# Instructional Design

How to Teach Well and Deal with Challenges in Teaching

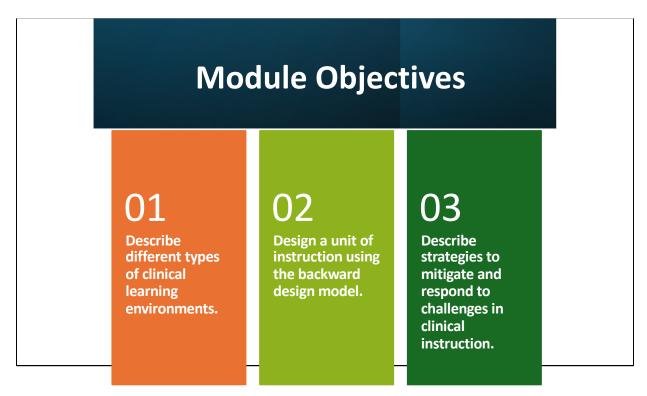
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# **Today's Overall Goal**

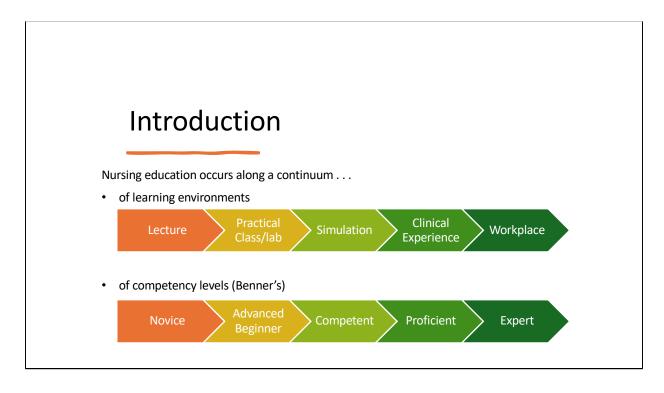
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Create evidence-based teaching strategies to prepare nursing staff and students to provide safe, high-quality patient care.

As a bachelor-prepared nurse, part of your responsibility will be to lead education and professional development in clinical settings. To do this effectively, you need to know how adults learn and how good instruction is designed. That is what we will focus on today.



Everything I teach throughout this session should be closely aligned with these three goals. These three goals reflect actions or behaviors that you should be able to do by the end of this session.



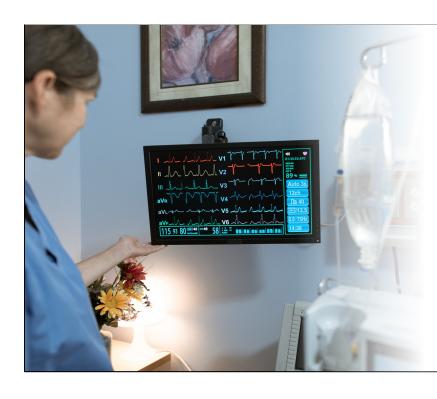
A "continuum" is a continuous sequence, a spectrum in which adjacent elements are not perceptibly different from each other, although the <u>extremes</u> are quite different.

Benner's framework for Levels of Competency describes a five-stage progression of skill acquisition for nurses, from the rule-following Novice to the intuitive Expert. The stages describe how nurses move from needing constant guidance to possessing a holistic, intuitive, and fluid understanding of complex clinical situations. Each level builds on the previous one through increased experience and reflective practice, transforming a rule-bound approach into deep, intuitive expertise.

# Types of Clinical Learning Environments

1. Describe different types of clinical learning environments.

Let's begin with the first objective. Note the verb that is used and the behavior that is described.



#### Clinical Learning Environments

- hospitals
- clinics
- · simulation labs
- virtual platforms

They foster clinical reasoning and professional identity.

Clinical learning environments (CLEs) allow students to apply knowledge, solve problems, develop professional identities, and become competent, ethical nurses. They integrate theoretical knowledge into care and build clinical reasoning skills. Common settings include hospitals, clinics, long-term care, home care, and community health.

Increased enrollment and limited access to traditional clinical learning sites have led to the use and expansion of other clinical environments, such as schools, workplace clinics, and neighborhood

social service agencies, including homeless shelters and food banks.



# Teaching Strategies

Teaching strategies include:

- simulation-based learning
- · focused, progressive skill building
- pairing with preceptors
- reflective journaling
- structured clinical debriefing
- case-based learning
- concept mapping

These are just a few of the main strategies used to educate nurses in the clinical setting.

#### **Teaching Strategies**

#### • Simulation-based Learning

Use high-fidelity mannequins and standardized patients to practice skills and decision-making in a safe, controlled environment before real patient encounters.

#### • Focused and Progressive Skill Building

Systematically advance from simple to complex tasks, allowing students to master foundational skills before moving to more advanced procedures and decision-making responsibilities.

#### • Pairing with Preceptors

Match students one-on-one with experienced nurses who provide direct mentoring, modeling, and feedback during patient care activities.

#### Reflective Journaling

Students document and analyze their clinical experiences, connecting theory to practice while developing critical thinking and self-awareness.

#### • Structured Clinical Debriefing

Facilitate post-experience discussions that help students process what happened, identify learning points, and improve future performance.

#### • Case-Based Learning

Use real or realistic patient scenarios to guide learning, encouraging students to apply knowledge, analyze situations, and develop problem-solving skills.

#### Concept Mapping

Create visual diagrams that help students organize and connect patient information, nursing diagnoses, interventions, and outcomes to see relationships between concepts.

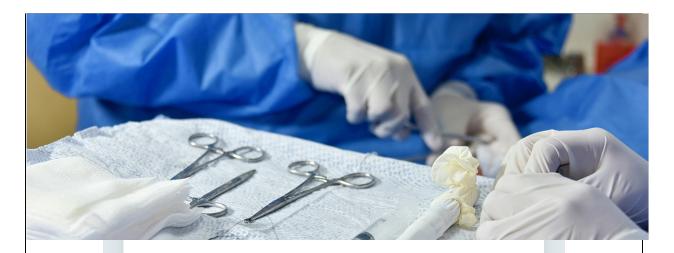
# Design Your Own Teaching Strategy

- 1. Read your scenario and identify the instructional need.
- 2. Select a teaching strategy from the previous slide that aligns with the instructional need.
- 3. How would you teach the concept, step by step, in the real classroom or clinical setting?
- Name the teaching strategy you will use.
- List the actions you would take to implement the teaching strategy.

Seven instructional needs, presented as instructional scenarios, will be presented to seven student groups.

# WHAT IS AN EFFECTIVE CLINICAL EDUCATOR?

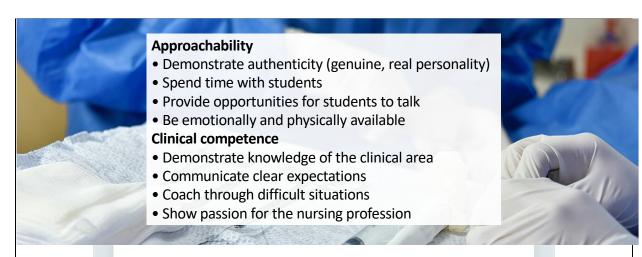
Attributes, characteristics, knowledge, skills, and attitudes



#### **Effective Clinical Teaching**

Pair and share: What characteristics, in your opinion, make a clinical instructor an effective teacher?

Refer to the Collier (2018) article in Moodle Brief summary: Students reported that positive relationships with instructors helped increase their self-worth, self-esteem, and self-confidence. These relationships made students feel more comfortable, less defensive and anxious, and allowed them to learn more effectively. Key attributes include being genuine, spending time with students, providing opportunities for students to talk, and being emotionally and physically available.



#### **Effective Clinical Teaching**

Characteristics of effective clinical instructors include competence, empathy, communication, and feedback.

Collier, A. D. (2018). Characteristics of an effective nursing clinical instructor: The state of the science. Journal of Clinical Nursing, 27(1–2), 363–374. https://doi.org/10.1111/jocn.13931

#### **Approachability and Personality Traits**

Approachability consistently emerged as the most important personality trait across multiple studies. Students identified effective instructors as supportive, helpful, approachable, respectful, caring, enthusiastic, encouraging, open to suggestions, good communicators, and able to make students feel confident. Other valued traits include fairness, openness, honesty, mutual respect, and correcting students without belittling them.

#### **Clinical Competency**

Eight of 37 studies ranked nursing competency as

the top characteristic. Competency encompasses theoretical and clinical knowledge used in nursing practice as well as the instructor's attitude toward the profession. Students desire instructors who demonstrate clinical skills and judgment, have knowledge about nursing, remain current in their specialty, and serve as positive role models.

# Multigenerational Workforce

"Entrenched workforce" (nurses aged 40–68)

 ranked clinical competency and approachability as the most important faculty characteristics

"Emerging workforce" (nursing students aged 20–35

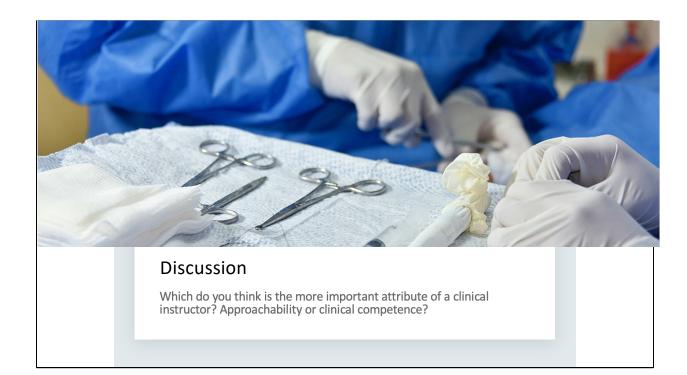
- ranked approachability as the top characteristic, but competency was not among the top 10 characteristics for this group
- wanted instructors who are receptive to people and ideas, supportive, and good communicators

Collier (2018), p. 368



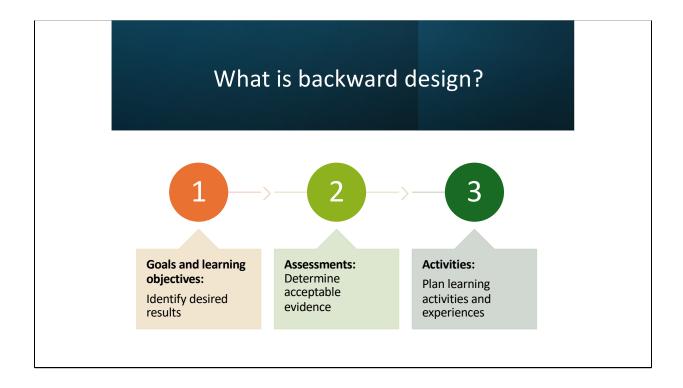
#### **Age-Related Differences in Priorities**

Younger students (ages 18-35) tend to value interpersonal relationships and approachability more highly than instructional skills or competency. In contrast, older students and faculty members tend to prioritize clinical competency more highly. With 82% of nursing students belonging to the millennial generation, understanding their preference for interpersonal connection over strict competency is especially important.



Pair and share.





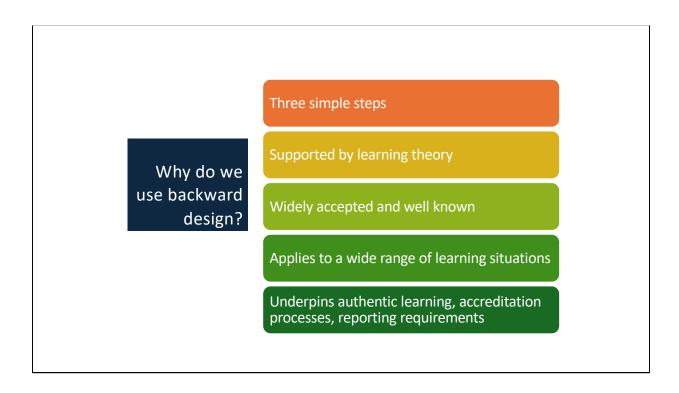
Backward Design is an instructional design method used by educators to create instruction. It originated with Wiggins and McTighe in their book *Understanding by Design* (Grant P. Wiggins and Jay McTighe, most recent edition 2005, Association for Supervision and Curriculum Development).

The backward design process for instructional planning has three main stages, as described above.

Very simply put, it differs from the more beginning-to-

end approach to instructional design where one decides what content to teach and then how to assess student learning. Backward design begins the course creation process with the desired end in mind and focuses on what the learner will learn, not on what the teacher will teach.

- First, write the learning objectives that learners should achieve through instruction (identify the desired results)
- Second, create the assessments that will act as proof that the learners met the objectives (determine the acceptable evidence)
- Third, create the activities and assignments that lead the learner to perform well on the assessments (plan learning experiences and instruction).

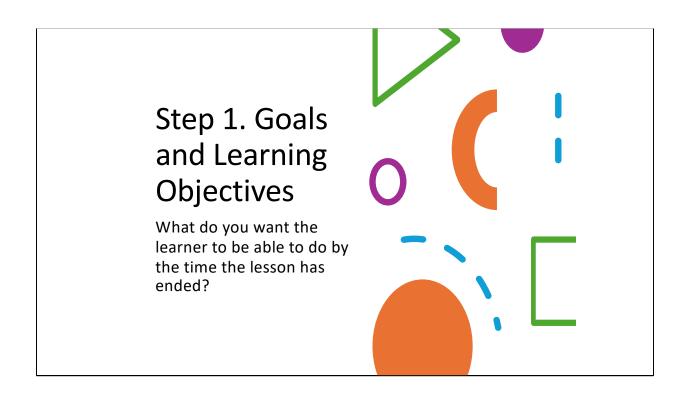


Instructional designers may choose the backward design process for several reasons:

- The three steps are simple and straightforward, easy to remember, and transferable to almost any instructional situation.
- It is well supported by learning theory.
- Backward design is a well-known and widely accepted process among educators. Regardless of who you are designing for, this method should be

applicable, and the educators you are working with will likely be able to immediately relate to the framework you are using. If they aren't, it's very easy to explain.

 It is based on common sense, it works consistently, and it meshes perfectly with the frameworks of authentic learning and quality assurance in online course design.

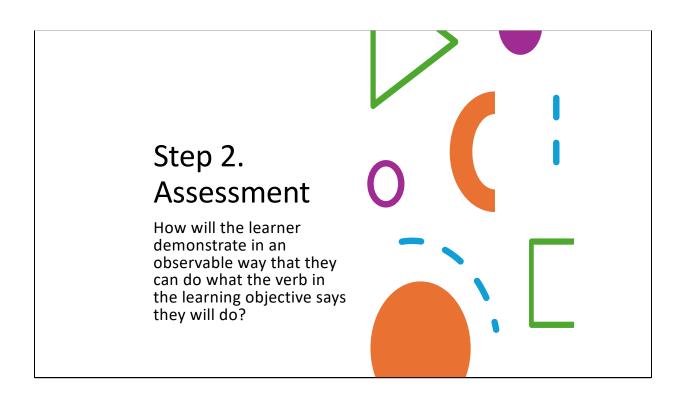


Simple formula for writing an objective

- Verb + direct object + condition
  - Examples:
    - Administer oral medications to patients following prescribed orders and protocols.
    - Implement safety checks before administering oral medications to ensure patient safety.

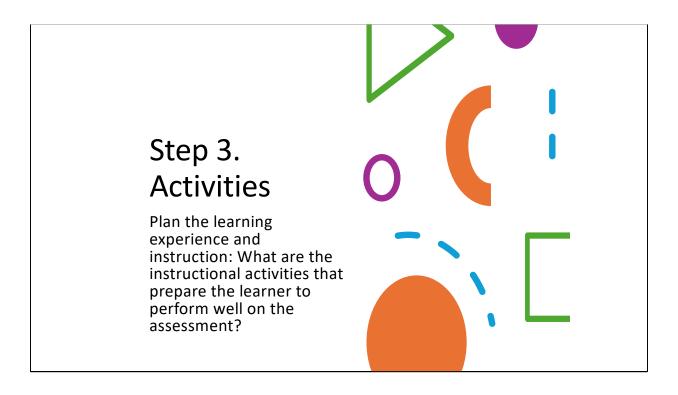
# know understand be aware of appreciate realize learn comprehend gain knowledge of be familiar with acquaint oneself with

A teacher cannot see learners performing any of the actions listed above.



Simple formula for designing an assessment

- Verb + direct object + condition
  - Example learning objective:
    - Administer oral medications to patients following prescribed orders and protocols.
  - Example assessment
    - The student will administer oral medications to 5-7 patients under instructor observation, according to orders in patients' charts and following the five "rights" of medication administration.
      - Grading criteria will be on a checklist that includes safety checks and other performance criteria.



**How** will you teach them what you need to teach them?

What content and activities do learners need to prepare to "administer oral medications"?

- Verb + direct object + condition
  - Example learning objective:
    - Administer oral medications to patients following prescribed orders and protocols.
  - Example assessment
    - The student will administer oral medications to 5-7 patients under instructor observation, according to orders in patients' charts and following the five "rights" of medication administration.

How will you prepare students to do well on this assessment and prove to themselves, you, and whoever has an interest in their education that they can achieve this goal and, ultimately, an expert level of competency?

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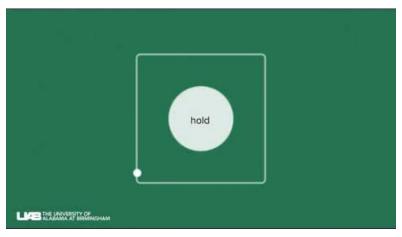
- Example assessment
  - The student will administer oral medications to 5-7 patients under instructor observation, according to orders in patients' charts and following the five "rights" of medication administration.
- Example activity

Students practice in a simulation lab with standardized patients/mannequins:

- Instructor observes and provides immediate feedback
- Students complete self-reflection after each practice
- Peer observation and feedback encouraged
- Opportunity to repeat until competent

How will you prepare students to do well on this assessment and prove to themselves, you, and whoever has an interest in their education that they can achieve this goal and, ultimately, an expert level of competency?

# Wellness break: box breathing



https://www.youtube.com/watch?v=bF 1ZiFta-E

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### Design Your Own Instructional Unit

- 1. Go back to your original instructional need and teaching strategy.
- 2. This time, focus first on writing an observable, measurable learning objective.
- 3. Next, <u>design an assessment to measure</u> <u>achievement</u> of the learning objective.
- 4. Last step: design a learning activity to support the learner's success on the assessment.

Simple clinical teaching ideas generated in Al

#### **Prompt entered in Claude AI**

"Using the backward design approach to instructional design, create assessments and learning activities that align with the following objectives. This clinical lesson is for third-year nursing students in a bachelor-level nursing program.

- 1. Administer oral medications to patients following prescribed orders and protocols.
- 2. Implement safety checks before administering oral medications to ensure patient safety."

Claude's response to this prompt (Russian)

Claude's response to this prompt (English)

If you would like to use AI to generate teaching ideas . . .

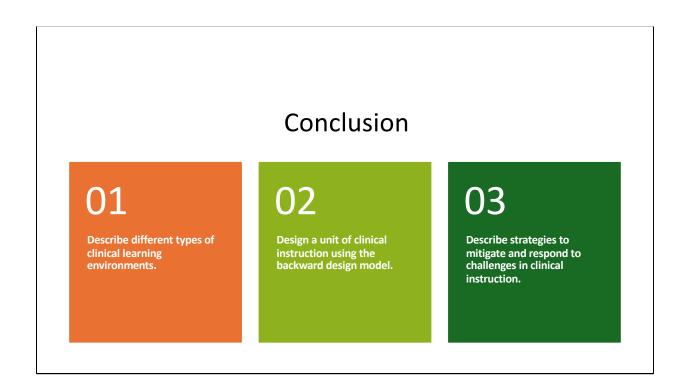
This is a simple prompt.

# **Challenges in Clinical Instruction**

3. Describe strategies to mitigate and respond to challenges in clinical instruction.

# Case Study





Are you able to demonstrate achievement of these objectives?

#### References

- Collier, A. D. (2018). Characteristics of an effective nursing clinical instructor: The state of the science. Journal of Clinical Nursing, 27(1-2), 363-374. https://doi.org/10.1111/jocn.13931
- Gubrud-Howe, P. (2025). Teaching in the Clinical Learning Environment. In Billings and Halstead (Eds.), Teaching in Nursing.
- Rinaldi, K., Messer, M., Hanson, A., & Chan, J. (2025). Utilization of backward design in health professional education: A rapid review. Journal of Professional Nursing. https://doi.org/10.1016/j.profnurs.2025.02.004
- Wiggins, G. P., & McTighe, J. (2005). Understanding by design. ASCD.