

Flipping a library class for undergraduate nursing students

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Abstract

Flipping a classroom is not a new idea, nor is a flipped information literacy class taught by librarians. Documented examples of the flipped classroom model being used for an information literacy class in a university environment are, however, less common. This paper reflects upon a flipped library class for a large cohort of second-year Bachelor of Nursing students at the Queensland University of Technology (QUT). Developed in collaboration with academic staff and delivered by a team of library staff, Liaison Librarians (LLs) and Academic Skills Advisers (ASAs) across two campuses, within a constantly changing higher education environment, the flipped classroom provided an opportunity for library staff to explore a blended learning model. The aim of documenting these experiences is to illustrate the model to any university staff interested in exploring the flexibility of this pedagogy.

Introduction

This paper presents a case study reflecting on the cumulative experience of three iterations of a flipped library class for second-year Bachelor of Nursing students at QUT. The class was developed in collaboration with academic staff and delivered by a team of library staff across two campuses. The purpose is to demonstrate the flexibility of the flipped classroom in providing an innovative approach to the development and delivery of information literacy and academic skills content for large cohorts when staff are constrained by distributed locations, a traditional teaching environment of a tiered lecture theatre, and single 'stand-alone' guest teaching episodes.

Planning and Design

In early 2014, the NSB019 Professional Studies 2: Research, Evidence and Nursing Practice Unit Coordinator (UC) concluded that some of her lectures would be suited to a flipped mode of teaching and learning. It was anticipated that using the flipped classroom approach, as defined by Brooks (2014) for example, would enable greater student participation in learning, greater peer learning, and provision of the opportunity for "real world learning" (Queensland University of Technology, 2016). The UC suggested to the LL that the regular library lecture might be one that is suitable for flipping. Since the library presentation content had not changed significantly since it was first offered in 2011, with a 30 minute presentation on finding and appraising scholarly and evidence-based literature for the major assessment task, this provided an opportunity for the LL to incorporate more innovation and challenge into the session design. The suggestion to flip the classroom also offered an increase in allocated class time to 90 minutes. An ASA was invited to contribute resources and to assist with co-delivering the flipped class to address the additional academic skill development, that is, 'working in groups', 'delivering a presentation', and 'giving feedback', that formed the basis of a major assessment task.

Flipping a classroom is not a new idea and neither perhaps is flipping an information literacy class taught by Teacher-Librarians. In fact, this seems to be a well-documented approach (Bishop & Verleger, 2013). Research regarding flipped tertiary nursing classrooms is also widely available, for example Hessler (2016), however these are from the perspective of an academic, not a librarian. Nevertheless, despite a scarcity of academic library exemplars, the QUT LL and ASA were able to innovate and apply the principles of flipped classroom design to a lesson plan that would achieve the desired learning goals, accommodate a tiered lecture theatre environment, be offered as a single occurrence rather than across the span of the semester, and be able to be delivered or facilitated (asynchronously or synchronously) by other library staff at a distributed location. For each iteration of the flipped class, the core content of the lesson plan remained consistent across all three teaching semesters (see Appendix One), although some adaptation was needed to address additional delivery requirements for each teaching event. For example, in 2015 the class was subsequently repeated on another campus by a different LL, and in 2016 live streaming technology was utilised instead of a repeat session. Key elements of the lesson design are described in the following section.

Delivering the Flipped Class

Prior to attending the class, students were asked to engage with a range of resources, including online videos and PowerPoint slides, which were made available via the NSB019 BlackBoard site. Video streaming had been pre-arranged but students at the non-metropolitan Caboolture Campus still had a LL on hand to facilitate whilst receiving a live broadcast of proceedings at the Kelvin Grove Campus – the Caboolture cohort would engage simultaneously but independently. At the beginning of the session the LL explained the format of the class. The large tiered lecture theatre (seating capacity up to 500) was well attended, and students were asked to form small groups of four to six. Students were reminded of the pre-lecture resources but no class time was spent reviewing them. The LL led the first part of the session covering PICO, search strategies and databases, and the library team supported the small groups as they worked through the group activity. On completion of the activity, a number of groups were invited to the front of the theatre to demonstrate their search strategies to the whole room. As an incentive, a ‘prize pack’ was awarded to each of the teams who shared their work. This consisted of some QUT Library merchandise (pens, highlighters, sticky notes, etc.) and confectionary.

The ASA led the second part of the session about presentation skills. This was an area in which the UC had indicated many students required assistance to improve their confidence and proficiency. It was a conscious decision to approach this session from a positive rather than a deficit angle and it was designed using an Appreciative Enquiry model (Kadi-Hanifi, Dagman, Peters, Snell, Tutton and Wright, 2014, 584). In keeping with the flipped classroom strategy students were also asked to engage with pre-lecture Power-Point resources, whilst GoSoapBox was used in-class where students were asked four questions:

1. Think of a presentation, either your own or one you experienced, that you felt was positive.
2. Brainstorm your own fears and challenges of delivering a presentation.
3. What steps will you take to make the ideas from the dream phase a reality?
4. How will you evaluate the effectiveness of what you have prepared both individually and as part of the group?

Groups were then further split into pairs for impromptu one-minute presentations using supplied topics. Each person in the pair gave feedback on the other's presentation based on the pre-lecture materials provided and on the discussion resulting from the in-class GoSoapBox activity. The purpose was to break down fears associated with speaking in public and provide some practice in delivering respectful feedback to assist in group processes. The peer instruction approach increased engagement and motivation amongst the cohort, as students were more likely to respond to their peers than to the ASA or LL. GoSoapBox was used again to provide a platform to record student contributions. This feedback was shared with academic staff after the class and also considered by the library team for improving future sessions. Students engaged actively and positively with the range of activities (the small group work, paired impromptu presentations and face to face feedback). The GoSoapBox feedback in response to the whole session indicated that interactivity was a popular aspect and a key to enhancing learning engagement.

Discussion

While all of the Library staff involved had considerable prior teaching experience, transitioning to the flipped format nevertheless elicited some nervousness through not knowing if the lesson plan would work or if the students would engage with the pre-class and in-class activities. Post-session feedback showed a high level of student satisfaction evidenced by consistently positive feedback collected via GoSoapBox (see Table 1), and relief from library staff that the planning, development and implementation was successful. The use of practical activities with facilitation rather than didactic teaching methods required much energy from the ASA and LL to keep the face to face session on track, although this also created momentum and a sense of student engagement within the lecture theatre.

Q1 One thing I learned	Q2 One thing I enjoyed	Q3 One thing I am still confused by
<i>I learnt pico and I think it is pretty useful for my assignment to find the key point of the questions</i>	<i>Interactive, enthusiastic and not boring! Walked step by step with us instead of just telling us how to do things</i>	<i>I am not confused but still need practice with my researching!</i>
<i>How to be more confident when giving presentations</i>	<i>GoSoapBox interaction and actually using it during the lecture to get different views from everyone</i>	<i>Handling audience questions</i>
<i>I don't feel alone. I feel motivated and I will try my best</i>	<i>It was engaging. Interactive and fun. Thank you</i>	<i>The PICO method it's still a little confusing, but we will get the hang of it</i>

Table 1. Selected post-session student feedback 2014-2016

Positive student feedback and reflecting on increased presenter confidence confirmed the validity and success of using a flipped approach for the Library's contribution to this unit. Students enjoyed the interactivity of the session, such as GoSoapBox, as well as the opportunity to practice their presentation skills in small groups. Students in the classrooms were able to interact freely with their peers and teaching staff. However, in 2016 the Caboolture students' ability to engage with the larger Kelvin Grove cohort was constrained due to the one-way streaming system and was viewed by students and staff as a limitation. Future flipped classrooms that entail streaming should preferably accommodate two-way communication across campuses to allow all students an opportunity to interact with the primary teaching staff.

Further validation for adopting this teaching model was demonstrated by the students' willingness to engage, such as enthusiastically volunteering to demonstrate search strategies to the entire class, and actively working in pairs to present and give feedback. An unexpected outcome was that the students showed a good-natured sense of competition in order to 'win' a prize, which further enhanced the level of participation. The peer to peer approach of the PICO demonstration enhanced teamwork skills and enabled students to share their learnings from the collaborative problem solving activity.

Conclusion

A flipped information literacy class can be successfully developed and delivered by academic librarians, even to large classes in a tiered lecture theatre. The purpose of this paper is to document one such experience and is not meant to be a definitive account of flipped classroom processes and procedures. The experiences gained by library and academic staff were overwhelming positive, and student feedback indicated a high level of satisfaction with the flipped model in terms of engagement and interactivity.

References

- Bishop, J. L., & Verleger, M. A. (2013). *The flipped classroom: A survey of the research*. Paper presented at the ASEE National Conference Proceedings, Atlanta, GA. Retrieved from <https://www.asee.org/public/conferences/20/papers/6219/view>
- Brooks, A. W. (2014). Information literacy and the flipped classroom. *Communications in Information Literacy*, 8(2), 225-235. Retrieved from <http://www.comminfolit.org/index.php?journal=cil>
- Hessler, K. L. (2016). Nursing education: Flipping the classroom. *The Nurse Practitioner*, 41(2), 17-27. doi: 10.1097/01.NPR.0000476373.04620.33
- Kadi-Hanifi, K., Dagman, O., Peters, J., Snell, E., Tutton, C., & Wright, T. (2014). Engaging students and staff with educational development through appreciative inquiry. *Innovations in Education and Teaching International*, 51(6), 584-594. doi: 10.1080/14703297.2013.796719
- Queensland University of Technology. (2016). QUT Blueprint 5. Retrieved from https://cms.qut.edu.au/_data/assets/pdf_file/0013/71113/qut-blueprint.pdf

Questions

- What would prompt you to consider 'flipping' a class?
- To what extent does the teaching environment influence the design and delivery of a flipped class?
- Have you, or would you consider team-teaching a flipped class, including academic staff and 'support for learning' staff?

Appendix One: Lesson Plan

NSB019 : LESSON PLAN (Flipped Classroom)

Duration:	80+ mins. approx. class time
Topic:	Finding Resources and Presentation/Group work Skills (incl. Giving Feedback)
Aim:	To guide students on how to find nursing resources, and to prepare for the oral presentation.
Objectives:	By the end of the lesson, students should be able to: <ul style="list-style-type: none"> ▪ Formulate a clinical question using PICO and translate it into search terms ▪ Prepare themselves to deliver a presentation ▪ Give appropriate feedback to peers regarding their presentation
Special action prior to session :	<ul style="list-style-type: none"> ▪ BB Link Video 1 (approx. 4 mins): Getting Started with PICO ▪ BB Link Video 2 (approx. 4 mins): Getting Started with CINAHL ▪ Ppt uploaded to NSB019 BB page: Groupwork ▪ Handout uploaded to NSB019 BB: Oral Presentations ▪ Set up GSB Discussions and Feedback
Resources/Aids:	<ul style="list-style-type: none"> ▪ Stationery : Whiteboard pens in different colours & whiteboard eraser (optional) ▪ Internet access and projector ▪ 'Prize/s' for group/s who volunteer to share their work with whole class (optional) ▪ Ppt #1: Scenario, PICO, Keywords, Databases ▪ Ppt lecture activity slides ▪ Presentation Preparation Activity - GSB ▪ Evaluation (GSB and small no. of alternative paper form)

Ss : Students Ppt: PowerPoint Presentation
WB : Whiteboard GSB: GoSoapBox app.GoSoapBox.com XXX-XXX-XXX

Step/Time	Presenter's tasks	Ss tasks	Resources
(1) Pre-Lecture	BlackBoard Resources <ul style="list-style-type: none"> • 2 Videos and PPT 	Review materials	<ul style="list-style-type: none"> • PPT • BB • Library website • Google Timer • GoSoapBox
(2) 5 mins	Welcome <ul style="list-style-type: none"> • Overview of how the session will run- interactive not lecture • Sort SS into small groups (4 or 6) 	Ask students to introduce themselves and share why they wanted to do this course.	
(3) 10 mins	PICO task <ul style="list-style-type: none"> • Explain task • Show search example PPT #1 slide • PICO (5 mins) • Group/s Demo to class 	Use scenario to formulate PICO, Volunteer/s to demo to whole class and claim prize.	'Prize'
(4) 15 mins	Search Terms task <ul style="list-style-type: none"> • Explain task • Terms • Group/s Demo to class • Assist demo and make suggestions e.g. incorporating truncation etc. 	Choose search terms. Volunteer/s to demo to whole class and claim prize.	'Prize'
(5) 15 mins	Choosing a Database task <ul style="list-style-type: none"> • Discuss Databases • Explain task • Group/s Demo to class • Ask for another group to demo a different database. • Talk to the class about where to go for further help. 	Choose database. Volunteer/s to demo to whole class and claim prize.	'Prize'
(4) 30 mins	Presenting and Giving Feedback <ul style="list-style-type: none"> • Explain task • Sort SS into pairs • Show lecture activity slides Ppt #2 • Presentation Preparation Activity (4 questions in GSB: code XXX-XXX-XXX) • 2 minute presentations and giving feedback 	Presentation Task Turns at 2 min presentations & giving feedback	GSB
(5) 10 mins	Conclusion and Questions <ul style="list-style-type: none"> • Evaluation 	GSB and/or Form	GSB and Paper forms

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