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How to Use Simulation for Competency-Based Education in Nursing

*Your Guide for Using Simulation to Prepare Learners
for Real-World Clinical Practice*



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Many people may feel overwhelmed or uncertain about how to begin, or not sure how we're going to end. But I think the point is that you're well trained, you're educated, you're capable, and you intend to do a good job. Those are the elements to really help you be successful here.'

– Carol Durham, EdD, RN, ANEF, FAAN, FSSH
Professor and Director, Education-Innovation-Simulation Learning Environment (EISLE)
University of North Carolina at Chapel Hill, School of Nursing



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Introduction

At a recent Laerdal Simulation User Network (SUN) conference, keynote speaker Dr. Carol Durham shared a story about one of her students.

Two weeks after graduating from nursing school, Anthony* took a nursing position in a long-term care facility. One afternoon, he was checking on a patient who'd recently had a knee infection. He noticed that she looked different – and he had an intuition that something wasn't quite right.

Her vital signs were fine – so he decided to check again a bit later. By then, her vital signs had begun to deteriorate in the pattern that he knew to be sepsis. Recognizing the seriousness and time sensitivity of the situation, he decided to accelerate her into care. Doubting the skills of a new graduate nurse, one of his CNA colleagues advised against it. “Just let the night shift take care of it,” she urged.

But Anthony was confident in his rationale. So, he held fast to his concerns and accelerated the patient into care anyway.



They later heard from the hospital where they had sent the patient. “**Whoever sent her saved her life,**” they said. “**Because she’s in full-blown sepsis now.**”

Mortality from sepsis increases by 4-9% for every hour that treatment is delayed.² If Anthony had waited until night, his patient would have died – or at least been in multi-organ failure. His ability to recognize the pattern of sepsis and use his voice ultimately saved his patient’s life.

Anthony had trained using simulation in nursing school. **The opportunities for repetitive practice, reflection, and coaching through simulation allowed him to “rehearse” the complex realities of healthcare and build competence in a safe way.** He refined skills like how to recognize clinically relevant signs in his patient and how to stand up for what he knew was right.

At the heart of the shift to competency-based education (CBE) in nursing is for every new graduate nurse to be competent and prepared for practice from day one of their careers – just like Anthony was. In this eBook, we’ll explore how you can use patient simulation to help create a comprehensive, well-rounded educational pathway for your students to learn and demonstrate their knowledge and readiness for practice.

**Name has been changed.*

Changing Your Mindset

What If Anthony Hadn't Been as Prepared as He Was?

What if he hadn't recognized the symptoms of sepsis and hadn't had the confidence to use his voice? The result would've likely been a poor outcome for his patient. The burden of feeling responsible for the loss of his patient would've likely been crushing for him as a new nurse. Maybe he would've started to feel like he wasn't cut out to be a nurse. Perhaps he would've abandoned the profession and become one of the 30% of new graduate nurses that leave in the first year.³

Changing Your Mindset

CBE in nursing calls for ensuring new nurse readiness by assessing the student's ability to demonstrate the knowledge, skills, and attitudes⁴ that make up a competent nurse.

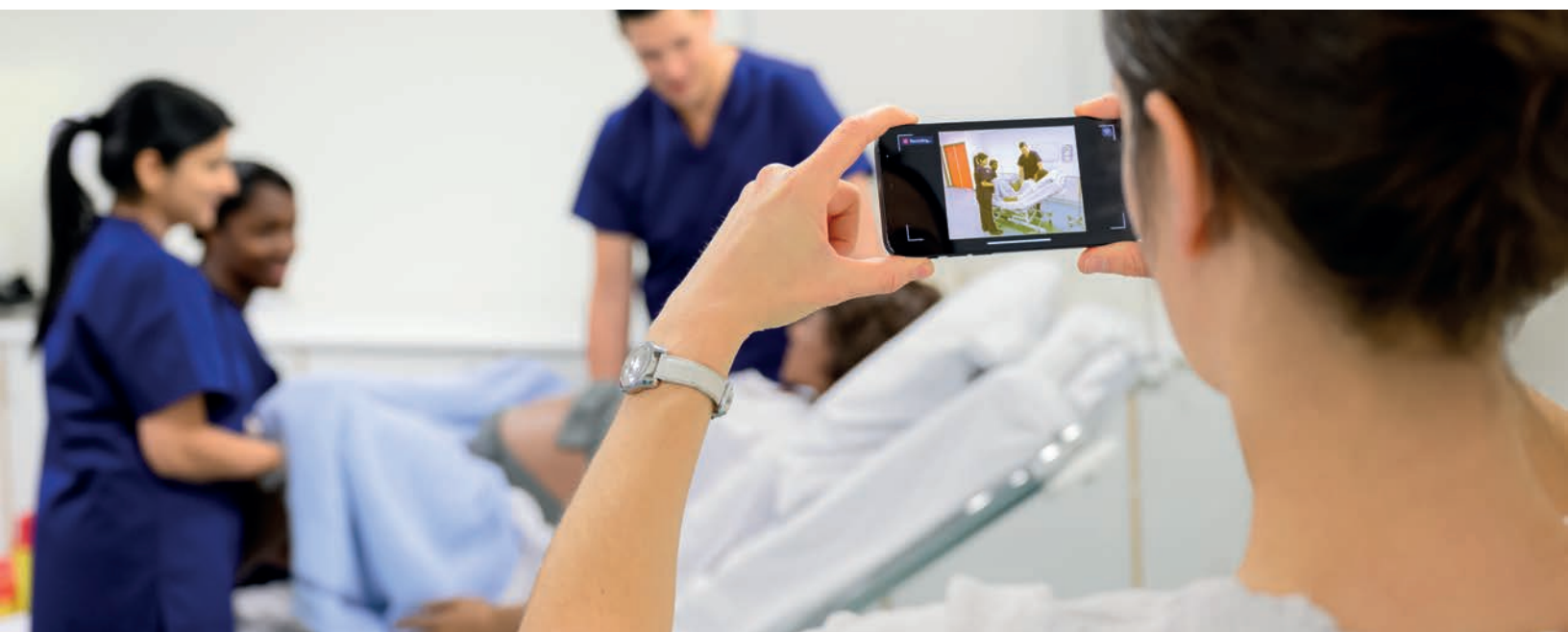
This means making a momentous shift from assessing fundamental skills – which are only a part of competency – to also measuring behaviors like situational awareness and resiliency in the face of stress.

*Assessing the depth and breadth of overall competency may likely require a different mindset than the one used to assess skills alone. **You may find it inspiring and motivating to change your vision of the desired outcome – which is nurses who are prepared to exhibit all the behaviors, values, self-expectations, and situational awareness that will give them real-world resiliency on the job.***

You will likely be setting different standards for your students: standards for them to learn how to effectively manage human factors, think critically as part of situational awareness, and be resilient in rapidly changing conditions. Having a competency-focused mindset will broaden your expectations for your students – which will lead them to broaden their own expectations of themselves.

By changing your vision to assessing overall competency, you have the opportunity to influence a new nurse's entire future.

Your nursing students are coming to school to learn how to be the nurse they've dreamed of being, and to make a difference in their patients' lives. CBE is an effective pathway to helping them reach that goal.



Overview of CBE

“While student learning is clearly the goal of education, there is a pressing need to provide evidence that learning or mastery actually occurs.”⁵

By the time students graduate from nursing school, you’ve taught them a lot. But what can they do with what they know?⁶ This is the goal of CBE: ensuring that your students can apply what they’ve learned when they enter the real-world work environment.

A competency can be defined as an observable ability of a health professional, integrating multiple components such as knowledge, skills, value, and attitudes.⁷ Because competencies are observable, they can be measured to ensure that students have acquired them during their education.

Some of the elements of CBE include:

Outcome-focused

The focus shifts from teachers delivering content to students demonstrating competence.⁸

Learner-centered

Students take control of their own learning, and teachers coach them as facilitators.⁹

Frequent formative assessment

Formative feedback is essential in helping students build competence.¹⁰

Data-driven

Student-specific learning data, guidance, and progression planning is crucial.¹¹

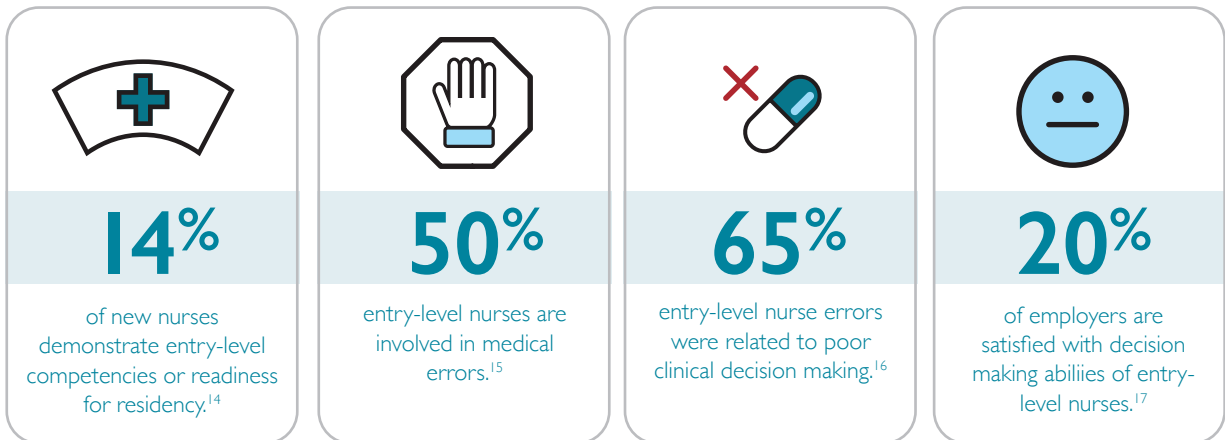
Did You Know?

The transition to CBE in nursing isn’t just happening in the U.S. The World Health Organization (WHO)’s Global Strategic Directions for Nursing and Midwifery 2021-2025 calls on nursing programs globally to design their programs to be competency-based. The end result is for nurse graduates to “have the requisite knowledge, competencies, and attitudes to meet national health priorities.”¹²

The “Why” Behind CBE

New Graduate Nurses Often Lack the Real-World Skills They Need

CBE isn't new: it's been around since the 1960s.¹³ In nursing education, what's driven it forward is the ever-increasing complexity of healthcare and all the skills nurses need to be competent.



The role of nurses has increased in complexity, with more advanced technologies, acuity of patients, specialization, quality and safety requirements, and evidence-based practice requirements, among other factors.¹⁸ **Practice partners are reporting increasing difficulty in transitioning new nurses to the workforce.**¹⁹

CBE Fosters a Clear Handshake Between Education and Practice

CBE builds a pathway to practice readiness by aligning curriculum and coursework to professional expectations and needs. When students are prepared to meet these needs and expectations, they will be less vulnerable to stress and burnout²⁰ and will have the foundation they need to begin – and grow – in their careers.

“Establishing a competency-based model of education promotes a clear handshake between academic and practice partners. And, [it] shifts the academic-practice transition from being a ‘gap’ to overcome to becoming a ‘step’ in professional growth and development,” explains Michelle C. Moulton, DNP, RN, CHSE, CNE, RYT-200, Director of Center for Clinical Excellence, University of Maryland St. Joseph Medical Center.

CBE holds promise for being able to lift and shift education beyond traditions of credit hours, clinical hours, and grades into a new, more fluid future of confident, competent new graduate nurses who will feel prepared and will be prepared to persist in high-quality nursing practice across their careers.

”

— National League for Nursing (NLN) Vision Statement: Integrating Competency-Based Education in the Nursing Curriculum²¹

Why Simulation Is Effective for Building Competence

Simulation is effective at building competence because it allows students to make mistakes, learn from them, and master competencies in a safe, controlled environment. In CBE, mistakes are considered to be part of the learning process.²² Simulation allows students to “rehearse patient care” and gives them the hands-on practice that they often don’t get in clinical.

Simulation allows students to synthesize everything they’ve learned and rehearse it so that when they encounter a real patient, they notice it, they recognize it, they apply what they know, and they can then care for the patient effectively.

And, the evidence is clear: simulation works. The 2014 landmark NCSBN National Simulation Study found no differences in nursing knowledge, clinical competency, or overall readiness for practice when 50% of clinical time was substituted for simulation²³

Deliberate Practice: A Key Element of Building Competence

The concept of deliberate practice involves repetitive performance of a skill, paired with rigorous assessment and specific feedback.²⁴ The term “deliberate practice” originated from research in instructional science and has since been utilized in medical education.²⁵

“Research has found that deliberate practice is a more powerful predictor of superior expert performance than experience or academic aptitude.”²⁶

“Learning a competency requires students to engage in deliberate practice through real or realistic experiences that present clinical challenges in context,” explains Andrew Wolf, EdD, RN, AGACNP-BC, CNE, Chief Nursing Officer and Director of the School of Nursing Professions at Marymount University.²⁷

And, the power of deliberate practice isn’t just limited to technical skills practice. Deliberate practice of cognitive skills, like the ones required for clinical decision-making, allows students to gain background knowledge and learn how to apply it in complex contexts.²⁸

vrClinicals for Nursing



Types of Simulation for Competency Development

The table below illustrates the different types of simulation – each of which can help build and assess competency. These definitions are taken from the Society for Simulation in Healthcare (SSH)'s [Healthcare Simulation Dictionary](#).²⁹

Types of Simulation:

Standardized Patient – A person who has been carefully coached to simulate an actual patient, presenting the history, body language, physical symptoms, as well as the emotional and personality characteristics.

Task Trainer – A device designed to train in just the key elements of the procedure or skill being learned, such as lumbar puncture, chest tube insertion, central line insertion, etc.

Manikin – A full or partial body representation of a patient for practice. Typically, manikins are used for a more refined set of skills training.

Low-Fidelity Simulation – Simulation techniques and solutions that do not require external programming for the learner to participate. Examples include case studies, role playing, and task trainers used in a clinical practice situation.

High-fidelity Simulation – Refers to simulation experiences that are highly realistic and provide a high level of interactivity and realism for the learner.

Hybrid Simulation – The union of two or more modalities of simulation. Most commonly, this applies to a situation where a task trainer is realistically affixed to a standardized patient allowing for the teaching and assessment of technical and communication skills in an integrated fashion.

Virtual Simulation – A person operates simulated systems to mimic a patient case virtually.

Virtual Reality (VR) Simulation – Virtual simulations that utilize VR headsets to immerse learners in an array of environments. Students can often “pick up” items in their environment and talk to patients the same way they would in real life.

Mixed Reality (MR) Simulation – Simulations that combine both virtual and physical elements. Simulation that utilizes the hybrid combination of virtual reality environments and reality, such as a manikin.

A Note on Choosing a Simulation Modality

According to the International Nursing Association for Clinical Simulation and Learning (INACSL), your learning objectives can help you determine what type of simulation to use.³⁰ Explore INACSL's Healthcare Simulation Standards of Best Practice™: [Outcomes and Objectives](#) and [Simulation Design](#) for comprehensive guidance.

“Showing How:” Why Simulation Is Ideal for Assessing Competence —

Simulation: An Observable Assessment Method

Simulation’s observability makes it an optimal way for students to be able to show what they can do. “As we move forward into the sort of new era of nursing education, **simulation is going to be a very significant part of how students are able to demonstrate that they’re meeting their competencies through their actions,**” says Jocelyn Ludlow, PhD, RN, CHSE, CNE, CMSRN, HS Associate Clinical Professor and Simulation Director at the University of California, Irvine School of Nursing.

Simulation can be used for formative assessment for learning. This type of assessment is developmental and intended to help learners improve through feedback.³¹ Simulation can also be used for assessment of learning, or summative assessment. This type of assessment measures outcomes or achievement of objectives at a specific moment in time – such as at the conclusion of a course.³²

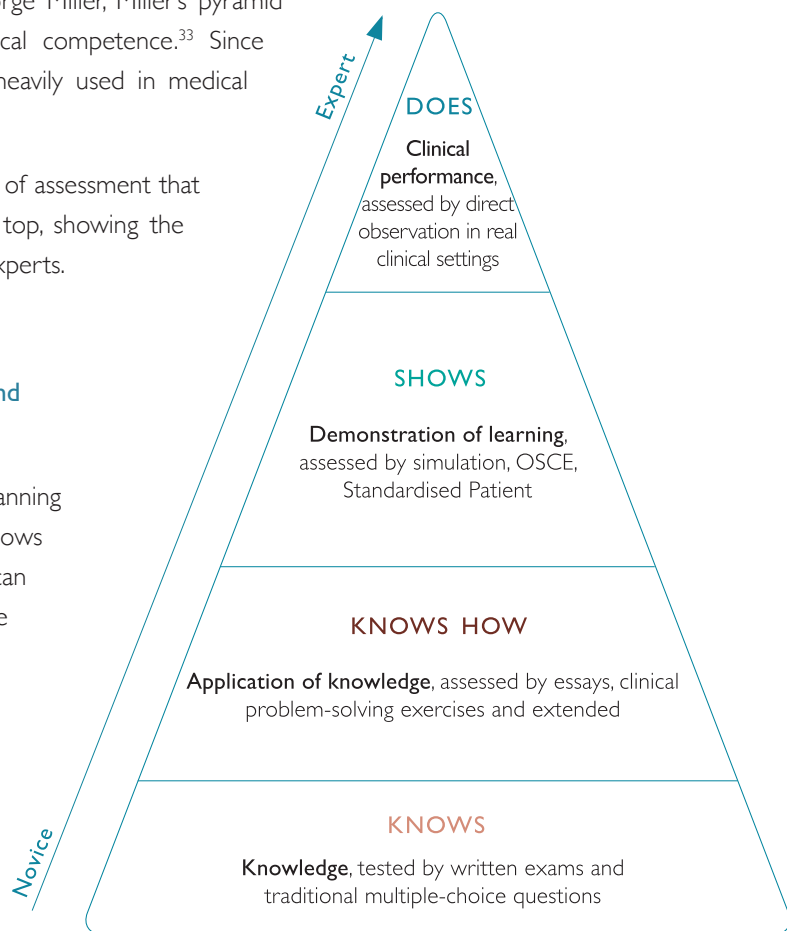
Miller’s Pyramid

Developed in 1990 by psychologist George Miller, Miller’s pyramid is a framework for assessment of clinical competence.³³ Since its introduction, the pyramid has been heavily used in medical education to guide assessment.³⁴

Miller’s pyramid is divided into four levels of assessment that build upon each other from bottom to top, showing the progression of learners from novices to experts.

Beyond Just Knowing: “Knowing How” and “Showing How”

Simulation can be used for assessment spanning from the “knows how” section to the “shows how” section of competence. Students can be assessed in the “knows how” phase using virtual simulations that require them to demonstrate clinical judgment and problem-solving skills. Higher up in the pyramid, patient simulations and virtual reality (VR) simulations can provide opportunities for students to “show” their behavior.



The AACN Core Principles for Assessment and How Simulation Can Help

The American Association of Colleges of Nursing (AACN) has provided [Core Principles for Assessment of Learners in CBE](#) to guide programs that are adopting the AACN Essentials. Simulation can help you implement some of this guidance.



[vrClinicals for Nursing](#) and [Nursing Anne Simulator](#)

Core Principle #1: Multiple Points, Assessors, and Methods

Decisions about student progress are based on assessments conducted at different times, using various tools and data collection methods.³⁵

Example: using various forms of simulation, from skills practice simulations to virtual simulation to high-fidelity simulation.



[SimCapture for Skills](#)

Core Principle #2: Active Learner Engagement

The learner must be an active participant in the assessment, and should be invested in their own learning.³⁶

Example: using a student-driven, digital skills practice and assessment program to give students ownership, flexibility, and freedom of unlimited deliberate practice with timely feedback. Students are empowered to take control of their progress while freeing up some faculty time and resources.



[Resuscitation Quality Improvement \(RQI®\) for Nursing Education](#)

Core Principle #3: Frequent Formative Feedback

Put an emphasis on providing personalized, timely, and meaningful feedback that provides learners with actionable data to guide their learning.³⁷

Example: using hands-on skills training with built-in audio-visual feedback, delivered during and directly after the learning experience for learners to immediately remediate their technique.



[SimCapture](#)

Core Principle #4: Data Management and Visualization

Keep a longitudinal record of each student's performance, with multiple data points, that shows development over time.³⁸

Example: using an electronic skills checklist or simulation learning management system (LMS) to organize simulation data into actionable trends that will make it easier to follow students' learning paths.

Assessment Toolbox: Ways to Assess Competence Using Simulation —

If you're like many others in nursing education, you may be using student satisfaction surveys to measure the effectiveness of your simulations. While these surveys help to measure students' reactions to the learning, the shift to CBE will require more visibility into actual learning outcomes.

Below, we describe just a few of many ways you can use simulation to assess your students' learning.



1. Use direct observation of in-person simulations and a simulation rubric or evaluation instrument. Some that are commonly used include:

- Creighton Competency Evaluation Instrument (C-CEI®): measurements include assessment, communication, clinical judgment, and patient safety
- Lasater Clinical Judgment Rubric: measurements include noticing, interpreting, responding, and reflecting
- Sweeney-Clark Simulation Evaluation Rubric®: measurements include patient assessment, clinical judgment, and communication

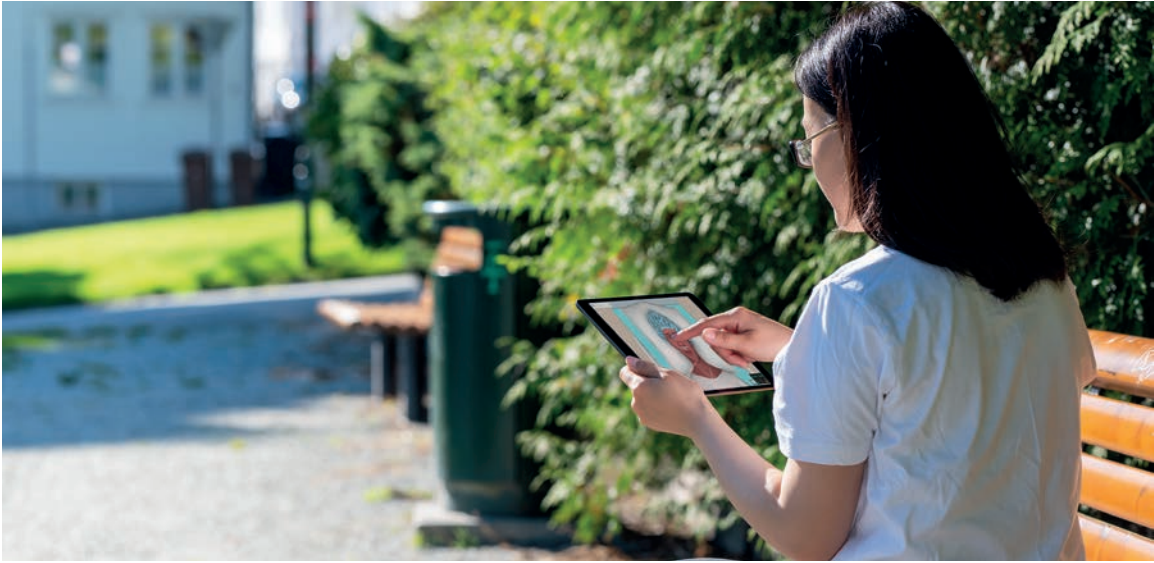
Read more about these and other available instruments in INACSL's [Repository of Instruments](#).

Note: You may want to consider recording your simulations so that you'll be able to reference them as needed. A simulation video recording platform can allow you to annotate videos so that specific moments can be easily accessed.

2. Conduct high-quality debriefings. The self-reflection and dialog that occur during a well-run debriefing make it a powerful tool for formative assessment. We cover debriefing in more depth in a later chapter – Debriefing: Build Competency Through Feedback and Reflection.

3. Solicit feedback from standardized patients. This is especially helpful for assessing skills like demonstrating empathy and compassion, as well as having difficult discussions.³⁹ After a simulation, ask standardized patients questions like, “Did you feel heard?” and “Did you feel cared for?”⁴⁰

4. Have students watch video recordings of simulations and then complete a reflection journal. Journaling has been found to effectively foster reflection and the development of clinical judgment and emotional competence.⁴¹



NextGen vSim® for Nursing

5. Assign Virtual Reality (VR) simulations and virtual simulations. These have built-in assessment functionality and provide the performance data you need to provide focused feedback on your students' clinical judgment skills or ability to prioritize multiple patients in the midst of real-world interruptions.

6. Have students assess each other on skills practice using peer-to-peer methodology. Students can take turns performing a skill, having the skill performed on them, and watching another student perform the skill. This provides ample exposure and reinforcement of the skill.

Additional reading: Read how UMass Boston drastically reduced their remediation rates from 60 students to 9 from one semester to the next using a [peer-to-peer approach with electronic checklists](#).

Laying the Foundation for Impactful Feedback: Feedback Literacy

*The most powerful single influence on achievement is feedback.*⁴²



Simulation offers plentiful opportunities for you to provide valuable feedback on your students' behaviors. It's easy to assume that your students are naturally ready to receive feedback when they enter your program. However, research shows that *not all students are inherently ready to receive and engage with feedback.*⁴³

Some students might avoid seeking feedback because it brings negative emotions like anxiety. Or, they might demonstrate defensive behaviors when receiving feedback. Defensiveness is especially common, and it can be argued that this emotion is innate for many.⁴⁴ *These factors hinder a students' ability to effectively process and respond to feedback.*⁴⁵

Feedback Literacy

Being able to manage feedback is a learned skill – and it's known as feedback literacy. Focus on the concept of feedback literacy has been growing in higher education.⁴⁶

"Feedback literacy is something that hasn't quite gotten enough attention. In competency-based curricula as we're moving into now, **it is key that we teach our learners how to manage the feedback conversations that they'll be having in nursing school,**" explains Mary Fey, Senior Director, Teaching and Learning at the Center for Medical Simulation in Boston, MA.⁴⁷

According to a framework developed in 2018 by Carless and Boud, students have successfully developed feedback literacy once they have learned how to:⁴⁸

Appreciate feedback. They recognize the crucial role that feedback plays in improving their performance.

Make judgments. They have the ability to make sound judgments about their own work and the work of others, and can participate effectively in peer-to-peer settings.

Manage their emotions, feelings, and attitudes. They can maintain emotional equilibrium and aren't defensive when they receive feedback. They're proactive in eliciting feedback and strive for continuous improvement.

Take action. They know the importance of needing to take action in response to feedback.



Tips for Helping Your Students Be Feedback-Ready

You can help your students build feedback literacy so that they will get the most of the feedback they receive from your simulations. Below, we provide some tips for instilling feedback literacy in your students.

- ✓ Reinforce the “why” behind feedback. Explaining to your students that feedback will help them meet the competencies and will ultimately lead to better patient care may help them appreciate the value of the feedback.⁴⁹
- ✓ Emphasize the importance of feedback to the learning process. Ensure they know that deliberate practice with feedback is the only path to getting better.⁵⁰
- ✓ Normalize the struggle. Nursing school is hard. Remind your students that mistakes and feedback are all normal parts of the learning process.⁵¹
- ✓ Offer plenty of peer-to-peer learning experiences. Exposure to the work of their peers helps students to self-assess effectively by making comparisons between their own work and the work of others.⁵²
- ✓ Use a caring tone when giving feedback. Your tone is one of the most crucial aspects of how they'll react to your feedback. A caring tone will increase their engagement with what you have to say.⁵³
- ✓ Provide timely feedback. Consider using technology to facilitate this, such as virtual or VR simulations that can provide them some immediate feedback on how to improve.
- ✓ Use exemplars. For example, having students watch and analyze a video recording of a simulation can allow you to show, rather than tell, students what your expectations are – while also building their capacity to make judgments.⁵⁴
- ✓ Give them a clear path forward. Be specific in your feedback about the action(s) they need to take to improve.
- ✓ Encourage them to strive for continuous improvement through feedback.⁵⁵ Explain that their nursing career is a journey in which they'll keep growing in skill and expertise – and that you, too, are doing the same.⁵⁶
- ✓ Start early. Aim to begin fostering feedback literacy in the first semester.
- ✓ Understand that building feedback literacy takes time. Offer opportunities for your students to build this skill across the curriculum.



Beyond Pencil and Paper: Organize Your Simulation Data for Maximum Efficiency

Your data really does tell a story. But you have to be able to read what the data is telling you – and then do something with it.

”

— Rosemary Samia, MSN, RN, CNS, CHSE, Director, Center for Clinical Education & Research, University of Massachusetts Boston

The shift to CBE will require capturing an immense amount of data on students' progression towards competence. If well-organized, the data you're getting from your simulations can generate meaningful insights to help you along in implementing CBE.

However, if you're like many others, you may still be putting your checklists and other data into various places and/or using pencil and paper. This makes it difficult to make the data meaningful and actionable.

A [simulation management system](#) can help. By housing your data and organizing it into insights, a simulation management system can make your data work for you. Below are some ways.

1. Track individual student progression towards competence.

In previous chapters, we covered the importance of frequent assessment in the shift to CBE. This immense number of assessments will capture a tremendous amount of data to measure your students' progression towards competence. A simulation management system can organize that data into a crystal-clear, longitudinal view of how your students are performing in simulation across the curriculum.

2. Identify ways to improve your teaching approach.

Access to cohort-level performance data can pinpoint trends faster so that you can remedy them sooner.

Example of real-world impact: Penn State University's simulation data showed them that students weren't maintaining competence in certain skills across the curriculum. This led to a decision to take a more deliberate approach of revisiting skills instead of “frontloading” them in the Fundamentals course.

3. Catch issues early.

Your simulation data can pinpoint specific areas where students are struggling and even where they're spending the most practice time. Using this data, you can quickly determine where to adjust or focus your teaching efforts.



[SimCapture](#)

4. Identify areas for faculty development.

The move to CBE will require more use of reliable, valid assessment tools. It will be important to ensure all faculty are using these accurately and consistently. A report that breaks down rubric scores by faculty member can uncover any issues with inter-rater consistency.

Example of real-world impact: UMass Boston was using the Lasater Clinical Judgment Rubric for simulation assessments. Upon looking at the data (in this case, an inter-rater consistency report), they saw that faculty were giving students “Exemplary” scores across the board – even when it was the first simulation the students had ever participated in. The data showed that faculty development on effective use of the rubric was necessary to ensure students were getting meaningful feedback.

Additional reading: Read more about how Penn State University, UMass Boston, and the University of Texas at Arlington leveraged the storytelling power of simulation data in our article: [Leveraging Data to Assess and Evaluate Competence Through the Curriculum](#).

Pro Tip

If the thought of all this data seems overwhelming, consider this expert advice from Rosemary Samia at UMass Boston: *start small*.



Look at what you're already collecting. Is it on paper? What are you doing with it? Maybe a transition to an electronic capture would be easier for you to analyze that.



Start with something that is manageable. You're not going to be able to do everything all at once – but just pick one thing start there, [and] make changes. Don't feel like you have to get it right on the first try. [Our program] has been two years in the making, and we're constantly changing things for the better.

Getting Started: Mapping Your Simulations to Competencies

Mapping your existing simulation activities to whichever competency framework you're using will help you get a grasp of what you already have and where there are gaps that need filling.

Below are some tips to keep in mind for “mapping and gapping” success.

DO's

- ✓ Utilize a simple simulation mapping tool template like [this one from the National League for Nursing \(NLN\)](#). Once you start filling it out, you will likely feel a sense of accomplishment by being able to capture and visualize everything you already have.
- ✓ Seek efficiencies when you start uncovering curriculum gaps. For example, if you're struggling to find the time to write scenarios to fill gaps, consider drawing from a [scenario library of expert-validated scenarios](#) to cut out some of the work.
- ✓ Seek input from your practice partners on your existing simulation activities as well as new ones you create. This can help ensure that learning outcomes are aligned with professional expectations.
- ✓ Moving forward, make sure that every new simulation activity you create is clearly mapped to competencies to ensure that all future content has a clear purpose and alignment with the competencies.

DON'Ts

- ✗ Don't try to reinvent the wheel. You're already doing a lot in your current program. Consider this process a “remapping” of the learning experiences you already have.
- ✗ Don't take a “one and done” approach. Remember that students will need multiple opportunities to learn, master, and demonstrate competencies.
- ✗ Don't try to do it all yourself. Collaborate with your colleagues to ensure thorough mapping at the program and course levels.
- ✗ Don't forget to look for already-existing resources that are available to you. For example, the NLN has mapped its Advancing Care Excellence for Seniors (ACE.S) unfolding cases to the AACN Essentials and shared the completed tools.
- ✗ Don't try to cover everything at once. Focusing on one area or competency at a time may help the process feel less overwhelming and more manageable.

Did You Know?

If you currently use the Quality and Safety Education for Nurses (QSEN) competencies framework in your existing curriculum, [significant work](#) has already been done to crosswalk it with the AACN Essentials. The [QSEN-AACN Essentials Crosswalk tool](#) can help you use your existing QSEN curriculum to integrate the AACN Essentials.

Exploring Person-Centered Care and Clinical Judgment:

Bowling Green State University

About Bowling Green State University

Established in 2021, the baccalaureate nursing program at Bowling Green State University (BGSU) currently has about 160 students enrolled. Their program is growing rapidly, and they expect to have about 240 students enrolled by Spring 2025. **They are currently on the path to implementing the 2021 AACN Essentials.**

Simulation As a Monumental Tool in CBE

Each student experiences a significant 80 hours of simulation in BGSU's program. **"I think where simulation comes in as we think about competency-based education, it's different from clinical in that we control the setting,"** explains Lisa Jacobs, DNP, MSN, RN, NEA-BC, EBP-C, CNE, CHSE, Simulation Coordinator and Assistant Professor, School of Nursing at BGSU. **"And we can really assess multiple things in each scenario."**



*We have a unique ability in simulation to create that controlled piece that we don't have in clinical. **That's monumental in helping us map and look at the true competency across the curriculum.***

— Lisa Jacobs, DNP, MSN, RN, NEA-BC, EBP-C, CNE, CHSE,
Simulation Coordinator, Assistant Professor School of Nursing,
Bowling Green State University

Person-Centered Care Is Critical for Effective Clinical Judgment

"If we don't treat someone with respect or communicate properly, we won't get down to the cellular level of what's going on with the patient," explains Michelle E. Bussard, PhD, RN, ACNS-BC, CNE, Director, School of Nursing and Associate Professor at BGSU.

"If we don't understand a person's culture, spiritual needs, or dietary needs, we are not able to provide them with proper care," she adds. Thus, without good clinical judgment skills we cannot provide optimal patient outcomes. **If you really look at the competencies of person-centered care, it takes you across every aspect of clinical judgment (noticing, interpreting, responding, and reflecting)."**



[Nursing Anne Simulator Male](#) representing an Amish-American patient

Building Competence Through Person-Centered Simulation Scenarios

BGSU's simulation curriculum consists of multiple person-centered scenarios that incorporate diversity, age, ethnicity, gender, and religion.⁵⁷

Creating realism with the simulator and setting is a priority for them – as this is critical to effective learning and clinical judgment development.⁵⁸ To maximize realism, they use a diverse range of manikins and a wide range of props. Examples include glasses, hearing aids, and a rosary to represent an elderly patient, to a wig, beard, hat, and suspenders for an Amish-American patient.

Scenario Example: Amish-American Hip Arthroplasty⁵⁹

One of their scenarios focuses on an Amish-American patient who's had a hip arthroplasty. He shares that completing his usual work on the farm has been challenging for him because of his hip. Students must observe increased bleeding on his surgical dressing and share their findings with the provider. They must also demonstrate cultural competence as they educate him on how to care for himself in consideration of his farming lifestyle.

This scenario incorporates all 9 competencies of the AACN's Person-Centered Care Domain:

- 2.1 Engage with the individual in establishing a caring relationship.
- 2.2 Communicate effectively with individuals.
- 2.3 Integrate assessment skills in practice.
- 2.4 Diagnose actual or potential health problems and needs.
- 2.5 Develop a plan of care.
- 2.6 Demonstrate accountability for care delivery.
- 2.7 Evaluate outcomes of care.
- 2.8 Promote self-care management.
- 2.9 Provide care coordination.

How Is Competency Assessed?

Their simulation scenarios consist of 6-8 students and 2 faculty members. Faculty assess and deliver feedback to students using a multi-layered approach:

1. **Faculty observe students directly during the prebriefing, during the actual simulation, and in debriefing after the simulation.** During debriefing, students engage in peer feedback on what they noticed from each other and where they can improve.
2. **Students watch a video recording of the simulation and then complete a reflection journal.** "Video reflection ... helps them kind of dissect a little bit more completely and reflect on how they might treat a patient from that culture or with a certain concept or disease process and reflect on that on another level," says Dr. Jacobs.
3. **Faculty complete a formative evaluation based on the student's simulation performance, participation in the debriefing, and their reflection journal.** They use the Lasater Clinical Judgment Rubric as their assessment tool.



Michelle E. Bussard, PhD, RN, ACNS-BC, CNE, Director, School of Nursing and Associate Professor at BGSU

On the Shift to CBE: 5 Pro Tips from Dr. Bussard

1. **Make sure you have a good team in place.** "You must have 'Essentials champions' on your team who have a passion for looking at competency-based assessments and mapping them throughout the curriculum. In addition, the team should complete this work outside of the academic year or have course releases to complete the mapping."
2. **Educate faculty.** "You need a lot of education for the faculty, especially for the team that is mapping the curriculum. They can't assess and map everything if they don't know what they're supposed to be mapping and why they're doing it. Our team [has been] receiving training on the new Essentials and competency-based education."
3. **Get creative with your resources.** "Even if you have medium fidelity or just low fidelity [manikins], you can still make this work. You just must be creative with how you're going to do it. If you don't have the finances to have a large high-fidelity room or simulation center, think outside the box to use your medium and low fidelity manikins."
4. **Invest in a dedicated simulation resource to manage the many elements of a successful program.** "You must have a faculty member who is focused solely on simulation. If you don't have one person in charge of simulation, the CBE may not be effective across the curriculum."
5. **Understand that there is close overlap between all the different sets of competencies.** "The QSEN competencies, ANA competencies, and AACN Essentials competencies, all intersect together. If you map them out, you can see how they are all interrelated."

Additional reading: Read more about BGSU's story (including detailed scenario descriptions) in their paper: [*Person-Centered Care and Clinical Judgment: Mapping the AACN Essentials with Simulation in Prelicensure Nursing Programs*, published in *Clinical Simulation in Nursing*.](#)

The Healthcare Simulation Standards of Best Practice™

Following evidence-based best practices in simulation is key to helping you maximize the full potential of simulation for building learner competence.

If there was one survival guide you need for simulation, the International Nursing Association for Clinical Simulation and Learning's (INACSL's) [Healthcare Simulation Standards of Best Practice™](#) is likely your best resource. The Standards are considered to be the industry go-to source: practical, tried, and tested.

We've provided a high-level summary of the Standards below to give you an idea of the areas they cover. Use this summary to identify areas that you wish to learn more about – and then explore them further by reading the full [Standards](#).



[Educational Services](#) and [SimBaby™](#)

✓ Invest in the ongoing professional development of your simulation staff

The field of simulation-based education is continuing to evolve – so it's important that your program's simulationists evolve with it in order to ensure the best quality simulations and educational payoff for your students. Consider having faculty attend a [Simulation User Network \(SUN\) conference](#), and/or take courses like NLN's [Simulation Innovation Resource Center \(SIRC\)](#) courses.

✓ Devote time to plan and conduct a quality prebriefing

Prebriefing consists of preparation (pre-simulation activities) and briefing (immediately before the activity) to ensure that learners are prepared for the experience and are aware of the ground rules.

✓ Design your simulations with purpose

Good simulation-based experiences are purposefully designed to meet identified objectives and optimize the attainment of expected outcomes by mimicking what actually happens in practice.

✓ Be a good facilitator

Ideally, facilitation should be conducted by a trained simulation facilitator – as specific skills and knowledge of simulation pedagogy are important for effective facilitation before, during, and after the simulation.

✓ Debrief expertly

All simulation-based educational (SBE) activities must include a planned debriefing process, which may include feedback, debriefing, and guided reflection. The ultimate goal of the debriefing process is to promote reflective thinking. We'll dive into debriefing a bit further in the next chapter.

✓ Don't under-estimate the impact of operations

Increased operational efficiency contributes to a smoother-running program. This includes ensuring operations staff receive the training they need to be competent in setting up, operating, and maintaining simulation equipment.



[Technical Services](#)

✓ Articulate measurable objectives and outcomes

Every simulation-based experience should originate with measurable objectives designed to accomplish expected outcomes. The objectives will help guide you in determining the right simulation modality and fidelity to use.

✓ Maintain professional integrity

Professional integrity refers to the ethical behaviors and conduct that are expected of everyone involved in simulation-based experiences: facilitators, learners, and participants.

✓ Incorporate Simulation-Enhanced Interprofessional Education

Simulation-enhanced interprofessional education (Sim-IPE) allows learners across different healthcare professions to engage in a simulation-based experience to achieve linked or shared objectives and outcomes.

✓ Evaluate the performance of your learners

Naturally, this one is particularly relevant for CBE. Simulation-based experiences may include evaluation of the learner. Evaluations should be directed by the objectives, outcome and/or level of the learner, and can be of a formative, summative, or high-stakes type.

Debriefing: Build Competency Through Feedback and Reflection

Debriefing has developed a reputation as the “heart and soul” of simulation because it’s where most of the learning occurs. It is only through the debrief that learners can fully absorb the information, discuss what they’ve learned, and then change their behavior in future situations.

Some essential elements of effective debriefing include:

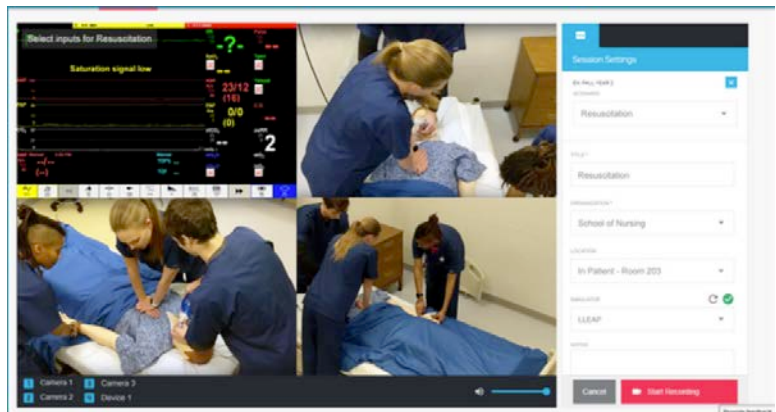
- ✓ Ensuring a supportive climate among peers.
- ✓ An established set of rules for engaging as a group.
- ✓ A shared mental model with input from the facilitator.
- ✓ Faculty selecting, receiving training on, and then utilizing a theory-based debriefing method
- ✓ Individuals being granted the space to process their reactions and feelings related to the scenario.
- ✓ More time dedicated to the debrief than the simulation experience itself.
- ✓ Participants doing most of the talking.

Debriefing questions could include:

- ✓ Tell me in a few sentences what happened to this patient.
- ✓ What were your objectives and how were they met/not met?
- ✓ What was your thought process when [a particular event occurred]?
- ✓ What are you most concerned about?
- ✓ What would you do differently next time?

Use Video Technology to Facilitate Debriefing Conversations

Debriefing a simulation scenario encourages better understanding of the learning concepts, and it’s worth considering how to take this one step further with video recording. The line of debriefing questions will uncover a retrospective look at the learners’ performance. Giving these same learners an opportunity to review a video playback of themselves can help them with self-reflection.

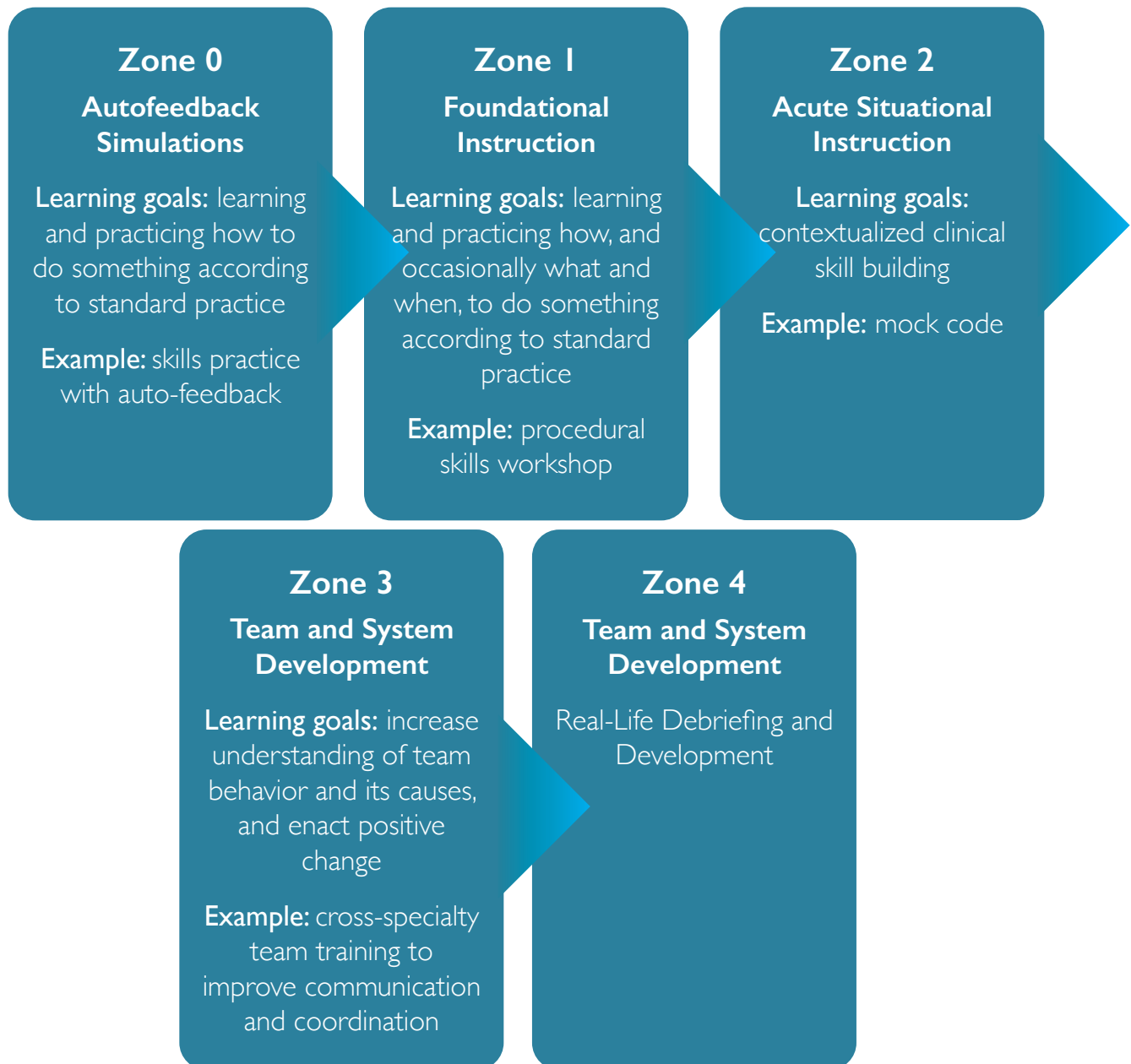


Pro Tip: Ensure You’re Conducting Expert Debriefings

In CBE, the students aren’t the only ones you should be looking to evaluate. Debriefing is such a critical step in simulation that it’s worth evaluating the quality of your team’s debriefings. The DASH® tool is a great way to do this. Read our article: [Master Debriefing with the DASH Tool](#).

Supporting the Progression of Learning: SimZones

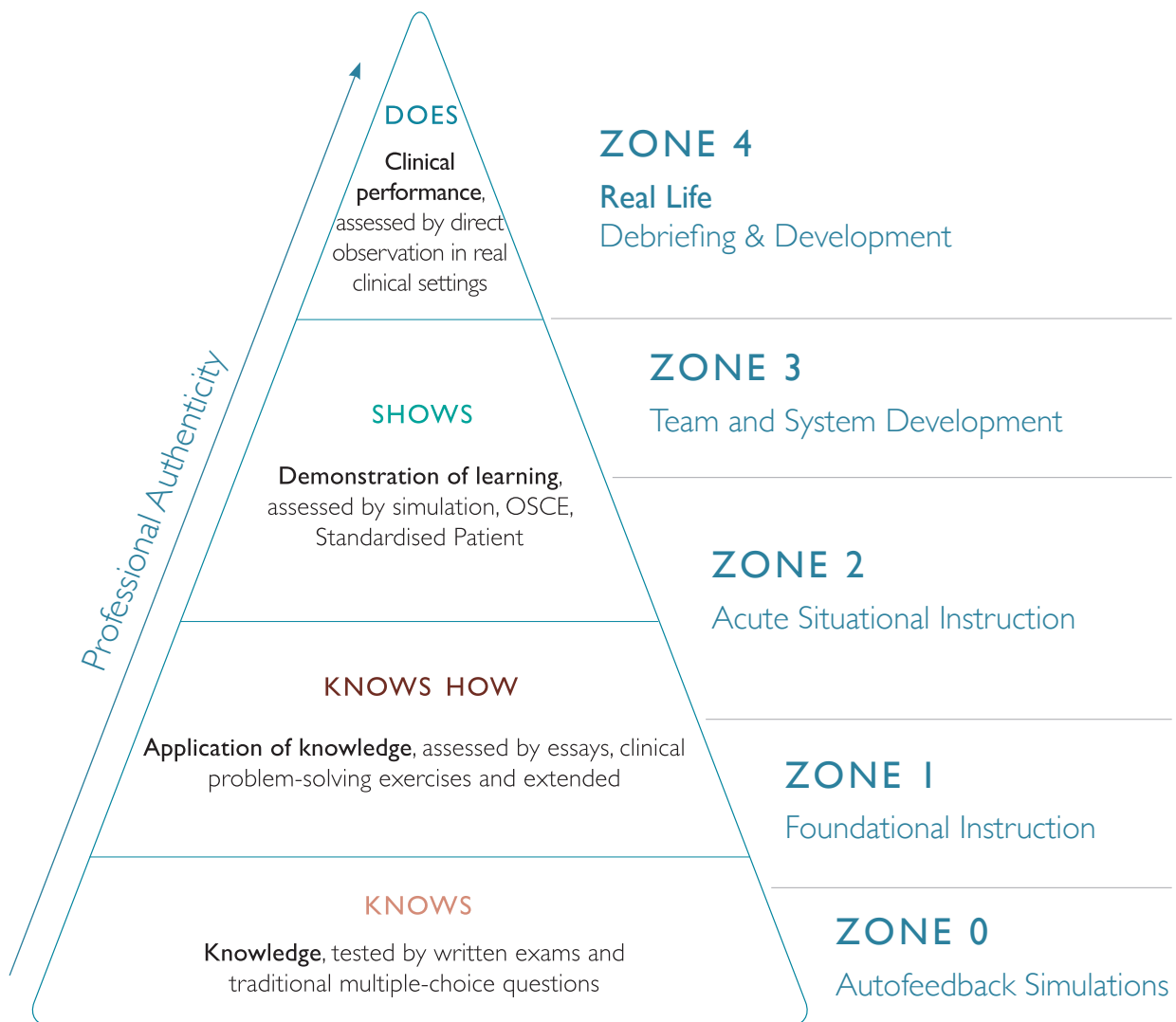
As you build out your simulation activities, it may help you to consider implementing an approach to help organize and align them with learning pathways. The [SimZones](#) framework is one such approach. Originally developed by Christopher Roussin, MS, PhD, and Peter Weinstock, MD, PhD, SimZones is a system for matching simulation delivery methods to specific learning needs.⁶⁰ It separates simulation activities into zones, with the learning goals increasing in complexity as students progress through each zone toward readiness.



“It’s really influenced our thinking and how we deliver our courses,” says Mary Fey, Senior Director, Teaching and Learning at the Center for Medical Simulation in Boston, MA. “This is the roadmap to take people from just being able to do something to actually really being able to integrate it into the complexities of the care environment.”⁶¹

Using SimZones for Assessment

To help illustrate how SimZones can also be utilized for assessment, the co-creator of SimZones has mapped the SimZones with Miller’s pyramid of assessment. This diagram illustrates how well the SimZones align with the stages of Miller’s pyramid.⁶²



This phased simulation learning journey allows students to “walk before they run” and build upon what they’ve learned before reaching a real patient.

Fostering Continuous Improvement: The Circle of Learning

We created the Laerdal Circle of Learning as our own framework to help organize learning efficiently and foster a goal of continuous improvement. Learning goals increase in complexity as learners progress through the phases toward competency. Visually, the Circle of Learning may look like a circle – but it is intended to function as an ever-evolving spiral toward lifelong learning and clinical improvement.



The segments include:

Healthcare quality improvement: both a starting point and an end goal, healthcare quality improvement is a continuous practice to drive positive change within healthcare. Improving patient care is at the heart of CBE.

Knowledge acquisition: introduction to the knowledge needed to meet educational objectives. Online learning systems are becoming a widely used form of knowledge acquisition, offering knowledge in a tailored and adaptive format and pace. Outcome data can be stored and used to further adapt to the individual learner's competence, pace, grit, and confidence levels.

Skills proficiency: repetitive practice using task trainers and/or manikins to support psychomotor skills mastery – for example, mastery of IV insertion using an IV arm task trainer.

Decision-making: interactive content simulating real patient cases and feedback to reinforce decision making and critical-thinking skills. Virtual simulations can help build these skills in preparation for the sim lab and later, caring for real patients.

Simulation in teams: A well-designed scenario using a high-fidelity simulator will lend a realistic learning environment for students to practice working together effectively as a team.

Actionable insights: Collecting and analyzing data on behavior and performance through every segment of the Circle of Learning allows you to provide the key feedback and suggestions for improvement that are essential to CBE.

Learn more about the [Circle of Learning](#).

A Final Word

Some nursing education experts have described the process of shifting to CBE as “building the plane while flying it.”

Your program's transition to CBE will likely be a challenging but exciting journey towards this new era of nursing education. Simulation can be a powerful resource for you to successfully help your students down their path towards practice readiness.

As we wrap up this eBook, we'd like to leave you with one final thought: in everything you do, **begin with the end in mind – safe, confident, and fully prepared future nurses.** Your work is going to empower your students to become the nurses they've dreamed of being and ultimately, make a positive impact on patient outcomes.

We are here to support you on your journey to embracing CBE.

At Laerdal, we are committed to providing you with the simulation solutions and support to prepare your students to face today's healthcare realities. No matter where you are on your journey, your Laerdal Representative can help you determine the right tools to support your students.



Additional Resources

To explore our other CBE-related content and learn more about simulation solutions to help you embrace CBE, visit:

[Laerdal.com/CBE](https://laerdal.com/CBE)

To stay up to date on Laerdal's published content,
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