GUIDING PRINCIPLES

FOR COMPETENCY-BASED EDUCATION AND ASSESSMENT

American Association
of **Colleges** *of* **Nursing**

The Voice of Academic Nursing

AACN developed this resource to guide faculty engaged with transitioning to competency-based curricula based on *The Essentials: Core Competencies for Professional Nursing Education*. The following key components of competency-based education (CBE) provide a foundation for implementing CBE: outcome competencies, sequenced progression, tailored learning experiences, competency-focused instruction, and programmatic assessment. A shared understanding of the components and approaches of CBE is needed for successful implementation while still allowing for flexible program design. ***Comprehensive evaluation of program outcomes is important; however, this document primarily focuses on guiding principles for competency assessment of individual learners.***

KEY POINTS

- In an outcomes-based competency framework, curriculum, outcomes, and assessment strategies are mapped to the 2021 *Essentials*.

- Competencies are sequenced progressively and drive curriculum design. Effective sequencing means:
  - Gradually increasing complexity of expectations,
  - Progressively building on foundational competencies,
  - Employing a systematic approach to map educational opportunities and assessments for each competency across the curriculum.

- Learner takes on authentic roles of graduates to attain and demonstrate competencies with some flexibility for enrichment.

- Teaching and assessment strategies are tailored to competencies and to the individual learner:
  - Faculty tailor learning experiences to competencies,
  - Learners actively guide their own learning,
  - Faculty ensure that each learner is an active participant in the assessment process, including formative and summative assessments.
  - Faculty clearly delineate expectations of the learner, so the learner knows the competencies they need to achieve and the behaviors expected.
  - Learners engage in gathering and reviewing performance evidence, including how to self-assess and collaborate with faculty in generating their individualized learning plans to attain competency.

- Faculty are intentional about minimizing bias.

- All assessments should be directly linked to the competencies delineated in the 2021 *Essentials*.

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[1] Van Melle, E., Frank, J.R., Holmboe, E.S., Dagnone, D., Stockley, D., & Sherbino, J. (2019). A core components framework for evaluating implementation of competency-based medical education programs. *Academic Medicine, 94*(7), 1002-1009.

CORE PRINCIPLES FOR ASSESSMENT OF LEARNERS IN CBE

Principle	Implications for Implementation	Examples
CBE Assessment: Multiple Points, Assessors, and Methods		
• Decisions about learner progress are based on assessments collected at multiple timepoints using a variety of tools and methods of data collection.	• Create methods for data collection that match the competency or competencies being assessed. • Gather multi-modal performance evidence from multiple assessors in different contexts about each learner for each competency or collection of associated competencies. • Identify and conduct assessments in clinical, lab/simulation, and didactic settings. • Approach assessment developmentally with multiple opportunities to demonstrate competency. • Use different levels of supervision/oversight. • Use multiple assessors over time.	• Direct observation is important across the curriculum. However, different levels of supervision may be used as evidence is documented regarding a student's progression. For example, assessing a student's ability to perform a history and physical exam by directly observing the student versus listening to the student's verbal presentation of the history and physical exam findings. • Map the increasing level of competency expected across courses related to physical assessment and identify points for assessing. • Create a performance rubric for assessors.
CBE Assessment: Active Learner Engagement		
• The learner must be an active participant, and the process must be dynamic. • Learner must be invested in his/her/their own learning.	• Ensure each learner is an active participant in the assessment and understands the final decision process on competency attainment. • Provide clear expectations and stakes for both the learner and assessor for each point of assessment. • Engage the learner in gathering and reviewing performance evidence. • Ensure each learner understands the importance of his/her/their role in the assessment process. Prepare learners to self-assess under the guidance of a mentor and generate their own individualized learning plans to attain competency achievement.	• Develop reflective assignments for students to assess their progress toward achieving mastery for a given competency.
CBE Assessment: Methods Match Competency		
• Assessments use methods that are valid and address the intended competencies. • Methods for assessment and data collection match the quality of the competency being assessed.	• Determine that the method being used is measuring what it is intended to measure.	• Example of a valid assessment measure that is matched to the competency: Student is observed for behaviors demonstrating accountability, responsibility, advocacy, and social justice across four courses distributed throughout the curriculum.

Principle	Implications for Implementation	Examples
CBE Assessment: Direct Observation		
• The primary emphasis should be on direct observation in the practice environment. • Assessments include multiple opportunities for direct observations in diverse practice settings.	• Create assessment opportunities for direct observations of students by multiple assessors and in diverse practice settings.	• Assessor uses observation of student performing health assessments during multiple patient care experiences rather than, or in addition to, using the written assessment reported on the patient care plan for multiple care plan assignments across several courses.
CBE Assessment: Frequent Formative Feedback		
• Emphasis is on providing personalized, timely, and meaningful feedback. • Assessment data provides learners with actionable feedback to guide their learning. • Formative (low stakes) assessments provide learners with actionable data to guide their progress toward attainment of the competency and entrustment for unsupervised practice. • Expected outcomes/behaviors are clearly defined. • Achieving competence is a developmental process. Competency expectations are leveled. Example: not competent, approaching competency, and competent. • Demonstration of competency occurs by demonstrating the sub-competencies for either Level 1 or Level 2. • Sub-competencies and the competencies themselves can be assessed individually or together in increasingly complex contexts.	• Train faculty, preceptors, and mentors in providing actionable, respectful feedback. • Follow each assessment with timely feedback. • Include debriefing, feedback, and time to allow student self-reflection with each assessment opportunity. • Establish a process and build in sufficient time for remediation and additional learning and assessment opportunities to increase successful competency achievement.	• Providing one-on-one feedback by the faculty/preceptor immediately following observing the learner in practice is essential to competency development. This could be brief (10 minutes) but should include recommendations for how or what the learner should be working on related to the competency as well as learner self-reflection. • Example of formative assessment could include directly observing a student's engagement with a patient and/or family in the clinic or simulation lab. The assessor provides feedback immediately after the encounter including what the learner did well and how they can improve with specifics of what to work on next.

Principle	Implications for Implementation	Examples
CBE Assessment: Collective Summative Assessments		
• At points across the curriculum, summative assessments are performed to make collective formal decisions on competency attainment. • Progression includes developing trust of the learner to demonstrate competency reliably in increasingly complex situations and in different contexts/ environments.	• Explicitly measure the attribute of trustworthiness of the student by the assessor in addition to the knowledge, skills, and attitudes required for each competency. • Progression goes from total direct supervision and observation to autonomous actions trusting that the student can repeatedly provide specific care on their own without input and prompting. • Assessments should be created to assess competencies in situations that include increasing complexity, multiple factors, and in different settings and environments. • There may be activities that students are not allowed to do autonomously due to institution/licensing regulations; the preceptor/faculty and student need to understand and be aware of limitations and expectations.	• Example for collective summative assessments based on level of autonomy allowed could include implementing an individualized plan of care using established protocols. • Early in the curriculum, students may implement person-centered care based on instruction and with direct supervision while in a capstone experience at the end of the program, students may implement person-centered care with the appropriate level of supervision required by the facility and/or program.
CBE Assessment: Decision Making Process		
• Create and use robust, validated system for decision making regarding learner progression to and attainment of competency.	• Include multiple, diverse professional judgments about competency attainment by each learner. • Make decisions based on the body of evidence on assessments. • Create a process to render and maintain formal assessment decisions by a trained group (representing faculty and practice) that reviews performance evidence for each student. • Develop a training plan focused on the provision of feedback and coaching methods for faculty, preceptors, mentors, and others who will be assessing learners. • Consider the value of including assessor/student relationships and formal coaching opportunities in informing assessment decisions.	Create an assessment rubric that includes: • For the third-year students, expected behaviors to demonstrate achievement of competencies for that level. • A fourth-year or capstone assessment rubric that expects the student to demonstrate the ability to perform all competencies unsupervised prior to graduation. • Utilize a progression committee for developing and implementing formalized processes for all students and includes plans for students attaining "not competent" or "approaching competence" levels and therefore not able to progress.
CBE Assessment: Data Management and Visualization		
• Create a longitudinal record/view of each learner's performance, which includes aggregated performance evidence as well as longitudinal data on assessments, settings, context, assessor, and performance.	• Create multiple data points. • Create a dashboard to document a learner's competency development over time. • Document multiple assessments and associated assessors over time. • Document setting and method of assessment. • Document outcome/performance of learner.	• Faculty implement a competency tracking tool that adheres to the principles of Self-Sovereign Identity and has the capability for students to retain ownership of their own data after graduation. • Competency tracking tools should allow access for faculty, preceptors, and students with context-based views for easy input and access to the right information at the right time for the right purpose.

Principles	Implications for Implementation	Examples
CBE Assessment: Equity Assurance and Bias Mitigation		
• Design assessments for equity assurance and bias mitigation. • Understand the risk of unconscious biases. • Document steps taken to mitigate unconscious bias. • Consider inherent bias and ensure alignment to mitigate unconscious bias. • Use a standardized rubric with exemplars to ensure the learner and assessor understands expectations for competency attainment. • Evaluate competency attainment of diverse students i.e., students of color, indigenous students, and those with disabilities, to decrease unintended consequences.	• Embrace the philosophy that the intent is to help all learners attain and demonstrate the expected competencies. • Create an equity lens process that includes multiple perspectives and focuses on uniqueness of the candidate's perspective. • Include early and frequent assessments by multiple assessors with the goal to decrease biases. • Create an inter-rater reliability process in which faculty are evaluated for bias in competency evaluation. • Consider replacing rankings such as "honors," "high pass," "pass," and "fail" with "not competent," "approaching competent," and "competent." This should decrease competition and increase transparency and willingness to support others.	• Data that could indicate a problem with bias is evaluated regularly, i.e., faculty assessment of students of color is markedly different from students in general. • A policy for interrater reliability among faculty is developed by the program.

Forscher, P. S., Lai, C. K., Axt, J. R., Ebersole, C. R., Herman, M., Devine, P. G., & Nosek, B. A. (2019). A meta-analysis of procedures to change implicit measures. *Journal of Personality and Social Psychology*, 117(3), 522–559. https://doi.org/10.1037/pspa0000160.

GLOSSARY

Assessment:

- *Formative assessment* is intended to enhance learning without consequences or to inform progression decisions.

- *Summative assessment* is intended for making a decision regarding attainment of the competency or a key step towards competency demonstration, ability to perform the competency without or limited supervision, or pass/fail.

Program Evaluation: The comprehensive evaluation of the overall outcomes of the program, which would include aggregate attainment of competencies by the learners.

Self-Sovereign Identity: An approach to digital identity that gives individuals sole ownership of or ability to control their personal data.

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THE ESSENTIALS

For more tools related to the AACN *Essentials,* strategies for engaging practice partners, and approaches to moving to CBE, visit:

www.aacnnursing.org/Essentials