

Commentary

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FLIPPING LECTURES: SUSTAINABLE TEACHING AND LEARNING
IN AN UNDERGRADUATE NURSING PROGRAMME

Kerry Davis

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INTRODUCTION

In this article, I provide examples of methods that I have employed in an attempt to flip classroom learning, when teaching in a New Zealand undergraduate nursing programme. Some examples have been developed intuitively, while others have been sourced from literature or discussion with colleagues. What follows is a by-no-means exhaustive list of activities that I have employed successfully over the past two years, to flip lectures. The intent is to encourage the reader to build up their creative toolbox, to enhance their own effective and sustainable teaching and learning practice. This paper provides an insight into different methods of flipping the classroom, with each method being presented with a title and a summary of what the exercise entails.

SUSTAINABILITY

Sustainability in contemporary learning and teaching practice is in everybody's best interest. Learners desire teaching practice that is dynamic yet clearly meets learning outcomes. Lecturers desire to see learners grasp essential concepts while engaging with class material, colleagues and themselves as facilitator (Youhasan et al., 2021). Despite these aspirations, as Microsoft PowerPoint celebrates its 25th birthday in 2022, the PowerPoint presentation remains a comfortable default for many lecturers in the classroom.

The Flipped Classroom (FC) is promoted in modern pedagogy as a redesign of the classroom that fosters student-centred learning through three key components: pre-classroom activity; in-classroom activity and post-classroom activity (Youhasan et al., 2021). Ozbay and Çinar (2020) completed a systematic review of 7,470 articles involving the flipped classroom in undergraduate nursing curricula, resulting in a detailed comparison of 24 papers. Overall, the papers promoted a flipped approach as a means of increasing the skill competence, satisfaction, and collaboration of student nurses. Several writers support FC as enhancing the ability of learners to self-pace and to interact more fully with content, when compared with traditional methods of teaching decontextualized knowledge (Joseph et al., 2021).

An essential first step in flipping the classroom is the decluttering of content, so that essential content is retained but with the inclusion of 'white space'. White space is the antithesis of a feverishly delivered PowerPoint presentation or didactic lecture. The concept of white space in education is about "deliberately (and strategically) leaving 'room for thinking', 'room for creativity', 'room for learning'" (Hall, 2017, p. 10). But how does a lecturer practically design this space and flip the classroom to engage learners with content and deep learning experiences? While many readers may lecture in non-nursing programs, I believe that much of what follows is transferable to alternative settings. Have a go – it's flipping awesome!

Speed dating

Paired learners have 10 minutes to roleplay a scenario, such as a nurse providing feedback to a colleague on clinical practice that does not meet an expected standard. After 10 minutes, one person in the pair shifts along one seat to a new partner and attempts a different feedback scenario. This exercise provides an opportunity for communication practice and problem solving in a low stakes role-play. The exercise is followed by a guided debrief with the facilitator of the session.

Sequencing

Rather than providing lists of important information to learners, they are presented with an 'out-of-order' list that they must correctly sequence with a rationale for their decision. An example of this is the correct sequence when applying Personal Protective Equipment (PPE), a term that we have all become familiar with, during the Covid-19 pandemic.

Mix n' Match magic

Learners consider clinical cases from decisions of the New Zealand Health and Disability Commissioner, then match each case with the professional codes or legislation that were breached. Learners go on to identify the magic (safeguards) that could have protected the patient and health practitioner, had they been employed. Wider discussion on mitigation of similar breaches follows.



Figure 1. Mix n' Match Magic (Source: Author)

Do you see what I see?

Learners study an image of a patient with a particular clinical condition, such as an older gentleman in respiratory distress, leaning forward over a table (the tripod position) to assist his breathing. In groups, learners discuss what the patient might be thinking, feeling, saying or doing. Wider discussion then underscores the importance of critical thinking when presented with clinical cases.

Sensory tables

A sensory table is created to foster active immersive learning, for example prior to clinical placement in an aged residential care facility. Learners explore objects that might typically be found in a resident's bedroom, including theatre tickets, a razor strop, crafts and items of religious or cultural significance. Learners actively explore each object, immersed in music of the era including Vera Lynn (We'll Meet Again), Jimmy Durante (I'll Be Seeing You) and the Howard Morrison quartet (Hoki Mai). Learners explore each item and its possible purpose, followed by a discussion on the privileges and responsibilities that accompany us as we enter a resident's personal space and establish what matters to each of them.

Visual props are also powerfully employed in a workshop on elder abuse. A bedside table serves as a centre piece, covered in a handbag and perfume bottle, a fedora hat and cane. Once again, learners are reminded of the intimate moments where trust is built and resident's concerns for their safety may be divulged.



Figure 2. Sensory table (Source: Author)

From the archives

Learners are presented with an historical account or a picture book story of a patient experience and unpack factoids contained within it. One class reviewed the ladybird book 'The Nurse' where a perioperative journey was described. This self-paced exercise fostered deeper discussions that included gender bias, advances in sedation and initiatives such as 'walking to theatre'.

Book group

Learners review contemporary books or poems to foster an understanding of the art of nursing, linked to central content such as 'breaking bad news' (Being mortal, by Atul Gawande), empathy (To Kill a Mockingbird, by Harper Lee) or 'locked-in-syndrome' (The diving bell and the butterfly, by Jean-Dominique Bauby). Learners also share literature that they have encountered around the topics discussed.

Fill in the gaps

Reinforce the connection between head and hand by de-cluttering notes and providing diagrams with labels missing or 'fill in the blank', to foster active note taking.

Dual coding

When learning about a professional clinical guideline, learners produce symbols or diagrams as visual representations of key messages. Dual coding is fun and reinforces learning of new concepts, as words and visuals powerfully combine and cater for varying learning styles (Mayer & Anderson, 1992). Learners then explain their diagrams, many creating powerful symbols such as breastplates and shields, cogs and wheels, hands and hearts.

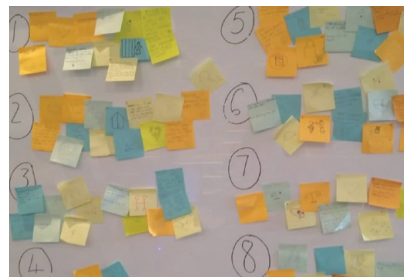


Figure 3. Dual coding (Source: Author)

Interactive case study

Classes are divided into short sections of lecturer led presentations (10 minutes) followed by an activity to foster ethical decision making. The relevance of what is being learned for future practice is stressed. One ethical conflict has been introduced with deliberate pauses for learners to identify the ethical dilemma then discuss likely consequences of alternative interventions.

Media studies

As a pre-classroom activity, learners in the Senior Person's Health course each locate one contemporary written or media portrayal of seniors. Each learner presents their article to the wider group and the group identifies the dominant discourse contained within it. A journalist (by invitation) joins the class and discusses bias in the media and the factors that drive a decision to view a story as 'newsworthy' or not.



Figure 4. Media studies
Source: Nanje Snyman (published with permission)

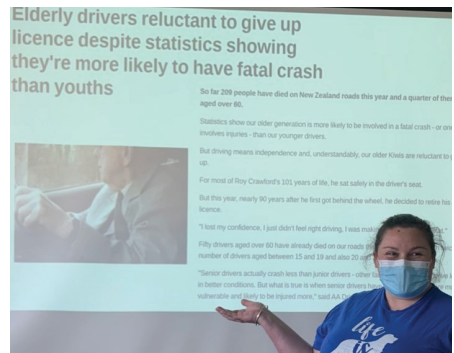


Figure 5. Media studies
Source: Elizabeth Duxbury (published with permission)

Finding fault

Learners are provided with medication charts that contain deliberate prescribing or administration errors. Learners must locate the errors and identify what step in medication vigilance has been missed in each situation.

Breaking the ice

Have some fun as learners interact with content. In the Senior Person's Health course icebreaker, learners are presented with a brown paper bag containing one or two items that a resident in an Aged Residential Care (ARC) facility has chosen to accompany them on a picnic outing. The learner's challenge is to review a list of residents on the excursion and identify who each bag belongs to. Items range from medications to bereavement cards or continence aids. Guided debrief includes discussion around assessment cues, unconscious bias and links to pathophysiology.



Māoritanga moment

When introducing international candidates for nursing registration to the Nursing Council of New Zealand (NCNZ) Code of Conduct, each candidate selects a Hei Tiki or Hei Pikorau gift tag from a kete. In Māori mythology, hei tiki represents the first created person while hei pikorau (twist) represents the path of life and loyalty. The candidates write one professional aspiration on the back of their tag, relating to the NCNZ Code of Conduct. Candidates then carry their tag on their person on their upcoming clinical placement. This activity links professionalism to reflective practice and fosters knowledge of te reo Māori and Tikaka Māori as outlined in Otago Polytechnic's Māori Strategic Framework, Te Rautaki Māori ki (2020-2022).

Figure 6. Māoritanga moment (Source: Author)

Health and Disability (HDC) Cluedo

Learners solve medication error 'crimes', including the location of the crime, suspects, and potential weapons. The game fosters 'noticing' of important cues. One example is the case of a caregiver in an ARC facility, situated in the dining room, at breakfast time, holding a bag of bread. Upon further exploration the learners discover that the caregiver became distracted while making toast and serving breakfast, while also administering morning medications.

It's in the (sick) bag

At the conclusion of a patient safety lecture, learners select from 12 possible bags and attempt to answer the questions contained within them. Airline motion sickness bags are used in acknowledgement of the leadership shown by the aviation industry in the mitigation of systems failures. Each question reinforces an important factor in medication safety vigilance, while learners have fun guessing the correct answer.

Crack the code

Small groups of learners are assigned one of eight principles contained in the Nursing Council of New Zealand (NCNZ) Code of Conduct for Nurses (2012). Each group provides a clinical example of that principle working well in practice and a further example of what a breach of that principle might look like. Wider discussion engages the whole group with all eight principles.

Special guests

Flip the classroom by inviting health consumers to engage in a Question and Answer (Q & A) session with learners. When preparing for a clinical placement in an aged-care facility, learners enjoy a 30-minute Q&A with a 93-year-old woman who lives independently. Questions elicit rich information about the complexities of self-administering medication, navigating community services and accessing the healthcare system. Heidke, Howie, and Ferdous suggest that "It is a challenge for educators to teach empathy about a particular population group without the lived experience of the people central to the interaction" (2018, p.31). Q & A in this context provides that lived experience. Similarly, when exploring 'lobbying for change' in the evidence-based nursing course, a pre-classroom activity involves review of a petition to the health select committee, around waiting times for housing modification for disabled people. In class, the learners meet the petitioner, Joshua Perry, and

ask about his experience with the lobbying process and life in a wheelchair. This Q&A brought humanity to what might have remained an academic exercise.



Figure 7. Disability lobbyist. Source: Joshua Perry (published with permission)

Host a debate

Flipping the classroom to a learner debate encourages learners to explore multiple perspectives on an issue. A lecture on the End-of-Life Choice Act (2019) was complemented by a debate where 'white space' was created for learners to consider opposing perspectives before debating both liberal and conservative viewpoints, in the classroom.

Manager for a day

After a short presentation on successful new staff induction, learners are presented with fictional curricula vitae of two international nurses, starting in their facility. Learners work in pairs to individualise an induction checklist and tailor an orientation package for each nurse based on their prior experience, strengths, and the needs of the facility.

Role-play

In an aged-care simulation involving a gentleman with acute delirium and polypharmacy, pre-classroom activity includes review of relevant articles, scripts for each character and an approved tool for the assessment of acute delirium. Roles include the older couple presenting to a rural General Practice, a student nurse, preceptor and observer. In the role-play, the student nurse interviews the couple and completes the delirium assessment, employing interview and paraphrasing techniques before phoning the General Practitioner. Learners gain confidence with telephone handover then participate in a debrief, guided by the facilitator, which includes discussion of Medicines Review (MR) and tips for distinguishing delirium from dementia or depression.

The eyes have it


In-class activities such as empathy-scoring foster self-awareness. The online 'Reading the Mind in the Eyes Test' measures situational empathy, with learners viewing ten pairs of eyes then attempting to match the correct emotion to each expression. This activity underscores the importance of reading facial expression and non-verbal communication cues as a vital nursing skill.

CONCLUSION

This paper has provided a range of activities, designed to flip the undergraduate nursing classroom into a more interactive, student-led space. Anecdotally these activities engage learners and help to sustain teaching practice. Sustainable teaching is also augmented by participation in communities of practice, such as online practice forums or social media networks. Whether it's sharing pedagogy or practical exercises, collaboration with like-minded colleagues can revitalise your teaching practice. I'm currently subscribed to breakoutRN, a network of educators, accessed at <http://www.breakoutRN.com/>. My next project is the design of an escape room, as an active learning strategy for clinical decision making. Learning (and learning to teach) is lifelong and the possibilities are flipping endless.

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Kerry Davis  <https://orcid.org/0000-0003-0991-9286> is a Senior Lecturer in the School of Nursing at Otago Polytechnic. Kerry is the coordinator of two second-year courses, 'Senior person's health' and 'Evidence-based nursing' in the undergraduate nursing programme.

Correspondence to: Kerry Davis, School of Nursing, Otago Polytechnic | Te Kura Matatini ki Otago, Forth Street, Private Bag 1910, Dunedin 9054, New Zealand. Email: kerry.davis@op.ac.nz

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