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## VII. The design and implementation of the program is innovative and seeks to build on traditional approaches to nursing education.

1. Rationale for innovation is supported by evidence and/or guided by the literature.
2. Faculty and students systematically evaluate the impact of innovative teaching and curriculum approaches on student learning, student satisfaction, and other student-centered outcomes.
3. Innovative aspects of the curriculum are evaluated.
4. Faculty have the requisite knowledge and skills to identify, plan, implement, and evaluate curricular innovations.
5. When barriers to innovation occur, the faculty are able to identify and implement strategies for success.
6. Faculty, students, and alumni can identify the features of the program that are truly innovative.
7. The faculty are committed to challenging traditional approaches to nursing education and implementing more innovative, evidence-based approaches.
8. There is administrative support for faculty to be innovative in their approach to teaching and learning, as well as in their approach to the design, implementation, and evaluation of the curriculum.
9. Resources and support for faculty development related to innovative curriculum are clearly evident.
10. A culture of innovation (such as risk-taking, diverse thinking, and challenging long-held assumptions) is celebrated.
Project Associate Assessment: Assessing Nursing Program Student Learning Outcomes (SLO)

The learning outcomes of a program describe the intended educational outcomes in terms of specific abilities, knowledge, values, and attitudes that you want students in your program to possess. The student learning outcomes are global statements that require qualities (abilities, knowledge, value, attitudes) that we can associate with measurement. For each SLO, identify the abilities, knowledge, values, and attitudes that you would associate with each SLO. A few examples of these qualities have been provided under each SLO. Please add to the list any qualities or knowledge that you would associate with the SLO in each row.

<table>
<thead>
<tr>
<th>Provide competent, safe, quality, patient-centered nursing care using established professional standards, guidelines, best practices and available evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patient Teaching</td>
</tr>
<tr>
<td>• Nursing Process</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provide competent and compassionate, patient-centered nursing care by promoting dignity, respect, privacy and advocacy, while assimilating professional, ethical and legal principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Professionalism</td>
</tr>
<tr>
<td>• State Nurse Practice Act</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incorporate effective communication and information technology to interact, manage information, support decision-making, and minimize the potential for error.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Informatics</td>
</tr>
<tr>
<td>• Documentation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analyze patient situations, integrate critical thinking skills, and apply clinical judgment to provide competent, safe, quality, patient-centered nursing care.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clinical Decision making</td>
</tr>
<tr>
<td>• Reasoning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participate in collaborative relationships with patients and members of the interdisciplinary healthcare team to provide and improve patient care.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teamwork</td>
</tr>
<tr>
<td>• Levels of Work Environment: Nurse Patient Relationship &amp; System Approach</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demonstrate leadership skills required for the care of diverse patients in a variety of healthcare settings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Delegation</td>
</tr>
<tr>
<td>• Supervision</td>
</tr>
</tbody>
</table>
Next task: Create an assessment method that contains a quantitative and qualitative component and identify assessment targets. See Appendix A

The rubric following this page contains a section for each of the nursing program student learning outcomes (SLO) and a tool developed using the individual NUR course outcomes. This creates a qualitative rubric for faculty to validate using the information provided above. In addition to the qualitative rubric, a quantitative component with value added using existing assessments is established. Benchmarks are collected in addition to the ratings on the qualitative rubric.

To validate this rubric, faculty would identify the essential knowledge, skills, attitudes and values in the descriptions that are essential to the achievement of the SLO and to determine at least two evaluation methods for each SLO unless a standardized exam is used, in which case, one or more sub-scales can be specified to assess an SLO.

Example: These might be competencies identified for the Teamwork/Collaboration SLO
APPENDIX A-Repeated measure tool using COPA model to evaluate Associate Degree and Bridge Program Student Learning Outcomes

<table>
<thead>
<tr>
<th>Benchmark (0)</th>
<th>Integrate (1)</th>
<th>Plan (2)</th>
<th>Implement (3)</th>
<th>Conduct (4)</th>
</tr>
</thead>
</table>

Safe, Patient-Centered Care (30%) – Provide competent, safe, quality, patient-centered nursing care using established professional standards, guidelines, best practices, and available evidence. *Seeks assistance with new procedures.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>Student identifies or articulates established practice standards, guidelines and competencies required to provide competent, safe, quality, patient-centered care, but needs guidance on application in theoretical or clinical settings.</td>
</tr>
<tr>
<td>7.5%</td>
<td>Student demonstrates understanding of established practice standards, guidelines and competencies, required to provide competent, safe, quality, patient-centered care and applies them to theoretical and clinical settings with faculty guidance.</td>
</tr>
<tr>
<td>15%</td>
<td>Student incorporates best practices, standards and established guidelines to provide safe, quality care to patients and families experiencing health problems across the lifespan (Includes Mental Health, Maternal/Child, Medical Surgical, Gerontology). a. Manages client care</td>
</tr>
<tr>
<td>22.5%</td>
<td>Student performs competent, safe, quality, patient-centered nursing care with supervision using established professional standards, guidelines, best practices, and available evidence. a. Implements interventions to provide cost effective care.</td>
</tr>
<tr>
<td>30%</td>
<td>Student coordinates competent, safe, quality, patient-centered nursing care with minimal supervision using established professional standards, guidelines, best practices, and available evidence. a. Discusses principles of delegation related to selected aspects of client care.</td>
</tr>
</tbody>
</table>

This example is used to provide a tool to measure the student’s learning over time so that those measures can be used to assess the program. I am recommending that we use the clinical evaluation tools as a metric for the qualitative component of the measurement. An example of this tool for NUR 242 has been provided to the course meeting participants.

This is the qualitative part of the SLO measurement.
established practice standards, guidelines and competencies required to administer and monitor the effects of pharmacological agents when caring for patients but needs guidance on application in theoretical or clinical settings.

Student identifies methods of problem solving and decision-making.

competencies, required to administer and monitor the effects of pharmacological agents when caring for patients and includes minimal errors in the laboratory setting.

Student uses problem solving techniques and decision making with guidance to achieve patient goals and outcomes.

Student performs safe administration and monitoring of the effects of pharmacological agents with supervision.

Student interacts with others to solve problems in a variety of healthcare settings.

strategies to encourage psychosocial and physiologic integrity, health promotion and risk reduction in a variety of healthcare settings.

*Follows established nursing standards when implementing interventions.

Student performs safe administration of pharmacological therapies with minimal supervision and monitoring of the effects of pharmacological agents with minimal supervision.

Student interacts creatively, respectfully, and openly with others to solve problems and achieve patient goals and outcomes.

Direct Measures:

<table>
<thead>
<tr>
<th>CPE¹: Comprehensive Performance Evaluation</th>
<th>CPE²:</th>
<th>CPA¹:</th>
<th>CPA²:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HESI Faculty Exam etc.</td>
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</tbody>
</table>

This is the quantitative part of the SLO measurement

¹CPE-Comprehensive Performance Evaluation: 1. Assessment and Intervention Skills - Monitoring and data collection; physical assessment, therapeutic treatments

2. Communication- a. Oral: interacting, listening, taking history, reporting to other providers, discussion b. Written: recording, writing reports, analyses, memos, assigned papers
c. Computing: data entry, search for resources, networking with other providers


4. Human Caring /Relationship Skills - Cultural respect for others, patient advocacy, patient-centered care, ethics, privacy, confidentiality

5. Teaching Skills - Telling, showing, demonstrating health care and promotion, instructing others, mentoring, precepting

6. Management Skills - Planning, delegating, coordinating work of others, human and material resource utilization, teamwork

7. Leadership Skills - Collaboration, coalition building, assertiveness, informed risk-taking, creating alternatives, professional accountability and continued development

8. Knowledge Integration Skills - Basing care on knowledge and standards, using evidence-based resources for decision-making, synthesis of information

²CPA-Comprehensive Performance Assignment: pertain to activities such as written assignments, presentations, plans, budgets, research analysis, and written tests that are developed with the same emphasis given to ensure that evaluation is consistent, objective, and accurate (rubric)
<table>
<thead>
<tr>
<th>Benchmark (0)</th>
<th>Integrates (1)</th>
<th>Plans (2)</th>
<th>Implements (3)</th>
<th>Conducts (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caring Behaviors (20%)</strong> - Provide competent and compassionate patient-centered nursing care by serving as a patient advocate and by promoting dignity, respect, and privacy, while assimilating ethical and legal principles. <em>Seeks assistance with new procedures.</em></td>
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<tr>
<td>0%</td>
<td>Student identifies the concept of advocacy and caring needed to provide quality health care in the promotion of autonomy and self-determination for all patients in theoretical or hypothetical situations only.</td>
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<tr>
<td>5%</td>
<td>Student understands and discusses appropriately the concepts of advocacy, self-determination, and patient rights. Student incorporates principles with faculty guidance, which promote dignity, respect, privacy, and advocacy, while assimilating professional, ethical, and legal principle. Student applies them to theoretical and clinical settings with faculty guidance.</td>
<td></td>
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<tr>
<td>10%</td>
<td>Student incorporates practices identified as competent and compassionate, patient-centered nursing care. With faculty guidance, student promotes dignity, respect, privacy and advocacy, while assimilating professional, ethical, and legal principles when caring for patients across the lifespan (Includes Mental Health, Maternal/ Child, Medical Surgical, Gerontology).</td>
<td></td>
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</tr>
<tr>
<td>15%</td>
<td>Student demonstrates competent and compassionate, patient-centered care to patients across the lifespan with supervision (Includes Mental Health, Maternal/ Child, Medical Surgical, Gerontology).</td>
<td></td>
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</tr>
<tr>
<td>20%</td>
<td>Student demonstrates caring behaviors. Student practices competent and compassionate, patient-centered care to patients across the lifespan with minimal supervision. Student acts as an advocate, while utilizing professional, ethical, and legal principles.</td>
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<tr>
<td>0%</td>
<td>a. Implements basic nursing skills in a safe manner*.</td>
<td></td>
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<tr>
<td>5%</td>
<td>b. Demonstrates nursing knowledge of selected medications: brand name, generic name, classification, dose expected effects, side effects.</td>
<td></td>
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</tr>
<tr>
<td>10%</td>
<td>a. Implements safe interventions in an organized manner*.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>15%</td>
<td>b. *Administers selected medications safely utilizing the six rights, demonstrates knowledge of: brand name, generic name, classification, dose expected effects, side effects, indication onset/duration, contraindications/interactions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td>a. Applies scientific principles to client safety following established protocols*.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
| 0% | b. *Administers medications safely utilizing the six-rights with integrates knowledge of: brand name, generic name, classification, dose expected effects, side effects, indication onset/duration, contraindications/interactions.
<table>
<thead>
<tr>
<th></th>
<th>effects, indication, onset/duration contraindications/interactions nursing implications.</th>
<th>expected effects, side effects, indication, onset/duration, contraindications/interactions nursing implications</th>
<th>Relates parenteral therapy to client's condition and utilizes nursing actions safely.</th>
<th>Demonstrates proficiency in program skills.</th>
<th>Onset/duration, contraindication/interactions, nursing implications.</th>
</tr>
</thead>
<tbody>
<tr>
<td>c.</td>
<td>Identifies cultural/spiritual beliefs and practices of selected clients.</td>
<td>c. Demonstrate knowledge of selected IV solutions and manages safely.</td>
<td>d. Incorporates sensitivity of cultural health practices, beliefs, and rituals of selected clients into nursing assessment.</td>
<td>c. Describes cultural practices, beliefs, and rituals of selected client populations.</td>
<td></td>
</tr>
<tr>
<td>Direct Measures:</td>
<td>CPE¹:</td>
<td></td>
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<tr>
<td></td>
<td>CPA¹:</td>
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<tr>
<td></td>
<td>CPA²:</td>
<td></td>
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</tbody>
</table>

53
Communication/Information Technology uses (10%)-Incorporate effective communication and information technology to interact, manage information, support decision-making, and minimize the potential for error.  *Seeks clarification appropriately

<table>
<thead>
<tr>
<th>Benchmark (0)</th>
<th>Integrates (1)</th>
<th>Plans (2)</th>
<th>Implements (3)</th>
<th>Conducts (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>2.5%</td>
<td>5%</td>
<td>7.5%</td>
<td>10%</td>
</tr>
<tr>
<td>Student identifies effective verbal, non-verbal, written, and therapeutic communication techniques.</td>
<td>Student uses effective verbal, non-verbal, written skills with guidance from faculty and interacts with information technology to support decision-making in patient-centered care.</td>
<td>Student incorporates principles of effective, therapeutic verbal, non-verbal, written skills when interacting with patients and families across the lifespan and supports decision-making for patient center care across the lifespan (Includes Mental Health, Maternal/Child, Medical Surgical, Gerontology).</td>
<td>Demonstrates effective, verbal, non-verbal, written skills when interacting with child bearing and or child caring patients and families and to support decision-making for patient centered care.</td>
<td>Demonstrate use of effective communication and information technology to interact, manage information, support decision-making, and minimize the potential for error. Student interacts with clinical agency’s information technology and documents appropriately according to policy and procedure.</td>
</tr>
<tr>
<td>Student identifies important computer skills required for registered nursing practice and requires guidance to apply them.</td>
<td>Student documents according to established practice standards or with assistance when administering and monitoring pharmacological agents.</td>
<td>With guidance by faculty, student uses computer skills to interact with information technology.</td>
<td>Student interacts with clinical agency’s information technology and documents appropriately with minimal supervision.</td>
<td>Student documents to established practice standards when administering and monitoring pharmacological agents.</td>
</tr>
<tr>
<td></td>
<td>a. Communicates with patient with a focus on clients concerns.</td>
<td>Student documents to established practice standards when administering and monitoring pharmacological agents with minimal assistance.</td>
<td>a. Utilizes therapeutic communication to establish trusting client relationship.</td>
<td>a. Develops teaching plan for a group of clients.</td>
</tr>
<tr>
<td></td>
<td>b. Shares information with other members of the healthcare team.</td>
<td>a. Responds to client concerns using basic</td>
<td>b. Implements, evaluates, and revises teaching</td>
<td>b.</td>
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<tr>
<td>1. Recognizes need for client teaching.</td>
<td>b. Communicates with other members of the healthcare team in nursing assessment.</td>
<td>c. *Communicates with instructor and healthcare team throughout the clinical day and seeks guidance as needed.</td>
<td></td>
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</tr>
<tr>
<td>2. Utilize client teaching in basic nursing care.</td>
<td>d. Documents all relevant data accurately in a timely manner.</td>
<td>d. Reports and records all relevant information in a timely manner.</td>
<td></td>
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<tr>
<td></td>
<td>e. Reports changes in client condition in a timely manner, both verbally and in writing.</td>
<td>e. Develops teaching plan based on nursing assessment.</td>
<td></td>
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<tr>
<td></td>
<td>f. Incorporates teaching needs into plan of care.</td>
<td>f. Implements and evaluates teaching plan.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>g. Implements a single purpose, client-teaching activity.</td>
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</tbody>
</table>

**Direct Measures:**
- **CPE**: CPE<sup>1</sup>, CPE<sup>2</sup>, CPA<sup>1</sup>
<table>
<thead>
<tr>
<th>CPA×</th>
<th>Benchmark (0)</th>
<th>Integrates (1)</th>
<th>Plans (2)</th>
<th>Implements (3)</th>
<th>Conducts (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Critical Thinking/Clinical Judgment (10%)-Analyze patient situations while integrating critical thinking skills and applying clinical judgment to provide competent, safe, quality, patient-centered nursing care.</td>
<td></td>
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<tr>
<td>0%</td>
<td>Student identifies the concept of critical thinking as required to provide accurate, safe, basic care to patients and requires guidance to apply it.</td>
<td>2.5%</td>
<td>5%</td>
<td>7.5%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Student understands the principles of critical thinking and judgment and attempts to problem solve in the clinical setting to provide competent, safe, quality, patient-centered nursing care, and medication administration with guidance by faculty.</td>
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<td></td>
<td>Student identifies important critical thinking skills required to administer and monitor pharmacological agents when caring for patients and requires guidance to apply them.</td>
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<tr>
<td></td>
<td>a. States objective and subjective data validating nursing diagnosis.</td>
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<td></td>
<td>b. Differentiates collaborative and independent nursing care.</td>
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<tr>
<td></td>
<td>c. Identifies nursing diagnosis</td>
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<td></td>
<td>Student incorporates critical thinking skills and applies clinical judgment in the provision of competent, safe, quality, patient-centered nursing care and administration of medications/pharmaceuticals across the lifespan (Includes Mental Health, Maternal/Child, Medical Surgical, Gerontology).</td>
<td></td>
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<tr>
<td></td>
<td>a. Clearly organizes subjective and objective data to formulate nursing diagnosis.</td>
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<td></td>
<td>b. Develops plan of care, which is individualized to client.</td>
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<td></td>
<td>c. Prioritizes interventions, based on scientific rationales, to meet outcomes.</td>
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<td></td>
<td>Student validates care decisions by using critical thinking skill, best practices, and applies clinical judgment to provide competent, safe, quality, patient-centered nursing care with supervision or faculty guidance.</td>
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<tr>
<td></td>
<td>With minimal guidance, student considers all implications of the administration of pharmaceutical agents to patients.</td>
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<tr>
<td></td>
<td>a. Data is accurate, relevant, succinct, and clearly organized.</td>
<td></td>
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<tr>
<td></td>
<td>b. Interprets validated data by identifying evidenced based nursing diagnosis.</td>
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<td></td>
<td>c. Develops and prioritizes plan of care for multiple clients.</td>
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<tr>
<td></td>
<td>Student analyzes patient situations, integrates critical thinking skills, and demonstrates evidence based decision making in all aspects of nursing practice.</td>
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<td></td>
<td>Student independently considers all implications of the administration of pharmaceutical agents to patients.</td>
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<tr>
<td></td>
<td>a. Data is accurate, relevant, succinct, and clearly organized.</td>
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<tr>
<td></td>
<td>b. Interprets validated data by identifying evidenced based nursing diagnosis and collaborative problems.</td>
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<td></td>
<td>c. Develops and prioritizes plan of care for multiple clients.</td>
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<td>56</td>
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<tr>
<td></td>
<td>States outcomes are clearly stated and measurable.</td>
<td>States outcomes, which are clearly stated, measurable, and realistic.</td>
<td></td>
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<tr>
<td></td>
<td>Seeks assistance in clarifying plan of care.</td>
<td>Validates outcomes based on individualized assessment.</td>
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<tr>
<td></td>
<td>Revises plan of care in collaboration with instructor.</td>
<td>Evaluates accurately the effectiveness of interventions.</td>
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<tr>
<td>d.</td>
<td>Identifies nursing diagnoses based on analyzing relevant data.</td>
<td>Selects evidenced based interventions to meet outcomes.</td>
<td></td>
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<tr>
<td>e.</td>
<td>States outcomes are clearly stated and measurable.</td>
<td>Utilizes nursing process to evaluate and revise plan of care.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>f.</td>
<td>Selects evidenced based interventions to meet outcomes.</td>
<td>Correlates Pathophysiology to plan of care.</td>
<td></td>
<td></td>
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<tr>
<td>g.</td>
<td>Evaluates plan of care and modifies as needed</td>
<td>Prioritizes collaborative and independent nursing care.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>h.</td>
<td>Anticipates change in client's condition relative to assessment and interventions.</td>
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</tr>
</tbody>
</table>

**Direct Measures:**
- CPE\(^1\):
- CPE\(^2\):
- CPA\(^1\):
- CPA\(^2\):
<table>
<thead>
<tr>
<th>Benchmark (0)</th>
<th>Integrates (1)</th>
<th>Plans (2)</th>
<th>Implements (3)</th>
<th>Conducts (4)</th>
</tr>
</thead>
</table>

**Teamwork/Collaboration (10%)** - Participate in collaborative relationships with patients and members of the interdisciplinary healthcare team to provide and improve patient care. *Seeks clarification appropriately.*

**0%**
- Student explores ways to effectively collaborate with members of the interdisciplinary healthcare team with guidance from faculty.

**2.5%**
- Student attempts to collaborate with other members of the interdisciplinary team to provide safe, quality, patient-centered care.
  
  Student prioritizes plan of nursing care for one client system.
  
  a. Defines components of client advocacy.
  
  b. Identifies members of the healthcare team.
  
  c. Interacts with members of the healthcare team to gather information.
  
  d. *Seeks clarification of information when needed.

**5%**
- Student collaborates with patients, families and members of the interdisciplinary healthcare team to provide care patients and families across the lifespan (Includes Mental Health, Maternal/Child, Medical Surgical, Gerontology).

  Student collaborates with other members of the healthcare team to establish a therapeutic plan of care for a client system.
  
  a. Collaborates with client and members of the healthcare team in planning nursing care with focus on client’s concerns.
  
  b. Interacts with members of the healthcare team to

**7.5%**
- Student collaborates with patients, families and members of the interdisciplinary healthcare team to plan and improve patient care with minimal supervision.

  Student collaborates with other members of the healthcare team to establish and implement a therapeutic plan of care for a client system.
  
  a. Demonstrates collaboration with other members of the healthcare team to advocate for client.
  
  b. Collaborates with the registered nurse providing client’s care. Seeks appropriate members of the healthcare team to

**10%**
- Student coordinates care and participates in collaborative relationships with patients and members of the interdisciplinary healthcare team to provide and improve patient care.

  Student collaborates with client systems and appropriate health care professionals to provide holistic care to groups of client systems.
  
  a. Collaborates with members of the healthcare team to strengthen client’s normal and flexible lines of defense and provide holistic, client centered care.
  
  b. Collaborates with team members to improve management of client
<table>
<thead>
<tr>
<th>gather information.</th>
<th>gather pertinent information</th>
<th>care.</th>
</tr>
</thead>
</table>

Direct Measures:
- CPE¹:
- CPE²:
- CPA¹:
- CPA²:
<table>
<thead>
<tr>
<th>Benchmark (0)</th>
<th>Integrates (1)</th>
<th>Plans (2)</th>
<th>Implements (3)</th>
<th>Conducts (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership (20%)</strong></td>
<td><strong>Demonstrate leadership skills and professional behavior required for the care of diverse patients in a variety of healthcare settings.</strong></td>
<td></td>
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<tr>
<td><em>Seeks clarification appropriately.</em></td>
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</tbody>
</table>

0%

Student identifies the qualities of a leader required for the care of diverse patients or does so with guidance from faculty.

Student discusses leadership skills required for the care of diverse patients in a variety of healthcare settings, but has no real world experience.

5%

Student can differentiate between formal and informal leadership characteristics.

a. *Takes responsibility for one’s own actions or lack of action in clinical setting and nursing laboratory.

b. Identifies own feelings and behaviors in response to clinical situations.

c. *Complies with nursing student handbook clinical policies.

d. States own strengths and weaknesses of nursing care with collaboration from instructor.

e. Accepts suggestions for performance improvement and makes appropriate changes.

f. *Complies with HIPAA

10%

Student demonstrates introductory leadership skills required for the care of patients and families across the lifespan (Includes Mental Health, Maternal/Child, Medical Surgical, Gerontology) with guidance from faculty.

a. *Takes responsibility for one’s own actions or lack of action in clinical setting and nursing laboratory.

b. Identifies how feelings, behaviors and attitudes affect interpretation of data.

c. *Complies with nursing student handbook clinical policies.

d. States own strengths and weaknesses of assessment, planning,

e. Suggests strategies for improving weaknesses.

15%

Student demonstrates leadership skills required for the care of diverse patients in a variety of healthcare settings.

a. *Takes responsibility for one’s own actions or lack of action in clinical setting and nursing laboratory.

b. Identifies how feelings, behaviors and attitudes affect response to client situation.

c. *Complies with nursing student handbook clinical policies.

d. States own strengths and weaknesses of use of nursing process.

e. Suggests strategies for improving weaknesses.

20%

Student acts as a leader and demonstrates leadership skills required for the care of diverse patients in a variety of healthcare settings.

a. *Takes responsibility for one’s own actions or lack of action in clinical setting and nursing laboratory.

b. Identifies how feelings, behaviors and attitudes affect responses to client situations and modulate them to advocate for client.

c. *Complies with nursing student handbook clinical policies.

d. Uses self-reflection and collaboration to improve nursing
<table>
<thead>
<tr>
<th></th>
<th>regulations.</th>
<th>interventions, and evaluation.</th>
<th>Incorporates suggestions for improvement into nursing practice.</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>f. Incorporates suggestions for improvement into care provided.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>g. *Complies with HIPAA regulations.</td>
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<tr>
<td></td>
<td></td>
<td>h. *Complies with HIPAA regulations.</td>
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<td></td>
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<td>f. Analyzes legal/ethical dilemmas in nursing practice.</td>
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</table>

**Direct Measures:**

CPE¹
CPE²
CPA¹
CPA²
SAFE, PATIENT CENTERED CARE

HESI Fundamentals Exam: QSEN Patient Centered Care Subscales (ALL) > 850

- Dimensions of Patient Care
- Pain and Suffering
- Safety and Quality
- Ethical and Legal
- Effective Communication

CARING BEHAVIORS

HESI NLNAC Categories of Therapeutic communications and Therapeutic Nursing Interventions > 850

- Critical Thinking
- Therapeutic Communications
- Therapeutic Nursing Interventions

COMMUNICATION AND INFORMATION TECHNOLOGY

- Core Category Communication >850
- Core Knowledge Info > 850
- AACN Healthcare Technology & Information Management & Patient Care Technology >850
- QSEN Informatics > 850

CRITICAL THINKING AND CLINICAL JUDGMENT

- HESI NLN Nursing Judgment> 850
- Nursing Clinical Decision-making > 850
- Core Category Critical Thinking >850

TEAM WORK/COLLABORATION

HESI QSEN Teamwork/Collaboration Subscales > 850

- Member of Team
- Scope of Practice
- Communication
- Systems/Team Functions

LEADERSHIP

HESI Sub-specialty Professional Issues (Leadership subscale) > 850

Role Development Subscales > 850
• Manager of Care
• Member of Profession
• Provider of Care

Analysis of the Exit Exam administered at the San Antonio Campus from 2009-2012: Reporting on HESI administrations and trends

The Elsevier website reports HESI tests administrations by:

• Campus
• program type
• exam type
• version administered
• date/time stamp.

All exams administered as an *EXIT exam* between the years of 2009-2012 were downloaded and examined. The mean scores by quarter of the exam administered in San Antonio were analyzed and illustrated as below. The distribution of scores across nine quarters demonstrates a flat slightly positive linear trend. There are several possible reasons for this appearance. This may demonstrate that learning outcomes and strategies employed throughout the program to achieve them for the last two years as measured by the blinded HESI are static. This may show that the standardized exam performs consistently across samples.

![SAN ANTONIO TEXAS HESI EXIT SCORES BY QUARTER (n=731)](chart)

According to the Elsevier HESI website, the two-year Associate Degree program at San Antonio administered the HESI exit exam from Summer 2009 to Spring (April) 2011 and then the results stopped. Then from (May) Spring 2011, the results were noted under the LPN to RN. This is explained by HESI reporting the results initially as ADN, when instead the results should all be attributed to the Bridge program since the San Antonio Campus is not approved to offer the pre-licensure 2 year ADN program.
However, this arbitrary division provided a method for determining two groups by using the scores in a cross sectional comparison to compare scores of students testing in 2009-APR2011 to students testing MAY 2011-2012. The first group was all EXIT HESI mean scores of all tests administered between 2009-2011 (n=431). The second group was all EXIT HESI mean scores of all tests administered between 2011-2012 (n=300). It is possible that students testing in one group may also be testing in the second group due to the repeated nature of the test and this may contribute to measurement error when consider the statistical significance of these results.

Comparison of the overall means of the groups is illustrated below that compares the 2009-2011 results to the 2011-2012 results.

A single sample t test was performed to assess the differences in the mean scores between those testing in group I compared to group II. A significant difference in the mean scores was noted (t=-4.63, p=0.00) with students in the 2011-2012 group scoring significantly higher than those in the 2009-2011 group.

Several subscales were evaluated for significance to determine if the significant effect was associated with particular subscales.

<table>
<thead>
<tr>
<th>Client Needs Subscale</th>
<th>t</th>
<th>p value</th>
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</thead>
<tbody>
<tr>
<td>Client Needs Basic Care and Comfort</td>
<td>-1.181465955</td>
<td>NS</td>
</tr>
<tr>
<td>Client Needs Health Promotion &amp; Maintenance</td>
<td>-2.97012</td>
<td>0.00</td>
</tr>
<tr>
<td>Client Needs Mgmt of Care</td>
<td>-3.73599</td>
<td>0.00</td>
</tr>
<tr>
<td>Client Needs Pharm &amp; Parenteral Tx</td>
<td>-3.07555</td>
<td>0.00</td>
</tr>
<tr>
<td>Client Needs Physio Adaptation</td>
<td>-2.11652</td>
<td>0.04</td>
</tr>
<tr>
<td>Client Needs Physiological Integrity</td>
<td>-3.94314</td>
<td>0.00</td>
</tr>
<tr>
<td>Client Needs Psychosocial Integrity</td>
<td>-2.02231</td>
<td>NS</td>
</tr>
<tr>
<td>Client Needs Reduce Risk Potential</td>
<td>-3.24264</td>
<td>0.00</td>
</tr>
<tr>
<td>Client Needs Safe/Effective Environment</td>
<td>-3.35603</td>
<td>0.00</td>
</tr>
<tr>
<td>Client Needs Safety &amp; Infect Control</td>
<td>-3.10092</td>
<td>0.00</td>
</tr>
</tbody>
</table>
According to the most recent Town Hall meeting, the NCLEX pass rates showing 2010 79% and 2011 82% reflect the trend implied by the difference in the results compared from 2009 – 2011.

The following bar graphs demonstrate that students in the 2011-2012 groups had higher scores associated with all the NCLEX Category of Client Needs.

Examination of the Clients Needs Sub-categories of the HESI comparing cross sectional mean scores for 2009-2010 to 2011-2012.
Caution should be used in the interpretation of these results due to the combination of various versions of exams and the potential for intercollinearity due to students results being included in both groups.
Measurement of General Education Competencies
SON College has committed itself to the measurement and analysis of general learning competencies to improve overall student achievement and meet institutional goals. When faculty place emphasis on assessment of student learning, they are working toward Galen’s mission of helping students succeed. When students succeed, the institution demonstrates progress towards or achievement of its strategic goals.

SON College and its faculty have made a commitment to implement outcomes-based learning. Measuring the student's achievement of institution-wide, program, and course learning outcomes involves selecting the appropriate methods of assessment. At least four levels of assessment exist in the process of outcomes measurement. At the course level, course syllabi demonstrate clear, measurable course-level student outcomes that students meet in order to be successful in the course. Each course syllabus identifies the methods faculty use to assess achievement of the course outcomes/competencies. At this level of assessment, students who pass the course are the ones who have achieved the overall course outcomes specified in those classes. The other levels involve measurement of general student learning across courses, between courses, and at the program/institutional level.

After faculty determined the general education competencies and integrated them throughout the curriculum, a major task that remained was to establish a process for measuring general education outcomes (competencies) at a level higher than that of the course. Discussions in the various academic committees indicated that faculty members understood the need to measure outcomes to ensure achievement of institution-wide competencies. However, the challenge expressed by faculty members was determining the method and a reliable measure of outcome assessment across the curriculum.

To respond to this challenge, a pilot study was conducted with the faculty to identify valid and reliable instruments in the measurement of student learning at SON College. Several tools were examined for each outcome and feedback from faculty was collected via formal survey, informal correspondence, webinars, and faculty in-services. Holistic rubrics for the general learning outcomes were developed through an iterative process by repeated revision to the rubric based on feedback received from faculty. Currently, rubrics are in their fourth iteration.

At the same time, faculty addressed three sub-problems through formal survey. These research questions included:

1. What level of learning is occurring at different points across the current sequence of courses?
2. What percentage of students should achieve the level of learning?
3. What makes a good instrument for the measurement of quality in student learning?

Level of Learning
Based on faculty feedback, the following course grid (Illustration one) was created to identify student learning occurring across the curriculum. Introductory courses are noted in red, developmental courses are noted in yellow and accomplished/mastery courses are in green. All courses correspond to the competency it is proposed to contribute student learning.
The majority of faculty responding indicated acceptance of terminology to differentiate levels of learning achieved. Dr. Scheuermann recommends adoption of terms of Introductory Benchmark, Introductory Learning, Developing Learning, Accomplished Learning, & Mastery or vote to adopt similar language to show the levels of learning achieved in lieu of Introductory Benchmark, Introductory Learning, Developing Learning, Accomplished Learning, & Mastery.

<table>
<thead>
<tr>
<th>COMMUNICATION</th>
<th>INTRODUCTORY LEARNING</th>
<th>DEVELOPING LEARNING</th>
<th>ACCOMPLISHED LEARNING</th>
<th>MASTERED LEARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, BSL 111, BSL 113</td>
<td>BSL 121, HUM 102</td>
<td>NUR 280</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUANTITATIVE LITERACY</td>
<td>MAT 101, BSL 113</td>
<td>BSL 121, NUR 155, NUR 170, NUR 230, NUR 255</td>
<td>NUR 265, NUR 280</td>
<td></td>
</tr>
<tr>
<td>CULTURAL COMPETENCY</td>
<td>SOC 101, PSY 131</td>
<td>HUM 102</td>
<td>NUR 280</td>
<td></td>
</tr>
<tr>
<td>ETHICAL REASONING</td>
<td>CSC 103, ENG 101, BSL 113, NUR 170</td>
<td>HUM 102, NUR 230, NUR 255</td>
<td>NUR 265, NUR 280</td>
<td></td>
</tr>
<tr>
<td>CRITICAL THINKING</td>
<td>ENG 101, BSL 111, BSL 113, PSY 131, NUR 111, NUR 155, NUR 170, NUR 210</td>
<td>BSL 121, HUM 102, NUR 230, NUR 255</td>
<td>NUR 265, NUR 280</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No* Provide Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory</td>
<td>34 (87%)</td>
<td>5</td>
</tr>
<tr>
<td>Developing</td>
<td>36 (92%)</td>
<td>3</td>
</tr>
<tr>
<td>Accomplished</td>
<td>34 (87%)</td>
<td>5</td>
</tr>
<tr>
<td>Mastery</td>
<td>33 (89%)</td>
<td>4</td>
</tr>
</tbody>
</table>
Based on the results from the pilot study, several significant issues regarding the leveling of courses were noted with recommendations for process identified.

1. Within the faculty survey, inconsistent reporting of learning levels (Introductory, Developing, Accomplished, and Mastery) associated with courses occurred in responses from faculty teaching equivalent courses at different campuses. This finding indicated that faculty teaching the same course perceived their courses achieving different levels of learning. Dr. Scheuermann recommends determining a process to ensure consistent evaluations on the level of learning, possibly in the course meetings. This process should include all faculty conducting assessment of student learning to increase consistency in evaluation. This also reduces measurement error that may influence the overall response.

2. Dr. Scheuermann recommends conducting ongoing sessions designed to increase inter-rater reliability of student learning and use examples of learning artifacts obtained across courses as tools for rating. This should be an on-going faculty development opportunity.

Benchmark for learning level
Surveyed faculty recommended a benchmark of 80% as the percentage of students proposed to achieve the minimum level of learning associated with the course. For example, if the course is an introductory course, at least 80% of students will achieve the introductory level or 80% of all students within all introductory courses will achieve the introductory level. While this percentage is considered arbitrarily, the faculty agreed that setting a high achievement level serves as a demonstration of their commitment to student success.

Instruments to measure student learning
According to surveyed faculty, 92% of faculty expressed intention to measure competencies in their courses at the end of Quarter One 2012. The faculty expressing reservations will be offered additional faculty development to emphasize the benefits of measuring outcomes. Further, the faculty with reservations may have questions or issues that were not fully answered or investigated during this short pilot study. It is recommended that we provide support and consultation with individual faculty to examine resources needed to increase comfort with measurement.

The current rubrics (third iteration) under consideration by faculty are noted in Illustration two. These rubrics have undergone a fourth and final iteration, which will result in the final five rubrics to be used in formal measurement. An upcoming session is being planned to finalize the definitions of the achievement levels of measurement and train lead faculty to conduct future inter-rater sessions that will be provided for all faculty.
1. Competency Critical Thinking/Judgment is characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Introductory Benchmark (0%)</th>
<th>Introductory Learning (25%)</th>
<th>Developing Learning (50%)</th>
<th>Accomplished Learning (75%)</th>
<th>Mastery of Learning (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanations of Issues (20% Weighting)</td>
<td>0 percent</td>
<td>5 percent</td>
<td>10 percent</td>
<td>15 percent</td>
<td>20 percent</td>
</tr>
</tbody>
</table>
| Does not achieve introductory benchmark                                 | Does not achieve introductory benchmark
| Student's issue/problem is stated without clarification or clear description of the issue being decided. | Student provides information taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question. | Student's issue/problem is stated but description leaves some terms undefined, ambiguities unexplored, and boundaries undetermined, and/or backgrounds unknown. | Student's issue/problem is stated, described, and clarified so that understanding is not seriously impeded by omissions in their explanation. | Student's issue/problem is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding. |

| Using evidence to investigate a point of view or conclusion. (20% Weighting) |
|-------------------------------------------------------------------------|-----------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|
| Does not achieve introductory benchmark                                 | Does not achieve introductory benchmark
| Student's issue/problem is stated without clarification or clear description of the issue being decided. | Student provides information taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question. | Student's issue/problem is stated but description leaves some terms undefined, ambiguities unexplored, and boundaries undetermined, and/or backgrounds unknown. | Student's issue/problem is stated, described, and clarified so that understanding is not seriously impeded by omissions in their explanation. | Student's issue/problem is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding. |

| Influence of context and assumptions (20% Weighting)                     | 0 percent                   | 5 percent                   | 10 percent                | 15 percent                  | 20 percent                |
| Does not achieve introductory benchmark                                 | Does not achieve introductory benchmark
| Student shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position. | Student questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa). | Student identifies own and others' assumptions and argues several relevant contexts when presenting a position. | Student thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position. |

| Student's position including their perspective based on their experience. (20% Weighting) |
|-------------------------------------------------------------------------|-----------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|
| Does not achieve introductory benchmark                                 | Does not achieve introductory benchmark
| Student's specific position is stated, but is simplistic and obvious. | Student's conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly. | Student's conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly. | Student's specific position is imaginative, taking into account the complexities of an issue. Limits of position are acknowledged. Others' points of view are synthesized within position. |

| Conclusions, Implications and Consequences (20% Weighting)               | 0 percent                   | 5 percent                   | 10 percent                | 15 percent                  | 20 percent                |
| Does not achieve introductory benchmark                                 | Does not achieve introductory benchmark
| Student's conclusion is inconsistently tied to some of the information discussed; related outcomes are oversimplified. | Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/concepts but does not respond to them. | Student states a position and can state the objections to, assumptions and implications of, and respond to the objections to, assumptions and implications of different ethical perspectives/concepts, but the student's response is inadequate. | Student's conclusions and related outcomes are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order. |
2. Competency: Cultural Competency is a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Achievement Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introductory Benchmark (0%)</td>
</tr>
<tr>
<td>Culture &amp; Self Awareness (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
<tr>
<td>Knowledge of Cultural Frameworks (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
<tr>
<td>Empathy (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
<tr>
<td>Verbal and nonverbal communication (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
</tbody>
</table>
| Attitudes (20% Weighting) | 0 percent Does not achieve introductory benchmark | 5 percent Student is minimally receptive to learning more about other cultures or is unaware of own judgment. | 10 percent Student asks simple or surface questions about other cultures. Expresses openness to most, if not all, interactions with culturally different others. Has difficulty suspending any interaction. | 15 percent Student asks deeper questions about other cultures and seeks out answers to these questions. Begins to initiate and develop interactions with culturally different others. | 20 percent Student’s asks complex questions about other cultures, seeks out and articulates answers to these questions that reflect multiple cultural perspectives. Initiates and develops
3. Competency: Ethical Reasoning is reasoning about right or wrong human conduct. Ethical reasoning evolves as students have decision-making experiences with ethical issues.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Introductory Benchmark (0%)</th>
<th>Introductory Learning (25%)</th>
<th>Developing Learning (50%)</th>
<th>Accomplished Learning (75%)</th>
<th>Mastery of Learning (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethical Self Awareness</strong> (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student states their core beliefs or writes about their core beliefs but not the origin of them.</td>
<td>10 percent Student states both core beliefs and the origins of the core beliefs.</td>
<td>15 percent Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.</td>
<td>20 percent Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.</td>
</tr>
<tr>
<td><strong>Understanding Different Ethical Perspectives/Concepts</strong> (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student is aware ethical theories exist or can name a major theory.</td>
<td>10 percent Student can name a major ethical theory and is able to present the gist of the named theory.</td>
<td>15 percent Student can name a major theory or theories, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used in context of the discipline, but has some inaccuracies.</td>
<td>20 percent Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross-relationships among the issues.</td>
</tr>
<tr>
<td><strong>Ethical Issue Recognition</strong> (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.</td>
<td>10 percent Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.</td>
<td>15 percent Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross-relationships among the issues.</td>
<td>20 percent Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross-relationships among the issues.</td>
</tr>
<tr>
<td><strong>Application of Ethical Perspectives/Concepts</strong> (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student can apply ethical perspectives/concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/concepts independently (to a new example.).</td>
<td>10 percent Student can apply ethical perspectives/concepts to an ethical question, independently (to a new example) but the application is inaccurate.</td>
<td>15 percent Student can independently apply ethical perspectives/concepts to an ethical question, accurately, but does not consider the specific implications of the application.</td>
<td>20 percent Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.</td>
</tr>
<tr>
<td><strong>Evaluation of Different Ethical Perspectives/Concepts</strong> (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student states a position but cannot state the objections to, assumptions of, or limitations of the different perspectives/concepts.</td>
<td>10 percent Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/concepts but does not respond to them (and ultimately</td>
<td>15 percent Student states a position and can state the objections, implications, and response to different ethical perspectives/concepts, but the student's response is inadequate.</td>
<td>20 percent Student states a position and can state the objections to, assumptions and implications of and can reasonably defend their position. The student's defense is adequate and effective.</td>
</tr>
</tbody>
</table>
4. Competency: Oral and Written Communication is the development and expression of ideas orally and in writing.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Introductory Benchmark (0%)</th>
<th>Introductory Learning (25%)</th>
<th>Developing Learning (50%)</th>
<th>Accomplished Learning (75%)</th>
<th>Mastery of Learning (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Development of Writing or Presentation (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (This includes expectations of instructor or others as an audience).</td>
<td>10 percent Student demonstrates awareness of context, audience, and purpose. Begins to show awareness of reader or audience's perceptions and assumptions of content.</td>
<td>15 percent Student demonstrates adequate consideration of context, audience, and purpose. Student has a clear focus on the assigned task(s).</td>
<td>20 percent Student demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.</td>
</tr>
<tr>
<td>Sources and Evidence (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student demonstrates an attempt to use sources to support ideas in general and discipline writing.</td>
<td>10 percent Student demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for general learning, the nursing discipline and genre of the writing.</td>
<td>15 percent Student demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.</td>
<td>20 percent Student demonstrates skillful use of high-quality, credible, relevant sources (scholarly) to develop ideas that are appropriate for the discipline and genre of the writing.</td>
</tr>
<tr>
<td>Control of Syntax and Mechanics of Writing or Presentation (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student writes or uses language that sometimes impedes meaning because of errors in usage.</td>
<td>10 percent Student writes or uses language that generally conveys meaning to readers or audience with clarity, although writing or details may include some errors.</td>
<td>15 percent Student writes or uses straightforward language that generally conveys meaning to readers or their audience. The language in the portfolio or presentation has few errors.</td>
<td>20 percent Student uses graceful language or presents skillfully to readers or audience with clarity and fluency, and is virtually error-free.</td>
</tr>
<tr>
<td>Central Message (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Central message can be deduced, but is not explicitly stated in the writing or presentation.</td>
<td>10 percent Central message is basically understandable but is not often repeated and is not memorable.</td>
<td>15 percent Central message is clear and consistent with the supporting material.</td>
<td>20 percent Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)</td>
</tr>
<tr>
<td>Delivery (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
<td>5 percent Student's writing (language, use of words) or delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the writing or presentation. For presentations, speaker appears uncomfortable.</td>
<td>10 percent Student's writing or delivery techniques make the paper or presentation understandable to the reader or audience.</td>
<td>15 percent Student's writing or delivery techniques make the paper or presentation interesting. Speaker appears comfortable.</td>
<td>20 percent Student's writing and delivery techniques make the paper or presentation compelling. Speaker appears polished and confident.</td>
</tr>
</tbody>
</table>
5. Competency: Quantitative Literacy is competency and comfort in working with numerical data including tables, graphs, mathematical equations, etc., as appropriate.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Achievement Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introductory Benchmark (0%)</td>
</tr>
<tr>
<td>Communication of Mathematical Language (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
<tr>
<td>Application/Analysis of Quantitative Measures (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
<tr>
<td>Mathematical Calculation (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
<tr>
<td>Units of Measure Conversions (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
<tr>
<td>Interpretation and Presentation of Mathematical Results (20% Weighting)</td>
<td>0 percent Does not achieve introductory benchmark</td>
</tr>
</tbody>
</table>

Reference: www.aacu.org
Measurement of Student Learning - 2010-2011
“Nursing courses in the curriculum are aligned to the institutional and program outcomes, and they are developed with intention to measure those outcomes.”

The Division of Nursing has identified the following nursing related learning outcomes. Lindsey Wilson Nursing Students will:

1. Apply evidence-based knowledge from nursing theories and research, and concepts from liberal education, including the humanities and behavioral, mathematical, natural and physical sciences into the practice of professional nursing.
2. Use critical thinking skills in decision-making and effective oral and written communication in the application of the nursing process to individuals, families, groups, and communities.
3. Demonstrate leadership and management skills in the practice of professional nursing.
4. Implement teaching plans appropriate to the developmental and learning needs of diverse clients, groups, and communities.
5. Apply the nursing process to assess internal and external factors influencing patient health.
7. Demonstrate a commitment to professional growth and improvement (life-long learning).

Within our theoretical mapping, the courses are developed according to the cognitive level of the student learning expected; the program is aligned to the ESLO; and then each student's signature work and progress are evaluated using the selected rubric to measure their achievement. This learning is measured at the institutional level and coded in one of five levels: Benchmark-0, Benchmark-1, Milestone-2, Milestone-3, and Capstone-4. The student also receives a letter grade in the course, using the nursing division's grading scale, that is indicative of their individual accomplishments and learning in the course. The Division of Nursing implemented measurement of these student-learning outcomes in the spring of 2011.

Measurement of Institutional and Nursing Program Student Learning Outcomes is conducted using rubrics created by the American Association of Colleges and Universities. Fourteen rubrics are available for faculty to evaluate achievement of student learning at the course, program or institutional level within the Division of Nursing.

LINDSEY WILSON COLLEGE - PROGRAM OF NURSING RUBRICS FOR MEASUREMENT OF STUDENT LEARNING OUTCOMES:
1 Measured by Written Communication VALUE Rubric
2 Measured by Oral Communication VALUE Rubric
3 Measured by Quantitative Literacy VALUE Rubric
4 Measured by Information Literacy VALUE Rubric
5 Measured by Creative Thinking VALUE Rubric
6 Measured by Inquiry and Analysis VALUE Rubric
7 Measured by Intercultural Knowledge and Competence Rubric
8 Measured by Ethical Reasoning Rubric
9 Measured by Integrative and Applied Learning VALUE Rubric
10 Measured by Critical Thinking VALUE Rubric
11 Measured by Teamwork VALUE Rubric
12 Measured by Foundations and skills for life-long learning Rubric
13 Measured by Civic Knowledge and engagement Rubric
14 Measured by Problem Solving VALUE Rubric
MEASUREMENT OF STUDENT LEARNING: Creative Thinking

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.

MEASURED IN SOPHOMORE NURS 2024 SPRING 2011

BENCHMARK 1

Model: Successfully reproduces an appropriate exemplar.

Stays strictly within the guidelines of the assignment.

Only a single approach is considered and is used to solve the problem.

Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.

Reformulates a collection of available ideas.

Recognizes existing connections among ideas or solutions.
Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions. Students’ ethical self-identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

MEASURED IN SOPHOMORE NURS 2024 SPRING 2011

BENCHMARK 1
Student states either their core beliefs or articulates the origins of the core beliefs but not both.
Student only names the major theory she/he uses.
Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.
Student can apply ethical perspectives/concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/concepts independently (to a new example).
Student states a position but cannot state the objections to and assumptions and limitations of the different perspectives/concepts.
Student states either their core beliefs or articulates the origins of the core beliefs but not both.
Integrative learning is an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.

**MEASURED IN SOPHOMORE NURS 2024 SPRING 2011**

**BENCHMARK 1**

**Identifies** connections between life experiences and those academic texts and ideas **perceived as similar and related** to own interests.

When prompted, presents examples, facts, or theories from more than one field of study or perspective.

Uses, in a basic way, skills, abilities, theories, or methodologies gained in one situation **in a new situation**.

Fulfills the assignment(s) (i.e. to produce an essay, a poster, a video, a PowerPoint presentation, etc.) **in an appropriate form**.

Describes own performances with general descriptors of success and failure.

**Identifies** connections between life experiences and those academic texts and ideas **perceived as similar and related** to own interests.
Quantitative Literacy (QL) — also known as Numeracy or Quantitative Reasoning (QR) — is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

MEASURED IN SOPHOMORE NURS 2013 SPRING 2011

BENCHMARK 0
Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. For example, attempts to explain the trend data shown in a graph, but will frequently misinterpret the nature of that trend, perhaps by confusing positive and negative trends.

Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.

Calculations are attempted but are both unsuccessful and are not comprehensive.

Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.

Attempts to describe assumptions.

Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as "many," "few," "increasing," "small," and the like in place of actual quantities.)
### Lindsey Wilson College Student Learning Outcomes Measured

1. Develop effective skills of inquiry and analysis
   - Quantitative literacy
   - Creative inquiry

2. Learn to apply and integrate knowledge
   - Application and reflection on content and connections within disciplines
   - Integration of knowledge across disciplines
   - Application of learning to new situations within and beyond the campus

3. Become culturally aware, engaged citizens of the nation and the world
   - Knowledge of local and global issues and trends
   - Knowledge of own culture and cultural patterns of diverse groups and society
   - Competence to communicate across cultural and linguistic boundaries
   - Knowledge and skills required for ethical reasoning

### Division of Nursing Student Learning Outcomes Measured

1. Use critical thinking skills in decision-making and effective oral and written communication in the application of the nursing process to individuals, families, groups, and communities.

2. Apply evidence-based knowledge from nursing theories and research, and concepts from liberal education, including the humanities and behavioral, mathematical, natural, and physical sciences into the practice of professional nursing.

3. Demonstrate a commitment to professional growth and improvement (life-long learning).

### Achievement of Student Learning in Nursing Courses Measured at Completion of Spring 2011 Semester

<table>
<thead>
<tr>
<th>Benchmark 0</th>
<th>Benchmark 1</th>
<th>Milestone 2</th>
<th>Milestone 3</th>
<th>Capstone</th>
</tr>
</thead>
</table>
Average Grade: 89

Bi Modal Distribution

Median: 89.5