

DEVELOPING A COMPETENCY-BASED PROGRAM FOR LACTATION CONSULTANTS

ILCA recognizes the need for a standard, minimum entry-level educational requirement for lactation consultants. Excellence and consistency in educational preparation are essential for a lactation consultant to be recognized as a credible source of quality health care and a legitimate partner in the interdisciplinary health care team. This requires uniformity among programs in such factors as pre-admission requirements, faculty and program director qualifications, curricula, and the number of clinical hours required. Use of a standard curriculum will contribute to consistency within the lactation consultant profession and produce graduates who meet the minimum educational requirement.

This does not preclude the fact that there are multiple methods of entry into the profession of lactation consulting. Individuals who are already expert health care providers, for instance, may have accomplished college prerequisites through their basic educational preparation and thus would need only to add components specific to lactation consultant practice. This guide outlines preparation for a student entering an advanced level academic program without some type of healthcare background (i.e., graduating from high school and completing a four-year college degree). It provides a point of comparison for individuals from a variety of backgrounds to evaluate their educational needs in preparation for entering the lactation consultant profession. It also guides administrators of courses with varying length and scope, and those that prepare students for varying practice levels.

Competency standards

The ultimate goal of any curriculum is competence in the workplace. Competency standards form the benchmarks for assessment and the basis for accepted qualifications. Competence is the ability to apply knowledge, skill and attitude to the standards required in employment in both routine and non-routine situations (Bloom, 1956). Level of competence reflects the degree of supervision required, and areas of responsibility, as well as the degree to which the learner can apply knowledge and skills. Assigning a competency level for individual areas of skill acquisition will help to identify areas for improvement.

All technical professionals need to consider the important question of how to develop competency in areas that are appropriate to their job. Overall competence involves individual competencies in many different areas. There are several questions to ask in defining a profession's competencies.

- What does the role encompass?
- What is needed to be competent in this role?
- What combination of knowledge, skill and attitude are needed to perform this work competently?
- What basic knowledge or expertise is needed?
- What level of skill is required to be competent?
- What performance standards apply to this work?
- What could an individual do to prove their competence?

Acquiring competency

A precursor to acquiring skills competency is the acquisition of a knowledge base that includes the scientific principles and rationale for the incorporation of skills into practice. Educators are instrumental in developing learning methods that will assure initial skills competence of their

graduates. Students need one or more practice sessions in order to learn how to perform the required steps, with instructors assisting and coaching them. They reach competence when they can perform the required steps in the proper sequence.

Competence progresses to proficiency when the student performs the skill efficiently. Ability to pass an exam about didactic information does not equate with ability to offer the best care to patients. Clinicians develop skills through practicing as well as learning. The ability to synthesize competencies in the context of complex practice takes variable amounts of time to refine. Proficiency requires an ability to recognize differences from usual patterns, the need for individualization, and warning signs in a patient and then determining the best course of action.

Teaching for professional competency

Clinical education is a significant component of any health care professional's educational program. Students approach the learning institution with the assumption that they will acquire the necessary knowledge and skills to become competent practitioners. Furthermore, employers assume that completion of training certifies competent performance (Redman, 1999). Educators, therefore, need to assess what students can *do*, not just their knowledge base and ability to pass a written test.

Course directors can contribute toward establishing competency among their students by teaching and assessing competencies as part of the educational process. A competency-based curriculum goes beyond teaching knowledge, skills and attitudes. It focuses on outcomes and prepares students for practicing skills in a real-life setting. Designing a curriculum based on competency outcomes also helps instructors know what they should teach.

A wide variety of skills can be taught in a realistic job-related situation (Lenburg, 2001). Core practice competencies can be taught and demonstrated in the classroom and then in supervised clinical settings. They may include:

- Physical assessment
- History taking
- Common interventions
- Therapeutic communication
- Critical thinking
- Teaching
- Establishing therapeutic caring relationships
- Identifying and managing common clinical problems
- Leadership; fostering organizational change

Competency-based learning strategies

Educators need to utilize a wide variety of instructional strategies and to recognize when to use those strategies. Instructional techniques, activities and learning experiences need to be learner-centered and to engage the learner actively in the learning process. Instructors can assess student performance through classroom demonstration and return demonstrations structured to apply competencies. Such a competency-based curriculum enables students to learn and demonstrate a competency in the educational setting and to refine their skills in the practice setting. The key to such a curriculum is demonstration of competency before leaving the learning setting.

Competency assessment

The goal of competency assessment is to evaluate effective application of knowledge, skill and attitude in the practice setting. Competency assessment is always outcome oriented. It provides a way to measure students' demonstration of learning. The learner should receive a set of criteria so that both the learner and the assessor are clear on what performance is required. The criteria should specify outcomes and describe what the learner must do to demonstrate competency. The instructor can then evaluate the learner's performance against the established outcome criteria.

A consideration of anticipated outcomes assessments early in curriculum planning facilitates the design effective learning activities. Continued monitoring, review, and evaluation of the curriculum will indicate whether it is having the desired effect on student learning. Such review enables educators to identify strengths and weaknesses of the curriculum and make changes that will raise student achievement and competency. Current and former students, faculty, and employers are all good sources of feedback on program assessment.

Self-assessment of competency

It takes time for a student to develop competence. Students can assess their performance to identify gaps and target competencies they need to achieve. Examining their performance against each of the profession's competence statements will help to determine the level at which they currently function or practice. The student's comparison of their own practice to that of others, using respected colleagues as a benchmark of good practice, provides insight about areas of growth needed. See *Clinical Competencies for IBCLC Practice*.

Formal assessment of competency

In formal competency-based assessment, the assessor sets goals and objectives, collects evidence of competence, and compares the evidence with the objectives. Assessment may occur daily or weekly, and may be a combination of formal evaluation and feedback from the worker. From these assessments, the assessor then forms an opinion of whether the individual is competent or not yet competent. Individuals are competent when they are able to apply their knowledge and skills to complete work activities successfully in a range of situations and environments, in accordance with the standard of performance expected in the profession and in the particular workplace. See *Standards of Practice for IBCLC Lactation Consultants*.

In the process of assessing competency, the assessor gathers evidence to determine whether the student has met the desired standards for performance. This competency evidence must be valid, reliable, authentic, current, and sufficient (VET, 2006).

- Valid: the performance assessment confirms the competency standard
- Reliable: the assessment consistently measures the standard from candidate to candidate, and from assessor to assessor
- Authentic: the evidence actually measures the candidate's performance
- Current: the evidence indicates recent performance
- Sufficient: there is enough evidence to conclude that competence has been achieved

If the evidence indicates that an individual is competent, the assessor is saying that this person has

demonstrated that they have the necessary skill, attitudes and knowledge to perform a function or task to the standard required by the profession. There is no concept of passing or failing in competency-based assessment. Individuals are either competent or not yet competent. There are no degrees of competence. A person judged as not yet competent may need further coaching or learning opportunities, or they may need to produce more evidence of their skills.

In competency-based assessment, standards describe the expected competency outcomes. The standards include criteria that provide details of what they consider a good job. Characteristics of a competency-based assessment include:

- It is individual, with no comparison among students.
- It judges the assessed student as either competent or not yet competent.
- It takes place in real working situations.
- It is a process rather than a particular moment or predetermined period.
- It is not subject to the completion of a specific training action.
- It recognizes competencies acquired through work experience (recognition of prior learning).
- It is a tool for the student's orientation and performance in the practice setting.

Information from the workplace will help to develop a complete picture of competency needs. Therefore, assessors need to have knowledge of the relevant processes, procedures and performance standards that operate within the practice setting. Answers to these key questions will help to provide this overall picture.

- How would competent practitioners in this setting perform the task?
- How would competent practitioners apply their knowledge in this setting?
- What level of performance would be expected?
- What would competent practitioners do if something went wrong?
- How would competent practitioners handle multiple competing priorities?
- What would the product or service look like?
- How would competent practitioners transfer their skills to other contexts?
- How would competent practitioners apply generic skills?
- What would a competent practitioner *not* do?

Summary

ILCA recognizes that curriculum encompasses content, learning strategies, assessment processes, and evaluation processes. The specific curriculum design of individual programs is the prerogative of the program faculty. ILCA supports the creativity of program faculty to design a curriculum that meets the needs of their student population. Through the process of didactic and clinical learning, professionals are able to acquire competency by acquiring knowledge, attitudes and skills. Competence increases as students apply their learning of increasingly complex skills across a wide and often unpredictable variety of contexts.

References

Bloom B. S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*. New York: David McKay Co Inc.

Lenburg, C.B. (2001). The competency outcomes and performance assessment model applied to nursing case management systems. In E. Cohen & T. Cesta, *Nursing Case Management: From*

Concept to Evaluation (3rd edition). St. Louis: Mosby, 269-279.

Redman, R.W., Lenburg, C.B., Hinton Walker, P. (Sept. 30, 1999): Competency Assessment: Methods for Development and Implementation in Nursing Education. Online Journal of Issues in Nursing. Available http://www.nursingworld.org/ojin/topic10/tpc10_3.htm

Vocation Education and Training (VET), Western Australia Department of Education and Training. www.vetinfonet.det.wa.edu.au/home/default.aspx. Accessed August 22, 2006.

Prepared by ILCA Professional Development Committee
March 2007 © International Lactation Consultant Association

Additional Resources on Competency-based Learning

COMPETENCY LEVELS

A particular role within a profession can be defined by the level of competence that is expected in order to perform that role. A novice, for example, would not be expected to perform at the same level as an expert within the same profession. Level of competence reflects the degree of supervision and responsibility, as well as the degree to which knowledge and skills can be applied. Assigning a competency level for individual areas of skill acquisition will help to identify those areas where improvement is needed.

Level 1: Unable to offer any evidence of competence in area

- Performs the activity with significant supervision and guidance
- Performs basic routines and predictable tasks
- Little or no responsibility or autonomy

Level 2: Can demonstrate competence in most elements associated with area

- Performs the activity in some complex and non-routine contexts
- Significant responsibility and autonomy
- Can oversee the work of others

Level 3: Proficient in area

- Can take a strategic view
- Applies a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts
- Wide scope of personal autonomy

COMPETENCY SKILLS

Competency requires the acquisition of skills that go beyond the knowledge and skill base of a particular profession (sorry, don't get this at all; are we saying that workplace or job competency, or being able to competently perform as a professional in a specific practice setting?).

These sound like wonderful things I want in a colleague or employee....But how does this "how to prepare people to become LCs" document need this part? These include the ability to:

- Demonstrate an acceptable level of skill in the performance of a task
- Manage a number of different tasks within the job
- Demonstrate the appropriate response or reaction to unforeseen problems or changed circumstances
- Fulfill workplace expectations and responsibilities
- Apply the skill to different situations

Competency also requires that an individual demonstrate mastery of personal abilities, including the ability to:

- Collect, analyze and organize information

- Communicate ideas and information
- Plan and organize activities
- Work with others in teams
- Use mathematical ideas and techniques
- Think critically and solve problems
- Computer use and other technology

RESOURCES FOR COMPETENCY BASED EDUCATION

Source: Union College, Barboursville, KY

<http://public.unionky.edu/sacs/Competency%20Based%20Education%20&%20Testing%20bib.htm>

Aitken, J. E., & Neer, M. R. (July 1992). "A faculty program of assessment for a college level competency-based communication core curriculum." Communication Education 41, 270-86.

Altieri, G. (Spring 1990). "A structural model for student outcomes: assessment programs in community colleges." Community College Review 17 (4), 15-22. [FT, EBSCO – Academic Search Premier (ASP)]

Brown, R. D., & Citrin, R. S. (Sept/Oct 1999). "A student development transcript: assumptions, uses, and formats." Journal of College Student Development 40 (5), 504-9. [reprinted from May 1977 issue]

Buerkel-Rothfuss, N., Gray, P. L., & Yerby, J. (January 1993). "The structured model of competency-based instruction." Communication Education 42, 22-36.

Carlson, T. (May 2000). "Implementing criterion-reference assessment within a multi-disciplinary university department." Higher Education Research & Development 19 (1), 103-117. [FT, EBSCO – ASP]

Carpenter, T. G., Brown, W. L., & Hickman, R. C. (Fall 2004). "Influences of online delivery on developmental writing outcomes." Journal of Developmental Education 28 (1), 14-9. [FT, EBSCO – ASP]

Casey, K. M. (February 2004). "Greater expectations?: teaching and assessing for academic skills and knowledge in the general education history classroom." The History Teacher 37 (2), 171-81. [FT – Wilson Web OMNI]

Clariana, R., & Wallace, P. (November 2002). "Paper-based versus computer-based assessment: key factors associated with the test mode effect." British Journal of Educational Technology 33 (5), 593-603. [FT, EBSCO – ASP]

Clark, R. A. (October 2002). "Learning outcomes: the bottom line." Communication Education 51 (4), 396-404.

Day, E. A., Radosevich, D. J., & Chasteen, C. S. (October 2003). "Construct- and criterion-related validity of four commonly used goal orientation instruments." Contemporary Educational Psychology 28 (4), 434-465.

Erwin, T. D. (1991). Assessing student learning and development: a guide to the principles, goals, and methods of determining college outcomes. San Francisco: Jossey-Bass. [378.73 E73a; currently on Reserve]

Furst-Bowe, J., Boger, C., & Franklin, T. (Winter 1995-96). "An analysis of required computer competencies for

university students.” Journal of Research on Computing in Education 28, 175-89. [FT, Wilson Web OMNI]

Gulikers, J. T. M., Bastiaens, T. J., & Kirschner, P. A. (2004). “A five-dimensional framework for authentic assessment.” Educational Technology Research and Development 52 (3), 67-86. [FT, Wilson Web OMNI]

Hamilton, S. J. (2003). “A principle-based approach to assessing general education through the majors.” JGE : The Journal of General Education 52 (4), 283-303. [FT, EBSCO – ASP]

Hayes, C. R. (Fall 1995). “Development of evaluation indicators: three universities of the Texas A&M System.” New Directions for Higher Education (91), 91-7.

Hood, S. (Summer 1998). “Culturally responsive performance-based assessment: conceptual and psychometric considerations.” Journal of Negro Education 67 (3), 187-97. [[FT, JSTOR]

Hoogveld, A. W. M., Paas, F., & Jochems, W. M. G. (April 2005). “Training higher education teachers for instructional design of competency-based education: product-oriented versus process-oriented worked examples.” Teaching and Teacher Education 21 (3), 287-97.

Hsu, P., & Dwyer, F. (2004). “Effect of level of adjunct questions on achievement of field independent/field dependent learners.” International Journal of Instructional Media 31 (1), 99-107. [FT, Wilson Web OMNI]

Hussey, T., & Smith, P. (November 2002). “The trouble with learning outcomes.” Active Learning in Higher Education 3 (3), 220-33.

Kirkland, T. P. (Apr/May 1997). “Assessment planning: the P in planning is for politics.” Community College Journal of Research & Practice 21 (3), 289-96. [FT, EBSCO – ASP]

Kretovics, M. A. (Mar/Apr 1999). “A seven-step approach to developing an outcomes assessment program.” Assessment Update 11 (2), 10-12. [FT, EBSCO – ASP]

Lewis, V. K., Shaha, S. H., & Farnsworth, B. J. (June 2003). “The use of assessment in improving technology-based instruction programs.” Journal of Instructional Psychology 30 (2), 110-19. [FT, Wilson Web OMNI]

Lum, G. (November 2004). “On the non-discursive nature of competence.” Educational Philosophy & Theory 36 (5), 485-97.

Madelaine, A. (March 2004). “Curriculum-based measurement of reading: recent advances.” International Journal of Disability, Development & Education 51 (1), 57-83. [FT, EBSCO – ASP]

McDaniel, E. A., Felder, B., Gordon, L., & Hrutka, M. E. (Winter 2000). “New faculty roles in learning outcomes education: the experiences of four models and institutions.” Innovative Higher Education 25 (2), 143-58. [FT, EBSCO – ASP]

Miles, C. L., & Wilson, C. (Summer 2004). “Learning outcomes for the twenty-first century: Cultivating student success for college and the knowledge economy.” New Directions for Community Colleges (126), 87-101. [FT, Wilson Web

OMNI]

Ring, G. L., & Foti, S. L. (March/April 2003). "Addressing standards at the program level with electronic portfolios." Tech Trends 47 (2), 28-32. [FT, Wilson Web, OMNI]

Seybert, J. A. (July 1997). "Development of a performance-based model for assessment of general education." Assessment Update 9 (4), 5-8. [FT, EBSCO – ASP]

Stevenson, J. M. (Summer 1996). "A synopsis for outcome-based versus income-focused enrollment management." Education 116 (4), 609-612. [FT, EBSCO – ASP]

Voorhees, A. B. (Summer 2001). "Creating and implementing competency-based learning models." New Directions for Institutional Research (110), 83-96. [FT, EBSCO – ASP]

Warren, J. (September 2003). "Changing community and technical college curricula to a learning outcomes approach." Community College Journal of Research and Practice 27 (8), 721-30. [FT, EBSCO – ASP]

Watson, P. (November 2002). "The role and integration of learning outcomes into the educational process." Active Learning in Higher Education 3 (3), 205-19.

Zekeri, A. A. (September 2004). "College curriculum competencies and skills former students found essential to their careers." College Student Journal 38 (3), 412-22. [FT, Wilson Web OMNI]

INTERNET SITES RELEVANT TO COMPETENCE

Source: Lenburg, C. (Sept. 30, 1999): Redesigning Expectations for Initial and Continuing Competence For Contemporary Nursing Practice *Online Journal of Issues in Nursing*. Available http://www.nursingworld.org/ojin/topic10/tpc10_1.htm

The following list of web page sites are intended as examples to locate useful information or links to information about competencies, assessment, and related requirements or regulations. Too many others exist, and change is too frequent to allow listing more sites.

<http://www.aacn.nche.edu/> American Association of Colleges of Nursing

<http://www.aahe.org/> American Association for Higher Education

<http://www accrediting-comm-nlnac.org/> NLN Accreditation Commission

<http://www.alverno.edu/> Alverno College

<http://www.gnacademy.org/> Global Network Academy; focus on distance learning

<http://www.josseybass.com/> Assessment Update and other assessment resources

<http://www.ncsbn.org/> National Council of State Boards of Nursing

<http://www.nln.org/> National League for Nursing

<http://www.nursce.com/> National Center for Continuing Education

<http://www.nursingworld.org/> American Nurses Association; OJIN & related sites

<http://www.regents.edu/> Regents College: external nursing and other degrees

<http://www.rnce.org/> ANA/ANF continuing education modules