



THE ADVANCING SCIENCE OF NURSING PRACTICE

GOALS

1. To present the meaning of the Science of Nursing Practice and the Science of Professional Nursing
2. To state the definitions of varied nursing degrees
3. To recognize the rapid movement of nursing toward a more professional role
4. To state selected educational expectations of the professional nurse
5. To acknowledge the dedication and professional prowess of the professional nurse
6. To encourage recognition of the rapid movement of the Science of Nursing; therefore, the need to begin to differentiate academic prowess related to nursing education
7. To increase awareness of nursing accrediting opportunities for nursing programs
8. To clarify the use and purpose of the National Council Licensure Exams (NCLEX)
9. To state the concern over the same generalized state testing and registration of technical and professional nurses
10. To encourage health care facilities to more accurately and effectively utilize nurses and support nursing education
11. To encourage health care facilities to make known academic prowess and utilize nurses in their intended nursing roles

KEYWORDS FOR APPLICATION

1. Science of Nursing Practice
2. Associate of Science in Nursing (ASN)
3. Baccalaureate/Bachelor's of Science in Nursing (BSN)
4. Academic Achievement
5. Licensed Practical Nurse (LPN)
6. Licensed Vocational Nurse (LVN)
7. Professional Nurse
8. Registered Nurse (RN)
9. Self-Fulfilling Prophecy
10. Pygmalion Effect
11. Accrediting Bodies—ACEN, CCNE, NLN CNEA, COA, ACME, ACSBN
12. State Accrediting Bodies
13. State Boards
14. Nursing License Compact (eNLC)
15. Piaget's Stages of Cognitive Development
16. National Council Licensing Exam (NCLEX)
17. Benjamin Bloom's Taxonomy/Domains

SCIENCE OF NURSING TITLES AND THEIR RELATIONSHIP

When considering the academic achievements of Registered Nurses (RNs), it is often agreed that nurses graduating with a Baccalaureate/Bachelor's Degree are known as "Professionals" in the Science of Nursing Practice. However, there are times in today's nursing education when the generalized term "Professional Nurse" describes nurses graduating from an associate and baccalaureate academic nursing program. Herein lies the theoretical confusion related to the expected educational differentiation of the Registered Nurse's role in the Science of Nursing Practice.

The Licensed Practical/Vocational Nurse (LPN/LVN) is generally known for obtaining/having an approximately one-year academic nursing education. A Licensed Practical/Vocational Nurse (LPN/LVN) is educated to achieve, complete, and perform basic or selectively determined nursing skills. A Registered Nurse (RN) is educated to achieve, complete, and perform a higher level of nursing skills and oversee the nursing performance of Licensed Practical/Vocational (LPN/LVN) nurses.

Whereas a practical/vocational nurse (LPN/LVN) is licensed, the nurse (RN) with an associate or a baccalaureate/bachelor's degree is registered upon successful completion of the enrolled academic course and the National Council Licensure Examination (NCLEX) exam.

THE SCIENCE OF PROFESSIONAL NURSING (BACCALAUREATE DEGREE)

There is an appreciation of the advancing academic promoted Science of Nursing Practice roles. It recognizes that the trend toward a more professional Science of Nursing Practice is advancing rapidly. The improvements test the intellectual ability to combine professional nursing scientific skepticism with inherent personal intelligence. Our finest academic, professional students in the Science of Nursing Practice are exceptional critical thinkers about the advances within the healthcare system. Nursing professionals are not subservient to historical healthcare habits—they are the intellectual purveyors of new scientific changes. Such ongoing scientific advancement with its many-faceted nursing opportunities promote the healthcare of humankind.

Professional Nursing Student's (BSN) learning to practice the advancing Science of Nursing Practice role are expected (at least) to:

Understand the personal positive Egocentrism (self needs/personal feelings related to care for others) that is the driving force to care for others

Understand individual Altruism (actual caring of others) that forms the basis of their healthcare

Understand the close collaborative relationship between physical and mental health

Understand the basic education and varied advanced role differentiation between nursing education/academic levels

Maintain positive and cooperative healthcare working relationships with numerous healthcare professionals

Perform effective leadership, management, and teaching roles within the healthcare system

Use the Nursing Process of Assessment, Planning, Implementation, and Evaluation effectively to provide outstanding healthcare and improvement of collaborative healthcare efforts

Assess the natural and intuitive talents in each health care worker for the improved effectiveness of a patient's mental and physical health

Have the desire and ability to do professional research and apply research findings to promote health and healthcare measures

Seek further education and professional enlightenment through reading, problem-solving, attending continuing nursing educational offerings, and taking academic courses

Have the intellectual ability to practice the Science of Nursing Practice using advanced academic concepts

Exhibit the ability to communicate advanced health care principles accurately and effectively with patients and other healthcare professionals

Consider the professional opinions on selected healthcare professional topics for the improvement of the Science of Nursing Practice

Maintain the researched Science of Nursing Practice by discouraging cognitive dissonance (inconsistent thoughts) related to the Science of Nursing Practice

Continue to support and participate in the academic advancement of Scientific Reasoning, Inductive Reasoning, and Deductive Reasoning

Participate in nursing associations for the improvement of the Science of Nursing Practice

Understand the concepts and use Benjamin Bloom's three domains—Cognitive, Psychomotor, and Affective in the teaching and practicing the Science of Nursing Practice.

Know how to implement the basic concepts of leadership and management of healthcare personnel and provision of healthcare

If a practicing nurse, compare personal job description/employment expectations with the expected role of a professional nurse.

The above considerations are just a few of the basic academic requirements that encourage professional nursing practice outcomes. They are the educational building blocks of the Science of Nursing Practice that promote the advancement of *professional* nursing. The result is improved healthcare outcomes.

HISTORICAL PROGRESSION OF THE SCIENCE OF NURSING PRACTICE TO A MORE PROFESSIONAL ROLE

The academic definition and title of "Professional Nurse" is often confusing to some—as some nurses desire to see themselves and represent their nursing education (no matter the academic level) as "professional." However, it confuses the intention of the different academic roles. It encourages organizational/corporate administrators who might not fully understand the academic hierarchy to fail

in recognizing the appropriate nursing assignments equivalent to the academically-prepared nursing roles.

The Science of Nursing Practice's upward evolution of knowledge and related skills is not always recognized. However, it has been and continues to be *progressive*. Our simple caring skills of rocking the cradle have advanced to be highly sophisticated nursing information, expertise, and skill.

All science, in general, evolves. Yet, (let me emphasize and pridefully state) nursing has the unique essence and education that separates the Science of Nursing Practice from any other healthcare profession. To emphasize science as it relates to nursing--- it is not uncommon to see the addition of the word "Science" in the titles/diplomas/degrees/and recognition of graduating higher education nursing programs. For example, such titles as Associate Science of Nursing and Baccalaureate Science of Nursing are now common.

The usual designation of the academic accomplishment for a Licensed Practical/Vocational Nurse (LPN or LVN) has the "Practical" or "Vocational" as a part of the usual nursing title—representing the academic achievement of being "licensed." Both the LPN and LVN programs are usually quite similar.

The academic accomplishment and passing of the NCLEX for a "Registered Nurse" (RN) currently do not have the "Associate" (ASN) or "Baccalaureate" (BSN) academic designation as a regular part of the nursing registered nurse title. In the intended advancement effort of nursing and appropriately recognized academic accomplishment, it seems appropriate to consider a more accurate recognition of academic success and passing of NCLEX by adding the word "Associate" and "Professional" (a replacement for Baccalaureate) to the "Registered Nurse" title. The word "Professional" (instead of "Baccalaureate") adds the recognized societal word for nursing academic expertise as a competent, skillful, and assured nurse.

Both nursing programs, Associate/Technical (2-year nursing degree) and Baccalaureate/Professional (4-year nursing degree), have similar nursing skills. However, they are different in the nursing intensity and longevity that infers excellence.

Currently, most (if not all) known National Council Licensure Examination (NCLEX) state registry exams do not differentiate NCLEX questions as to associate/technical nursing (ASN) or baccalaureate/professional nursing (BSN). After passing the state exam, nursing students at academic educational levels (ASN and BSN) are awarded a state Registered Nurse (RN) title.

Perhaps nursing academic achievement should consider more differentiation regarding state license titles and state registration titles. Consider the addition of the nursing academic and level of expertise title as a part of the acquired recognition of passing nursing state board exams.

LICENSED PRACTICAL/VOCATIONAL NURSE —(acknowledging approximately one year of academic education)

REGISTERED ASSOCIATE/TECHNICAL NURSE —(acknowledging approximately two years of academic education—instead of just RN)

REGISTERED BACCALAUREATE/PROFESSIONAL NURSE ---(acknowledging approximately four years of academic education—instead of just RN. The emphasis is on "Professional.")

Let us consider changing the generalized title to a more accurate recognition of academic accomplishment after passing the NCLEX. Correctness, clarity, and respectful reference to the academic title earned and acquired by every nurse completing the NCLEX successfully should reference their academic standing. One exception applies to the Baccalaureate nurse, who has earned the “Professional” designation to the nursing RN title. The academic achievement and professional status of the Baccalaureate nurse deserve to be recognized.

Perhaps the time is upon us (or should now occur) when NCLEX exams should increase their specificity, academic clarity, and differentiation through theoretical questions related to the level of academic educational preparation and expected expertise. It also means a shared, intense understanding and accurate representation and differentiation of scholarly content by nursing faculty. With such positive changes, it continues to push forward the Science of Nursing Practice to meet the ever-advancing role of nursing. It finally admits that nursing has an important and *professional* role in the provision of universal healthcare.

The rationale for more clarity and accurate differentiation in NCLEX testing might include (as an example)—

“A state board recognizes nursing roles according to the expected academic education of each nursing education level. Each nursing level of education is different. We request that every academic nurse practicing in each state fully understands and applies their academic understanding of the Science of Nursing principles and behavior. Hence, we test each level of academic nursing success and expertise differently with full intent to accurately measure content, safety, knowledge, and compliance to the student’s academic course related to the Science of Nursing Practice.”

“Therefore, upon a nursing student successfully completing a specific academic nursing educational course of study and passing the appropriate NCLEX exam according to the academic level of the Science of Nursing, an applicable state nursing license/registration is granted. The Baccalaureate Nursing Degree will henceforth be known as a Registered Professional Nurse in the Science of Nursing Practice.”

JEAN PIAGET’S CONTRIBUTION TO NURSING PROFESSIONALISM

During the 1920s, Jean Piaget, a Swiss Psychologist, worked with developing the stages of cognitive development through a person’s lifetime. The four stages that progressed through a lifetime were:

- Object Permanence -- Age: 0-2
- Symbolic Thought -- Age: 2-7
- Logical Thought -- Age: 7-11
- Scientific Reasoning -- Age: 11-Adulthood

As a professional nurse (BSN), special attention is given to the categories of Logical Thought and Scientific Reasoning. It is in the category of Scientific Reasoning that Inductive Reasoning and Deductive Reasoning occur.

The principles/expectations of Inductive and Deductive Reasoning related to the Science of Professional Nursing are:

Scientific Reasoning: It is the curiosity and personal goal to find the correct answer to an ultimate goal. Without interest and inquiry, there is no basis related to science! Professional nurses seek to understand and apply that understanding to patient care and healthcare associate relationships—including the outcome of accurate decisions on behalf of humankind. Correct decisions include two kinds of cognitive thinking—Inductive Reasoning and Deductive Reasoning. The definitions are:

(A) Inductive Reasoning: Observation (qualitative and quantitative) and related logical thinking occurs. The analysis and careful observation result in a professional nursing conclusion that is systematically recorded and analyzed. This evidence infers professional nursing conclusions.

(B) Deductive Reasoning: This logic is used in hypothesis-based science. Thinking moves in the opposite from Inductive Reasoning. General nursing principles and laws are used to forecast specific results. As long as the professional nurse understands the general principles of healthcare situations and potential outcomes, a professionally experienced nurse can extrapolate (extend the understanding to an unknown condition) and predict specific results/outcomes.

NATIONAL COUNCIL LICENSURE EXAMS (NCLEX)

The nursing exam, entitled “National Council Licensure Exam” (NCLEX), generally refers to two standardized tests-- LPN/LVN and RN. The Practical/Vocational (LPN/LVN) tests for state nursing *licensure* are the same. The Associate Degree and Baccalaureate Nursing Degrees tests for state nursing *registration* are the same.

An unstated and untrue implication is inferred by having the associate degree and baccalaureate nursing graduates take the same NCLEX. The implication is that there is no academic difference expected or required between associate and baccalaureate nursing education. However, the truth is that there is (and should be) a significant educational difference between associate and baccalaureate nursing education! The difference between the two programs is in the cognitive (knowledge and intellectual skills), psychomotor (adapting and imitating of skills), and affective (interest, attitude, and values) domains. These three domains are usually referred to as “Benjamin Bloom’s Taxonomy Domains,” even though he was not the only person to develop and revise the three domains over time.

Currently, all nurses need to pass their specific NCLEX test (LPN/LVN or RN) related to their academic education to determine entry-level nursing practice competency and health care safety related to their academic education.

On a positive note: Regardless of student nursing educational aspirations, each Science of Nursing Practice level is needed and educationally rewarding. Each nursing educational program (LPN/LVN and RN) offers a challenging and educationally appropriate academic achievement level for providing healthcare to humankind.

NURSING EDUCATION/PROGRAM ACCREDITATION

Nursing academic program accreditation is an independent (third-party) evaluation related to the nursing program's compliance to expected standards and related tasks.

1. ACEN

The Accreditation Commission for Education in Nursing (ACEN) states that it is the leading authority in nursing education accreditation. The commission supports nursing educational programs through peer review, self-regulation and fosters all aspects to improve academic nursing preparation at all levels.

2. CCNE

The Commission on Collegiate Nursing Education (CCNE) is a nationally recognized accrediting agency for improving public health by ensuring Baccalaureate and graduate nursing degrees' quality, integrity, and entry-to-practice nursing residency program. It is a voluntary *autonomous* accrediting agency. It is a self-regulatory process that encourages self-assessment.

3. NLN CNEA

The National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) is an *autonomous* accreditation division promoting excellence and integrity through a values-driven accreditation process. It accredits nursing programs throughout the nursing spectrum—practical/vocational, diploma, associate, bachelor, master's, clinical doctorate, postgraduate certificate, and distance learning.

4. COA

The Council on Accreditation of Nurse Anesthesia (COA) Education Programs accredits nurse anesthesia programs in the United States and Puerto Rico.

5. ACME

The Accreditation Commission for Midwifery Education (ACME) advances excellence in midwifery education. It is a *voluntary* quality assurance activity conducted by both the educational institution and the commission. It combines self-assessment and peer evaluation.

6. NCSBN

The National Council of State Boards of Nursing (NCSBN) is an independent not-for-profit organization that provides an organization through which boards of nursing act and counsel together on common interests and concerns that affect public health, safety, welfare, and development of nursing licensure exams.

7. STATE-ACCREDITING BODIES

Some states have accrediting bodies that evaluate their own nursing programs—i.e., Kansas, Maryland, Missouri, New York, and North Dakota.

8. STATE BOARDS OF NURSING APPROVAL OF NURSING PROGRAMS

Graduating nurses have to apply to the Board of Nursing (B of N) in the state they intend to practice.

9. eNLC

The Enhanced Nursing License Compact (eNLC) is an agreement between participating states that allows nurses to practice in other states as a part of the agreement. The current compact requires state and federal fingerprinting based on criminal background checks. Continuing Education requirements of the originating state are met to work in another state. As of July 6, 2021, 37 states and one territory are a part of the eNLC.

ACCOLADES TO PROFESSIONAL NURSES

We especially salute with pride our students and colleagues who are in the process or have completed the *professional* expectation of at least a baccalaureate in the Science of Nursing. Soon, the passing of a state board NCLEX exam with the Registered Nurse title will hopefully respect and reward their accomplishment of “Registered *Professional* Nurse.” When other specific titles are academically earned, of course, it represents an additional end-title of any nursing specificity to which it implies.

Through class activities and assignments, professional nurses (BSN) are encouraged to delve beyond the basics of practical/technical/vocational/associate nursing into a state of advanced cognitive understanding of concepts and application of healthcare principles and guidance of multi-disciplinary healthcare activities. The ability to perform exceptional nursing process behaviors/skills related to the Nursing Process occurs.

And, so it goes, historically, the progressive practice of the Science of Nursing continues to gain more professional and academic prominence in the total health care of humankind. Because of the importance of the professional nursing (BSN) role, educational content is more intense and intellectually challenging.

The academically recognized professional nursing (BSN) role is a long-awaited recognized embellishment of the Science of Nursing Practice to a more finite, specific, and elite profession for the more intellectually astute nurse.

AN ORGANIZATION’S/ADMINISTRATOR’S COMMITMENT TO NURSING EXCELLENCE

Let us consider how nursing leadership choices often occur! As an organizational administrator, you think the person selected is good at communicating, problem-solving, and they have proven to be a valuable employee for some time! Or, maybe there is no choice— merely go with what nursing staff member is available. Herein lies the comfort zone for corporate administrators.

There is a decision to go with the flow of continuing to *do and do and do* without academic expectation from high-performing academic employees, or you can expect increased excellence. Expecting additional excellence (especially academic excellence) can be daunting.

The administrative questions for high performance and excellence often arise regarding nursing staff:

1. Will you lose current administrative staff?
2. Are they able to provide improved academic/educational information as nursing science advances?
3. Will they put acquired academic/educational information to good use in the facility?
4. Will such an expectation of increased academic theoretical knowledge and ability help or hinder the happiness-quotient of the administrative world?
5. Will more academic theoretical knowledge improve nursing patient care and leadership abilities?

The excuses of corporate/facility administrators are many (and sometimes thought to be valid). However, it is a test of administrative leadership attitude and a commitment to the betterment, philosophy, goals, and objectives of the corporation/facility nursing role. Academic pursuance confirms the love for excellence in all aspects—process, relationships, outcomes, community support, and future acquisition of truly qualified nursing employees in various nursing positions. It speaks to the fact that nothing ever stays the same—that changes (Entropy) in the entire universe will always occur and that increased education most likely will meet the needs of a forever-changing healthcare system.

Some employees perform “by the seat of their pants.” Then, there are employees who professionally and accurately *know how to perform by increased knowledge and academic expertise*. Because we are creatures of habit and sometimes resist positive change without seeing the futuristic facts before us, we often choose to bypass educational opportunities as a precursor to future success. Comfort and sedentary behaviors become an unspoken motto. It means there is no place for, “If it works/it isn’t broken, don’t fix it” attitude. *The idea is to make it better.*

There is no GOOD REASON for not making available through administrative, educational efforts the academic advancement of current faithful nursing employees. That includes employees who seem to have a natural propensity for making good decisions to meet the mission, objectives, and expected outcomes of an organization/facility. Continued academic advancement for MORE improvement of nursing behaviors is available from online courses available by prestigious universities and outstanding professors. Some nationally-acclaimed educators are “not in the backyard”—they are located in universities/colleges or are private presenters who must communicate from a distance. Online classes (usually ZOOM classes) are stimulating and can be incrementally incorporated and expected as a part of their nursing care and leadership employment.

The monetary cost and employment time an employee spends on professional nursing education could be part of an employee’s work-day and job description. After all, pursuing excellence in all aspects of employment—even more professional nursing education—is not an unreasonable request. Even a contract of continual and satisfactory employment for a time interval can defray facility monetary expense, and, of course, everyone benefits from the newly learned nursing skills and leadership abilities.

If the employee has some abilities without advanced academic education, that employee will more likely *improve* the nursing role by acquiring advanced knowledge. The outcome is enhanced nursing care, increased community trust, and accolades for the astute corporate/facility administrator who recognizes the significant contribution of professional academic education.

There is no better high-quality expectation that a corporate/facility administrator can send to all nursing staff than to demonstrate through expectations a high-level professional leadership ability through academic accomplishment that forms the basis of nursing performance. The psychology of human behavior supports the fact that:

An organization/facility administrator expects (as in a job description) and makes publicly known (as in a name tag) the earned academic title of the employee's profession. In that case, the organization/facility is more likely to see and experience the desired behavior associated with the job description and name tag. It is referred to as a Self-Fulfilling Prophecy or the Pygmalion Effect.

A self-fulfilling prophecy: A person's expectations (job description and nametag) can lead to that person behaving in ways that confirm organizational/facility expectations.

Pygmalion Effect: The way you treat someone (level of expectations) directly impacts how that person acts.

Improved clarity of the name tag representing role expectations could (at this time) occur in this order by using the current understanding of the acronym (LPN/LVN or RN), yet recognizing the academic prowess of the person wearing the name tag. (Hopefully, state boards of nursing will soon approve/require the added acronym of "Professional" to Baccalaureate RN (BSN) titles. Until community understanding becomes accustomed to the clarified meaning of the registered nurse title by adding the academic accomplishment, the name tag provided to nurses in the organization/facility is updated. The name tag (for academic clarification and respect for all practicing nurses) could include by line:

- Line 1. Name of the Organization/Facility
- Line 2. Name of the Nursing Employee followed by the usual (at this time) LPN, LVN, RN
- Line 3. Professional Academic Title of the Nursing Employee (Practical Nurse, Vocational Nurse, Associate Nurse, Technical Nurse, or Professional Nurse)
- Line 4. Specific job/role assignment by title in the facility/organization

THE ESSENCE OF TIME

There is a time and season for everything: a time to build up and a time to tear down. And, so it is for everything under heaven and earth—yes, even a time to learn or advance to a specified academic nursing level of the Science of Nursing Practice.

As educators and corporate administrators, we are the "makers" and the "breakers" of professional nursing roles and, therefore, how humankind recognizes nursing expertise. We determine the symphony and rhythm of progress that leads to recognizing appropriate nursing behaviors and the continual advancement of the academically prepared professional nurse.

"I hear a great disturbance in the force," said Obi-Kenobi. So it is—the "force" disturbance of expected professional nursing differentiation and leadership excellence is with us. We cannot deny the driving force of academic recognition and movement toward the professional aspect of almost everything in our world. Therefore, it is now time to make an intense academic and progressive commitment to (especially) the Science of Professional Nursing Practice. It is the better way to help assure the accuracy and enhancement of our entire healthcare system.

REFERENCES: (Nursing Program Accreditation)

www.acenursing.org

www.aacnnursing.org/CCNE

www.nln.org

www.coacrna.org

www.midwife.org/accreditation

www.ncsbn.org

www.bestnursingdegree.com

www.COACRNA.org

www.ncsbn.org

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