OPINION

The constraints-led approach in nursing education is being introduced as a novel viewpoint on skill acquisition

Carol William

William C. The constraints-led approach in nursing education is being introduced as a novel viewpoint on skill acquisition. J Nurs Res Pract. 2022; 6(12):192-193.

ABSTRACT

We wanted to discuss the applicability of the constraints-led approach for nurse education in this research and education for other paramedic professions. Compared to traditional education, where students only need to obey vocal and written explicit instructions, we think this strategy represents a significant advance. Students are helped to learn attuning to contextual information through search, discovery, and exploration when learning basic nursing skills thanks to the adoption of the constraints-led method in nurse education. We attempted to convey the significance of learning through the interplay between the student, the learning environment, and the task using nonlinear pedagogy and self-organization. Please take note that we did not intend to cover all of the theoretical underpinnings of the constraints-led approach. Our primary goals were to highlight and describe its potential for nurse education.

Key Words: *Patients; Nursing skills; Student nurses; Nurse-education*

OPINION

In particular, the applicability of the constraints-led method for teaching nursing skills will be examined in this Big Ideas paper. An applied theory known as the constraints-led approach, which is based on the ecological-dynamics framework, emphasises that acquiring new skills involves adapting to the circumstances at hand rather than repeating isolated, ideal actions out of context. However, during nurse education, students frequently find themselves in solitary practise drills where they do a nursing skill in accordance with specific lecturer instructions or thorough protocol. Using the framework for ecological dynamics. We contend that there isn't just one perfect method for carrying out a particular assignment. In clinical practise, it is common for there to be multiple appropriate task executions for a given condition. On the other hand, a given task execution may be successful in one circumstance but less successful in another. Students need to practise with representative clinical practise characteristics because every patient and context has different characteristics. This will help them learn to pay attention to contextual information rather than just following step-by-step instructions.

When lecturers are teaching nursing skills, the constraints-led method could be a beneficial didactic strategy to expand their toolkit. It has primarily been acknowledged and used in athletics thus far, and more lately in policing. Instead of using step-by-step instructions, the constraints-led approach gives lecturers a hands-off framework to create learning exercises that guide student learning through the manipulation of constraints. Students search, discover, and explore solutions within constraints, which can be tangible or abstract boundaries. The book Dynamics of Skill Acquisition: A Constraints-Led Approach provides a thorough explanation of the methodology and its theoretical underpinnings. The theoretical underpinnings and practical applications are expanded upon in the subsequent edition. We specifically refer to the first edition when writing this paper because our primary goal is to introduce and clarify the fundamental ideas behind the constraints-led approach.

Theoretical context

Understanding the distinction between conventional teaching methods, which are based on linear pedagogy, and the ecological-dynamics framework, which is based on nonlinear pedagogy, is crucial to comprehending the implementation of the constraints-led approach. According to linear pedagogy, learning is viewed as an ongoing, linear progression of skill through time. Assuming that learning is a more chaotic process with discontinuous changes across

Editorial Office, Journal of Nursing Research and Practice, Windsor, Berkshire United Kingdom.

Correspondence: Carol William, Editorial Office, Journal of Nursing Research and Practice, Windsor, Berkshire, United Kingdom Email id: nursingresearch212@yahoo.com

Received: Dec 15, 2022, Manuscript No. PULJNRP-22-5857; Editor assigned: Dec 16, 2022, PreQC No. PULJNRP-22-5857 (PQ); Reviewed: Dec 21, 2022, QC No. PULJNRP-22-5857 (Q); Revised: Dec 26, 2022, Manuscript No. PULJNRP-22-5857 (R); Published: Dec 29, 2022, DOI: 10.37532/ Puljnrp .22.6(12).192-193.

time, the ecological-dynamics paradigm relies on nonlinear pedagogy. It is predicated on the notion that a variety of constraints relating to the student, the learning environment, and the learning task interact to produce learning. Depending on the particular traits of the learner and the limitations of the learning environment, these interactions produce a nonlinear learning curve. Consider a student nurse in class who can inject a needle with ease when they can completely concentrate on the technique, but who becomes unsteady when they have to do so while responding to questions in a game of random communication. The quality of injecting decreases as a result of the additional restrictions. Instead of only practicing injecting without interruptions, however, practicing with such distractions will help the skill transfer to clinical practise. According to the ecological-dynamics concept, education should promote a more chaotic nonlinear teaching process. Over the past few years, the strategy of initially teaching discrete abilities with the intention of integrating them later into more complicated settings has come under fire, especially with relation to the transfer of taught skills to novel situations. Learning isolated skills has the drawback of ignoring the learner as a self-organizing, adaptive system that gains knowledge through interactions with its surroundings. To put it another way, kids should not be viewed as automatons that require algorithmic programming, but rather as sophisticated neurobiological creatures whose development occurs naturally inside the system, independent of outside interference. However, many nursing educational programmes continue to use conventional linear learning models that place a significant emphasis on adhering to precise instructions. The constraints-led method has shown to be an effective framework for creating learning tasks as an alternative.

The approach in nurse education that is driven by constraints

We want to start by emphasizing that implementing the constraints-led approach in education does not result in classrooms where students magically become skilled after completing just one well-designed exercise. It takes time and effort to learn. The constraints-led method only makes learning more difficult by facilitating it. We'd want to use a lesson from one of our classes to illustrate how it might be applied. Beginning with the first lesson of our programme, children are taught the value of and best practises for hand cleanliness. One of the most crucial practises to stop the spread of microorganisms to people, bodily parts, or items is hand cleanliness. In-depth protocols provide a full description of the clinical hand washing procedure. In a traditional classroom, students carefully follow the routine, making sure they don't miss any of the steps along the way. Students are unable to assess if they were effective in cleansing their hands and change their behaviour in response to what they learn. Furthermore, students may heavily rely on their working memory when following step-by-step instructions, which reduces the amount of cognitive space available for them to actually feel what they are doing.

As a substitute, our colleagues created a task based on the ideas of the constraints-led strategy. Without explicitly teaching the desired behaviour, lecturers can use these restrictions to guide students toward it. Students were initially told to fully immerse their hands in eco-friendly finger paint for the newly planned activity. They were told to wash their hands again and again until they could see that their hands were visually clean. Students learned whether and how to adjust their movements until they had successfully cleaned their hands by combining perception and action.

Another constraint was added in the second exercise. Students had to successfully wash their hands using their senses after dipping their hands in finger paint and being blindfolded. The blindfold might be taken off when pupils thought they were completed to determine whether or not they were successful. They could continue the activity and modify their movements thanks to that clear information. Students' lower success rates with the second exercise compared to the first exercise made nonlinearity apparent. However, the various exercises support the process of self-organization, which raises the possibility that the learned skill will be applied in clinical settings.

We wish to encourage instructors to use the constraints-led approach in their classes by means of this paper. In our experience, a team of lecturers' inventiveness in creating learning exercises rapidly rises as they begin to completely embrace the strategy. For example, even though they weren't skilled enough to insert an IV and simultaneously monitor a patient's feelings, our colleagues wanted to encourage students to practise the combination of performing a skill in this case, inserting an intravenous cannulation and communicating at the same time as soon as possible.

Our colleagues created a task in which students placed an IV in a fake arm while answering hypothetical questions from their peers. Through this activity, students were able to practise speaking and acting simultaneously at the level they were capable of. These activities help students get used to being questioned while using their nursing skills.

CONCLUSION

As a conclusion, we'd like to point out that precise directions could be useful in the classroom. The majority of lecturers certainly have experience that some explicit instructions are helpful for learning, especially for nursing skills that include numerous sequences of motions, even if earlier study tended to investigate explicit and non-explicit learning as opposing ideas. In this study, we aim to underline the significance of creating learning activities that support self-organization and nonlinear learning. In some circumstances, including a small number of specific directions to aid students in completing a learning exercise may be advantageous. Future studies are required to look at the learning outcomes and experiences of nurse education that includes more tailored learning tasks and significantly less instruction. This paper is intended to spark further investigation into the constraints-led approach's potential in nurse education and nurse education research.