TRANSITION TO ACADEMIA

A toolkit prepared by the Texas Team
INTRODUCTION

The nursing shortage in Texas continues to be a growing problem. The COVID-19 pandemic has prompted nurses to consider leaving the profession, further contributing to the nursing shortage. With its growing population and estimated retirements for nurses, Texas is expected to have a deficit of 57,000 nurses by 2032.¹ This shortage is exacerbated by a shortage in nursing faculty. In 2021, the Texas nursing faculty vacancy rate was 6.9%, the highest faculty vacancy rate since 2015—compared to a national vacancy rate of 7.2%—and turnover rates for nursing faculty are 14.1%.²³ Ref 1 2015—compared to a national vacancy rate of 7.2%—and turnover rates for nursing faculty are 14.1%.⁴⁵

Ref 1 Texas Center for Nursing Workforce Studies Texas Professional Nursing Trends: Statewide
Ref 2 https://www.dshs.texas.gov/chs/cnws/NEPIS/2021/2021_RN_FacultyDemographics.pdf
Ref 3 https://www.aacnnursing.org/News-Information/Fact-Sheets/Nursing-Faculty-Shortage

Transitioning from clinical practice to academia can be daunting and challenging. Before making such a shift, nurses need to carefully consider this shift and understand the responsibilities involved in faculty positions.

Texas Team is invested in helping nurses make the change to join the ranks of nursing faculty to educate future generations of nurses. Increasing the number of nursing faculty, especially those with diverse backgrounds and experiences, will help address the nursing shortage and ensure Texans continue to have access to care. This toolkit will not only help nurses understand how to shift to academia, how to translate clinical skills into classroom strategies, and how to use the latest tools to be a successful educator, but also provides tools for experienced undergraduate and graduate faculty to strengthen and revise curricular content. Additionally, for those nurse educators who may be preparing to take the Certified Nurse Educator exam, this site is useful as a review.

¹ Texas Center for Nursing Workforce Studies. Nurse Supply and Demand Projections, 2015-2030.
² Texas Center for Nursing Workforce Studies. (2017). Faculty demographics in professional nursing programs.
⁴ Texas Center for Nursing Workforce Studies. (2017). Faculty demographics in professional nursing programs.
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GETTING STARTED RESOURCES

FACULTY TOOLKITS

A good place to start when evaluating the transition to academia, these free online toolkits provide information on teaching and fitting into a new faculty role, whether entering education programs as new faculty or developing or revising curricula as experienced faculty. The sites include guidelines, reports, and resources curated by experienced nurses from a variety of respected nursing organizations.

American Association of Colleges of Nursing
• Graduate Nursing Student Academy: For graduate students preparing for faculty careers
• Transitioning Clinical Faculty: Faculty role responsibilities

American Psychiatric Nurses Association: For teaching undergraduate psychiatric-mental health nursing

National League of Nursing: Faculty toolkits on nurse education, curriculum design, and inclusion

TEACHING ORGANIZATIONS

Organizations

Centers for Medicare and Medicaid Services Innovation Center

Agency for Healthcare Research and Quality: Offers students access to case studies and safety content

Quality and Safety Education for Nurses

Online Resources

Top Nine Ways to Implement IPE in your nursing curriculum

Campaign for Action: Future of Nursing: Co-sponsored by the Robert Wood Johnson Foundation and American Association of Retired Persons. Read Transforming Nursing Education
Books

**Educating Nurses: A Call for Radical Transformation**

**Nurse as Educator: Principles of Teaching and Learning for Nursing Practice**

**Innovative Teaching Strategies in Nursing**

**Evidence-Based Teaching in Nursing: A Foundation for Educators**

**Clinical Teaching Strategies in Nursing**

**The New Leadership Challenge: Creating the Future of Nursing**

**Curriculum Development in Nursing Education**

**Curriculum Development and Evaluation in Nursing**

**The Scope of Practice of Academic Clinical Nurse Educator**

**A Systematic Approach to Assessment and Evaluation of Nursing Programs**

**Teaching in Nursing and Role of The Educator**

**The Legal, Professional, and Ethical Dimensions of Higher Education**

**Certified Nurse Educator Review**

**Enhancing Learning through Formative Assessment and Feedback**

**Online Teaching at its Best**

PROFESSIONAL DEVELOPMENT

National League of Nursing Professional Development Site

- Certification for nurse educators Certification for academic clinical nurse educators
- Academic Novice Educator
- Interprofessional education tools and skills

AACN Career Center

The Certified Healthcare Simulation Educator (CHSE) certification

National Education Progression in Nursing Collaborative

Quality Matters (QM)
ORGANIZATIONS THAT SUPPORT NURSE EDUCATORS

- National League for Nursing: Supports nursing education from licensed vocational nurses to doctorates
- American Association of Colleges of Nursing: Memberships for faculty and schools of nursing offering a Baccalaureate or higher degree with many faculty resources and communication boards
- Organization for Associate Degree Nursing
- Sigma Theta Tau International Honor Society for Nursing: Tools for faculty, leadership in academia
- Patient Safety Organizations: From Quality and Safety Education for Nurses website

NURSE EDUCATOR COMPETENCIES

New faculty should become familiar with the competencies that will be expected of them. These resources can help with transition to academia and understanding educator responsibilities in educating new nurses to respond to the health needs of populations they serve.

The National League for Nursing (NLN) has an accredited Academic Nurse Educator Certification Program, which solidifies nursing education as a specialty area of practice and allows faculty an opportunity to show their expertise and become a Certified Nurse Educator (CNE) or Certified Academic Clinical Nurse Educator (CNEcl). Visit the NLN website to learn about eligibility, registration, renewal, FAQs, fees, exam prep (including test blueprint, reference list, self-assessment exam), and access the handbooks. The CNE exam was first piloted in 2005, and the CNEcl started in 2018.

- NLN’s Nurse Educator Core Competencies
- The Essentials: Core Competencies for Professional Nursing Education
- WHO’s Nurse Educator Core Competencies

RESOURCES

- Faculty Toolkit for Innovation in Curriculum Design, National League for Nursing
- Teaching in nursing: A guide for faculty
- Preparation of academic nurse educators
- Nurse to educator? Academic roles and the formation of personal academic identities
- National League for Nursing
  - Nurse educator competencies: Creating an evidence-based practice for nurse educators
- **NLN core competencies for nurse educators: A decade of influence**
- **Clinical nurse educator competencies: Creating an evidence-based practice for academic clinical nurse educators**

**Core competencies of nurse educators: inspiring excellence in nurse educator practice**

**Transition from expert clinician to novice faculty: A blueprint for success**

**Critical reflective teaching practice for novice nurse educators**

**Developing competencies in the novice nurse educator: An integrative review**

**Certified Nurse Educator review book: The official NLN guide to the CNE exam**

### DIVERSITY, EQUITY, AND INCLUSION

As society becomes increasingly more diverse, student populations have charted the path to health care diversity and equity. Diversity in nursing is essential. Increased diversity demonstrates a link between healthcare workforce advocacy and improved quality of care.

To promote equity and diversity in nursing education, nurse educators must begin with self-awareness. One must acknowledge diversity, equity, and inclusion within oneself to understand how identification with a particular group experiences life differently because of social groupings. Nurse educators must acknowledge personal biases and seek to understand students with different experiences. According to the National League for Nursing, the idea of diversity encompasses race, ethnicity, gender, sexual orientation and gender identity, socio-economic status, age, physical abilities, religious beliefs, or political beliefs. Nurse educators hold the key to making safe and equitable decisions for all patient populations, nursing students, and educators of all backgrounds.

**Education & Scholarship Strategies and Tools**

Education and Scholarship focuses on the academic core and the scholarly focus of a school of nursing. As a discipline, the center of nursing’s focus is the whole person (body, mind, and spirit) with the influence of the environment on an individual’s health and recovery being of utmost importance.

[American Association of Colleges of Nursing Inclusive Teaching Strategies](#)
In the past few decades, technology has rapidly advanced. Nurses use technology daily in practice settings, and college classrooms have incorporated technology to maintain student interest and engagement. Nursing faculty will have a large amount of technology at their disposal to shape their courses and content delivery. Nurses transitioning to education may find the following books useful:

- **Teaching in Nursing: A Guide for Faculty**
- **Integrating technology in nursing education: Tools for the knowledge era**
- **Essentials of Nursing Informatics, 7th Ed.**
- **Telehealth Essentials for Advanced Practice Nursing**

### LECTURE RESOURCES

Nurse educators often use a variety of technology to keep students engaged and teach effectively.

- Educational technology
- Interactive whiteboards
- Data visualization with Tableau

Learn how to make classroom time more interactive and enjoyable:

- How to create a PowerPoint presentation
- How to use Prezi
- How to use classroom Clickers
- How to use Voicethread
Learning Management Systems—or LMSs—allow for courses to be delivered online in a contained password-protected system. Here are two of the major systems used by many universities today.

1. **Canvas:** You can create a free Canvas account to see how this system is set up.
2. **Blackboard:** You can try Blackboard for free also.

**Boardmax,** like Canvas and Blackboard, allows educators to create online sites for meeting tools and storage. Agenda, handouts, votes, and policy changes can all be saved in a cloud for those who have access to view and use.

Videoconferencing software is used for many online and site-based programs. **Zoom** is a commonly used software that can integrate with other existing programs. Microsoft Teams, a collaborative and video conferencing platform, may be available in your organization for use by faculty, staff, and students. The **University of Washington** has more information for teaching online.

**WRITING RESOURCES**

The **Publication Manual of the American Psychological Association, Seventh Edition,** outlines APA Style, the favored style for nursing, social and behavioral sciences, natural sciences, and other fields. The manual describes how to format papers, headings, tables, figures, and helps students understand the ethics of authorship.

The **Purdue OWL writing center** is a great site to share with students so they can improve their writing skills and reference how to use APA formatting. Students can also use **Grammarly** for free grammar and sentence structure checks.

**Plagiarism software** for checking student papers can be free, or your school may purchase a product.
OTHER DIGITAL RESOURCES

Qualtrics allows you to create quick online surveys. Students, educators, and nurses have several mobile apps at their disposal.

Teaching students to use electronic health records can be challenging. Three software options help students train on the software and prepare to use them in clinical settings: Lippincott DocuCare, EHR Tutor, and SimChart.

SIMULATION

Nearly every nursing program in Texas uses simulation to prepare students for clinical practice. Simulation allows students to practice hands-on skills and develop abilities to make clinical judgments in a safe environment, but many schools face challenges with providing simulation due to a lack of faculty training, administrative support, or budget. The Board of Nursing has prepared a guide to help nursing schools and faculty.

*This guideline will help faculty as they reassess the clinical learning experiences in their programs and modify the clinical instructional strategies in nursing skills and simulation laboratories as well as in patient care settings. Rules 215 include simulation among the types of clinical learning experiences used in nursing education programs.*

The NLN partnered with Laerdal Medical to help nursing faculty use simulation effectively. They have built a community of educators who work together to advance simulation. The Simulation Innovation Resource Center was developed by a group of nine simulation experts from various educational institutions and locations. The courses help nursing faculty design, implement, and evaluate simulations used in nursing education.

The National Council of State Boards of Nursing (NCSBN) has also prepared National Simulation Guidelines for Prelicensure Nursing Programs.

*Simulation is a pedagogy that may be integrated across the pre-licensure curriculum; however, nursing education programs are advised to begin slowly and steadily increase the amount of simulation as they acquire expertise in this pedagogy ... If*
students are going to be placed in clinical settings where there is inadequate opportunity for hands-on experience, employment of simulation by capable faculty with meaningful debriefing may offer a better alternative.

The International Nursing Association for Clinical Simulation and Learning (INACSL) has developed the INACSL Standards of Best Practice: Simulation for schools and educators. These standards cover the science of simulation, best practices, and evidence-based guidelines for implementation and training.

Adoption of the INACSL Standards of Best Practice: Simulation demonstrate[s] a commitment to quality and implementation of rigorous evidence-based practices in healthcare education to improve patient care by complying with practice standards.

The University of Washington has a resource for learning to teach with simulation.
CLASSROOM STRATEGIES TO INCREASE ENGAGEMENT

With patient care and hospital industries evolving so quickly, nursing education and classroom learning styles should adapt and grow as well. Many educators feel they must stick to a singular approach of teaching concepts and theories or the “old school” way. While that approach still has its place, implementing active learning strategies in nursing education will better engage students.

Active learning means course material should be supplemented with practicing, experiencing, and learning to support deeper understanding of course content. Using active learning strategies helps prepare students for the complex nature of working in health care. In clinical settings, nurses must often communicate effectively with multiple departments using different technologies. Sometimes this communication occurs during difficult care situations and can add extra stress for the nurse.

Here are 11 Active Learning Strategies for the nursing classroom to prepare students for the workforce.

Educators who use active learning strategies in their nursing programs can teach a variety of learners: visual learners, auditory learners, tactile learners, and yes, even those learners who have difficulty remaining seated. But what is more, students can learn in a way that most closely simulates real, on-the-job nursing situations, making for a more seamless transition into the workforce.

Some of these strategies are simple, such as assigning pre-class work or reviewing case studies and National Council Licensure Examination (NCLEX) practice questions. Here are some of the more unique strategies:

• Brain Drain: Have students shout out five to ten terms related to that day’s concept or lesson. Walk through each term, erasing as you go along.
• Mystery in a Box: Place boxes around the classroom with items or pictures. Have students use those boxes to build a patient story and then brainstorm treatment as a class.
• Gallery walk: Place pictures and artifacts connected to the lesson around the classroom. In small groups, students should identify each item and its relevance to the concept of the day.
RESOURCES

Engaging students with visual stories: Using infographics in nursing education

Strategies for sustaining and enhancing nursing students’ engagement in academic and clinical settings: a narrative review

Students, take out your phones

Using gaming as an active teaching strategy in nursing education

A Scoping View of Effective Teaching Strategies Vs Learning Dynamics in Nursing Education

Toolbox of teaching strategies in nurse education

Introducing a flipped classroom in a pharmacology course

AACN Faculty Toolkit Diversity, Equity & Inclusion

Eleven Active Learning Strategies to Engage Active Learning

Can a Flipped Classroom Enhance Class Engagement and Academic Performance?

Nursing Student Engagement: Taking a Closer Look

Iowa State University Learning Technologies/Engaging Students

Implementation of active learning methods by nurse educators BMC Nursing

Strategies for sustaining and enhancing nursing students’ engagement: academic & clinical settings

Ten active learning exercises to engage students and stimulate learning

KeithRN What Active Learning Strategy Best Prepares Students for Practice?

Using TikTok as an Active Learning Strategy

Nursing Student Engagement: Student, Classroom and Clinical

CLINICAL JUDGMENT

The nursing process is foundational to developing critical thinking skills and abilities that support safe and effective clinical judgments. Learning activities that teach critical thinking support acquisition of skills, knowledge, and abilities that drive clinical decision-making to reach effective and safe patient outcomes. Such activities must be intentional and continuous throughout the nursing education program and imbedded in classroom, lab, simulation, and clinical learning experiences.

Clinical Judgment in today’s health care environment is complex with multiple data sources generated by technology and practice parameters. Nurses must be able to discern the facts and
data to guide thinking that will result in the determination of patient problems and needs. Interventions must focus on safety and best practices. Critical thinking supports communication effectiveness which is imperative among team members, patients and families. Nursing students must learn and practice communication skills that are applicable to a variety of settings with diverse populations.

Critical thinking strategies should be normative in the learning environment and recognized as a valued skill and ability that supports safe nursing practice.

The nurse educator must be knowledgeable about critical thinking concepts and develop expertise in guiding the learner to employ critical thinking behaviors as a component of nursing care planning and delivery.

**Strategies to consider include:**

Enable learners to discuss, identify, and apply critical thinking concepts throughout the nursing learning experience.

Infuse curricula with identifiable activities that lead the learner to gain exposure to critical thinking concepts and practices and support learner proficiency.

Encourage learners to explore thoughts, feelings, ideas, and attitudes that impact clinical judgements and decision making.

- Create learning environments that support inquiry, self-direction, effective communication, and team building.
- Develop dynamic learning activities that foster exchange of ideas, creativity, and innovation.

**Activities to consider:**

- Assign readings and research that focus on best practices, critical thinking acquisition, and the importance of critical thinking behaviors to safe nursing practice.
- Have learners identify and discuss their practices that demonstrate the application of critical thinking concepts.
- As a part of case reviews, learners identify data elements nurses need to consider for plan development and implementation including rationales for data elements chosen.
Use learning activities and simulations that require students to provide rationales for actions and show the importance of such actions to safe nursing practice.

Develop written assignments that have students identify and describe their thoughts and the thinking that leads to nursing diagnosis development, care plan development, and nursing actions with inclusion of expected outcomes.

Create clinical assignments that require students to identify previous experiences that demonstrate application of critical thinking techniques resulting in effective patient outcomes.

During evaluation activities, learners identify areas of confidence and areas needing growth in terms of critical thinking.

Assist students in developing a growth plan for improved skill acquisition in applying critical thinking concepts.

Learners identify activities or experiences that support critical thinking knowledge.

In clinical learning activities, include development of reporting for assigned patients where the student provides rationales for information reported.

Students describe key data that must be reported to oncoming staff with rationales.

Review and discuss physical data such as lab reports and physical assessment findings to provide opportunities for learners to identify important data elements in care planning, care delivery, medication administration, reporting, and record documentation.

**Concept mapping** is a popular and effective method for students to learn critical thinking skills. Concept maps may be used in classroom exercises or as individual student activities associated with patient care assignments. Concept maps provide visual depictions of essential ideas and linkages. Learners use and organize knowledge gleaned from various sources to learn how to think in complex ways instead of in a linear fashion. Binoy and Raddi (2022) provide an excellent discussion on the use of concept maps that includes examples and ideas for integration into nursing courses.

**Concept Mapping: Enhance Critical Thinking in Nursing Students**

**RESOURCES**

- An Update on Clinical Judgement in Nursing and Implications for Education, Practice, and Regulation
- Clinical Judgement and Next Generation NCLEXR - A Positive Direction for Nursing Education
- Comparison of the effectiveness of two styles of case-based learning implemented in lectures for developing nursing students critical thinking ability
- Improving Nursing Care Through Critical Judgement: Education and Assessment Among Entry Level Practitioners
Integrating the National Council of State Boards of Nursing Clinical Judgment Model into Nursing Educational Frameworks

Fundamentals of Nursing, 11th Edition

Measurement of critical thinking clinical reasoning and clinical judgment in culturally diverse nursing students-A literature review

NCSBN Clinical Judgment Measurement Model | NCSBN

Patient Safety and Quality: An Evidence-Based Handbook for Nurses Chapter 6 Clinical Reasoning, Decision Making, and Action: Thinking Critically and Clinically

Strategies used for the Promotion of Critical Thinking in Nursing Undergraduate Education A Systematic Review.pdf

The Effect of Concept Maps on Undergraduate Nursing Students Critical Thinking.pdf

The effect of critical thinking education on nursing students problem-solving skills.pdf

The Impact of Critical Thinking on Clinical Judgement During Simulation with Senior Nursing Students.pdf

The use of the Socratic inquiry to facilitate critical thinking in nursing education | Makhene | Health SA Gesondheid

Thinking_Like_a_Nurse_A_Research-Based_Model_of_Clinical_Judgment_in_Nursing

Using Experiential Learning in Escape Rooms to Deliver Policies and Procedures in Academic and Acute Care Settings.pdf

ACCREDITATION

There are three professional nursing education accrediting bodies.

National League for Nursing Commission on Nursing Education Accreditation (CNEA)

The NLN’s accreditation services, represented by the NLN Commission for Nursing Education Accreditation, promotes excellence and integrity in nursing education globally through an accreditation process that respects the diversity of program mission, curricula, students, and faculty; emphasizes a culture of continuous quality improvement; and influences the preparation of a caring and competent nursing workforce. CNEA carries out its accreditation activities guided by the National League for Nursing’s core values—caring, diversity, integrity, and excellence—as applied to the accreditation process.
Commission on Collegiate Nursing Education (CCNE)

Officially recognized by the U.S. Secretary of Education as a national accreditation agency, the Commission on Collegiate Nursing Education is an autonomous accrediting agency, contributing to the improvement of the public's health. CCNE ensures the quality and integrity of baccalaureate, graduate, and residency programs in nursing.

Accreditation Commission for Education in Nursing (ACEN)

The Accreditation Commission for Education in Nursing is the oldest nursing education accreditor, which provides specialized accreditations for all levels of nursing education and transition-to-practice programs. ACEN strives to support nursing education, nursing practice, and the public by recognizing that nursing programs have met a set of standards designed to ensure the delivery of quality education.

Southern Association of Colleges and School Commission on Colleges (SACSCOC): SACSCOC is the accrediting body for regional accreditation of degree granting institutions and accredits the entire college or university.

The Southern Association of Colleges and Schools Commission on Colleges is the regional body for the accreditation of degree-granting higher education institutions in the Southern states. It serves as the common denominator of shared values and practices among the diverse institutions in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and Latin America and other international sites approved by the SACSCOC Board of Trustees that award associate, baccalaureate, master’s, or doctoral degrees. The Commission also accepts applications from other international institutions of higher education.

The National Council of State Boards of Nursing is not an accrediting agency but is a resource for exemplars in nursing education guidelines and regulatory guidelines.

Texas Board of Nursing

Current Texas Board of Nursing Rules and Regulations Relating to Nurse Education, Licensure, and Practice
TESTING AND EVALUATION

Testing and evaluation are critical components of the nursing education process. One of the methods of evaluation used most often for didactic (theory) courses is testing. The suggestions below apply to examinations and assessments used for nursing courses leading to initial licensure as a registered nurse.

Most major exams throughout the nursing curriculum follow formats commonly used in the National Council Licensure Examination (NCLEX-RN). This is because students need to learn to answer the types of questions, they will encounter on the licensing exam. Faculty guidance for test preparation will be provided by the department chair. Seasoned faculty who have honed their test construction skills are a great resource to newcomers in education. Writing test items and developing examinations are skills learned over time. Be patient with yourself!

When giving nursing examinations, test questions and exams themselves must be valid and reliable. Item writing is not a skill used in practice—nor addressed in graduate nursing programs unless it is a program in nursing education—and takes a while for new faculty to develop. This information will help a new faculty member to get started.

Kranz et al. (2019) provide an excellent guide to item writing for clinical nurses transitioning to education. The authors suggest using a three-step process to develop a high-quality multiple-choice question: Planning, item development, and review and proofing. Practical tips for applying the three-step process are discussed.

How to write a good test question: Nine tips for novice nurse educators

BLOOM’S TAXONOMY

Educational taxonomies, such as Bloom’s taxonomy, are used by educators to develop outcomes for the nursing program, courses, and more narrowly, for modules and assignments. Using Bloom’s framework, educators can systematically and effectively state outcomes that focus on what the student should learn or do. Evaluation of learning focuses on three domains of learning: Cognitive, psychomotor, and affective. The nurse educator determines the level which learning needs to occur. An appropriate verb is selected to write the outcome in such a way that learning can be measured.

References: Bloom’s Taxonomy of Learning – Revised
Bloom’s Taxonomy Verb Chart
BLUEPRINTING

Test blueprints clarify the connections between planning, instruction and assessment. Test blueprints assure the content of a test aligns with the curriculum, a critical aspect of validity. Susan Morrison, PhD, RN, is a recognized expert in test item writing. In her classic book, Critical Thinking and Test Item Writing, 2nd ed., (2006), Morrison explains that validity refers to the extent to which a test measures what it purports to measure and is assessed through a logical analysis of the exam. Measurement of validity is an ongoing process. Content validity refers to the effectiveness of test items in measuring nursing knowledge and the students’ ability to apply what they know to clinical situations. Valid items are relevant to current nursing practice. Content validity is assessed prior to test administration using the comprehensive test blueprint. Nursing instructors also need to know if their test measures what it is supposed to measure. This is construct validity.

Another important term to learn for testing and evaluation is reliability. Reliability asks whether the test used to collect data produces accurate results. Computer-based programs that compute test data after an exam is administered provide statistics for faculty to review and analyze for reliability standards. Learning to interpret analytics and apply the information to current and future examinations are skills that require training and experience.

In a practical sense, test blueprints provide a study guide for the students to prepare for an exam; feedback to students and faculty on mastery of content and competencies; a means for the department to determine that the curriculum was taught; and input for faculty self-reflection on the quality of teaching and the value of instructional resources (Raymond & Grande, 2019).

A Practical Guide to Test Blueprinting

Faculty should have a blueprint for the development of most exams in the curriculum, even those that utilize secured test banks and item development software. A useful blueprint will delineate test items by concepts or content, level of difficulty of questions using Bloom’s taxonomy, nursing process, and or NCLEX-RN client needs areas. The faculty test blueprint may be more complex than what is shared with the students. The blueprint given to the students will guide them in preparing for the exams. Course and unit-level student learning outcomes (SLOs) guide instruction. SLOs are found in course syllabi. Well-written SLOs provide the basis for testing and evaluating. Measuring attainment of knowledge and the ability to apply concepts should follow a logical process, and a quality blueprint is central to attaining those goals.

The NCLEX-RN examination has a detailed test plan, a type of blueprint that is helpful to individual nursing educators and programs. It is periodically updated. The April 2019 edition can be found at: https://www.ncsbn.org/2019_RN_TestPlan-English.pdf

The NCLEX Test Plan offers a comprehensive listing of content for each client needs category and subcategory outlined in the test plan. Sample items are provided at the end of each category.
specific to that section. There is an item writing guide and sample case scenarios, which provide nurse educators with hands-on experience writing NCLEX® style test items.

Your program director and faculty team will teach you the method they use for blueprinting and what is shared with students. There will be a plan for increasing the percentage of higher-level thinking questions across the curriculum. For example, a certain percentage of remembering and understanding questions may be allowed in the first semester, but all the questions should be at application or analysis levels by the last semester of the program. Use the Texas Board of Nursing Education Guideline 3.7.3.a. Student Evaluation Methods & Tools.

Construction of examinations [or] tests should include blueprinting. The construction of test blueprinting is left to the discretion of nursing faculty; however, documentation of the structure should be on file, available, and shared with students. A suggested blueprinting structure might include use of the client needs and cognitive level of the test items as organizing dimensions to be consistent with the NCLEX-PN and NCLEX-RN test plans.

**ITEM WRITING**

Item writing for nursing school exams is a specialized skill that takes knowledge and practice. It would be very beneficial for you to view webinars or attend a workshop or conference on test construction and item writing. Watch for opportunities to attend conferences or courses that focus on the Next Generation NCLEX (NGN) exam, which is the licensing examination nursing program graduates will take beginning in 2023. Many of the workshops or webinars will give you a set of sample items to help you get started. It takes time to write a well-written exam question. Your school should have an exam policy for students and faculty, so become familiar with it. The faculty policy will provide guidelines for developing tests and exam items.

New faculty tend to write items that require lower-level thinking such as remembering or understanding. It takes practice to write items at the application level and above. If the answer to a test item can be found in a textbook, it is only at the remembering or understanding level. For good quality items, students should pull together information from new and previous learning to answer the questions.

Measuring the ability to use nursing clinical judgment should be at the heart of most test items. Students must learn to use critical thinking to make sound clinical judgments and decisions. New
faculty should become familiar with the NCSBN Clinical Judgment Measurement Model to help students prepare for the new types of questions.

Test items should test current clinical nursing practice. When you create test questions, it would be best to have colleagues critique those items to help you learn to improve your test-writing skills. Some schools of nursing have formal mechanisms in place for peer review of instructor-made exams.

Mirroring the types of questions found on NCLEX-RN means that exams should include standard multiple-choice items with one best answer from four choices and alternate format items. NGN uses multiple-response items (select all that apply), fill-in-the-blank items (numerical answers only), hot-spot items (clicking on an image) and ordered responses (drag and drop). Any of the items may include exhibit items, audio response, or graphic items.

Case study items have been added to the NGN, which reflect real-world clinical situations and the decisions nurses make to address patient needs and anticipated outcomes. Test takers must recognize cues, analyze cues, prioritize hypotheses, generate solutions, take actions, and evaluate outcomes. Students will need to practice answering case study questions while they are in school. The program’s exam policy should specify a range of alternate items expected on each exam across the curriculum.

A comprehensive presentation of the NGN examination which discusses the rationale for the exam, why teaching and measuring clinical judgment is essential, faculty preparation, strategies to teach clinical judgment, and details about the new exam are found in a guidebook published by Assessment Technologies Institute (ATI).

Next Generation NCLEX Guidebook

Tips on writing case studies and test questions can be found in the Moving Forward Together blog.

TEST BANK

Your program will probably have a test bank where exam items are stored and accessed. Examples include, Exam Soft, ATI’s Assessment Builder, Test Generator, and Respondus. Assessments and examinations may be given through test bank software or learning management systems (LMS) such as Blackboard or Canvas. Training videos are available to learn to use an LMS. Most software also comes with instructional videos and support. Reach out to your college’s IT department or instructional resource staff for assistance. Educators may be tempted to use test-bank items that come with instructor copies of the nursing textbooks, but many of these banks are available to students on the internet. Make sure you understand the procedures for maintaining test security.
TEST PROCTORING

Your program will have policies and procedures for proctoring exams. You will need to know what your role is. Ask these questions:

- What is allowed in the testing room? Where do phones and keys go?
- What should you do if a cell phone rings or vibrates during the exam?
- Are students allowed to wear coats, hoodies or watches while taking an exam?
- Do you need to provide scratch paper?
- Can students go to the restroom during the exam?
- Can they use calculators or are calculators available in the testing program?
- What is your role in making sure the testing environment is conducive to testing?
- What is your role with regards to circulating around the room?
- What are students supposed to do if they have a question?
- What would you do if a student were coughing and disturbing other students?
- What if the student asks a question about the test? What if they ask a question about what a word means? A medical word? A non-medical word?
- What should you do if the student is taking a computerized exam and there is a computer issue during the exam?
- What is the process for providing testing accommodations for those who qualify?

ITEM ANALYSIS

Examinations must be thoughtfully developed to measure the achievement of course and unit level SLOs. The Texas Board of Nursing requires an item analysis be performed on nursing exams.

Most nursing programs have software to perform the analysis, or if using an LMS for testing, the statistical data is generated after the administration of the exam. Item analysis should include discrimination index, difficulty level, response distribution, reliability coefficient, and student feedback. Test items should be revised based on the results of item analysis. Policies should indicate criteria for the selection of items to be discarded, revised, or replaced.
• Discrimination is a measure of item effectiveness and indicates how well the question separates the students who know the material from those who do not. The discrimination index can vary from –1.00 to +1.00 and compares how the top 27% scorers do on an item compared to the bottom 27% scorers. A negative discrimination index (-1.00 to zero) results when more students in the low-performing group answer correctly than students in the high-performing group. A positive discrimination index is desirable and occurs when more students in the high-scoring group answer correctly than students in the low-scoring group.
• The difficulty level is the percentage of students answering the question correctly and can range from zero to 100%. The benchmark of item difficulty is 30 – 90%. Items with difficulty assessed between 30 and 50% might be good questions. For items deemed unacceptable, faculty may decide to keep the questions as is, accept two or more answers or nullify the question (accept all answers). Questionable items should be revised before they are used again.
• Response distribution looks at how many people selected the incorrect answers or distractors. Distractors, which are the incorrect answers to the question, should be revised if they were selected by few to no students.

Reliability coefficient measures the likelihood of obtaining similar results if you re-administer the exam to another group of similar students. The Cronbach alpha statistic is reliable for a variety of test item types. The statistic ranges from 0-1. Greater than 0.5 can be considered adequate on a teacher-made test; however, 0.7 to 1.0 means the assessment has good reliability. Having many difficult items or poorly written items can skew this measure. Find out the process for adjusting scores. Decide if you will accept more than one answer for a question, throw a question out, or give credit to all students for a question.

TEST REVIEW

Inquire about the process for test review with students:

• Is test review required?
• When will it take place? Immediately following the exam, after it is graded, or the next class period.
• How will it take place? What will the students be allowed to view? All questions or only those they missed? Do faculty go over the exam with all students at once, or do they review at their own pace?
• What type of test security is required for the review?
• Is there a process for students to challenge test questions?
• What is the process if students have a question about an exam item?
• Is there a process for one-to-one test review with students who have failed the exam? What should that session look like?
• How can you help students who are not doing well?

Poor performance on exams typically results from three causes: inadequate test preparation, difficulty with test-taking skills, or increased test anxiety. Interview the students. Collect information to determine areas of difficulty so a plan for improvement can be made. If the student has inadequate test preparation, they may need help deciding what to study and how to study. If the student has high test anxiety, they may need to be referred to the campus counselor. If they have trouble with test-taking, help the student determine why they missed each question and determine if there are any trends. Students can be directed to test-taking skills modules and videos available through various resources.

Do they not know the content? Help the students know the importance of referring to the unit-level SLOS to prepare for a test.
Do they have trouble with alternate items? Tell them to practice answering NCLEX-style questions and direct them to resources. Do they read too much into the question? Help them learn to answer what the question is asking and refrain from thinking ‘what if ” or “maybe “. Do they change their answers? Help them develop confidence that their first response is likely the correct answer unless they have misread the question. Do they miss keywords? Help them through a tutorial with you to identify key words in the stem of each question they miss.

**USE OF STANDARDIZED EXAMS**

A primary concern for nursing program directors and faculty should be graduating students who have demonstrated the knowledge to practice competently and safely. Faculty also want to know if the graduating students are likely to pass NCLEX-RN. Instructor-made exams measure knowledge, skills, and attitudes at designated points in time for that college’s or university’s specific curriculum and student cohorts. Students take standardized assessments all over the country and provide comparison data for program assessment and evaluation.

Your nursing program is held accountable by the Texas Board of Nursing and accrediting bodies for reviewing the curriculum, clinical experiences, and program outcomes such as the NCLEX-RN pass rate for first-time testers. Students are expected to learn a vast amount of content, prepare for
tests, and remediate when indicated. Standardized tests show students areas of strengths and weaknesses. Likewise, nursing faculty use data obtained through standardized tests to evaluate and improve the nursing program.

Most programs contract with a particular company for curricular integration products, including standardized exams. Providers include El Sevier HESI®, ATI, Kaplan, or National League for Nursing’s Assessment Services. You should learn how standardized exams are used in your program’s curriculum plan. For example, students may take a standardized exam towards the end of a course, such as pediatrics or fundamentals, to ascertain their mastery of the content compared to other students in similar programs. Another common use of standardized tests is requiring an exit exam to determine NCLEX-RN readiness. The Texas Board of Nursing does not recommend using these exams for high-stakes testing, meaning performance should not prevent students from progressing or graduating. The use of standardized exams should complement other effective evaluation and remediation strategies.

RESOURCES

Lab Coat Notes for Test Item Writing – Nurse Think ™ for Nurse Educators
Effective Test Development & Item Writing for NCLEX Questions
Critical Thinking & Test Item Writing
Teaching in nursing: A guide for faculty
Evaluation and Testing in Nursing Education
Critical Thinking and Test Item Writing (Morrison, et al.)
TEXAS REQUIREMENTS

Education Guidelines

The Texas Board of Nursing provides education guidelines to assist program directors and faculty in implementing the education rules. Each guideline outlines the necessary steps for compliance with the rules. Where applicable, forms are included and may be completed and forwarded to the Texas Board of Nursing staff. Education Consultants are available for questions.

Nursing Faculty Module

This module provides an overview of regulations in Rules 215 for faculty. The reader may want to have the rules open while reviewing this document. The Board of Nursing has included principles to help programs remain in compliance with rules.

Differentiated Essential Competencies

The Differentiated Essential Competencies of Graduates of Texas Nursing Programs Evidenced by Knowledge, Clinical Judgments, and Behaviors (DECs) are designed to provide a framework and guidance to nursing education programs for curriculum development and revision and for effective preparation of graduates who will provide safe, competent, compassionate care. The DECs are important to nursing programs in Texas. The rules and regulations from the Texas Board of Nursing state that the program of study shall include both didactic and clinical learning experiences and shall be designed and implemented to accomplish the DECs. It is likely you will find program and course learning outcomes linked and coded to the DECs. Evaluation of students’ knowledge and ability to perform the DECs is essential throughout the curriculum. The DECs outline knowledge, clinical behaviors, and judgments necessary to meet the essential competencies and are differentiated by educational levels. The graduate nurse should have received the educational preparation to demonstrate each competency, but some advanced competencies cannot be reasonably assessed until the nurse has transitioned into nursing practice.

Differentiated Essential Competencies for Graduates of Texas Nursing Programs
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student records. All schools that receive funds from the U.S. Department of Education must adhere to FERPA.

Educators must make sure to identify who has a right to information before releasing educational records, including test grades, semester grades, or other student progress. While parents have certain rights to their children’s education records, the rights transfer to the student at the age of 18 or when they attend a school above high school level. At that point, the students are called “eligible students.”

Depending on their rights, parents or eligible students can review education records maintained by the school. Parents or eligible students can request a correction if they believe the record is inaccurate or misleading. If the school declines to change the record, the parent or eligible student can then request a formal hearing. After the hearing, if the school still will not change the record, the parent or eligible student can have a statement appended to the record about the contested information.

Schools need written consent from the parent or eligible student to release educational record information. However, FERPA allows schools to disclose records without consent to certain parties:

- School officials with legitimate educational interest
- Other schools to which a student is transferring
- Specified officials for audit or evaluation purposes
- Appropriate parties in connection with financial aid to a student
- Organizations conducting certain studies for or on behalf of the school
- Accrediting organizations

Schools can also release records in certain situations:

- To comply with a judicial order or lawfully issued subpoena
- In cases of health and safety emergencies
- In accordance with specific state laws relevant to the juvenile justice system

Schools do not need consent to disclose directory-type information: student name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, schools must inform parents and eligible students about the release of directory information and allow them time to request the information not be released. Schools should also have a mechanism in place for students to notify the college if they do not want the directory information to be released.
Parents and eligible students should receive information about FERPA rights and protection from their school annually, such as through a letter, a school bulletin, student handbook, or newspaper article.

**AMERICANS WITH DISABILITIES ACT**

Since July 26, 1990, the Americans with Disabilities Act (ADA) has helped to increase accessibility to jobs, education, and public spaces for people with disabilities. In 2008, the ADA Amendments Act (ADAAA) broadened the definition of disability.

Schools that receive public funds must adhere to ADA regulations, including by providing access to buildings, classrooms, residential facilities, and extracurricular activities. Schools may also provide accommodations such as sign language interpreters, materials available in other formats—Braille, electronic, or audio—or by modifying policies and procedures, such as testing practices. In addition, faculty who use videos or post pre-recorded lectures are required to add closed captioning to ensure equal access to online videos for students with disabilities. Faculty should find out what options the university or college has for adding closed captioning.

Accommodations should be individualized for each student with a disability. Many colleges have an office where students with disabilities can get guidance, access accommodations, or file complaints.

**RESOURCES**

- Inclusion of Students with Disabilities in Nursing Educational Programs
- The Americans with Disabilities Act: Implications for Nursing Education
- National Organization of Nurses with Disabilities
- The Office of Disability Employment Policy and National Organization of Nurses with Disabilities
TITLE IX

Title IX deals with federal civil rights law as a section of the 1972 Education Amendments of the Higher Education Act of 1965. This law prohibits discrimination based on sex in education programs. For example, students who are pregnant are covered under Title IX and programs should consult with their Title IX coordinator if there are questions about how to apply policies such as the attendance policy when the student must miss class related to their pregnancy.

MENTORSHIP

Research conducted on the importance of mentorship in nursing academia indicates that mentorship relationships and foundations in the advancement of nursing science are among the most critical relationships in one’s career and are essential to ensuring professional growth. Throughout nursing education, mentoring plays a vital role in professional and educational development in the practice environment.

Mentored faculty are more satisfied and committed to their careers than those not mentored. Mentors are necessary to assist new faculty members to feel comfortable and confident, enabling them to display the wisdom that they need to teach students the essential requirements of being a safe and prudent nurse required in today's highly needed career field. With the leadership and confidence mentors can provide, new faculty are more successful in educating students, and modeling best practice for new nurses to increase retention. New faculty transitioning to academia may have a mentor with whom they have been working and can continue to do so. Others may desire to have a formal mentor and should ask their dean or director about the possibility of being assigned one. Sometimes faculty “team teach” and their colleague becomes an informal mentor.
RESOURCES

Job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty

What mentors wish their mentees knew

The effect of mentoring on career satisfaction of registered nurses and intent to stay in the nursing profession

Importance of mentoring in nursing education

From clinician to educator: supportive mentoring is key

How to start a mentoring program: Key components of an effective mentorship relationship

Helping educators become teachers through mentoring

Developing and sustaining effective faculty mentoring programs

The development, implementation, and assessment of an innovative faculty mentoring leadership program

Job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty

The effect of mentoring on career satisfaction of registered nurses and intent to stay in the nursing profession


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BOT  Board of Trustees
BSN  Baccalaureate of Science in Nursing
CAA  Clinical affiliation agreement – Agreement between nursing program and clinical affiliate
CCNE  Commission on Collegiate Nursing Education – National accreditation agency for baccalaureate, graduate, and residency programs
C&I  Curriculum and instruction
CINAHL  Cumulative Index to Nursing and Allied Health Literature
CLEP  College Level Examination Program – Getting college credit for prior knowledge
CNE  Certified Nurse Educator – Academic nurse educator certification program from NLN
CNEA  Commission for Nursing Education Accreditation – Accrediting arm of the National League for Nursing
CTE  Career and technical education
DFWHC  Dallas–Fort Worth Hospital Council
DEC  Differentiated Essential Competencies – Competencies of graduates of Texas Nursing programs set by the Texas Board of Nursing for LVN, ADN (diploma), and BSN graduates
DEU  Dedicated education unit
DNP  Doctor of Nursing Practice
Elsevier®HESI  Elsevier HESI – Comprehensive assessment solution
EAL  Elsevier Adaptive Learning – Adaptive learning solutions from Elsevier
EAQ  Elsevier Adaptive Quizzing – Adaptive quizzing solutions from Elsevier
EBP  Evidence-based practice
eNLC  Enhanced Nurse Licensure Compact
EOP  Emergency operations plan – Plan to be used in emergencies
ERIC  Educational Resources Information Center – Online library of education research and information from the Institute of Education Sciences of the US Department of Education
ERS  Employees Retirement System of Texas
FAFSA  Free Application for Federal Student Aid
FON  Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity – The Institute of Medicine Committee and the Robert Wood Johnson Foundation Initiative on the Future of Nursing at the Institute of Medicine that inspired the AARP and RWJF Campaign for Action
FSAH  Federal Student Aid Handbook
FERPA  Federal Educational Rights and Privacy Act – Law that protects the privacy of student education records
GED  General Education Development – Test to earn high school equivalency diploma
GIPWE  Guidelines for Instructional Programs in Workforce Education – Policies and procedures for workforce programs
GPA  Grade point average
HESI A²  HESI Admission Assessment – Pre-admission assessment exam from HESI
IT  Information technology
IOM  Institute of Medicine (now known as the National Academy of Medicine)
IPEDS  Integrated Postsecondary Education Data Systems – Core postsecondary education data collection program for the National Center for Education
IR  Institutional research
IRB  Institutional review board – Administrative body established to protect the rights and welfare of human research subjects under the college or university
LRC  Learning resource center
MOU  Memorandum of Understanding – Formal agreement between nursing program and clinical affiliation site when formal clinical affiliation agreement is not needed
MSN  Master of Science in Nursing degree
NCLEX  National Council Licensure Examination – National licensure exam for LVNs and RNs
NCSBN  National Council of State Boards of Nursing – Organization of state boards of nursing and world leader in nursing regulator knowledge which oversees the NCLEX
NGN  Next Generation NCLEX
NISOD  National Institute for Staff and Organizational Development – Membership organization committed to promoting and celebrating excellence in teaching, learning, and leadership at community and technical colleges
NLN  National League of Nursing – Premier organization for nurse educators which offers professional development, teaching resources, research grants, testing services, and public policy initiatives
NPA  Texas Nursing Practice Act – Law which governs nursing in Texas
NSNA  National Student Nurses’ Association – Organization dedicated to fostering professional development of nursing students
OADN  Organization for Associate Degree Nursing – Leader in dynamic and collaborative nursing education
OCNE  Oregon Consortium for Nursing Education – Partnership of Oregon nursing programs, which was the leader in partnerships for academic progression
OCR  Office of Civil Rights
ORP  Optional Retirement Plan – Individualized retirement plan for Texas educators in which participant selects from variety of investment products offered by insurance and investment companies that are authorized by the employing institution (educators usually chose between ORP and TRS for retirement)
PBK  Phi Beta Kappa – Honor society for four-year institution
PhD  Doctor of Philosophy
PIP  Personal improvement plan
PTK  Phi Theta Kappa – Honor society for two-year colleges
QEP  Quality Enhancement Plan – Requirement of accreditation from SACSCOC, which is a major project focusing on improving key issues at the college or university

QSEN  Quality and Safety Education for Nurses – Project that addresses the challenge of preparing future nurses with the knowledge, skills, and attitudes necessary to improve the quality and safety of the systems within which they work (website is a central repository of information on the QSEN competencies with teaching strategies and faculty development resources)

SACSCOC  Southern Association of Colleges and Schools Commission on Colleges – Regional body for the accreditation of degree-granting higher education institutions in the Southern states

SAT  Scholastic Aptitude Test – Standardized test widely used for college admissions

SBAR  Situation Background Assessment & Recommendation – Framework for communication between members of the health care team about a patient’s condition

SCANS  Secretary’s Commission on the Acquisition of Necessary Skills – Committee appointed by the U.S. Secretary of Labor to determine the skills need to succeed in the world of work

STTI  Sigma Theta Tau International members are baccalaureate and graduate nursing students who demonstrate excellence in scholarship and nurse leaders exhibiting exceptional achievements in nursing. The vision is to connect and import nurse leaders to transform global healthcare.

TBA  To Be Arranged (usually time period for certain classes)

TCCTA  Texas Community College Teachers’ Association – Organization of post-secondary educators

TEAS  Test of Essential Academic Skills – Pre-admission assessment exam from ATI

TRELLIS  Texas Guaranteed Student Loan Corporation (Formerly Texas Guaranteed Student Loan Corporation)

THECB  Texas Higher Education Coordinating Board – Provides leadership and coordination for Texas higher education

TIGER  Technology Informatics Guiding Education Reform – Grassroots initiative focused on education reform and interprofessional community development

TOADN  Texas Organization for Associate Degree Nursing

TOBGNE  Texas Organization of Baccalaureate and Graduate Nursing Education

TOEFL  Test of English as a Foreign Language – The English-language test for non-native speakers

TON  Texas Organization of Nurse Executives

TONE  Texas Organization of Nurse Executives

TRS  Teacher Retirement System – Option for Texas teacher retirement
TSI  Texas Success Initiative – Program designed to determine if students are ready for college-level course work in reading, writing, and math

UDCM  Upper division course manual

USDOE  United States Department of Education

VPN  Virtual private network – Mechanism whereby faculty can get a secure connection to their work network over the internet

WECM  Workforce Education Course Manual – List of approved workforce education courses available for community colleges to offer