

**The Essentials of Baccalaureate Education for Professional
Nursing Practice**

&

The Essentials of Master's Education in Nursing

**As They Apply to the ACRL Information Literacy
Competency Standards**

Sponsored by the Health Science Interest Group of the Association of College & Research Libraries

Compiled by:

Chair: Sue F. Phelps, Reference Librarian, Washington State University Vancouver
asp Phelps@vancouver.wsu.edu

Loree Hyde, Instruction, Research & Outreach Reference Librarian, Oregon Health & Science University
hydel@ohsu.edu

Julie Planchon Wolf, Research & Instruction/Nursing Librarian, Serving Cascadia Community College and the University of Washington Bothell
JWolf@uwb.edu

Laura Zeigen, Instruction, Research & Outreach User Experience Librarian, Oregon Health & Science University
zeigenl@ohsu.edu

Please refer all communication regarding this document to Sue Phelps
asp Phelps@vancouver.wsu.edu

This document is a blending of the [ACRL Information Literacy Competency Standards](#), the [Essentials of Baccalaureate Education for Professional Nursing](#), and [The Essentials of Master's Education in Nursing](#). The ACRL Standards provide a framework for teaching information competency to students at the university level and The Essentials, both for Baccalaureate and Master's level education in nursing, are the reference documents held in common by the two nursing school accreditation boards in the U.S.

Entries from the Essentials of Baccalaureate Education for Professional Nursing are identified by the parenthetical abbreviation EBE along with the location of the information within that document. The Essentials of Master's Education in Nursing is identified by EME and also includes the location of content taken from that document.

The purpose of this merged language is to guide librarians who support a nursing education program by mapping the language of nursing to the standards of information literacy. It is also meant to advise nurse educators on the information literacy needs of their students in the language of the nursing profession as it is expressed in the standards that are common to nursing education institutions. It will serve as a guide until discipline specific ACRL Information Literacy Competency Standards are written for Nursing.

Entries from the Nursing Essential documents are in italics, while the ACRL Competency Standards are not. The ACRL Standards are in full while the nursing essentials are selected.

Standards, Performance Indicators, and Outcomes

Standard One

The information literate student determines the nature and extent of the information needed.

*Use skills of inquiry, analysis, and information literacy to address practice issues. (EBE, I, 3)
Professional nursing practice at all levels is grounded in the ethical translation of current evidence into practice. Nurses need a questioning and inquiring attitude toward their practice and the care environment. (EME, IV)*

Performance Indicators:

1. The information literate student defines and articulates the need for information.

Nurses collaborate in the collection, documentation, and dissemination of evidence. (EBE,III,7)

Nurses are engaged in a process of identifying questions needing answers. (EME,IV, Rationale)

Sample Content

- *Graduates are able to identify problems and gaps in evidence for practice. (EME, IV)*

ACRL Outcomes Include:

- a. Confers with instructors and participates in class discussions, peer workgroups, and electronic discussions to identify a research topic, or other information need
 - b. Develops a thesis statement and formulates questions based on the information need
 - c. Explores general information sources to increase familiarity with the topic
 - d. Defines or modifies the information need to achieve a manageable focus
 - e. Identifies key concepts and terms that describe the information need
 - f. Recognizes that existing information can be combined with original thought, experimentation, and/or analysis to produce new information
2. The information literate student identifies a variety of types and formats of potential sources for information.

Nurses are able to locate health and other relevant research literature and other sources of evidence. (EBE, III, Rationale)

Integrate the knowledge and methods of a variety of disciplines to inform decision making. (EBE,I,7)

Sample Content (EBE, III)

- *Nurses recognize levels of evidence: textbooks, case studies, reviews of literature, research critiques, controlled trials, evidence based clinical practice guidelines (www.guideline.gov), metaanalyses, and systematic reviews (e.g., the Cochrane Database of Systematic Reviews).*

ACRL Outcomes Include:

- a. Knows how information is formally and informally produced, organized, and disseminated
 - b. Recognizes that knowledge can be organized into disciplines that influence the way information is accessed
 - c. Identifies the value and differences of potential resources in a variety of formats (e.g., multimedia, database, website, data set, audio/visual, book)
 - d. Identifies the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical)
 - e. Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline
 - f. Realizes that information may need to be constructed with raw data from primary sources
3. The information literate student considers the costs and benefits of acquiring the needed information.

Use skills of inquiry, analysis, and information literacy to address practice issues.(EBE,III, 2)

Sample Content

- *Conducts an online review and seeks resources for evidence-based practice. (EME, V)*

ACRL Outcomes Include:

- a. Determines the availability of needed information and makes decisions on broadening the information seeking process beyond local resources (e.g., interlibrary loan; using resources at other locations; obtaining images, videos, text, or sound)
- b. Considers the feasibility of acquiring a new language or skill (e.g., foreign or discipline-based) in order to gather needed information and to understand its context
- c. Defines a realistic overall plan and timeline to acquire the needed information

4. The information literate student reevaluates the nature and extent of the information need.

Nurses are engaged in a process of evaluating the outcomes and identifying additional questions. (EME,IV, Rationale)

Articulate to a variety of audiences the evidence base for practice decisions, including the credibility of sources of information and the relevance to the practice problem confronted (EME, IV,3)

ACRL Outcomes Include:

- a. Reviews the initial information need to clarify, revise, or refine the question
- b. Describes criteria used to make information decisions and choices

Standard Two

The information literate student accesses needed information effectively and efficiently.

Demonstrate an understanding of the basic elements of the research process and models for applying evidence to clinical practice. (EBE III 2.)

Demonstrate skills in using patient care technologies, information systems and communication devices that support safe nursing practice. (EBE IV 1.)

Sample Content (EBE IV)

- *Use of technology and information systems for clinical decision making*
- *Online literature searches*
- *Web-based learning and online literature searches for self and patient use*
- *Information literacy*

Access interprofessional and intraprofessional resources to resolve ethical and other practice dilemmas. (EBE VIII 11.)

Master's-prepared nurses serve as information managers, patient advocates, and educators by assisting others (including patients, students, caregivers and healthcare professionals) in accessing, understanding, evaluating, and applying health-related information. (EME V Rationale)

Performance Indicators:

1. The information literate student selects the most appropriate investigative methods or information retrieval systems for accessing the needed information.

Participate in the process of retrieval, appraisal, and synthesis of evidence in collaboration with other members of the healthcare team to improve patient outcomes. (EBE III 5)

Sample Content (EBE III)

- *Methods for locating and appraising health and other relevant research literature and other sources of evidence.*
- *Locating and evaluating sources of evidence*
- *Electronic database search strategies (e.g. CINAHL, PubMed)*
- *Levels of evidence; textbooks, case studies, reviews of literature, research critiques, controlled trials, evidence-based clinical practice guidelines, meta-analysis, and systematic reviews*

ACRL Outcomes Include:

- a. Identifies appropriate investigative methods (e.g., laboratory experiment, simulation, fieldwork)
 - b. Investigates benefits and applicability of various investigative methods
 - c. Investigates the scope, content, and organization of information retrieval systems
 - d. Selects efficient and effective approaches for accessing the information needed from the investigative method or information retrieval system
2. The information literate student constructs and implements effectively-designed search strategies.

Using information from numerous sources, these nurses navigate the patient through the healthcare system and assume accountability for quality outcomes. (EME II Rationale)

Sample content

- *Use of technology, information management systems, and standardized terminology. (EME V)*

ACRL Outcomes Include:

- a. Develops a research plan appropriate to the investigative method
- b. Identifies keywords, synonyms and related terms for the information needed
- c. Selects controlled vocabulary specific to the discipline or information retrieval source
- d. Constructs a search strategy using appropriate commands for the information retrieval system selected (e.g., Boolean operators, truncation, and proximity for search engines; internal organizers such as indexes for books)

- e. Implements the search strategy in various information retrieval systems using different user interfaces and search engines, with different command languages, protocols, and search parameters
 - f. Implements the search using investigative protocols appropriate to the discipline
3. The information literate student retrieves information online or in person using a variety of methods.

Sample Content

- *Levels of evidence; textbooks, case studies, reviews of literature, research critiques, controlled trials, evidence-based clinical practice guidelines, meta-analysis, and systematic reviews. (EBE III)*

ACRL Outcomes Include:

- g. Uses various search systems to retrieve information in a variety of formats
 - h. Uses various classification schemes and other systems (e.g., call number systems or indexes) to locate information resources within the library or to identify specific sites for physical exploration
 - i. Uses specialized online or in person services available at the institution to retrieve information needed (e.g., interlibrary loan/document delivery, professional associations, institutional research offices, community resources, experts and practitioners)
 - j. Uses surveys, letters, interviews, and other forms of inquiry to retrieve primary information
4. The information literate student refines the search strategy if necessary.

Master's-prepared nurses lead continuous improvement processes based on translational research skills. The cyclical processes in which these nurses are engaged includes identifying questions needing answers, searching or creating the evidence for potential solutions/innovations, evaluating the outcomes, and identifying additional questions. (EME IV Rationale)

ACRL Outcomes Include:

- a. Assesses the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilized

- b. Identifies gaps in the information retrieved and determines if the search strategy should be revised
 - c. Repeats the search using the revised strategy as necessary
5. The information literate student extracts, records, and manages the information and its sources.

In addition, baccalaureate graduates ethically manage data, information, knowledge, and technology to communicate effectively; provide safe and effective patient care; and use research and clinical evidence to inform practice decisions. (EBE IV Rationale)

ACRL Outcomes Include:

- a. Selects among various technologies the most appropriate one for the task of extracting the needed information (e.g., copy/paste software functions, photocopier, scanner, audio/visual equipment, or exploratory instruments)
- b. Creates a system for organizing the information
- c. Differentiates between the types of sources cited and understands the elements and correct syntax of a citation for a wide range of resources
- d. Records all pertinent citation information for future reference
- e. Uses various technologies to manage the information selected and organized

Standard Three

The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

Professional nursing practice is grounded in the translation of current evidence into practice. Scholarship for the baccalaureate graduate involves identification of practice issues; appraisal and integration of evidence; and evaluation of outcomes. (EBE, III, Rationale)

Performance Indicators:

1. The information literate student summarizes the main ideas to be extracted from the information gathered.

Nurses collaborate with other healthcare team members, in documenting and interpreting evidence for improving patient outcomes (AACN, 2006b). (EBE, III)

ACRL Outcomes Include:

- a. Reads the text and selects main ideas

- b. Restates textual concepts in his/her own words and selects data accurately
 - c. Identifies verbatim material that can be then appropriately quoted
2. The information literate student articulates and applies initial criteria for evaluating both the information and its sources.

Nurses evaluate the credibility of sources of information, including but not limited to databases and Internet resources. (EBE, III, 4)

Sample Content (EBE, III)

- *Locating and evaluating sources of evidence*
- *Levels of evidence: textbooks, case studies, reviews of literature, research critiques, controlled trials, evidence-based clinical practice guidelines (www.guideline.gov), meta-analyses, and systematic reviews (e.g., the Cochrane Database of Systematic Reviews)*
- *Differentiation of clinical opinion from research and evidence summaries*

ACRL Outcomes Include:

- a. Examines and compares information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias
 - b. Analyzes the structure and logic of supporting arguments or methods
 - c. Recognizes prejudice, deception, or manipulation
 - d. Recognizes the cultural, physical, or other context within which the information was created and understands the impact of context on interpreting the information
3. The information literate student synthesizes main ideas to construct new concepts.

Nurses synthesize broad ecological, global and social determinants of health; principles of genetics and genomics; and epidemiologic data to design and deliver evidence-based, culturally relevant clinical prevention interventions and strategies. (EME, VIII, 1)

Sample Content (EBE, IV)

- *Use of technology and information systems for clinical decision-making*
- *Computer skills that may include basic software, spreadsheet, and healthcare databases*

ACRL Outcomes Include:

- a. Recognizes interrelationships among concepts and combines them into potentially useful primary statements with supporting evidence
 - b. Extends initial synthesis, when possible, at a higher level of abstraction to construct new hypotheses that may require additional information

- c. Utilizes computer and other technologies (e.g. spreadsheets, databases, multimedia, and audio or visual equipment) for studying the interaction of ideas and other phenomena
4. The information literate student compares new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.

Nurses integrate evidence, clinical judgment, interprofessional perspectives, and patient preferences in planning, implementing, and evaluating outcomes of care. (EBE, III, 6)

Sample Content (EBE III)

- *Forces driving research agendas*
- *Simulation training in a variety of settings (e.g., disasters, codes, and other high-risk clinical areas)*

ACRL Outcomes Include:

- a. Determines whether information satisfies the research or other information need
 - b. Uses consciously selected criteria to determine whether the information contradicts or verifies information used from other sources
 - c. Draws conclusions based upon information gathered
 - d. Tests theories with discipline-appropriate techniques (e.g., simulators, experiments)
 - e. Determines probable accuracy by questioning the source of the data, the limitations of the information gathering tools or strategies, and the reasonableness of the conclusions
 - f. Integrates new information with previous information or knowledge
 - g. Selects information that provides evidence for the topic
5. The information literate student determines whether the new knowledge has an impact on the individual's value system and takes steps to reconcile differences.

Nurses use epidemiological, social, and environmental data in drawing inferences regarding the health status of patient populations and interventions to promote and preserve health and healthy lifestyles. (EME, IX, 6)

Sample Content (EME, II)

- *Data-driven decision-making based on an ethical framework to promote culturally responsive, quality patient care in a variety of settings, including creative and imaginative strategies in problem solving*

ACRL Outcomes Include:

- a. Investigates differing viewpoints encountered in the literature
 - b. Determines whether to incorporate or reject viewpoints encountered
6. The information literate student validates understanding and interpretation of the information through discourse with other individuals, subject-area experts, and/or practitioners.

Nurses use inter and intraprofessional communication and collaborative skills to deliver evidence-based, patient-centered care. (EBE, VI, 2)

Sample Content (EBE, VI)

- *Teamwork/concepts of teambuilding/cooperative learning*
- *Professional roles, knowledge translation, role boundaries, and diverse disciplinary perspectives*
- *Interdependence and resource sharing of healthcare professions*

ACRL Outcomes Include:

- a. Participates in classroom and other discussions
 - b. Participates in class-sponsored electronic communication forums designed to encourage discourse on the topic (e.g., email, bulletin boards, chat rooms)
 - c. Seeks expert opinion through a variety of mechanisms (e.g., interviews, email, listservs)
7. The information literate student determines whether the initial query should be revised.

Nurses conduct a comprehensive and systematic assessment as a foundation for decision making. (EME, IX, 1)

Sample Content

- *Evidence-based practice (EME, IV):*
 - *Clinical decision making and judgment*
 - *Critical thinking*
 - *Problem Identification*
 - *Outcome measurement*
- *Translational science (EME, IV):*
 - *Data collection in nursing practice*
 - *Design of databases that generate meaningful evidence for nursing practice*
 - *Data analysis in practice*
 - *Evidence-based interventions*
 - *Prediction and analysis of outcomes*
 - *Patterns of behavior and outcomes*
 - *Gaps in evidence for practice*

- Importance of cultural relevance
- Appreciative inquiry (EME, IX)

ACRL Outcomes Include:

- a. Determines if original information need has been satisfied or if additional information is needed
- b. Reviews search strategy and incorporates additional concepts as necessary
- c. Reviews information retrieval sources used and expands to include others as needed

Standard Four

The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

Because professional nurses are the human link between the patient and the complex healthcare environment, they must provide compassionate care informed by a scientific base of knowledge, including current evidence from nursing research. Essential IX recognizes that the integration of knowledge and skills is critical to practice. (EBE, IX, Rationale)

Knowledge from information sciences, health communication, and health literacy are used to provide care to multiple populations. (EME, I, Rationale)

Performance Indicators:

1. The information literate student applies new and prior information to the planning and creation of a particular product or performance.

As noted by the Carnegie Foundation for the Advancement of Teaching, the sciences are a critical aspect of liberal education for nurses. Sciences that have clinical relevance are especially important to the profession of nursing to ensure that graduates have the ability to keep pace with changes driven by research and new technologies. (EBE, I, Rationale)

Scholarship for the baccalaureate graduate involves identification of practice issues; appraisal and integration of evidence; and evaluation of outcomes. (EBE, III, Rationale)

Skills of inquiry, analysis, critical thinking, and communication in a variety of modes, including the written and spoken word, prepare baccalaureate graduates to involve others in the common good through use of information technologies, team work, and interprofessional problem solving. (EBE, I, Rationale)

Synthesize evidence for practice to determine appropriate application of interventions across diverse populations. (EME, I,5)

The master's-prepared nurse examines policies and seeks evidence for every aspect of practice, thereby translating current evidence and identifying gaps where evidence is lacking. (EME, IV, rationale)

ACRL Outcomes:

- a. Organizes the content in a manner that supports the purposes and format of the product or performance (e.g. outlines, drafts, storyboards)
- b. Articulates knowledge and skills transferred from prior experiences to planning and creating the product or performance
- c. Integrates the new and prior information, including quotations and paraphrasing, in a manner that supports the purposes of the product or performance
- d. Manipulates digital text, images, and data, as needed, transferring them from their original locations and formats to a new context

2. The information literate student revises the development process for the product or performance.

*Value the ideal of lifelong learning to support excellence in nursing practice. (EBE, I, 9)
Knowledge is increasingly complex and evolving rapidly. For example, genetics and genomics are areas where knowledge is escalating and the graduate will be cognizant of customized therapies designed to improve care outcomes. Therefore, baccalaureate graduates will be expected to focus on continuous self evaluation and lifelong learning.(EBE, IX, Rationale)
Master's-prepared nurses lead continuous improvement processes based on translational research skills. The cyclical processes in which these nurses are engaged includes identifying questions needing answers, searching or creating the evidence for potential solutions/innovations, evaluating the outcomes, and identifying additional questions.(EME, IV, Rationale)*

Master's-degree graduates are prepared to gather, document, and analyze outcome data that serve as a foundation for decision making and the implementation of interventions or strategies to improve care outcomes. The master's-prepared nurse uses statistical and epidemiological principles to synthesize these data, information, and knowledge to evaluate and achieve optimal health outcomes. (EME, V, Rationale)

ACRL Outcomes:

- a. Maintains a journal or log of activities related to the information seeking, evaluating, and communicating process
- b. Reflects on past successes, failures, and alternative strategies

3. The information literate student communicates the product or performance effectively to others.

Use written, verbal, nonverbal, and emerging technology methods to communicate effectively. (EBE,I, 4)

Evaluate data from all relevant sources, including technology, to inform the delivery of care. (EBE, IV, 6)

Implement evidence-based nursing interventions as appropriate for managing the acute and chronic care of patients and promoting health across the lifespan.(EBE,IX,8)

Integrate organizational science and informatics to make changes in the care environment to improve health outcomes. (EME, I,7)

Articulate to a variety of audiences the evidence base for practice decisions, including the credibility of sources of information and the relevance to the practice problem confronted. (EME, IV, 3)

Use information and communication technologies, resources, and principles of learning to teach patients and others. (EME, V, 5)

Master's-prepared nurses serve as information managers, patient advocates, and educators by assisting others (including patients, students, caregivers and healthcare professionals) in accessing, understanding, evaluating, and applying health-related information. The master's-prepared nurse designs and implements education programs for cohorts of patients or other healthcare providers using information and communication technologies. (EME, V, Rationale)

Master's-prepared nurses, when appropriate, lead the healthcare team in the implementation of evidence-based practice. These nurses support staff in lifelong learning to improve care decisions, serving as a role model and mentor for evidence-based decision making. Program graduates must possess the skills necessary to bring evidence-based practice to both individual patients for whom they directly care and to those patients for whom they are indirectly responsible. Those skills include knowledge acquisition and dissemination, working in groups, and change management. (EME, IV, Rationale)

Use information and communication technologies to advance patient education, enhance accessibility of care, analyze practice patterns, and improve health care outcomes, including nurse sensitive outcomes. (EME, IX, 4)

ACRL Outcomes:

- a. Chooses a communication medium and format that best supports the purposes of the product or performance and the intended audience.
- b. Uses a range of information technology applications in creating the product or performance.
- c. Incorporates principles of design and communication.
- d. Communicates clearly and with a style that supports the purposes of the intended audience)

Standard Five

The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Demonstrate the professional standards of moral, ethical, and legal conduct. (VIII, 1)

Performance Indicators:

1. The information literate student understands many of the ethical, legal and socio-economic issues surrounding information and information technology.

Students will ethically manage data, information, knowledge, and technology to communicate effectively; provide safe and effective patient care; and use research and clinical evidence to inform practice decisions. (EBE, IV, Rationale)

Promote policies that incorporate ethical principles and standards for the use of health and information technologies. (EME, V, 2)

Sample Content (EME, V,2)

- *Manage ethical and legal issues related to the use of information technology, including copyright, privacy, and confidentiality issues.*

ACRL Outcomes Include:

- Identifies and discusses issues related to privacy and security in both the print and electronic environments
 - Identifies and discusses issues related to free vs. fee-based access to information
 - Identifies and discusses issues related to censorship and freedom of speech
 - Demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material
2. The information literate student follows laws, regulations, institutional policies, and etiquette related to the access and use of information resources.

Uphold ethical standards related to data security, regulatory requirements confidentiality, and clients' right to privacy. (EBE, IV,8)

Participate in evaluation of information systems in practice settings through policy and procedure development. (EBE, IV, 12)

Use information and communication technologies, resources, and principles of learning to teach patients and others. (EME, V, 5)

Sample Content (EBE, III)

- *Observes ethical conduct of research and scholarly work., Sample)*

ACRL Outcomes Include:

- Participates in electronic discussions following accepted practices (e.g. "Netiquette")
- Uses approved passwords and other forms of ID for access to information resources
- Complies with institutional policies on access to information resources
- Preserves the integrity of information resources, equipment, systems and facilities
- Legally obtains, stores, and disseminates text, data, images, or sounds
- Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own

- g. Demonstrates an understanding of institutional policies related to human subjects research
- 3. The information literate student acknowledges the use of information sources in communicating the product or performance.

Outcomes Include:

- a. Selects an appropriate documentation style and uses it consistently to cite sources
- b. Posts permission granted notices, as needed, for copyrighted material