

Interview with Susan Forneris and Michelle Moulton

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Lisa Bonsall: Hi! It's Lisa Bonsall Senior Clinical Editor for Lippincott NursingCenter. I'm here at the Nursing Education Innovation Summit. Right now I have the privilege to speak with Susan Forneris and Michelle Moulton about their presentation "From Bedside to Brain: Simulation and Brain-Based Teaching." What is situated cognition and how does it intersect with virtual simulation?

Susan Forneris: Situated cognition can sound like a really complex term, but if you break it up and you think about cognition on one side and situation on the other, it is providing the opportunity for a learner to think, use their thinking or their cognition in a real life context. So situating that so that they have the opportunity to think through with the dynamics of the environment weighing in on how they think through the situation.

Another example might be back, Dr. Patricia Benner when she wrote a lot about novice to expert, she would talk about the novice nurse or the new nurse coming into practice as being acontextual; meaning they come without context. They're not like a seasoned nurse who has lots of stories and situations that they file away, that as they encounter new patients, they can easily draw from that experience, from context to help inform their decision making.

So nursing education needs to, in the classroom environment, provide learners the opportunity to use the context within, or use the content, excuse me, within the context of patient care. VSim is a story. It's a story of a patient that unfolds over time and will respond in that time frame based on what the nurse does or decisions that the nurse makes or the actions the nurse takes.

So the learner in VSim has the opportunity to all of a sudden begin to apply and use their content knowledge, their thinking, their cognition in a situated learning environment so they can and VSim provides that environment, that real life patient encounter.

Michelle Moulton: I would also just add that there's an example, you can look at a piece of clinical data like a blood pressure, and you can even put parameters around it. You have elevated blood pressure and low blood pressure. That is acontextual information. So even if it's elevated, the context that can be added when with virtual simulation is that now you've got this abnormal blood pressure, but now it has meaning.

It's tied to a patient - their age, their medical history. And then you've got some time pressure, right? Because that's not your only patient that you're responding to that blood pressure. You have other priorities to think about and to weigh in context when considering this piece of clinical data.

Susan Forneris: And that one blood pressure might be within the norm for that patient, as you trend. So what might look like a high blood pressure on paper acontextually may not be as scary or as needing attention in the same way that if you compared it and they have a lower blood pressure over time.

Lisa Bonsall: What are the connections between situational awareness and clinical reasoning?

Michelle Moulton: So clinical reasoning, especially if we look at the clinical judgment measurement model from the NCSBN Next Gen NCLEX, layer three really does a nice job of taking clinical reasoning and breaking it down into its pieces. So recognizing cues, analyzing, prioritizing, generating hypotheses and making coming to an action. When we think about and that so that's all cognitive processing that we all do as nurses under the hood.

Nobody can see that. What's interesting about situational awareness is that the definition of situational awareness is perception, comprehension and anticipation or response. So what that looks like, if you look at those two definitions together, that really mirrors very closely what clinical reasoning is. It's getting data, assigning meaning to data and then responding or anticipating a next response. The work in situational awareness that's been done in many other industries, such as aviation, military, law enforcement, can help us to take with the work that they've done around situational awareness to help people respond to certain situations and how to broaden their awareness to get more information to help them make decisions.

We can take the work that many other industries have done around developing situational awareness and put that into nursing education and to help our learners develop that cognitive practice of clinical reasoning, of gathering information, assigning meaning to it, and deciding what to do next. So I think when we think of like an example in a pilot's training, they may do a simulation of a flight simulation and they have to think about what data is coming in, assign meaning to it, and then respond in the simulator.

And we can do that here in developing nursing practice, in the classroom, in the simulation lab, in clinical.

Susan Forneris: I would add that the notion of being situationally aware sometimes if we think about that and we are working with our learners to think about their surroundings, it also creates an opportunity for them to ask questions, to double check the information with somebody else, to sort of get out of that snap decision of being very reactionary and taking action right away.

To step back a bit and run their awareness by somebody else, What am I missing? Is there something else I should be paying attention to? Which is something we tend to gravitate to when we're in practice. We check things with our colleagues on the unit or in the field, and if we can provide opportunities around making our learners more cognizant of their situational awareness, that fear of should I ask goes away.

It's just I'm cementing that I am paying attention to everything I should be paying attention to here.

Michelle Moulton: We can help our learners ask themselves, Am I getting all the information? Am I seeing the whole picture? What am I missing? And if we can help our learners develop that inner monologue while they're in practice, then they will be able to then pull in that colleague and say, You know what... help me see this...something's happening, something is not right, but I really need help getting down to like what's really going on.

And you know, what we know from situational awareness is that we as humans are not good at keeping ourselves situationally aware. We need somebody else to tap us on the shoulder and say, did you see that blood pressure? Did you see the monitor going off? And because you might respond, say, No, I was looking at the glucose, I was really concerned about a completely different part of the patient care scenario, which could be valid.

But sometimes we get tunnel vision and we can lose sight of the bigger picture. So we need to pull in and have that kind of meta awareness, awareness of our awareness that we need to pull people in to help us in our decision making and in our clinical reasoning and if we can do that in the classroom with learners using virtual simulation or even in the simulation lab, with coaching, with feedback, with expertise that a teacher can provide, learners can do that, gain that skill a lot faster and not just faster, but for better practice.

Lisa Bonsall: And how can virtual simulation prepare learners for next gen NCLEX?

Susan Forneris: I think the other piece of the use of VSim is that it does provide context, but it also provides an opportunity for the learner to keep rehearsing. And one of the...as you think of the micro skills of clinical reasoning that make up your ability to make a judgment, a clinical judgment... rehearsing that pattern is something that we often in education fail to do.

We think that if they do this experience, once they've learned it, when this micro skill, this micro skill array of little tiny skills put together to lead to clinical judgment is not something that you can do just once. You have to practice that and VSim allows that opportunity to go back in and redo it, slow it down, have a conversation about it.

You can stop things in real time and an educator can ask a learner, walk me through your thinking. What are you thinking in this point? And those opportunities to dialog with our learners, to pull back what's going on inside their head and double checking their rationale is so important.

Michelle Moulton: And I think sometimes in nursing education, what I know I myself have gotten into the habit of doing, is providing a list of...talking about a respiratory condition, say, COPD, and then running through all the signs of symptoms and the assessment data. And here the complications and here all the things that can happen. And we give it in list form, right?

Bullets, right on a PowerPoint slide and then on the exam, what we want to evaluate and measure, because this is what's happening in practice, is we give a situation and we give a story, a little vignette, a patient with a history and data, and we ask the learner to respond to that now. So now they're responding to this data in context and we're evaluating that, but we're not teaching that.

So we need to teach, our teaching methods need to match how we're evaluating. So if we're evaluating at a high level where there's analysis and decision making happening, then we need to teach with analysis and decision making happening in the classroom. And so things like virtual simulation and other modalities can help create that practice and that rehearsal.

Susan Forneris: They're tools that we can put in our toolkit to use.

Lisa Bonsall: Thank you so much.

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