Competency-Based Education and Assessment: A Shared Student/Faculty Commitment

AACN Transform 2021 Conference

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Sr. Joel Read, Alverno College President

- President, 1968-2003
- Asked these questions in the early 1970's:
  - What should a student graduating from Alverno be able to do with what she knows? (All women's college)
  - What do grades mean?

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Alverno College at a Glance

- Women's college in Undergraduate programs
- About 1,800 students
- Outcomes based education and abilities-based assessment since 1973
- Eight Abilities inform undergraduate curriculum

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The Essentials: Transforming Nursing Education

Knowledge for Nursing Practice	Person-Centered Care	Population Health	Scholarship for the Nursing Discipline
Quality and Safety	Interprofessional Partnerships	Systems-Based Practice	Informatics and Healthcare Technologies
	Professionalism	Personal, Professional, and Leadership Development	

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So where do we start? How do we start?

Crosswalks

Essentials' Crosswalk					
DOMAIN	COMPETENCE	SUB-COMPETENCE	COURSE & OUTCOME	COURSE & OUTCOME	COURSE & OUTCOME
Domain 1: Knowledge for Nursing Practice	1.1 Demonstrate an understanding of the discipline of nursing's distinct perspective and where shared perspectives exist with other disciplines	1.1a Identify concepts, derived from theories from nursing and other disciplines, which distinguish the practice of nursing.			
		1.1b Apply knowledge of nursing science that develops a foundation for nursing practice.			
		1.1c Understand the historical foundation of nursing as the relationship developed between the individual and nurse.			
		1.1d Articulate nursing's distinct perspective to practice.			

Identify gaps and create learning and assessment experiences to fill them.

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How Competency-Based Education Influences Practice

Communicating for better care

Scientific inquiry and problem solving skills for effective practice

Critical thinking and evidence based practice

Professionalism, leadership, advocacy, entrepreneurship

Ash, Palermo, & Gallegos (2019)

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From Principles to Practice: Transforming Nursing Education

Principle: Education goes beyond knowing to being able to do what one knows.

(Alverno College Faculty, 1994)

"…the *Essentials* serve to bridge the gap between education and practice. The core competencies are informed by the expanse of higher education, nursing education, nursing as a discipline, and a breadth of knowledge. The core competencies also are informed by the lived experiences of those deeply entrenched in various areas where nurses practice and the synthesis of knowledge and action intersect."

(*Essentials*, p. 1.)

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From Principles to Practice: Transforming Nursing Education

Principle: Educators are responsible for making learning more available by articulating public outcomes.

(Alverno College Faculty, 1994)

"Clear expectations made explicit to learners, employers, and public."

(*Tool Kit, Basic Principles of CBE)*

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Characteristics of Learner-Centered Behavioral Outcomes

Involve the whole person

Are teachable

Can be assessed (behavioral, measurable)

Transfer across settings

Are continually evaluated and redefined

Alverno Faculty, 1994

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Writing an outcome that integrates competency

- **Alverno Institutional Outcome:** Problem Solving
- **Alverno UG Program Outcome**: Promote a culture of quality, safety, and inclusiveness through mindful practice of continuous quality improvement
- *Essentials:* Domain 5 Quality and Safety
- **Competence:** 5.2 Contribute to a culture of patient safety
- **Sub-Competence**: 5.2c Examine basic safety design principles to reduce risk of harm

Developing Student: Alverno Problem-Solving Outcome: Uses elements of disciplinary problem-solving processes to approach problems

Example: **Learner-Centered Outcome**: Applies nursing process to identify and address issues affecting the safety of an individual patient.

Learning Strategy: Observe in apartment; document; self assess

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From Principles to Practice: Transforming Nursing Education

Principle: Abilities or competencies need to be defined in a way that our teaching of them can be developmental.

(Alverno College Faculty, 1994)

Scaffold learning: Simple to complex

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Learning Experiences in CBE

Integrative and experiential

Self-aware and reflective

Active and interactive

Developmental

Transferable

(Tool Kit, Basic Principles of CBE)

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Strategies: Cognitive, Affective, Psychomotor

Role playing
Modeling
Computer assisted learning programs
Games
Story telling
Debate
Concept mapping

Immersion
Practicum
Producing an artwork
Writing a poem
Making a video
Designing a graphic

Explanation
Description
Lecture
One to one discussion
Answering questions
Demonstration
Discovery
Problem solving
Case study
Group discussion

High and low fidelity simulation
Clinical experiences
Practice synthesis experience

Practice
Printed audio visuals
Simulate a Committee meeting
Interview
Reading
Writing book, essay, article, your own eulogy
Experiment
Listening and responding: TED talk, music
Student choice of any mode

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Assessment OF, FOR, and AS Learning
(Stiggins, 2005)

Assessment-OF-Learning: Standards-based measurement for accountability, certification, progression (NCLEX)

Assessment-FOR-Learning: Diagnostic measurement to provide developmental feedback to learner and teacher

Assessment-AS-Learning: Metacognitive process whereby self assessment, peer feedback, and instructor feedback are used to help students set and monitor progress toward learning goals

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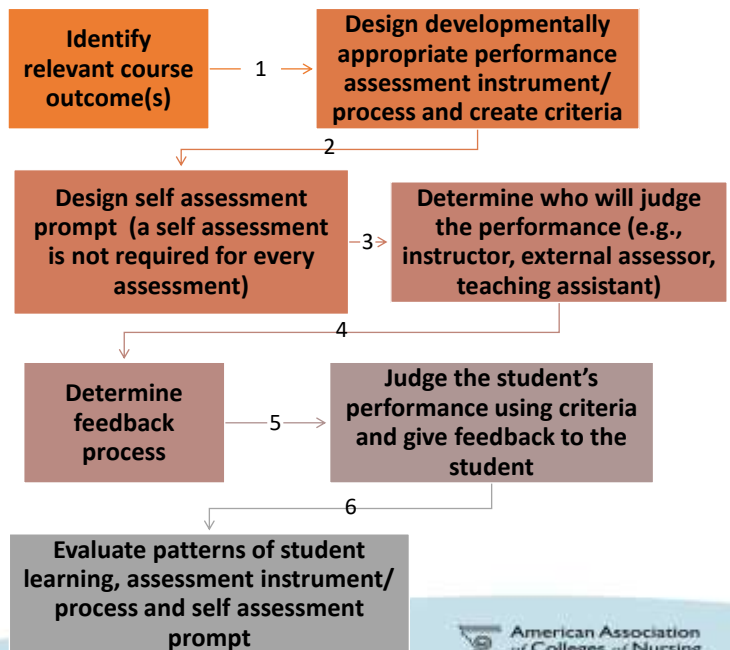The Voice of Academic Nursing

Assessment-as-Learning

- Good assessment is about probing what students know and can do in relation to course, program, and institution-wide outcomes.

✦ Verification of student knowledge
✦ Demonstration of student's ability to **use** that knowledge
✦ Creation of a holistic picture of a student's learning in a course and over time

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Framework for Designing a Performance Assessment in a Course

Identify relevant course outcome(s)

1 →

Design developmentally appropriate performance assessment instrument/ process and create criteria

2

Design self assessment prompt (a self assessment is not required for every assessment)

3 →

Determine who will judge the performance (e.g., instructor, external assessor, teaching assistant)

4

Determine feedback process

5 →

Judge the student's performance using criteria and give feedback to the student

6

Evaluate patterns of student learning, assessment instrument/ process and self assessment prompt

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Questions to ask about the assessment stimulus/prompt

How close is the assessment to what the students will actually do when they complete this program/course?

Is the assessment clearly related to Competencies and Sub-competencies?

Does the assessment elicit the most advanced performance of which each student is capable?

Is the assessment expansive in nature?

Will the assessment engage the student?

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Possible Performance Modes

WRITTEN: Essay, report, case study, in-basket, letter, field notes, journals

ORAL: Individual presentation, group presentation, discussion, interview, debate

VISUAL: Digital film, photograph, painting, poster session, sculpture, digital presentation

INTEGRATED: Clinical assessment, exhibit, portfolio, research project, live performance, simulated performance

PROCESS: Portfolio, journals, records of observed behavior, self assessment

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Alverno's Definition of Criteria

- Criteria are qualitative indicators of an integration of ability and knowledge as seen in performance.
- Criteria result from breaking open an outcome into specific components.
- Criteria need to be specific enough for a student at a given level to understand and use, without being so specific that the performance is limited to following directions.
- Criteria must include qualitative dimensions of performance.
- ▶ Criteria are **not** directions, e.g., 3-5 pages long, *APA* format

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A few questions to ask about the criteria

Are they more specific than the outcome?

Are they something you could observe?

Could a student meet these criteria in a variety of ways?

Could a student self-assess based on these criteria?

Will it give the student an opportunity to demonstrate sufficient indicators of the outcome?

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Descriptive Rubrics

Explicit statements of performance criteria

Explicit statements of levels of achievement

Focus on performance levels, not iterations—on quality, not quantity

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Principles of Feedback: Focus on

Behavior in relation to criteria

Observation rather than inferences

Description rather than judgment

Behavior related to a specific situation

Serving the needs of the recipient
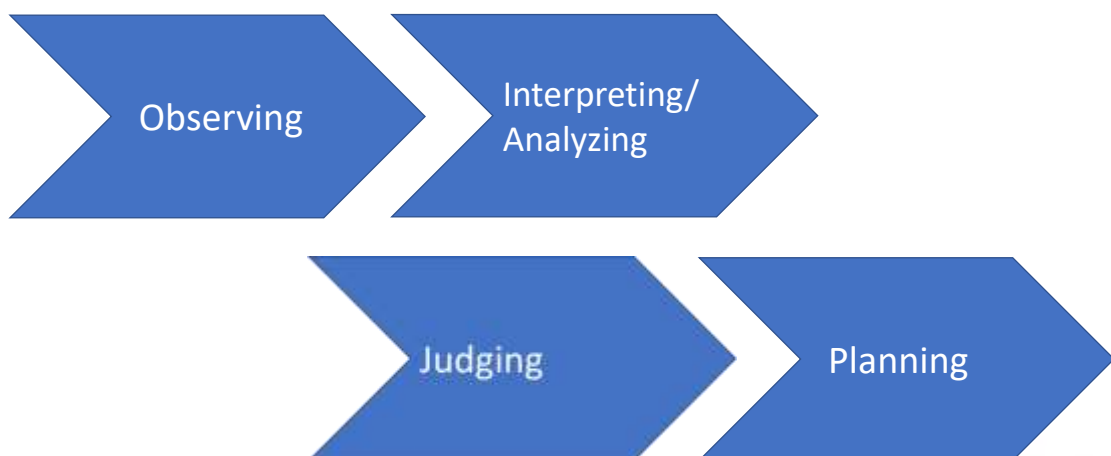
Amount of information person can use

Share "feed forward" rather than advice

(Lehner, 1975)

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Plan for Self Assessment

Self Assessment: The ability of a student to deepen their learning by observing, analyzing, and judging their performance on the basis of criteria and determining how to improve it.

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Self Assessment Process

Observing

Interpreting/ Analyzing

Judging

Planning

(Alverno College Faculty, 1994)

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End of Course Assessment Example

- Community Health Course
- In-Basket Format
- Scenario: Student is a public health nurse leaving for a two week vacation. Given case details for five patients. Given a list of who will be covering for her (nurse, social worker, home care assistant)
- Task: Prioritize the needs of the patients and designate who to delegate to. Must have scholarly rationale. Provide instructions to those covering.
- Format: Written

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Domains, Competencies, Sub-Competencies

Domain 1: Knowledge for Nursing Practice

- Competence 1.3: Demonstrate clinical judgment founded on a broad knowledge base
  - Sub-Competence 1.3c: Incorporate knowledge from nursing and other disciplines to support clinical judgment

Domain 2: Person-Centered Care

- Competence 2.6: Demonstrate accountability for care delivery
  - Sub-Competence 2.6c: Delegate appropriately to team members

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Domains, Competencies, Sub-Competencies (cont'd)

Domain 6: Interprofessional Partnerships

- Competence 6.3: Use knowledge of nursing and other professions to address healthcare needs
  - Sub-Competence 6.3b: Leverage roles and abilities of team members to optimize care

Domain 10: Personal, Professional, and Leadership Development

- Competence 10.3: Develop capacity for leadership
  - Sub-competence 10.3c: Demonstrate leadership behaviors in professional situations

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How do we do this with large numbers of students?

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Questions to ask with Program Assessment

How can we demonstrate that our students are meeting our programmatic student learning outcomes?

How can we demonstrate that each individual student can integrate and transfer their learning across courses, over time, and to real-world applications?

How can we use assessment to critically reflect on our curriculum and pedagogy for continuous improvement for future generations of students?

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Difficult question: How do we facilitate faculty and student commitment to competency-based education?

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Faculty Commitment: What does it take?

- Encourage dialogue and debate. There will be emotional responses!
- Identify the "return on investment."
- Faculty need to be involved in creating processes and products.
- Check in for continued support.
- Create time to do the work.
- Be clear about desired outcome(s).

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And…..get assistance from those who are doing it well.

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Student Commitment: What does it take?

| **Cognition:** Cognitive understanding of the concept of being able to do something with what one knows. | **Emotion:** Accepting responsibility for own learning. | **Motivation:** Experiencing success in applying knowledge in a variety of situations. |

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Biggest Challenge: Student Self Assessment

Knowing yourself is the beginning of all wisdom.

Aristotle

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My best advice:

- Don't be intimidated by the **perceived** volume of work.
- Become immersed in the *Essentials* document, so that the domains and competencies are truly familiar.
- Engage all stakeholders.
- Plan time for the needed work.
- Evaluate outcomes.
- Celebrate successes.

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