



## Seeing the bigger picture through context-based learning

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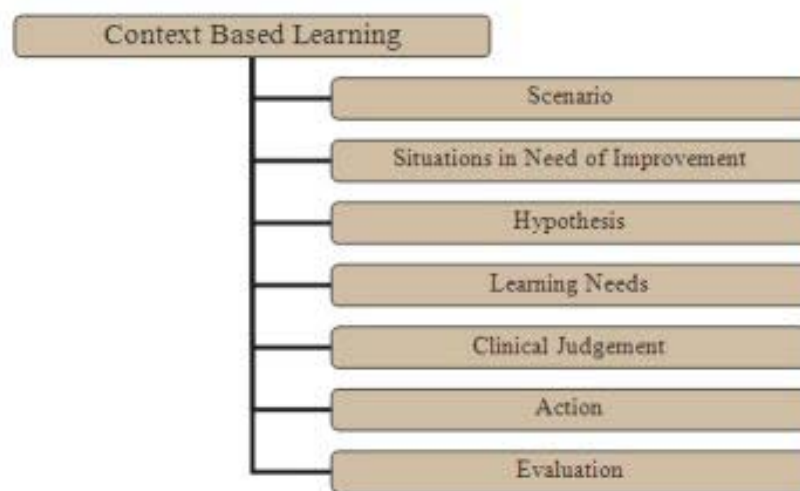
### Background

Context-based learning (CBL) provides an alternative to the more traditional lecture approach to teaching. CBL, previously called problem-based learning but changed due to the negative connotations of the word 'problem' and the importance of utilising context when teaching health care, is a learning concept that originated in Canada in the 1960s at McMaster University and was used initially to prepare medical students for practice (Alexander, McDaniel, & Baldwin, 2005; Dochy, Segers, Van den Bossche, & Gijbels, 2003).

The process of CBL involves students being provided with a scenario, and undertaking a student-led process of hypothesising, which ultimately results in the development of the students' own learning needs. The identified learning needs are explored by the student group, who use current research and resources to consolidate a position and present this to their peers (Figure 1). As a teaching tool CBL utilises a group approach to learning – the process of working together creates discourse and leads students towards a solution focus.

CBL as an inductive method of teaching and learning includes trial and error in the classroom, and group discussion is seen as a powerful enhancer of learning (Prince & Felder, 2007). The role for educators who use CBL is to facilitate learning (Schultz-Ross & Kline, 1999) and to assist students to be creative, critical thinkers in an open environment. According to Alexander et al. (2005), the main barrier to implementing CBL is the educator's hesitance to change practice from a content-driven process to a student-led process. The nature of CBL facilitation is probably the most difficult aspect of CBL to grasp as there is a change of roles from educator to facilitator. The facilitator role is to guide, question and challenge; the concept of 'not being in control' is a challenge for some educators. CBL is cooperative

learning and a group process. Time needs to be taken to allow for brainstorming and evaluation of group processes. Facilitators must be able to deal with issues as they come up and share their subject/non-subject expertise.



**Figure 1: The CBL Process**

Planning CBL in the classroom setting requires educators to develop learning packages, ensuring that all content and learning outcomes are covered in the curriculum. In the development of learning packages educators consider instructional design; this includes mapping the content, selecting the media, developing the learning package, and ensuring openness to enquiry. As CBL scenarios are developed as an integral part of the learning package, it is important educators work through the CBL scenario, are clear about what background information is required, and ensure learning outcomes will be facilitated in a way that meets the need of the programme and the student.

## Teaching/learning as a teach

Providing scenarios that address the complexity of clinical situations creating cognitive dissonance, which is the feeling of uncomfortable tension resulting from holding two conflicting thoughts in the mind at the same time that promotes critical thought and discussion (Prince & Felder, 2007). Facilitating those discussions, exploring world views, ethical positioning, and resolving potential team conflict in clinical setting were powerful strategies. The process of CBL built students' confidence in the development of the role of the registered nurse as a member of the multidisciplinary team.

CBL promoted a sense of team work and allowed a shift in students' thinking about the strengths and skills of the group. Students began to see each other as a resource and felt safe in sharing their views. Comments from students include the following:

*"Good to work within group – promoting sense of teamwork and drawing on their strengths beginning to see others as a resource"*

*"Enjoyable – gave me a sense of team working process"*

*“It worked well and felt safe. I felt part of the group and it was okay that I was working in a different geographical area to the other members. I felt that we learnt from each other rather than being excluded because of their shared history”*

Some students also commented on negotiating workload and positive group dynamics during CBL sessions. Overall, the majority enjoyed the interaction and sharing of knowledge. As students demonstrated creative and critical thinking, educators became just another resource for students “rather than being a purveyor of information” (Alavi, 2005, p. 5).

## Building capability

Capability is the extent to which individuals can adapt to change, generate new knowledge, and continue to improve their performance (Frazer & Greenhalgh, 2001). It was evident throughout the process that CBL allowed students to think about questioning, rather than providing the ‘quick fix’ to situations or events that occur in clinical practice. For one student, CBL is seen as:

*“The process I use in my professional role but a process I have used inconsistently in the past..... It has enabled me to practise presenting/challenging information in a safe environment.”*

For another student, learning with the process of CBL has implications for practice:

*“It will make me think outside the square in practice and take into account the whole person and the processes we may have to go through to fully meet their needs. I think as I do it more I will be quicker in the process and more efficient in my practice”*

As the teaching styles of individual educators were different, they made a conscious decision during the delivery of CBL to question each other and role model discourse and conflict resolution within the classroom. The intention was to mirror a professional approach to resolving conflict because of the complexity of the multidisciplinary environments in which the students would find themselves. Critical feedback was provided on the information students presented in order to build the students’ ability and confidence to justify a held position. By the end of the first year the students were demonstrating improved professional practice with increased confidence in their ability to argue their position, agree to differ, and consider ‘who’s needs were being met’.

## Creating a space to close the theory practice gap

Students viewed the CBL scenarios as being realistic, relevant and aligned to clinical practice. As a teaching learning tool CBL allows the students a place where they can fully use others as a resource, challenge ideas, and learn about resolving conflict in a team. This enhances the skills of working in teams, promotes lateral thinking, and requires students to consider what it is they need to know in order to look after the client safely. The process allowed them to think critically about practice issues, thus closing the gap between theory and clinical practice:

*“It made me think of more things I wanted to know about Jason. I was able to start thinking of what I needed to do as a nurse to begin caring for him”*

*“Big picture – looking at reasons why team work, different points of view, promoting lateral thinking”*

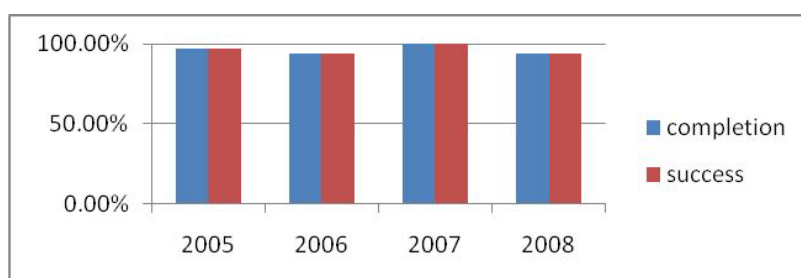
*“That it was a realistic situation and I now know strategies that I can use when in similar situations”*

*“Negotiating amongst the team was an interesting experience as some were not prepared to change & had their own views’.*

## Evidence of effectiveness

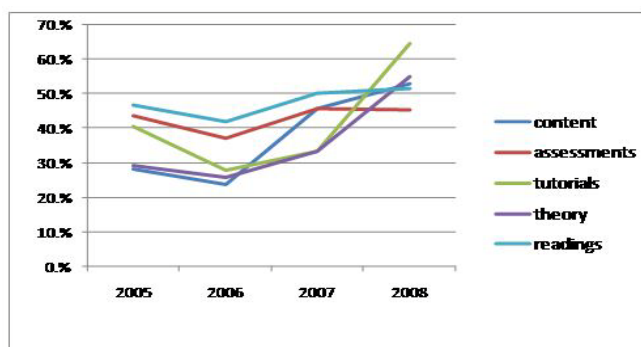
CBL contributes to the development of students' practice as registered nurses working in mental health settings. Evaluation findings showed that CBL contributed a great deal to the ability of students to see the bigger picture (80%); assisted clinical practice (68%), increased students' confidence to speak out in a multidisciplinary team (72%), and 68% of students reported the experience had increased their ability to challenge appropriately (Trimmer, Laracy, & Love-Gray, 2008).

The programme's completion and success rates in 2007 were 100%. Although we are unsure if the implementation of CBL contributed to this result, we would like to think that it has (Figure 2).



**Figure 2: Completion and Success Rates**

Data were also triangulated with the end of year programme evaluation, which clearly showed that since the implementation of CBL in 2007 students have rated aspects of the programme more useful than in previous years, particularly the tutorials and theory weeks (Figure 3). Figure 4 gives an overview of student enrolment and the percentage of students who completed the end of year evaluation for the years 2005–2008.



**Figure 3: Percentage of students who rated the programme 'very useful'**

**Figure 4: Students enrolled from 2005 to 2008**

	2005	2006	2007	2008	total
Students enrolled in the Postgraduate Mental Health Programme	44	51	32	35	162
Evaluation response rate	73% (n=32)	82% (n=42)	75% (n=24)	86% (n=30)	79% (n=128)

## Discussion

The consistent application of teaching and learning processes for all students in the postgraduate mental health programmes was a priority. Educators warmed to the CBL process as a team, and observed that in the first two weeks of theory the students' group work and reflection were increasingly enthusiastic, and they accepted the challenge of finding best practice and delivering this as discussion within the larger group. This level of engagement was maintained throughout the year, which agrees with Ahlfeldt, Mehta and Sellnow's (2005) assertion that "the level of engagement was typically higher in those classrooms with more CBL" (p. 5). It is also evident that students participate more when steps are taken to involve them actively (Ahlfeldt et al., 2005; Alavi, 2005; Prince & Felder, 2007).

The student group embraced CBL and became thoroughly engaged in it. The impact of CBL on the students' development has potential for their future practice. The process allows the students to recognise the complex nature of team work and critically review the subjects they are studying. Students' feedback to their peers showed principles of equity, autonomy, and an understanding of social context. These attributes of professional practice are transferrable into their practice settings as evidenced anecdotally in conversations with both students and the clinical providers.

The principles of CBL workshops, delivered more widely to other educators within the Faculty of Health, promoted the sharing of teaching resources among other undergraduate and postgraduate degrees, with educators sharing expertise and, on occasion, teaching in other programmes. Whitireia has recognised the contribution CBL has made to teaching and learning and has provided the physical resources to support delivery, professional development for teachers and funded international dissemination of our work (Trimmer, Laracy, & Love-Gray, 2008). The library and computer services staff were also most supportive in accommodating this style of teaching, thus adding to the community of practice that mentors and supports the implementation of CBL across the Faculty.

## Conclusion

CBL has greatly enhanced the team work skills of students enrolled in the new graduate mental health programme, suggesting that the process mirrors what occurs in the clinical setting. Not only have

students embraced seeing the 'bigger picture' of client care, they have also learnt team work skills. This is evident in their work with peers in theory weeks and also in their ability to be solution focused in clinical practice. Students have acquired the confidence to speak up in the team environment and to challenge where appropriate. As a transformative tool, CBL helps build capability, creativity and critical analysis for both students and educators.

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