
Assessing the Learned Learner When Using A Concept Curriculum in Nursing Education

*Norman Dale Norris, Ed.D.
Nicholls State University*

Preface

This position paper is intended to examine an assessment dilemma that is problematic to adult teaching in general but particularly problematic for the non-traditional learner wishing to enter the nursing profession. It is the position of this report that such dilemma is particularly problematic for the adult/non-traditional learner who enters the nursing education arena subsequent to post-secondary, collegiate education and particularly graduate/professional school. Such problems that are going unaddressed by current faculty (1) create unnecessary barriers to entry / progression into the nursing profession; (2) create undue work and burden on nursing faculty and (3) create unnecessary strain on entire nursing programs that can be eliminated with some foresight and re-thinking on the part of nursing faculty.

As we are seeing an increase in mature Americans seeking a second or even third career choice there is much consideration today for the specific and particular learning styles and learning needs of the mature student. Although commonly used, the term “adult learner” can be interpreted so broadly that it can become non-meaningful. Therefore, for the purposes of this report I will refer to the adult learner / non-traditional student as the “Learned Learner.” I have crafted the following model and defined the learned learner as the student who:

- Is pursuing nursing as a second or even third career
- Holds a college degree, or graduate/ professional degree
- Fits reasonably into any model of “professional”
- Has worked as a practitioner long enough to be considered “established, competent and self-sufficient” in their work.

In this manner we are able to create a broader inclusion of the nursing student who has not only life experience but also previous academic experience(s) in other areas, possibly not related to the biological or health sciences at all. Also, this report is intended to specifically address the learned learner returning to initial undergraduate study in nursing.

Theoretical Framework

The Theoretical Framework guiding this report speaks to the following questions:

1. Does the more contemporary Concept Curriculum bring to the field of nursing education attributes that the more traditional medical curriculum leaves behind?
2. Does the more contemporary Concept Curriculum pose advantages or disadvantages to the “learned learner”?
3. What does current nursing faculty need to know about the learned learner and the concept curriculum for a successful teaching endeavor?
4. What do we expect to see when the learned learner is being appropriately assessed?

Additionally, the Theoretical Framework of this report will speak to the following:

1. The literature is replete with references to the adult learner/ non-traditional/ advanced learner and how their learning differs from younger children.
2. There are subtle distinctions between the adult learner and the learned learner.

This theoretical framework creates a natural bridge to the method used for this study. While there is a significant body of literature speaking to the conceptual mode of teaching there is little specifically relating such

to the learned learner as I have defined it earlier in this report. There is even less literature connecting conceptual teaching, the learned learner and nursing.

Method

The methodology utilized for this report was a combination of (1) an extensive literature review spanning several decades leading up to the emergence of the concept curriculum in nursing education, (2) an analysis of literature review in relation to what is known as best practices in teaching and learning, focused on the relation to nursing education, and (3) an analysis of current literature relative to conceptual teaching both in general and nursing education.

Current Problematic State of Nursing Education

Like many service professions, the field of nursing education is in a problematic state where supply cannot meet demand. As societal problems and the knowledge base becomes more complex so does the need for services and the role/ scope of providers. Consequently, we find a huge gap between the need for practitioners and the available workforce. As the American workforce changes, Baby Boomers retire, and more attractive career options come about the need for nurses increases. The specialized nature of nursing creates a huge burden on the nursing education arena to balance supply and demand (Benner, 2012).

Systemic vs. Concept Curriculum

It is well noted that as the health-care professions become more sophisticated the requisite knowledge base for the health-care professions, including nursing, becomes more cumbersome. Consequently, nursing faculties and students are finding it impossible to complete program requirements in a realistic amount of time (Giddens & Brady, 2005). Nursing educators and professional nursing organizations have responded by re-thinking the scope, structure and content of nursing curricula in general (AACN, 2008 ; Hunt, 2017; Metzner & Bean, 1987; Nielsen, Noone, Voss & Mathews, 2013; NLN, 2005) Herein creates the curricular dichotomy of systemic vs. conceptual. In short, the systemic curriculum speaks to the very traditional medical model, based around the various bodily systems. The conceptual curriculum is built around bigger ideas that are explored/ explained (exemplars) in a real world context.

Since any reform must necessarily be met with compromise, such a re-thinking brings two inherently problematic points not peculiar to nursing, but relative to any such effort for re-design of teaching. First, teaching is a democratic process/ experience and therefore, like democracy, does not require everyone to agree but does require everyone to participate, participate meaningfully and graciously compromise. This brings us to problem two which is that when such curricular reforms come about in teaching and learning then everything about the teaching and learning must change with it. It is not sufficient to simply craft another design for curriculum and continue to schedule classes, arrange lessons, design instructional scope and sequence, deliver instruction and assess in the same way. Of all that must be considered in the implementation of reform, the most critical is *assessment* for it is here that we truly determine if our reforms have merit or have worked. The assessment piece of instruction (at any level) is becoming more critical as we see the push for increased data describing the observation / quantifiable reporting of “leaning outcomes” – (a.k.a data driven decisions) (Worthen, 2018).

While this report is intended to look at various problematic areas in nursing education specific to the learned learner it bears a brief, cursory look at similar dramatic educational reforms in the last fifty years that did not fare well. It is for similar reasons the concept based curriculum in nursing education may not fare well without some serious re-thinking of the teaching and assessment.

In the 1960s educational leaders across the country embarked on the idea of the “open school” or “open education”. Like many educational reforms that are certainly well intended this broad, humanitarian idea of

making schools and learning less restrictive and more inclusive aligned nicely with the political leanings of the 1960's civil rights reforms in this country. The unfortunate corollary to any well-intended reform is that leaders and policy makers are seldom willing to wait a realistic amount of time for reforms to be systematically tested before being tried on a large scale. As scholars always see a lot of what is common, we often find those in charge pressured to create the illusion of grand changes that look entirely different from anything past. The idea of open education fell victim to this thinking when all over this country schools popped up with no walls. They were essentially large warehouses intended to contain groups of students engaged in unstructured learning activities and little direction. The failure of this idea can easily be pointed to the fact that we cannot build schools without walls and continue to function as though we had walls (Norris, 2004).

The concept curriculum ideology plays into the extreme schools of thought as described by Norris (2004) and others (Balla & Boyle, 1994; Rowntree, 1987) as to question of “what exactly are students supposed to know?” Two extreme schools of thought have been the impetus behind this educational squabble for the last two centuries. At the one extreme there is a very *traditional* mode of thinking where every student is taught a particular body of content that is eventually useful as the student grows and develops. At the other extreme is a more *progressive* mode of thinking that abandons the body of content in favor of developing certain higher order thinking skills, critical thinking, problem solving abilities, etc. in the belief that when these higher skills are in place all the “traditional content stuff” will naturally follow. In a spirit of true intellectual honesty, it cannot be said that one idea is superior to the other because in truth it is only some semblance of balance between the two that will ever actually work. One extreme over another becomes problematic (a) when only the epitome of one ideology or the other is considered and (b) when one extreme or the other is not delivered well. It is fair to say the concept curriculum ideology definitely falls into the progressive end of the spectrum. The following table further explains:

Table 1
Extremes in Ideology

Curricular Question	One Extreme	The Other Extreme
What is to be taught?	A core body of information is emphasized. It is assumed that nurses must possess a common body of information in order to facilitate communication across the profession; a common language – aka body of understanding – is necessary.	The need for a core body of information is dismissed in favor of [theoretical] problem solving, higher level, critical thinking skills. Subjects/ content/ skills are integrated with virtually no skill or idea taught in isolation. There is much variation in what and how material is taught.
How is it to be taught?	The driving force behind the teaching is faculty knowledge, expertise and academic experience. Mainstream and current medical issues and problems drive instructional matters.	It is assumed that creating higher thinking individuals will subsequently produce competencies in skills and content. It is assumed that creating the proper environment for teaching and learning will allow all to succeed to potential.
How is the teaching to be measured for success?	Measurement/ assessment is by traditional tests focused on content and <i>use</i> of the content.	Measurement efforts that have more nebulous boundaries are the desired; the belief that focusing on higher taxonomical thinking supersedes the need for content to support such thinking.

The Concept Curriculum idea in many ways parallels the practice often seen in K-12 teaching known as “Thematic Teaching.” Thematic Teaching attempts to integrate smaller pieces of content with larger, overarching themes (Funderstanding, 2011). Thematic Teaching is heralded as the desired based on a number of beliefs about motivation of students (Putwain, Whitely & Caddick, 2011), quality of learning, depth of learning, enjoyment of learning (Bolak, Bialach, & Dunphy, 2005) and various beliefs about instructional efficiency.

While the idea of a conceptual curriculum in nursing has been around for a number of years the recent literature is sparse and questionable. On the one hand are glowing reports issued by the textbook companies that have responded by publishing materials focused in that way, purporting how their materials *can* solve so many instructional problems, educate nurses to be critical thinkers, etc. (Elsevier, 2016). Unfortunately, such glowing reports must always be approached and interpreted with caution because:

1. Such materials are a for-profit proprietary product and
2. Such reports generally are laden with assertions, but no hard data based on scientific comparisons or systematic inquiry.

On the other hand, there are serious academic reports (Brooks, et al, 2015), position papers and even doctoral dissertations (Harrison, 2016) advising caution before going too far with this curricular idea. The unfortunate reality is that the current nursing faculties who have come on board with the concept curriculum have not produced a convincing body of literature speaking to its success or failure. There is a collection of somewhat repetitive academic writing that speaks to such points as how to design a conceptual curriculum (Giddens, Wright & Gray, 2012), needed changes in curriculum (Stanley & Dougherty, 2010), beliefs about a conceptual curriculum, possible benefits, how to transition from a traditional to conceptual curriculum (Baron, 2017), improved student abilities, etc. In short, the current literature base is replete with what progressive practitioners think and believe. Glaringly absent from the literature, minus a small number of anecdotal accounts, is adequate empirical evidence that the concept curriculum improves student learning and NCLEX pass rates.

When reading into the body of literature that does exist, certain familiar [progressive] terminologies emerge over and over again.

- The term *integrated* pops up supporting the ideology that in this curricular mode no idea or phenomenon stands alone as its own intellectual entity. In this school of thought it is not necessary to divide or compartmentalize curricular aspects into segmented pieces that *eventually* fit together and create a common intellectual plane. Instead, the larger, overarching concept is fitted out with exemplars/ examples that in some way fall under this big umbrella (Deane & Asselin, 2015).
- The term *seamless* finds its way into the discussion as the progressive school of thought does not like to see content taught or skills practiced in isolation. This thinking insists that all curricular content must touch all other curricular content. In the same vein that reading is not something that elementary school children do first thing every morning at school but is part of everyday life, a collection of skills that touch every aspect every day, so it is with the “seamless” ideology. The thinking only becomes “bad” when nothing else is considered or when poorly delivered (Deane & Asselin, 2015).
- The terminology of *content saturated* seems to appear more in nursing curriculum literature than other areas (Diekelmann, 2002). The idea of “saturated content” might easily be explained as over-abundance or over-dependence on the “One Extreme” as explained in the chart above. The notion that there is “too much content” to realistically prepare practitioners is not peculiar to nursing, but is a common concern in many of the service professions. This is a common concern that is usually used in the call for curricular reform that is more focused in the direction of the “Other Extreme”.

Characteristics of the Learned Learner

The learned learner brings to the teaching, learning and assessment environment a variety of experiences, which are both advantageous and disadvantageous. In the literature we find an abundance of models purporting to be “characteristics of the adult learner” and a reasonable review of this literature finds some consistent similarities (Kenner & Weinerman, 2011). Paraphrased, we find:

- The learned learner comes to the learning environment with a clearly developed sense of self. As such, there is an inherent desire to be in control of their learning because they are well aware of their goals and abilities but, most importantly, they understand *how* they learn best (Donnelly-Smith, 2011);
- The learned learner seeks the new learning environment for significantly different reasons than the traditional student. Such reasons tend to be quite internal, bridging from the point of values, beliefs, personal interests, desire for growth or simply desire for change (Anderson, 2016);
- The learned learner relates new learning to previous learning much more quickly than the traditional student because they have more life experience(s) with which to relate. Essentially, the learned learner is far more likely to see “the big picture” much sooner (Donnelly-Smith, 2011);
- The overall perspective of the Learned Learner will be far more cosmopolitan than provincial (Donnelly-Smith, 2011);
- The learned learner brings a maturity of thinking often not found in the traditional student. The learned learner is more able to distance their personal feelings, beliefs, values, mores and experiences from the issues and problems they will encounter in their studies. The learned learner presents with a much more mature understanding of professional boundaries. This is a critical attribute of what constitutes professional and is necessary for making professional decisions (Chen, 2014);
- The learned learner needs to be respected as an intelligent, competent adult who is capable of learning and well aware of his or her own learning styles and parameters. As such, instruction must consider the most efficient means of bringing the student to the requisite level of understanding (Berling, 2013);
- The learned learner typically learns more slowly but more *deeply*;
- The learned learner is generally not content with “lecture/ memorize/ test” instructional formats. Aside from the fact that this is known to be a poor teaching model at any level, the learned learner typically desires a deeper academic discourse with classmates and faculty (Chen, 2014).
- The learned learner may not be as tolerant or benefitted by the use of computer technology as a study tool or instructional supplement. In this information age the computer is as much a part of life as anything else. Textbook companies develop software programs to supplement their published materials often under the guise that its use causes students to learn faster, learn better, retain more, learn at deeper levels, etc. Software engineers, not pedagogues, propagate this mindset (McCoy, 2013).
- The Learned Learner typically arrives with a well-established command of spoken and written language. As such, the Learned Learner will be more sensitive to and aware of discrepancies, flaws, or possibly unintended/ problematic nuances in written language. It is these attributes that often make objective testing less than objective for the Learned Learner (Phipps, Prieto & Ndinguri, 2013).

Finally, the learned learner brings to the teaching/ learning/ assessment environment a previously developed and well utilized sense of critical thinking which may be a combination of their previous formal

education or a matter of simply having lived longer (Kenner & Weinerman, 2011). While the notion of critical thinking will be discussed much more in depth later in this report, Davis (2012) sums it best by saying:

Adult learners' characteristics constitute the habits of mind that affect the way individuals approach the learning process. These habits of mind are shaped by both internal cognitive processes and external social contexts. Learning in adulthood is distinguished by its self-directed and critically reflective nature, as well as its rootedness in everyday experiences and the social roles associated with those experiences. (p. 216)

Realistic Assessment Within the Progressive Context

The unique characteristics of the learned learner make any valid assessment difficult and places an ethical burden on faculty. In a perfect world we would love to see all nursing students assessed by multiple sources of data which give a clear picture of what the nursing student knows, is able to do and believes about the practice of nursing. Unfortunately, faculty teaching loads, time and budget constraints typically do not allow for such and we are therefore [overly] dependent on objective testing that can be scored mechanically, quickly and provide *generally* useful information about students. But despite the burden of human limitations it is incumbent upon faculty to bear in mind that instruction and assessment is a very imperfect, inexact science. The "perfect" goal would be to have no student "fall through the cracks." Likewise, faculty must bear in mind that the instruction and assessment used for the traditional nursing student may not necessarily be appropriate or even fair for the learned learner.

In nursing, the student most likely to be disadvantaged by the inherent and unavoidable attribute of test item flaw/ bias is the learned learner. For example, it is well established that standardized/ objective testing test/ assessment design is frequently to the detriment of the adult/ learned/ advanced learner because the nature of objective testing looks for "one" correct answer. Such is typically based on the experiences, perspectives and beliefs of the item writer, not necessarily that of the learned learner, comparable practitioners in the field or even the accepted body of knowledge in the field (Benner, 2012; Norris, 2002).

The imprecise and not well agreed upon nature of the Concept Curriculum further complicates any realistic, valid or fair assessment of the learned learner because its nature denies that teaching and learning are scaffolded – aka Constructivist – phenomenon. Instead, like any other progressive curricular thinking, it attempts to turn learning into a linear process. The Constructivist ideology centers around the belief that rudimentary/ prior/ requisite learning must be in place before new learning can ever occur (Pelech & Pieper, 2010). As an oversimplified example of this ideology consider the plethora of minute skills (sounds, letters, vowel and consonant blends, left to right) that must be in place before a child will even come near starting to read. Various failed experiments (i.e. - Whole Language, Inventive Spelling) in bypassing the requisite and jumping to the higher level in the belief that the requisite will eventually fall into place have produced some problematic results. Many schools of nursing are experiencing similar problematic results when attempting to realistically assess the learned learner in the context of the progressive thinking.

Assessing the Learned Learner

When broaching the question of how best to assess the learned learner two critical points must be considered. First, the learned learner will come to nursing education with backgrounds, experiences, knowledge, perspective and formal education that will typically be far removed from, possibly significantly more advanced than the traditional learner. Second, such backgrounds, experiences, etc. will always influence their perspective and interpretation of what any assessment or assessment item is seeking. It is a safe assumption that the learned learner "gets there" knowing how to think critically (Balla & Boyle, 1994).

In a spirit of true intellectual honesty, one must approach the notion of "critical thinking" very cautiously as the idea can realistically mean different things to different people. The great educational philosopher John

Dewey (1910) described critical thinking as, “To maintain the state of doubt and to carry on systematic and protracted inquiry” (p.96). By this definition, critical thinking is a process, not the acquisition of an absolute answer.

In the call for nurses to demonstrate higher order thinking, critical thinking, problem solving skills, etc. we find a dependence on the taxonomical model of Benjamin Bloom. While there are other taxonomical models that can be useful to educators Bloom’s has been the most popular for decades (Heick, 2019). Consequently, it is incumbent upon faculty to know and understand what Bloom’s model is and is not.

It is the nature of objective assessment that the further up the ladder of Bloom’s Taxonomy an item is intended to assess, the more likely the item can be intelligently and realistically argued. Likewise, the further up Bloom’s ladder, the less likely to have only one correct answer. Speaking to the question of assessment convenience, Norris (2002) stated, “The convenience of universal applicability brings with it the burden of consistency (p. 108).” Consequently, nursing faculty cannot have it both ways. If we want educated nurses who think, reason and apply toward the top end of the Bloom model there must be room to come together and discuss what is really “evidence-based practice.” Otherwise we do not have nurses who are educated, we have nurses who are trained.

Assessing the Learned Nursing Student

To the dismay of many in the nursing education arena, it is common practice to use first-time NCLEX pass rates as the determinant of program quality (Edwards, 2015; Carr, 2011). Across the profession as pressure builds to see favorable first time licensure test scores there are a number of tenets of the field of testing and measurement that may find themselves skewed, marginalized or disregarded altogether. Rather any profession shapes lives or saves lives, there is no excusal from psychometric standards for assessment. Rather one is teaching primary school, graduate school or nursing school all are held to the standards and tenets of testing and measurement because psychometric findings tell us the same things regardless of level or academic discipline.

The market holds an abundance of teaching and assessment materials designed for the purpose of educating new nurses, competent in practice and safety and prepared to meet the changing needs of the nursing world (i.e. - ATI, HESI, Kaplan). While never perfect, commercially available assessment materials are crafted to be well aligned with standard nursing curricula, across the profession are considered appropriate practice/preparation for N-CLEX and are well established as psychometrically sound. Competent faculties know their curriculum, their program and their students. They are able to make educated decisions about assessment. Assessments must speak to what the future nurse knows, is able to do and believes about the scope, role and practice of nursing.

Rather a faculty chooses to use professional test banks or teacher made test items, several important issues which apply more so to the Learned Learner must always be in the foreground:

- Never allow the pride of authorship or experience to supplant medical truth (Brown & Knight, 2012; Rowntree, 1987);
- In circumstances of potential assessment impropriety, it is incumbent that faculty work to solve the problem(s) rather than to win every single battle. Standing your ground against questionably crafted assessment(s) does not constitute rigor, strengthen instruction or assessment and wastes intellectual time and energy (Rowntree, 1987).
- When assessment questions arise from the nursing student population of learned learners their perspective must be taken seriously for all the very reasons that make the learned learner unique and separate from the more traditional learner (Knight, 2012).
- Subtle, extreme and unnecessary nuances in assessment design do not challenge the learned learner, but instead frustrates and insults their intelligence. Such is not true rigor and does not make

for a better-educated or prepared nurse but instead pushes the scope of population validity far away from an acceptable or believable point (Brown and Knight, 2012).

- The science of teaching and assessment is very imperfect and inexact therefore faculty must constantly assess and re-assess if psychometric findings truly reflect what has been taught and learned. Part of this process, known as *item analysis*, must go far beyond simply percentages of correct vs. incorrect responses. A true item analysis uses student responses to determine the quality of the item and the test as a whole. When we see the word *analysis*, we are not seeing absolutes; we are seeing a judgment call (Knight, 2012).

Findings and Conclusion

In reviewing the literature and examining the question(s) posed in this report, several findings come forth:

1. The body of literature speaking to the learning attributes of nursing students needs to more closely align to the existing body of literature speaking to adult teaching in general.
2. Current nursing education literature seems to miss the point that nursing, like any other area of teaching, must be built upon constructivist thinking (Brandon, 2010). It is a misnomer to claim “higher thinking” when rudimentary aspects are not there.
3. It is clear from the literature that while a large percentage of nursing students across the nation are beyond the age of the typical “first time college freshman.” Unfortunately, we are not seeing curriculum designed and delivered with those students in mind.
4. While N-CLEX asserts their standard to be that of a beginning nurse much of what happens in the nursing education arena speaks more to the experienced nurse. A meeting in the middle would be the desired.
5. The literature speaks to the assertion that if the more progressive curriculum is chosen the faculty must be prepared to deliver and assess.
6. While it is clear in the literature that a shortage of nurses exists and will continue, little is being done to attract learned learners to the profession. While some colleges offer alternative baccalaureate programs they are not hugely populated and therefore not filling gaps.

As nursing sees more and more mature individuals entering the profession there will always be concern for how to best meet their needs and see that their nursing education experience is as fair and valid as any other. As the demand for nurses and nursing expertise grows the problem of the axiomatic “content-saturated curriculum” is not going away. Therefore, it is incumbent upon nursing faculty to design, deliver and assess instruction in such a manner that the Learned Learner is not disadvantaged in any way.

Despite the meager body of literature in support of a concept curriculum we cannot assume it to be a bad thing. However, if a concept curriculum is adopted, implemented and delivered in a less than stellar manner it leads to a very “hit and miss” quality of teaching. When faculty choose the conceptual route for their nursing curriculum, they must be prepared with a thorough understanding of all that is involved. When choosing the “other extreme” (see Table 1) faculty must understand that this mode of teaching, while very desirable, requires much more time and effort to perform well. The unfortunate reality is that even one potentially good nurse lost to poorly aligned instruction and assessment reflects badly on our system as a whole.

Despite discrepancies in nursing education teaching in general it must be said that competent nursing faculties share the same burdens as any other instructional team(s). The act of teaching is an inexact science so our work must constantly be under review and seeking improvement. It is well known and discussed in casual conversation that nursing school curricula is rigorous and failure rates are sometimes higher than many would like. Constant improvement in teaching and assessment is the desired.

Like any other instructional teams, nursing faculty are under immense pressure to produce the needed nurses, competent upon entry and do so in a reasonable amount of time. The scope, role and practice of the nurse has grown exponentially in the last two decades. This further exacerbates the need for curricula that produces high quality nurses in the least amount of time. The conceptual curriculum is a noble effort in that regard, but the literature and NCLEX performance data does not make clear that it is working.

References

- Anderson, L. (2016, August 3). 27 is the new 18: Adult students on the rise. *Education Commission of the States*. Retrieved from <https://www.naicu.edu/news-events/headline-news/2016/08/27-is-the-new-18-adult-students-on-the-rise?page=2>
- American Association of Colleges of Nursing. (2008). The essentials of baccalaureate education for professional nursing practice. Washington, DC. Retrieved from <http://www.aacn.nche.edu/education/pdf/BaccEssentials08.pdf>
- Balla, J. & Boyle, P. (1994). Assessment of student performance: A framework for improving practice. *Assessment & Evaluation in Higher Education*, 19(1), 17-28.
- Baron, K. A. (2017). Changing to Concept-Based Curricula: The Process for Nurse Educators. *The Open Nursing Journal*, 11, 277-287.
- Benner, P. (2012). Educating nurses: A call for radical transformation-how far have we come? *Journal of Nursing Education*, 51(4), 183-184.
- Berling, V. (2013, July). Five most critical needs of adult students. The Evollution. Retrieved from <https://evollution.com/opinions/critical-adult-students/>
- Bolak, K., Bialach, D., & Dunphy, M. (2005). Standards-Based, thematic units integrate the arts and energize students and teachers. *Middle School Journal*, 36(5), 9-19.
- Brandon, A. F., & All, A. C. (2010). Constructivism theory analysis and application to curricula. *Nursing Education Perspectives*, 31(2), 89-92.
- Brooks, K.Q., Matheson, L., Ciminieri, C., Withers, G. (2015). Exploring Concept-Based Curriculum: A Paradigm Shift to Improving National Licensure Examination (NCLEX-RN) First Time Pass Rates. Retrieved from: https://www.nursinglibrary.org/vhl/bitstream/10755/558784/3/Brooks_Keisha_Milestone12_6-20-2015_Version_3.pdf
- Brown, S. & Knight, P. (2012). *Assessing Learners in Higher Education*. New York: Routledge Publishing Group.
- Carr, S. M. (2011). NCLEX-RN pass rate peril: One school's journey through curriculum revision, standardized testing, and attitudinal change. *Nursing Education Perspectives*, 32(6), 384-388.
- Chen, J. C. (2014). Teaching nontraditional adult students: Adult learning theories in practice. *Teaching in Higher Education*, 19, 406-418.
- Davis K. (2012) Adult Learners' Characteristics. In: Seel N.M. (eds) *Encyclopedia of the Sciences of Learning* (p. 216). Springer, Boston, MA
- Deane, W.H. & Asselin, M. (2015). *Transitioning to Concept Based Teaching: A Discussion of Strategies and the use of the Bridges Change Model*. *Journal of Nursing Education and Practice*; 25 (10), 52-59.
- Dewey, J. (1910). *How We Think*. Boston: Heath and Company.
- Diekelmann, N. (2002). "Too much content..." epistemologies' grasp and nursing education. *The Journal of Nursing Education*, 41(11), 469-470. Retrieved from <http://www.healio.com/nursing/journals/jne>.
- Donnelly-Smith, L. (2011, Winter). What adult learners can teach us about all learners: A conversation with L. Lee Knepfelkamp. *Peer Review*, 13(1). Retrieved from <https://www.aacu.org/publications-research/periodicals/what-adult-learners-can-teach-us-about-all-learners->

conversation-1

- Edwards, P.A. (2015). The Effects of a Concept-Based Curriculum on Nursing Students' NCLEX-RN Exam Scores. Doctoral dissertation, Walden University. Retrieved from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=2643&context=dissertations>.
- Elsevier (2016). Concept-Based Curricula: Preparing students to thrive in the ever-changing healthcare environment. Retrieved from <https://evolve.elsevier.com/education/pdf/2015-Concept-Based-Curricula-paper.pdf>
- Funderstanding, (2011). Thematic Instruction. Retrieved from <http://www.funderstanding.com/educators/thematic-instruction>.
- Giddens, J.F. & Brady, D.P. (2005). *Rescuing Nursing Education from Content Saturation: The Case for a Concept-Based Curriculum*. Journal of Nursing Education, 46, (2), 65-69.
- Giddens, J.F., Wright, M., & Gray, I. (2012). Selecting Concepts for a Concept-Based Curriculum: Application of a Benchmark Approach. Journal of Nursing Education, 51, (9), 511-515.
- Harrison, C. (2016). Evaluating the Outcomes of a Concept-Based Curriculum in an Associate Degree Nursing Program. Retrieved from <https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/48987/HarrisonEvaOutCon.pdf?sequence=1>
- Heick, T. (2019). 6 alternatives to Bloom's Taxonomy for teachers. Retrieved from <https://www.teachthought.com/critical-thinking/5-alternatives-to-blooms-taxonomy/>
- Hunt, D.D. (2017). *The New Nurse Educator: Mastering Academe*. (2nd ed.) New York: Springer Publishing Company.
- Kenner, C. & Weinerman, J., 2011, 'Adult learning theory: Applications to non- traditional college learners', *Journal of College Reading and Learning* 41(2), 87–96.
- Knight, P. (ed.) (2012) *Assessing for Learning in Higher Education*. New York: Routledge Publishing Group.
- McCoy, B. (2013). Digital distractions in the classroom: Student classroom use of digital devices for non-class related purposes. *Journal of Media Education*, 4(4), 5-15.
- Metzner, B. S., & Bean, J. P. (1987). The estimation of a conceptual model of nontraditional undergraduate student attrition. *Research in Higher Education*, 27(1), 15– 38. Retrieved from www.jstor.org May 18, 2019.
- National League of Nursing (2005). Transforming nursing education. Retrieved from: www.nln.org/aboutnln/PositionStatement/transforming052005.pdf
- Norris, N.D. (2002). Perspectives on the Mistreatment of American Educators: Throwing Water on a Drowning Man. Lanham, MD: Rowman and Littlefield Publishers.
- Norris, N.D. (2004). The Promise and Failure of Progressive Education. Lanham, MD: Rowman and Littlefield Publishers.
- Pelech, J. & Pieper, G. (2010). The Comprehensive Handbook of Constructivist Teaching: From Theory to Practice. Charlotte, NC: Information Age Publishing.
- Phipps, S.T.A., Prieto, L.C. & Ndinguri, E.N., 2013, 'Teaching an old dog new tricks: Investigating how age, ability, and self-efficacy influence intentions to learn and learning among participants in adult education', *Academy of Educational Leadership Journal* 17(1), 13–25.
- Putwain, D., Whiteley, H., & Cadley, L. (2011). Thematic versus subject-based curriculum delivery and achievement goals: findings from a single-school study. Retrieved from: <https://www.tandfonline.com/doi/abs/10.1080/00131881.2011.625149?src=recsys&journalCode=rere20>
- Rowntree, D. (1987). *Assessing Students: How Shall We Know Them?* New York: Routledge Publish Group.
- Stanley, M.J. & Dougherty, J.P. (2010). *A Paradigm Shift in Nursing Education: A NEW MODEL*. Nursing Education Perspectives, 31 (6), 378-380.
- Worthen, M. (2018) The misguided drive to measure 'learning outcomes'. Retrieved from <https://www.nytimes.com/2018/02/23/opinion/sunday/colleges-measure-learning-outcomes.html?smid=fb-share>