

Dr Bill Baker – UTAS – 11th June 2021

Linking mobile phone technology to student learning, engagement and assessment

Purpose and context of the presentation

Learning outcomes, activities and assessment tasks should be closely interrelated, if not a web of learning (Biggs & Tang). Educators can reflect on their teaching practice by engaging a number of different lenses: our own story, our peers, the literature, and the student (Brookfield). This presentation presents an analysis of research from 2017 into the impact of linking mobile technologies in first year Bachelor of Education. The study comprised a survey and interviews. The research emerged from student feedback, peer review of the course, assessing literature, and personal reflection. There were three identified problems:

- Tutorials were not explicitly linked to assessments.
- Engagement was affected by disconnect between the practical tutorials and the practical nature of teaching.
- Assessments addressed different learning outcomes and so did not enable genuine student improvement over time through formative feedback.

Two challenges were identified: engaging distance and online students and ensuring learning was practical and meaningful for them; making learning specific but useful for generalist teachers.

Research questions

The research aims were:

1. The impact of constructive alignment of assessment task and learning activity design and intended learning outcomes on student learning and experience in an Arts education unit in ITE.
2. The impact of TELT (technology enhanced learning and teaching) principles (including embedded rich media and the application of appropriate technologies) on student learning and experience in an Arts education unit in ITE.
3. The impact of the alignment of content and assessment with the Australian Curriculum or the Early Years Learning Framework on student learning and experience in an Arts education unit in ITE.

Illustration of practice

Underpinning literature and philosophy

“students must do more than just listen and they must engage in higher order thinking skills.”

- Socially constructive, active learning – Bates, 2015; Bothwell and Elson 1991.
- Student agency – Gore, Ladwig, Elsworth and Ellis, 2009.
- Constructive alignment – Biggs and Tang 2007; Bearman, Dawson, Boud, Hall, Bennett, Molloy and Joughin, 2014.

- Sustainable assessment – Boud and Soler, 2016

The structure of the course changed in the following ways:

- From a weekly topic structure to modular content, direct links between curriculum and assessment, and music/visual arts modules linked to cross-curricular priorities. Three non-teaching weeks were included throughout the semester to support staff to focus on providing detailed feedback.
- From two written assessment tasks to four interconnected ATs incorporating professional and curriculum-based reflection and linking with practical components including a teaching episode as the final assessment. The assessments built on each other, supporting both formative feedback and student improvement. The product (art) was not graded; the learning process was. The more Intended Learning Activities (ILAs) completed, the higher the criterion score, following the concept of students showing everything they can do, and then teaching one activity, recording it and reflecting on it.
- From little use of non-dialogic, asynchronous technology (e.g. discussion forums and online PowerPoints) and instructional videos to TELT principles, and the expectation that all students use the same mobile technology regardless of enrolment mode (distance or on-campus).

Results

Overall, the (ongoing) research indicated that there were improved student learning and experience in six main areas:

1. Improvement in core curriculum understanding
2. ILAs important to development and understanding of arts skills
3. Instructional videos were slightly less important to development and understanding of arts skills
4. More than 90% of participants viewed assessment as appropriate (i.e. constructive alignment and evidence of ILAs and written reflections)
5. Students mostly (95%) agreed that arts can help to teach cross curriculum areas
6. Positive overall response to unit (95%) indicating the unit was very good, good, or outstanding.

Students also indicated significant improvement of understanding of the three cross curriculum priorities after completing the unit. Additionally, a significant majority of students indicated that they found using mobile technology an appropriate way to record and reflect on their learning. For education specific curriculum teaching in Australia, students responded positively in agreement that integrating curriculum outcomes (cross-curriculum priorities) and music and the arts was effective for learning.

Further Research

1. The relationship between making and reflecting in relation to improving students' arts skills.
2. Exploring the relationship between making, reflecting and curriculum.
3. Relatedness between micro-performing, recording and reflecting to improved performance.