

Patricia Benner P. Commentary (Reprinted with Permission):*

I am grateful for this debate, and particularly grateful for the critique offered by Rosalinda Alfaro-LeFevre POSITION PAPER: "The National Council of State Boards of Nursing Must Pause the Next Generation NCLEX® Project and Re-examine Phase One (Develop Clinical Judgment Model)", available at <http://www.alfaroteachsmart.com/ngn.html>.

The Information Processing Model used by Philip Dickison in the NCSBN work on the CJM (Clinical Judgment Model) is outdated and does not match the current research on clinical reasoning as a form of reasoning in transition, and neuroscience on memory systems for skilled know-how (See: Ennen, E. (2003) "Phenomenological coping skills and the striatal memory system." *Phenomenology and the Cognitive Sciences* 2: 299–325, 2003), and clinical reasoning as a form of practical reasoning across transitions (See: Taylor, C. (1995) *Explanation and Practical Reasoning*. In *Philosophical arguments*. Cambridge MA: Harvard University Press. (See pp. 51-53)). The Information Processing Model (See: Dickison, P., Lou, X., Kim, D., Woo, A., Muntean, W., & Bergstrom, B. (2016).

Assessing higher-order cognitive constructs by using an information-processing framework. *Journal of Applied Testing Technology*, 17, 1-19.] Moving away from the linear processing model to a higher fidelity model of a computerized neuro-net increases our understanding experiential learning and how human minds work. Most neuro-scientists and philosophers of the mind no longer hold a representational, symbol manipulating view of how the mind works. Using the neuro-net approach to learning AI produces results that have not been achieved by the linear information-processing model in the past 40 years. My colleagues and I are currently working on a refutation on the model, a conversation which Dr. Dickson, though invited, did not wish to join. My colleague, working on this project Stuart Dreyfus notes: "The NCJ (Dickison, et al) paper is correct when it observes that "intuitive thinking is involved for well-structured and familiar decision tasks while analytic thinking is triggered for ill-structured and unfamiliar decision tasks. Rewarding nurses only for the rarely required latter skill, because it is testable, while ignoring what skilled nurses do most of the time and hopefully improve based on experiential learning is misguided and doomed to inhibit normal nursing skill development [and real world context based clinical reasoning]." Two of the major misunderstandings of the information processing model of clinical reasoning are: 1) It fails to capture how the human problem solver is already in the situation in ways that shapes their perceptual grasp and understanding of that situation; 2) This situatedness by the actor cannot be mimicked by adding on contextual facts and features outside the clinical contextual information that shapes the perceptual grasp of the nature of the clinician. Yet adding on explicit features to capture context is the only approach available to a linear information processing model as illustrated by Dickinson's et al (2016). The CJM developed by NCSBN has not been an adequately researched nor adequately critiqued, as pointed out in the paper above by Rosalinda Alfaro-LeFevre. Thus far, the test developers have focused on issues of reliability, (Can measures be reliably replicated?) with little or no attention to validity, (Does the measure accurately measure what it purports to measure in the real world?). The validity question must be addressed before it makes sense to address reliability. We need serious scholarship, and debate to address these vital issues, before a snapshot decision making approach using a linear information processing approach is adopted as a valid NCLEX RN Test to, mistakenly, assess clinical reasoning across time through changes in the patient, and/or changes in the clinician's understanding of the situation (clinical reasoning).

*Benner P. Commentary on Susan Boyer's Nurse Leaders Community Board posting, *Is theory development the right role for the NCSBN?*; Accessed July 30, 2019 at:

<https://community.ana.org/communities/community-home/digestviewer/viewthread?GroupId=1243&MessageKey=448d5333-4da8-4d7e-b20c-436d4d0a3e5d&CommunityKey=445ea2ae-0f3a-45eb-a8e4-758730def83c&tab=digestviewer&ReturnUrl=%2fcommunities%2fcommunity-home%2fdigestviewer%3fcommunitykey%3d445ea2ae-0f3a-45eb-a8e4-758730def83c%26tab%3ddigestviewer>