COOPERATIVE LEARNING: KEY CONSIDERATIONS FOR NURSE EDUCATORS

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Abstract

In the ever-changing healthcare arena, nurse educators have a responsibility to develop independent lifelong learners. In the healthcare setting, students must progress to become healthcare professionals that are able to work productively, independently, innovatively and effectively in teams to promote patients’ outcomes. This implies that nurse educators have a responsibility to develop nursing students’ skills and knowledge and equip them with strategies to collaborate effectively to reach their academic outcomes. Students must be able to function as independent knowledgeable members of the healthcare team. One of the strategies that can be utilised to develop the above-mentioned knowledge and skills of students is collaborative learning. This paper aims at sharing key considerations with nurse educators when utilising collaborative learning.

Keywords: Collaborative learning, facilitation of learning, higher education, learning task design, lifelong learner.

Introduction

Nurse educators are responsible for the education and professional development of students. Due to the explosion of new knowledge and consequent continuously changing clinical learning environment, students should be equipped to be lifelong independent and self-directed learners. In addition to professional competence, students should develop human virtues such as respect, authentic engagement, humanisation, forgiveness and leadership (Baehr 2013; Slabbert, de Kock & Hattingh 2008). These human virtues are in-line with people-centred workplace cultures and inter-professional collaboration that the WHO (2016) proposed as strategies to resolve the existing healthcare workforce crisis.

Expectations of healthcare service providers and consumers led to a paradigm shift from teacher- to student-centred education. One student-centred approach that can be used is collaborative learning (Law, Chung, Leung & Wong 2017; Ferguson-Patrick 2018). However, ‘collaborative learning’ and ‘cooperative learning’ are often used interchangeably. These authors plot cooperative and collaborative learning on a continuum. Both are student-centred small group learning strategies (Law et al 2017; Ferguson-Patrick 2018) characterised by positive interdependence (Johnson et al 2013), individual accountability (Varvarigou 2016; Shimazoe & Aldrich 2010) and life-long learning. Figure 1 illustrates cooperative learning when students share information and resources in pursuit of foundational knowledge and development of intrapersonal human virtues (e.g., self-confidence, motivation, perseverance). Collaborative learning is where individuals in a small group take responsibility for completion of sub-tasks to synchronously complete a learning task in order to maximise their own and others’ (group members’) potential (Curşeu & Pluut 2013; Arnold, Ducate & Kost 2012) thereby fostering higher-order thinking processes and the development of interpersonal human virtues (e.g., humanisation, justice, respect). According to Davidson and Major (2014), collaborative learning occurs when students work “with each other” towards discovering, understanding and constructing knowledge to reach a common goal. It is imperative to understand...
that a student sitting with other students and working is neither cooperative nor collaborative learning (Ferguson-Patrick 2018).

The aim of the article is to provide nurse educators with an introduction of the key considerations when using collaborative learning as an educational strategy. The approach to the discussion in this article is based on Kipling’s six wise men namely what, when, where, why, who and how. The ‘what’ has been addressed in the introduction of this article.

**When to use collaborative learning**

Ideally, the nurse educator should use collaborative learning when students have foundational knowledge to solve unstructured real-life problems. Collaborative learning affords students opportunities to rehearse clinical reasoning and problem-solving skills (Ennen, Stark & Lassiter 2015; Berge & Weilenmann 2014; Curşeu & Pluut 2013; Shimazoe & Aldrich 2010). Where students are engaged in learning in the community or outside of the hospital environment, collaborative learning becomes a valuable teaching strategy and fosters working relationships between faculty (educators) and hospital administrators. It further promotes onsite knowledge of evidence-based care (O’Neal, McClellan & Jarosinski 2016).

**Where to use collaborative learning**

Learning takes place in specific contexts that have social and cultural dimensions with a clear departure from the single rationality and narrow progressive path of learning (Thondhlana & Belluigi 2014). Collaborative learning can take place in any context varying from the classroom to all levels of healthcare service delivery (Yang, Woomerand & Matthews 2012). Immersive simulation (Au et al 2016) and inter-professional education are ideal for collaborative learning (Yang, Woomer & Matthews 2012).

**Why use collaborative learning**

The advantages of collaborative learning can be categorised into personal growth, learning, and group gains.

**Individuals** grow through developing:

✓ appreciation for diversity;
✓ confidence and autonomy through affirmation and celebration of knowledge;
✓ interpersonal human virtues;
✓ positive attitudes toward autonomous learning, resulting in higher grades; and
✓ social skills

(Ennen et al 2015; Johnson & Johnson 2014; Van Dat 2014; Celik, Aytin & Bayram 2013; Curşeu & Pluut 2013; Yang et al 2012; Shimazoe & Aldrich, 2010)

**Learning** through collaboration results in:

✓ achieving learning outcomes;
✓ better retention of material;
✓ developing higher-order thinking and problem-solving skills;
✓ engagement with the learning tasks; and
✓ transfer of learning beyond the classroom into the work world

(Casey & Goodyear 2015; Ennen et al 2015; Berge & Weilenmann 2014; Johnson & Johnson 2014; Thondhlana & Belluigi 2014; Van Dat 2014; Curşeu & Pluut 2013; Shimazoe & Aldrich 2010).
Effective collaborative groups are:
- creative in problem-solving;
- committed to care for each other’s success and wellbeing and subsequently have lower turnover and absenteeism;
- committed to achieve the group’s goal; and
- willing to accept difficult tasks

(Barkley, Cross & Major 2016; Johnson & Johnson 2014; van Dat 2014)

Who should be part of collaborative learning?
One of the important considerations is the composition and duration of the collaborative learning group. This small group should consist of three to six members, with four being the ideal number (Slavin 2014; Slabbert et al 2008). Although O’Neal et al (2016) and Nunnery et al (2013) encourage diversity, others are of the opinion that diversity is not that important because group effectiveness depends on willingness and the proactive nature of the individual members who want to work hard and achieve good grades (Thondhlana & Belluigi 2014; Curşeu & Pluut 2013).

Diversity involves educational background, culture/ethnicity, personality, social class, gender, and aptitude level, among other things (O’Neal et al 2016; Farzaneh & Nejadansari 2014). Collaborative groups should remain intact for at least a semester or the duration of a short programme (e.g., a 3-month programme) because trust, norms, and interdependence develop over time (Scager, Boonstra, Peeters & Wiegant 2016; Laal, Geranpaye & Daemi 2013). Group members should move their desks together and engage in group bonding activities.

How to use collaborative learning:
Collaborative learning is a student-centred approach, where learning should be facilitated (Law et al 2017; Davidson & Major 2014). The role of the facilitator is to assist students in the development of cognitive skills (Barkley et al 2014; Davidson & Major 2014). The facilitator develops social skills, e.g. should solve contentious issues that arise within the group. The facilitator of learning must not choose a learning outcome one student could do alone (Slavin 2014). The learning task should be a complex real-life collaborative learning scenario (Davidson & Major 2014; Cruz & Isotani 2014). Students should work towards a shared learning goal (Law et al 2017; Barkley et al 2014; Davidson & Major 2014; Laal et al 2013).

The following core principles should be incorporated to ensure the effectiveness of collaborative learning groups:

Group orientation
Appropriate selection of group members is vital to enhance meaningful interaction, robust learning and intellectual growth (Cruz & Isotani 2014). Cruz and Isotani (2014) suggest that the facilitator of learning should analyse and combine specific characteristics such as learning styles, cultural background, knowledge, skills, leadership styles and personality traits to create a positive synergy amongst group members to enhance meaningful interaction and learning. Orientation within the collaborative learning group is very important to ensure the effectiveness of the group. Group values and norms should be clarified from the outset (JARGV2ELU, Volet & JAVRVENOJA 2010). Group members should be motivated to achieve individual and group goals. All group members are expected to master communication, collaborative, problem-solving and critical thinking skills (NAYKKI 2014).
Group productivity
Group productivity is enhanced when group members share learning activities to promote individual and the group’s knowledge and understanding of a specific learning task (Näykki 2014). Productivity improves further when group members express their ideas clearly and listen to other group members (Thondhlana & Belluigi 2014). In addition, productivity will be enhanced when group members get along well, are good at brainstorming and accept responsibility for individual learning tasks (Laal et al 2013; Thondhlana & Belluigi 2014). A vital aspect in collaborative learning groups is that knowledge will be constructed through their interaction and communication with each other. To stimulate interaction, they need to sit together (Davidson & Major 2014).

Individual accountability
Individual accountability means all students in the collaborative learning group are held accountable for doing their share of the work/task and mastering all the material (academic content) to be learned. Individual accountability means students ask for assistance, do their best work, present their ideas, learn as much as possible, take their task seriously, and help the group (Law et al 2017; Laguador 2014; van Dat 2014; Celik et al 2013; Laal et al 2013). During collaborative learning students take substantive responsibility for working together focusing on making and sharing of meaning (Davidson & Major 2014). Pierce and Gillies (2008) talking to each other within the group can be categorised as a) social talk, b) presentational talk, c) meta-talk (making the talk visual), and d) critical talk. The authors are convinced these forms of talking within the group are vital for creating meaning as well as creating action to bring about change.

Collaboration within learning groups
Optimal collaboration within the learning group is dependent on communication and problem-solving skills as well as teamwork and interpersonal collaboration (Law et al 2017; Curşeu & Pluut 2013). Furthermore, the team’s ability to critically reflect on collaboration and planning a way forward based on identified challenges will, in turn, support teamwork and enhance academic outcomes as well as develop interpersonal human virtues (Baehr 2013; Slabbert et al 2008). Open communication and critical reflection is vital to ensure optimal collaboration and functional learning groups.

Positive interdependence
Positive interdependence focuses on how well team members work together, set goals, share expectations for participation and performance, and receive feedback. Norms are established early in interaction and serve as mediators in identifying and addressing problems as they emerge (Hillier & Dunn-Jensen 2013). Group members provide help and assistance, share resources and encourage contributions from the other members (Law et al 2017; Curşeu & Pluut 2013).

Collaborative learning groups’ success relies on the leader’s behaviour, one who takes charge through collaboration (skills set), is a democratic leader (ask who wants to), volunteers, is assertive and meets expectations and deadlines (Lambertz-Berndt & Blight 2016). The most desirable active leadership characteristic is a leader that is fun to work with, an effective communicator, and respectful (Lambertz-Berndt & Blight 2016).

Conclusion
The main focus of this article was to assist nurse educators to consider or utilise collaborative learning as an educational strategy and inform them about the most important aspects thereof. Future research should explore the importance of the diversity of group members on the outcomes relating

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to personal learning and group performance. More research should be conducted on the design and development of real-life collaborative learning tasks to assist educators in utilizing this method to support the development of lifelong independent adult learners.

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