

Flipped Learning and its application to undergraduate nursing education

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Introduction

A brief overview of the current literature indicates that flipped learning is often confused with a flipped classroom but, as noted by the Flipped Learning Network (FLN) (2014), these terms are not interchangeable. A flipped classroom can, but does not necessarily lead to, flipped learning.

Flipped learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter.

Flipped Learning Network (2014)

Keeping the FLN definition in mind, this discussion will focus on whether flipped learning is beneficial for nursing students in their first year of study in New Zealand.

Discussion

While the discourse on flipped learning in education has been increasing, most literature is international (Early, 2016; Harris & Jones, 2015; Thai, De Weaver & Valcke, 2017; McLean, Attardi, Faden & Goldszmidt, 2016; Triantafyllou, Kofoed, Purwins & Timcenko, 2016; Nanclares & Rodriguez, 2016). There was little found from a New Zealand perspective. New Zealand has specific cultural and educational delivery requirements that may have an influence on whether an educator chooses to move to the flipped learning pedagogy, and if so, how the educator designs their flipped classroom. In addition, the New Zealand educator needs a good understanding of what 'flipping' is, before re-designing course content to facilitate the students' learning needs.

Many educators are using a flipped classroom as part of flexible learning. However, flipped learning and flexible learning, while there are similarities, are different. For flipped learning to occur four pillars have been identified that must be met. These pillars are **Flexible environment**, **Learning culture**, **Intentional content** and **Professional educator** (Flipped Learning Network 2014). Flexible learning provides learning experiences based on understanding the learner and increasing their choices of what, when, where and how they learn. Such choices may include a mix of activities which are class-room based, on-line or mobile, using a range of tools such as technology devices, learning management systems and social media (Flexible Learning Association, New Zealand 2017; Waikato Institute of Technology, n.d.).

Changing to flipped learning will often be an individual decision made by the educator. However, an educator may be directed to change to flipped learning by their employer. Many factors should be considered when this decision is being made. For example, the authors are both educators teaching within a nursing bachelor's degree programme. This undergraduate three-year nursing programme begins at a New Zealand Qualifications Authority (NZQA) level five and ends at level seven. These levels have been identified by NZQA as the necessary level for a bachelor's degree regardless of subject being studied (NZQA, 2011). Level five requires education to be delivered that is tutor led, interactive and often face-to-face. Level six education has increased emphasis on student learning processes using enquiry-based activities, case-based activities, group activities, seminars and investigations. Finally, level seven education is student centred with many self-directed activities (Waikato Institute of Technology, 2013). This follows Bloom's Taxonomy where lower levels of student learning, such as that at level five, require understanding and remembering while upper levels of student learning, level seven, requires applying, analysing and creating (Marshall, 2013).

An additional factor to consider in the decision whether to move to flipped learning is that the content of all undergraduate nursing education needs to be approved by the Nursing Council New Zealand (NCNZ). While NCNZ does not prescribe how this content is taught there are requirements for clinical education hours alongside the theoretical. Whether this has an impact on flipped learning is yet to be seen. The learner outcome at the completion of the bachelor's degree is for the learner to be autonomous in the context of their learning, self-directed, fully engaged in their education, and flexible and adaptable in response to vocational challenges and education. Clearly a flipped learning environment fits well with the required student outcomes at level seven as students are able to apply concepts learned throughout their nursing study and engage in the subject matter. What is less clear is whether a flipped learning environment is expedient with students in their first semester of nursing studies at level five, when these students are unlikely to understand what the nursing profession is, let alone understand and apply concepts when they do not have the experience, clinical or otherwise, to help their understanding and learning.

The literature indicates that flipped learning has taken place at many levels of education from primary school through to university post graduate in many subjects (Aidinopoulou & Sampson, 2017; Hao, 2016; Lo & Hew 2017, Matich-Maroney & Moore, 2016). To date, nothing was found specific to nursing education in New Zealand. Interestingly, the timing of the change to flipped learning may be more important than the level of study itself. Quest (2012, as reported in Hessler, 2017) notes that "loading too many changes on a person or group at one time will exponentially increase their resistance to change" (p. 85). Rather than rapid change, the suggestion is for change to be implemented slowly over time as too many changes all at once may result in failure. This may be relevant to first semester nursing students who are new to the tertiary education setting, new to study requirements of level five education, and new to nursing as a topic and career. Some may be new to the physical location of the tertiary institution, having relocated for study. Where the authors teach, nursing students are typically a mix of young high-school graduates, older students returning to study, and international students. An assumption can be made from informal discussions the authors have had with students that most, if not all students, have previously experienced the traditional

methods of education delivery and learning. It is possible that the timing of introducing flipped learning in the first semester may be one change too many for the students to cope with, impacting their learning negatively.

There are many positive aspects of flipped learning. Providing students with the opportunity to learn in their own space and time increases their learning opportunities and maximises the learning that takes place. Other aspects include increasing student comprehension, interaction and critical thinking (Marshall, 2013). Therefore, the idea of flipped learning for nursing students at level five should not be dismissed. When new ideas are presented in the literature and at education conferences, it is perhaps natural for educators to want to change. However, when an educator is deciding whether to make the change to a flipped learning pedagogy, it is important to gain a clear understanding of what flipped learning is, as opposed to a flipped classroom, and consider all aspects such as the level of study the student is at, the content, the culture, and requirements by other organisations.

Conclusion

As noted above, there are known benefits to flipped learning but also some cautions. Some of the aspects to consider in regards to nursing students are at present unknown. The authors of this article are neither for nor against flipped learning in nursing undergraduate education. To discover if nursing students in New Zealand undertaking their first year of study at level five adapt to flipped learning differently than nursing students at levels six and seven, further research needs to be undertaken and is planned.

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