

ORIGINAL RESEARCH

Nursing faculty and student transition to a context-based learning curriculum

Vivian Afrah Puplampu *, Carolyn Ross

Faculty of Nursing, University of Alberta, Edmonton, Alberta, Canada

Received: November 28, 2016

Accepted: January 16, 2017

Online Published: February 14, 2017

DOI: 10.5430/jnep.v7n7p54

URL: <http://dx.doi.org/10.5430/jnep.v7n7p54>

ABSTRACT

Background: Context-based learning (CBL) a student-centered teaching and learning approach (STL) is used at the study site to teach undergraduate nursing theory. While it is widely accepted that transition to STL can be difficult, little is known about the perception of nursing faculty and students transition to CBL. The purpose of this study was to describe nursing faculty and students' perception about their transition to CBL.

Methods: An exploratory-descriptive qualitative design was undertaken to understand and describe the perception of nursing faculty and students transition to CBL as a teaching and learning strategy for undergraduate nursing theory courses.

Results: Five themes emerged from the students' data: throwing someone into an ocean, sink or swim, turning point, just doing it, and valuing. Four themes emerged from the faculty data on transition to CBL: an adaptation, trusting the CBL process, a maturing process for students, and controversies about CBL. While the transition was uncomfortable for students and faculty, over time both understood the benefits of CBL.

Conclusions: Nursing as a practice discipline will best be served using a variety of teaching and learning strategies in the undergraduate education of nursing students. Based on the findings of this study, recommendations have been made to smooth the transition for faculty members and students not previously exposed to the STL approach using CBL.

Key Words: Nursing students, Faculty members, Context-based learning, Transition

1. INTRODUCTION

Over the past several decades there has been mounting support for a paradigm shift from teacher-centered to student-centered teaching and learning approaches in post-secondary education programs including nursing.^[1-3] Factors driving this paradigm shift in nursing include research evidence about what contributes to effective learning^[4] and awareness about the learning outcomes graduates need to adapt to the accelerated growth in health information and the rapidly changing work environment.^[2,3] A recent review of the literature shows that compared to graduates of programs with

an emphasis on teacher-centered teaching approaches, graduates of programs with an emphasis on student-centered teaching approaches show significantly greater ability to think critically, solve problems, effectively communicate, work collaboratively, and engage in lifelong self-directed learning.^[5,6] These learning outcomes are widely considered to be essential for adapting to the realities of the twenty first century work environment.^[1,2]

The most common student-centered teaching and learning approach discussed in the literature is problem-based learning (PBL). PBL is defined as a form of learning that involves

*Correspondence: Vivian Afrah Puplampu; Email: Vivian.Puplampu@uregina.ca; Address: Faculty of Nursing, University of Regina, Saskatchewan, Canada.

small groups of six to ten learners working together in teams to comprehend and resolve a situation derived from a scenario.^[7] Context-based learning (CBL) is a version of PBL which involves small groups of 10 to 14 students working with a faculty tutor to discuss situations that nurses typically encounter in practice.^[8] CBL is based on the assumption that nursing is holistic and nurses appreciate the life context of their patients in providing care either in assisting people who are experiencing health problems or providing health promotion programs to enable patients to maintain their wellness.^[8,9]

The shift from teacher-centered learning to CBL requires a change in the roles of the teacher and the student which can create uncertainty for faculty and students unfamiliar with CBL. Understanding faculty and student experience with the transition from teacher-centered to student-centered teaching and learning approaches such as CBL can help inform strategies to better facilitate the transition for students and faculty. The purpose of this study was to understand and describe nursing faculty and students' perception about their transition to a hybrid CBL curriculum. It was expected that the results could inform how the faculty facilitates student and faculty members transition to teaching and learning in the undergraduate curriculum.

Literature review

PBL was first introduced by Barrows while teaching medical students at McMaster University in Ontario, Canada in 1969.^[10-14] The aim of establishing PBL was to promote students' integration of knowledge and make medical education enjoyable.^[10] In the mid-80s, the Panel on the General Professional Education of Physicians (GPEP) and College Preparation for Medicine recommended that medical education should include teaching and learning methods that would support students' independent and self-directed learning and problem solving, and limit the use of a didactic approach.^[12] Since the introduction of PBL in medical education, it has been adopted by many disciplines, including nursing, and more disciplines are converting their curricula to PBL.^[14]

PBL is used as an instructional method for all curriculum delivery and student learning activities in some instances while in other instances a hybrid PBL version or blended version is used. The hybrid version involves delivering some select content of the curricula through more conventional instructional methods.^[15] A number of variants to the PBL approach have emerged including: case-based learning,^[16] inquiry-based learning,^[17] enquiry-based learning,^[18] cooperative learning,^[19] team-based learning,^[20] and context-based learning.^[8] However, some key elements are common to each of these student-centered teaching and learning approaches

which includes student's active participation in their learning as they go through the PBL process.

The PBL process has four phases. In Phase 1, a teacher referred to as a tutor presents a scenario to a group of 6-10 students. Students then brainstorm to generate questions that are important to the situation which become learning issues and form the motivating forces for students' self-directed learning.^[21] Also in Phase 1, group members set "the ground rules" on how the group members will work together and tutors make their expectations known to the students^[22] and ask questions to guide and stimulate students' thinking.^[8,23] The second phase involves the group members individually seeking information relevant to the scenario from a variety of sources including the library online resources, and interviewing experts. In the third phase, the group reconvenes to discuss the information gathered, debate it critically, apply knowledge to the situation, and form new knowledge through connecting with existing knowledge.^[21,24] Learners in phase three then formulate a nursing care plan to address the care needs relevant to the scenario. In the fourth phase, both the group and individual students reflect on the content and the process of learning.^[23,24] Learners are expected to provide feedback to one another about participation in the group process. Each student is required to assume a leadership role in at least one of the scenarios in each theoretical course. All four phases in PBL occur in two or three sessions. As students go through the phases of PBL, they use the PBL philosophical assumptions of active participation in learning to create their own knowledge.

Table 1. Phases in the CBL process

CBL Phase	Activity
One	Tutor presents scenario to students
	Students brainstorm to identify learning issues Tutor explains expectation about the CBL process to students
Two	Students search for information on scenario individually
	Students share findings from individual research
Three	Students reconvene to analyze information, and create their knowledge
	Students develop nursing care plan on scenario
Four	Individual and group reflection on content and CBL process
	Students take leadership role in turns

The main philosophical assumption guiding the PBL method is associated with constructivism.^[25-27] Constructivism is the belief that learners construct meaning based on their interaction with the course material, environment, and fellow students through discussion and negotiation of meaning.^[25,28] Constructivists such as Dewey, Piaget and Vygotsky suggest that students' learning should be learner-focused, with students actively participating in their learning rather than being passive receivers of information.^[25,28] Constructivists

argue that intellectual disharmony enhances learning, an assumption rooted in Dewey's philosophy thus, learning should begin with a situation.^[29] In addition, constructivists have stressed that learners are able to create their own knowledge and retrieve information when the situation resembles a real-life situation and is linked to previous knowledge.^[23] Schmidt et al.^[14] support the view that PBL is linked to constructivism because PBL supports contextual, group learning; self-directed learning; and student agency.

PBL reflects constructivism assumption that intellectual conflict fosters learning by starting the learning process with a scenario. The constructivist belief in communal creation of knowledge is reflected in PBL through students learning in teams with a common goal and constructing their own knowledge.^[30] Furthermore, using clinical situations in PBL fosters constructive and contextual learning processes.^[29,30] PBL supports student-centered learning by empowering students in decision-making and searching for information from different sources while the instructor serves as a guide. In a PBL classroom, instructors do not provide information to students; instead they provide learners with opportunities to create their own reality by guiding them to find answers to questions, sustaining the learning process, probing students' knowledge, engaging all students, and providing constructive feedback.^[28,30] Dolmans and colleagues^[30] argue that learning in PBL is a constructive process that involves students' active participation and should be directed towards activation of prior experience, elaboration, and better understanding.

Because of the focus on students' active involvement, self-direction in their learning to create their understanding in a PBL learning environment, a number of studies suggest that transition to a PBL program can be challenging for faculty members and students. Key concerns that faculty have reported about student-centered learning include: worry about their loss of control over students' depth of learning and application of knowledge^[31] and student interpretation about faculty variation in their approach to facilitating group learning.^[13] Some students report dissatisfaction with student-centered learning at the start of their first course or program but this concern often decreases over time.^[18,32,33] According to published research, learning through group work,^[17] lack of consistency in group experience and the faculty approach to facilitation,^[13] and a perceived lack of adequate orientation to the student-centered approach^[18] are important student concerns related to their initial exposure to a student-centered curriculum.

CBL being a version of PBL shares similar philosophical assumption with PBL.^[34] In both PBL and CBL, learners work in small groups. While at the research setting, students

work in groups of 10 to 14 they follow the same phases used in PBL to create their knowledge. The focus on contextual learning in CBL differs from PBL.^[8,24,34] In CBL, students consider the whole context of their patients in order to address the situation because patients' concerns are complex with different contributing factors. Based on the concern associated with the student-centered learning approach, there has been extensive research conducted on faculty and students experience in the student-centered approach. However, there is minimal research on nursing faculty and students transition to CBL. This current research therefore seeks to answer the research question "what are nursing faculty and students' perceptions of their transition to a CBL program?" The PBL philosophy forms the theoretical framework guiding this current study.

2. METHOD

An exploratory-descriptive qualitative study was undertaken to understand and describe the perception of nursing faculty and students on their transition from a traditional curriculum to a hybrid CBL curriculum. The goal of an exploratory-descriptive qualitative research is to acquire a deeper understanding of a phenomenon, describe the participants' opinions on the topic and address the inquiry that guided the study.^[35-37] Tape-recorded focus groups, using a semi-structured interview guide was the primary data collection strategy used to separately explore the perspectives of students and faculty on their transition to CBL. Field observations and a review of documents were also used to understand the hybrid CBL teaching and learning context.

2.1 Description of research participants and context

The study was conducted in a western Canadian university which used CBL as the student-centered instructional method since 1997 and more recently a hybrid form of CBL. The Faculty of Nursing in this university offers three unique undergraduate nursing programs; Collaborative, Bilingual and After Degree programs. The Collaborative and the Bilingual undergraduate programs each take a minimum of four years for students to complete required course work, and students' eligibility is based on grade point average upon completion of high school. The former is taught in the English language while the latter requires students complete at least 50% of their course credits in the French language. Another feature of the Bilingual program is that unlike the other programs, CBL is not introduced until the second year of the program. The After Degree nursing program requires a minimum of two years to complete and students' eligibility is based on their grade point average upon completion of an undergraduate degree from another discipline, usually in arts or sciences. The schedules for all students invited was comprised of at

least one six-week nursing theory course and one six-week clinical course each term. In addition, three-hour skill labs are organized and offered weekly for students to practice nursing clinical skills. In each of the nursing theory courses students are presented with four to six unique scenarios that reflect relevant nursing concepts and context. The students go through the four phases of CBL as explained in section 1.1 to create their knowledge on the topic being discussed.

2.2 Recruitment, data collection and analysis

Participants for students and faculty focus groups were recruited after the research team received ethics and administrative approval for the study from the University's ethics board and the Faculty of Nursing. Electronic invitations, poster advertisement and word-of-mouth were used to invite all undergraduate students and faculty who met the eligibility criteria for the study. Anticipating that student views change over the course of exposure to student-centered learning, an attempt was made to recruit a sample representative of the nursing student population across years and across programs for focus groups. All students registered in each of the first three years of the Collaborative program, each of the second and third years of the Bilingual program and all the After Degree students were eligible and were invited to participate in the study. Fourth year students were in their final semester during recruitment, a time when clinical course schedules are very demanding and largely individualized thus they were excluded from the study.

Other data collection strategies were field observations, and document analysis to serve as a type of triangulation to increase the credibility of information obtained during the focus groups.^[38] The researcher used both observer-as-participant and participant-as-observer approaches during field observations in select CBL students' tutorials facilitated by tutors, which enabled validation of data with participants to gain a deeper understanding about transition to CBL.^[39]

All students and faculty who were interested in participating in focus groups were contacted by email and a convenient date for the focus group interview was negotiated. The researcher sent electronic copies of the information letters and consent forms to students and faculty who agreed to participate in the study. In the information letters, participants were informed about the purpose of the study, the risks and benefits of participating, the voluntary nature of the study, and how confidentiality was protected. Consent forms were collected from all study participants before data collection began.

Members of each focus group were directed by the group facilitator to describe teaching strategies they were familiar

with before they came to the Faculty of Nursing and then with other questions such as, "what was your first reaction to your first experience with CBL?"; "tell me about your experience adjusting to CBL?". Each focus group lasted approximately 60 minutes and was tape recorded. The researcher collected and analyzed data concurrently to enhance deeper understanding of the data^[37] and to identify the point in time when data saturation occurred. Documents such as program information, curriculum materials and students' weekly research were reviewed to understand the hybrid CBL teaching and learning context.

2.3 Data analysis

Inductive content analysis was used to analyze the data. Inductive content analysis begins from observation of specific concepts to the development of general principle with codes being generated from the transcribed data.^[37,40] Inductive content analysis is used when there is no former research on the topic or information on the topic is fragmented.^[37,40]

Each tape recording was transcribed and stripped of any information that could identify participants. The researcher then read through each transcript two to three times in order to be familiar with the data.^[37,40] The researcher performed open coding by reading through text section by section and writing notes in the margins of the text to identify ideas from the data^[36,39] beginning with the student focus groups, followed by the faculty focus groups. The researcher met with the research team to discuss the codes and areas for further probing in subsequent interviews. Both manifest content which is developing categories and latent content, developing themes^[37,40] were analyzed.

2.4 Identification of category

Categorization of data began by reading through the initial codes a second time under each research question in order to identify the common patterns, meaning of phrases that participants were using, similarities and differences among and across the groups of participants.^[41] Similar categories were further condensed into broader headings to obtain one document representing faculty data and one representing students' data and to identify major themes.^[9,40]

2.5 Identification of themes (latent content)

Categories were regrouped into themes to identify patterns in the data that were important to the participants, addressed the research question and relevant to the topic.^[35,42,43] The researcher was deeply immersed in the data, verified data with participants, kept memos of data analysis, met frequently with the supervisory team and compared findings with the literature in order to interpret and identify themes from the data in relation to the purpose of the study.^[37]

2.6 Rigor

Rigor was maintained following Morse et al.'s^[44] recommendation of researcher's responsiveness, methodological consistency, appropriate sampling, concurrent data collection and analysis, theoretical thinking, and theory development. Furthermore, the researcher used reflexive practice by avoiding leading questions, being open to participants' opinions, listened carefully, and was not judgmental. An audit trail of the data analysis was kept and the researcher had frequent meetings with the research team to discuss the codes and categories generated.

3. RESULTS

Twenty-six students took part in the study. Of those 26 students, 14 were Collaborative students, 9 were After Degree students and 3 were Bilingual students. All student participants were female with the exception of one collaborative student. There were student participants representing each

of the first three years of the Collaborative program, each of the second and third years of the Bilingual program and each of the two years of the After Degree program.

Seventeen faculty members participated in the study. Of the 17 faculty members, three were PhD prepared tenure track and 14 were faculty lecturers with a Master's degree. Most faculty members, 14, had taught in the Faculty of Nursing for over 10 years while three faculty members had taught for less than ten years.

Five themes emerged from the researcher's analysis of data from field observation, document analysis and iterative analysis of the transcripts from the students' focus groups. The five themes were: "throwing someone into an ocean", "sink or swim", "turning point", "just doing it", and "valuing". Four themes were identified in the faculty data: "an adaptation, trusting the CBL process, a maturing process for students, and controversies about CBL."

Table 2. Demographic characteristics of the students' participants

Characteristics of students	n	Gender		Highest level of Education			
		Male	Female	H	S	U	G
Collaborative program	14	1	13	25	1	0	0
Bilingual program	3	0	3	0	3	0	0
After Degree program	9	0	9	0	0	8	1

Note. H = high school, S = some university, U = Undergraduate Degree, G = Graduate

Table 3. Demographic characteristics of the tutor participants

Characteristics of Tutors	n	Gender		Highest level of Education	
		Male	Female	M	D
Total number	17	1	16	14	3
Taught less than ten years	3				
Taught more than ten years	14				

Note. M = Master degree, D = Doctorate

3.1 Findings from students

3.1.1 *Throwing someone into an ocean*

"*Throwing someone into an ocean*" represents the students' initial experience with CBL which the students' described as difficult, turbulent, overwhelming, uncomfortable, and confusing because they were not familiar with CBL. The Collaborative students described their past experience "the only teaching technique that I was used to was a traditional teaching method in which there would be a professor or a teacher at the front of the room and the student absorbing and taking note of the content". Similarly, the bilingual students expressed that learning in CBL was new and a big change.

I think um just like what they've said because it's such a big transition from lecture based to

CBL. Initially I think the tutor plays a huge role as a guide that can also change how we progress I guess. It was really kind of new for me doing it. Her presence was much better. . .

The feeling of "turbulence" was linked to students not knowing which information was essential to take away from the seminar discussions because of the minimal guidance they received about what they were doing. The Collaborative students shared

. . . you can almost sum it up like throwing someone who has never swam before in an ocean and tell him to swim. The university is so overwhelming. Like the campus is so big there is

so much going on and you do not know what is going on in class. Like you have to direct yourself. The teacher doesn't say anything ever.

The After Degree students indicated that CBL was stressful for them initially because they felt their backgrounds were not recognized and were not helping them in the new program. The After Degree students shared "there are a lot of high achievers and people that care a lot about marks and performance. And so to be in a situation where we have no confidence in, like, our past experiences and, like, can be very stressful"... On the other hand, the Collaborative students in this study felt they had been taken out of their comfort zone because they had no background knowledge in nursing and had not been to the clinical setting, so the transition was difficult.

It would have been the background in nursing that would have been a lot more helpful. Because CBL, you pick it up fairly quickly, but the nursing you don't know what to know until you've been there. And you can't teach other people until you've, I guess you've had the chance to be taught yourself.

The students also mentioned they initially struggled with writing examinations in the CBL program and this contributed to making the transition difficult:

... my group in CBL had covered a lot of information and I knew my exams would cover also a lot of information but when it came to time of studying I wasn't sure if I should be reading all of the textbooks or should I use all of the writing and teaching materials from my classmates because we don't know the quality of it...

Faculty members who were involved in this study concurred that one of the most difficult things for students was writing one common exam in CBL:

... We have common exams and students do not find the exams easy. We have the objectives or the concept maps or both and our exams questions fit this but they are pretty much all application... So they feel like they are going to an exam without a clear idea about what is going to be on the exam

3.1.2 *Sink or swim*

Students suggested that their failure or success (sink or swim) in the CBL program depended on multiple factors including

classmates, tutors, and themselves and what they did or did not already know. For example, the Collaborative students said:

The thing with CBL, especially in the beginning, it's like it is [a] sink-or-swim kind of thing. If your other group members don't adjust well to the process then you are kind of in trouble, too, because they are responsible for teaching you the concept.

The support the students received from their tutors was essential to their success in the program. The Collaborative students described it this way: "I think I definitely found that in second year my problem wasn't the CBL, but who was your tutor... The experience is different because of how your tutor was helping you, encouraging you, and, being there if you needed something". The researcher observed that tutors for the first year groups were more involved in the students' learning and fulfilled the expected roles of cooperative learning tutors by providing the students with more directions, modifying the students' questions, asking questions on the content and pointing out what students should expect in their exams.^[19]

3.1.3 *Turning point*

This is associated with individual student making a decision to remain and succeed in the CBL program. The students explained that the turning point occurred in the first few weeks when they realized they did not have a choice. "I found that was the biggest source of information because you have no choice. You have to do it if you're going to make it past the first few weeks in the program". Being able to make the decision to stay in the program was extremely important. Many of the students found that when they chose to make the best of their situation, their experience improved. The Collaborative students explained, "making the decision to make the best of the situation [was something] I needed. As soon as I made that decision, then everything else fell into place." Some students did not understand the CBL process until after their first exams "I agree that I think the first exam was really eye opening. There was a lot of, oh that's what we were supposed to do".

3.1.4 *Just doing it*

The fourth theme is about the coping skills the students developed in order to make a successful transition to the CBL program. The students said that practicing CBL was the main strategy that they used to understand the process: "Um, probably the most useful thing in terms of, like, figuring out how to do it was just doing it...". Another strategy the students shared about learning in the CBL program was that they went back to the recommended textbook:

Like most of the things we do in the handout are like points. We don't really elaborate on them. So like I found out that I still have to go back to the textbook and read them over again for myself. . . which is like a lot of stress.

Students' transition was successful when they began to have conversations with each other. The Collaborative students indicated "I think the big thing with our group is just getting comfortable with ourselves and everyone felt more confident and taking part, I think, once they kind of got to know each other. I quite enjoy going to seminars now". During the researcher's observation, third-year Collaborative and second-year After Degree students interacted freely with their tutors during their tutorial discussions. For example, in the second-year After Degree class, there was a role-play on disaster management. The tutor, students, and the researcher were all involved in the role-play which involved making a guess of the word on a card placed on ones' forehead.

3.1.5 Valuing

This last theme involves the students' assessment of the benefits of CBL to them presently and in future when they become registered nurses (RNs). The students shared that through CBL they have acquired research skill:

In the lecture type of environment, you will only do your textbook and the material. While we still crave that component in CBL, I think looking down the line, like, we know a lot. We know a ton of websites, we know all kinds of acts and regulations about support groups, for any condition and disease you can think about. We know about housing and aging and all kinds of other resources. . . And so in terms of nursing in the future, integrating into, like, practice or something like that, it will be that resource and skill sets that was (sic) encouraged in CBL.

Students explained that CBL students will work better in a team setting "I think if you compare the students in the CBL program and one that was just [a] traditional program, it will be far better for the students in [the] CBL program to transition into a team environment". The students in this study were no exception and they indicated that the CBL process had helped them to think through situations.

I feel like that applies in clinical as well. And as a nurse in general because you are then in a situation and you are like, okay, this could happen. And I could do this, this, and this, and this could happen because of this. So I just feel like it

increases my ability to think through situations and stuff like that.

Another benefit of CBL the students identified was being able to teach. Teaching peers had made students confident to teach patients.

Because the CBL is a group process, it will make it easier to talk to a patient or to talk to families and to be comfortable and confident in the theory that you know, and be able to explain it to somebody that is not so familiar with things in the hospital setting. Because we are taught that, we are taught how to teach.

The students in this study shared that the activities in CBL such as speaking in front of their peers, preparing a handout, teaching each other, and tutors not providing exact factual information were new to them and influenced their transition to CBL. It is essential to note that the participants identified many benefits of CBL, such as being able to find credible information, not being afraid to talk, being able to teach, developing critical thinking skills, and being able to work in a team setting. All these are skills the students would need in their future role as nurses and for their lifelong learning.

3.2 Findings from faculty data

3.2.1 An adaptation

Many of the tutors indicated that some principles of learning guiding CBL were similar to those guiding traditional approaches, so the change was really an adaptation. "And so no I hadn't. I hadn't any experience with CBL outside of, I mean, some basic principles are similar and working in clinical with students in small groups. But the CBL approach and the stages that are typical of CBL were new to me". Because the CBL process was new to most faculty members, they discussed that they were supported by the Dean, team leaders and experienced tutors

As far as actually doing, being a tutor in [the] CBL course, I had to figure it out. The conversations with my course lead were the most helpful in terms of figuring out how it works and what I was supposed to do. And also as time passes you do it and you learn from doing it.

3.2.2 Trusting the CBL process

This was the second theme on tutors' perception about transition to CBL. Tutors in this study shared their concerns about students covering the content in a CBL program:

There is always a concern with and this is in the literature, too, that a group covering or dealing

with the scenario, they will discuss certain aspects of a scenario but they may ignore other aspects and not realize what they have missed. For example, in studying schizophrenia they may study the medications and the legalities and the experience of hospitalization and all those things. But they may not talk about what is the best way to communicate with the client. . . The students don't often generalize. They stay very much to what they've been assigned. . . but it's the leap of faith. I have to trust that when they have gone through all the steps of CBL that they have covered what they need to know for that. So I need to have faith or trust the CBL process that it will do what it was supposed to.

During document analysis, the researcher observed that the curriculum designers had included learning goals and questions in the course pack to guide the students. The researcher observation was supported by a quote from the tutors' data:

I have to say we have built in lots of guidelines. We have got all the learning goals at the beginning of each of [the] learning packages and then some questions at the end to sort of check. Trigger questions to kind of get them [to] expand their thinking. It comes down to that trust I think, and sometimes it's harder for faculty to kind let go.

In addition, experienced tutors prompted new tutors about areas that CBL students had difficulty understanding and suggested the tutor be present. The tutors described the prompting "so be prepared for that and maybe try to be present in their group when they are discussing that particular concept or really check over their handout to make sure that their handouts include that pertinent information". Furthermore, tutors used lecture method to incorporate difficult concepts for clarification so that students could understand. "So I have seen that I can do a short didactic session on a topic and incorporate that quite nicely into a group discussion and invite input". . .

3.2.3 *Maturing process for students*

The students gained competence in the CBL process after at least one year in the program. Both students and faculty members agreed that the CBL process became less difficult and stressful after one year in the program. For example, a student shared "yeah, I will say it becomes easier as you are more familiar with it. Um, which I think is like everything new, like after you have had some experience in it". The students matured through the process over one to two

years of figuring out how to do CBL. Tutors described their fourth-year students' growth in CBL: "When I was working in fourth year I had students come and say 'I get it. P4, I get it. Yea, yea.' So it is a maturing process for students". In addition to agreeing that learning in a CBL program is a maturing process for students, tutors also identified some advantages of CBL such as providing them with the opportunity to get to know their students very well and to learn about their own individual preferences:

I think in general, for me, facilitating small groups, 14, even if you have 56 students total and moving back and forth between small groups I get to know my students and I don't see how I will do that if I was lecturing to 120. I will know only those who came and ask questions afterwards or came to the office whereas I think I know a little bit about most of my students in the CBL format. That's the part I enjoy the most is getting to know them as people as students, their little quirks, their learning styles, is much more accessible than in a lecture format.

The researcher observed that after the initial nursing theory course in the first two semesters of the program, the tutor facilitates two groups of up to 14 students. The facilitator spends half of each scheduled seminar with each group and will be able to know the group members.

3.2.4 *Controversies about CBL*

The majority of the tutor participants had positive views about CBL. However, a small number of the participants (three out of 17) were frustrated with the method. The tutors in this study shared a misconception about CBL that some other tutors might possess:

Sometimes faculty had a perception that in CBL they should not be engaged in the discussion and not involved. So they sit outside of the circle or sit quietly and [do] not say 'boo' the entire tutorial class. And that is the farthest thing from the truth. I mean, the tutor does not give up that role responsibility of being accountable for the teaching and learning process, and so if something is being missed by the students [the tutors] need to be bringing that up and helping the students work through and understand the concept.

Tutors who were frustrated with the CBL program explained it was a new learning experience to them and some did not possess knowledge on the course content. The faculty data revealed two kinds of transitions that occurred for tutors in

the CBL program. Majority of the tutors, 14 out of 17 made the transition while a small number had not adapted.

4. DISCUSSION

This study is the first known study that describes undergraduate nursing students and faculty members' perceptions about transition to a hybrid CBL program. It is also the first study to describe the transition from the perspectives of students in different undergraduate nursing programs. Similar to previous study findings, the students' perception of their transition was characterized by an initial stage of confusion about the CBL learning process with progression to no longer being anxious about learning that way.^[17, 18, 45, 46] The students were anxious about their learning because they received minimal factual information from their tutors which reflected the CBL philosophy of learning.^[28, 30] Tutors in a CBL program guide students to create their own knowledge.^[28, 30] The students after spending one year in the CBL program recognized benefits of CBL such as being able to apply their knowledge in clinical context, work in teams, engage in research and patients teaching. These learning outcomes form the goals of the CBL philosophy that are pivotal for practice professionals future work in the modern health care system.^[1, 3] Consistent with Grkovic,^[47] we found majority of the tutors made the transition by learning to trust the CBL approach through applying the CBL process. Grkovic^[47] reported that the faculty members involved in facilitating in a PBL curriculum were satisfied with their roles and the program.

Faculty members and students' perception about their transition to CBL described in this study are consistent with Meleis and colleagues^[45] middle range theory on transition with four levels. The four levels in Meleis et al.'s^[45] middle range theory are: identifying different aspects of transition, recognizing that transition is associated with anxiety, recognizing contextual factors that could facilitate or hinder successful transition, and feeling connected and developing coping skills. There are major findings from this study that contribute to the literature on nursing students' and faculty perception on their transition to a CBL program.

First, the After Degree students were frustrated that their past educational backgrounds were not used. One reason students might have felt that their past knowledge was not recognized was that they were in a new discipline, learning new concepts and using a different learning method. This study finding reflects findings about returning RNs who felt their past experiences were not recognized.^[48] The Bilingual students shared similar characteristics with the Collaborative students in that they wanted more direction and feedback about their learning.^[48] Even though the students received minimal lecture from the tutors, the tutors provided direction

to the students in accordance with the CBL philosophy of learning. The researcher recommends that at orientation, the philosophy of the CBL curriculum, including the belief that knowledge is socially formed through interaction with peers, is discussed and any possible misconceptions are clarified in order to reduce the anxiety linked with transition to CBL program. Furthermore, the researcher recommends that during orientation tutors suggest to After Degree students that initially they may feel their past experiences are not used and that their initial grades in this program may not reflect their graduating grades from their previous program.

The students and faculty members advocated for a mixture of lectures and CBL in the education of nursing students. Although the assumption guiding CBL requires that students learning is facilitated with a scenario structured on real life issues,^[29, 30, 34] the integration of lectures in CBL program is supported in the literature.^[49] Concepts that are difficult and require more fundamental knowledge, retrieving, and comprehension should be taught in different formats including lecture, seminar, and case study to ensure mastery of the content knowledge by the students.^[49] Currently, a hybrid form of CBL where lectures are integrated with CBL is provided in the study setting.

The students expressed satisfaction with the CBL program when they spend more time in the program and when tutors laid out their expectations at the first meeting, a role expected of tutors in cooperative learning.^[14, 17, 19] The researcher recommends that trust should be strengthened in the CBL program through mentorship. Experienced tutors can share their successes and challenges with new tutors and more senior students can reassure first year students through speaking to first year students and becoming mentors in the clinical area.

Similar to Hamilton et al.'s^[18] finding, some tutors in this study were frustrated with the CBL process because it was a new learning experience to them and some did not possess knowledge on the course content. Assistance in the form of development of course materials and organization of frequent meetings are to be given to tutors having difficulty with adjusting to the CBL process before beginning a CBL course and during the course to address concerns with acquiring-content specific skills.^[18, 19, 50]

Even though CBL is documented to be an effective teaching and learning strategy for education of nurses, when the CBL philosophy of facilitating students learning with scenarios is used for major part of the curriculum students may experience anxiety with the method initially. Nursing is a practice profession and as a result nursing students on some occasions require information on difficult topics to effectively

and efficiently apply their knowledge to address situations in clinical setting. Integrating lectures with scenarios is highly recommended by the students and faculty participants in this study.

Limitations

A limitation of this study was the collection of data from one site and in one semester. However, the repetition of information across the students' year groups and faculty indicates saturation was achieved in the students' and faculty data. The results provide a rich description of transition to CBL from the perspectives of students and tutors congruent with findings from previous work on PBL.

5. CONCLUSION

The transition of nursing students to CBL was initially characterized by anxiety until after spending one year in the program when students were no longer anxious and they began to identify key benefits of CBL which are important for their future practice. Faculty members considered their transition to CBL as an adaptation. Both students and faculty members advocated for a combination of CBL and lecture

in the education of nursing students. Presently, a hybrid form of CBL is used as the instructional method for nursing courses in the research setting. Through this research, deeper understanding of participants' opinion about CBL has been achieved. Recommendations have been provided to facilitate students and faculty members successful transition to a CBL program. An important recommendation is to relieve the anxiety in first year of CBL by providing mentors for first year students as well as tutors being explicit about their expectations. Tutors facilitating CBL sessions the first time need to be supported through mentorship and regular team meetings. This study contributes to knowledge in nursing education and the recommendations can serve as a guide for institutions considering a change in their curriculum to a CBL program.

ACKNOWLEDGEMENTS

I would like to express my profound appreciation to my supervisors Dr. Bev. Williams and Dr. Carolyn Ross for their guidance during the conduction of the research.

CONFLICTS OF INTEREST DISCLOSURE

The authors do not have any competing conflict of interest.

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