Intensive mode teaching good practice report

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Abstract

Intensive mode teaching involves classes on fewer days and for longer on each day than is traditional in the discipline. The mode is used increasingly in universities in Australia. In a national research project, we developed an Intensive Mode Teaching Guide based on a survey of 105 coordinators of intensive mode units at 26 universities, and investigations in 8 intensive mode units at 4 universities. The guide was reviewed by 161 university staff members at 10 workshops, and 27 students in a survey. Threshold capability theory and threshold concept theory were used. We found that intensive mode offers opportunities including a retreat-like focus; development of learning communities; and time and flexibility for interactive, practical, and authentic activities that provide exposure to practice and/or practitioners. However, intensive mode also increases risks such as students falling behind. We recommend that teachers intentionally design to optimise the benefits and mitigate the risks.

Rationale

Intensive mode teaching involves classes on fewer days and for longer on each day than is traditional in the discipline. For example, a unit of study (also known as a course or paper) that might normally be taught with a series of several hour-long classes every week for a whole semester, can be taught in intensive mode with one full-day class for half of the semester, or four full weekends of classes during the semester. Many other models of intensive mode exist. The mode is used for teaching credit-bearing university units and other courses such as professional development for postgraduate students (Greer, Cathcart, & Neale, 2016). The mode is also used for professional development in industry.

Intensive mode teaching is popular in Australia. The mode has been used for many years in postgraduate courses in which a large portion of the students work full-time, and in courses in which students need time off-campus to gain practical experience (Davies, 2006). With today's technology, students can access learning materials and engage in asynchronous learning activities outside class. This has improved the convenience of and opportunities for intensive mode teaching. Intensive mode is now popular when university staff members teach at offshore or remote campuses, and when teachers who are based in industry teach university courses.

Despite the increasing popularity of intensive mode, until now recommendations for teaching in the mode have been limited. It could not be assumed that general recommendations for good teaching practice are sufficient in this mode. An evidence-based guide was overdue to prepare teachers to support students to learn when classes are on fewer days and for longer on each day than the model to which students and teachers are accustomed.

Much of the on intensive mode teaching compares the efficacy or popularity of intensive and traditional modes (e.g., Kucsera & Zimmaro, 2010). Common recommendations are to motivate students to prepare, introduce important and difficult concepts early, carefully structure assessments, and carefully select reading (Kops, 2014; Kuiper, Solomonides, & Hardy, 2015; Wlodkowski & Ginsberg, 2010). Based on the most significant study across multiple disciplines in Australia, Lee and Horsfall (2010) recommended active learning in which students apply theory to develop skills in meaningful ways. Lee and Horsfall (2010), consistent with Scott (2003) who had consulted teachers and students in two units in the US on English, recommend that teachers should ensure that the learning environment is such that all students feel able to engage with each other and the teacher in interactive learning.

In the current study we investigated students' experiences of learning in business and engineering units at four Australian universities using threshold capability theory, which is introduced below, to identify and describe the factors that supported and hindered students to develop critical, transformative and troublesome capabilities. A study of this depth across such a breadth of units had not been made previously in Australia. Furthermore, findings of the limited previous studies were due for review due to changes in technology and student cohorts.

Aim

The project aimed to promote and support improved student experiences of threshold capability development in units that involve intensive mode teaching.

Objective

Based on the investigation in the units, and on literature, and experience, we developed an Intensive Mode Teaching Guide. The guide was reviewed and refined at workshops across Australia to ensure multi-disciplinary, sector-wide relevance.

Theoretical framework

This project was framed by threshold capability theory (Meyer & Land, 2003) and threshold concept theory (Baillie, Bowden, & Meyer, 2013). The founders of threshold concept theory proposed that in every discipline there are 'threshold concepts' which are transformative for students, critical to their progress, and usually troublesome. The founders of threshold capability theory extended this proposition to 'threshold capabilities' which are similarly critical, transformative, and troublesome, and usually depend on one or more threshold concepts. The theories are useful for focusing curricula and for studying learning and teaching.

Threshold concept theory and threshold capability theory include descriptions of common characteristics of threshold concepts and capabilities, common ways they can be troublesome, and a state called the 'liminal space' (Meyer & Land, 2003, p. 10) experienced by a student when a threshold concept or capability has come into view but is not yet comfortable for the student. Based on the theories, it is understood that students take varying times to traverse the liminal space. Some students never completely emerge from the liminal space to become comfortable with the threshold concept or capability.

Threshold capability theory was a valuable framework for the current project because it focused the study on the factors that supported and hindered students in achieving the most critical, transformative and troublesome learning in their intensive mode units. Furthermore,

the theoretical framework provided a conceptual explanation and terminology describing the concern that students might not have time to learn in intensive mode. In intensive mode, we perceived a risk that students might not have time, on the fewer days of class than usual, to traverse the liminal space.

Method

The project approach included the following stages (author reference to be inserted after review).

1. A sector-wide survey of 105 coordinators of units taught in intensive mode. Twenty-six institutions were represented among the survey participants. The purpose was to understand use of intensive mode across the sector.
2. Two-phase studies including an exploratory phase ($N_{students}$ = 213; $N_{teachers}$ = 10) and where possible a quantitative phase ($N_{students}$ = 55) in eight intensive units and three matched traditional units, to explore and confirm students' experiences of threshold capability development in the units (Male et al., 2016).
3. In-depth interviews with a purposive sample of six intensive mode university teachers.
4. Development of the draft Intensive Mode Teaching Guide.
5. Ten workshops with 161 post-secondary teachers in 7 Australian cities, to review the draft guide.
6. Brief videoed interviews with ten intensive mode teachers, for the online guide.
7. A repeat study in a unit to evaluate improvements based on the recommendations in the guide.
8. A survey of 27 students to review the guide.

Findings

Why intensive mode was used

The survey of coordinators confirmed that intensive mode was used across numerous disciplines taught in universities in Australia. Participants reported on one intensive mode unit that they coordinated. Fifty-two per cent of reported units were taught at the graduate or post-graduate level. The most frequently selected primary reasons for using intensive mode were for students to fit study between other activities (30 per cent of units), for students to engage in interactive learning activities (25 per cent), for students to focus on one unit with limited distractions (10 per cent) and for the teaching team to travel to students (9 per cent).

Opportunities to support learning

In all stages, participants reported that they liked the following opportunities provided by intensive mode:

- students bonding and learning from and with each other in a learning community
- focus on a unit with limited distractions
- extended interactive activities
- continuity between learning, facing trouble, applying, engaging with and overcoming challenges, and practising in one day

- exposure to practice such as hands-on and authentic activities, with proximity to practitioners and/or real or simulated workplaces.

Risks to student learning

The most common threats to learning in intensive mode reported by teachers and students were:

- exhaustion
- students failing to prepare for class or keep up during the unit
- lack of timely feedback to students between assessments.

In the studies in classes (stage 2), teachers observed from the themes among students' responses that many students were preoccupied with hurdles such as learning to use software and learning about terminology at the expense of focusing on threshold concepts and threshold capabilities.

Recommendations

Using the threshold capability framework, the above opportunities that are identified above can be explained as supporting students to engage with troublesome features of threshold concepts and threshold capabilities in order to traverse the liminal space. Similarly, the risks can be explained as hindering students from traversing the liminal space. Preoccupation with hurdles that are not intended by teachers to be threshold in nature can be explained as delaying entry to the liminal space.

Students and teachers who participated in project stages 2 to 8 described curriculum features and teaching and learning practices that supported learning in intensive mode units. These are described as recommendations in the Intensive Mode Guide and are outlined below.

Recommendation 1. Focus on thresholds.

This recommendation is to intentionally support students to enter the liminal spaces for threshold concepts and capabilities early in the unit, engage with troublesome features, and be supported such that they are not pre-occupied with non-threshold learning during class time.

Recommendation 2. Support and value student diversity.

Students can support each other to traverse the liminal space because they have different strengths. They can be supported to realise the value of their diversity by creating learning activities and an environment in which they can learn from each other. Preparation such as pre-reading can help those whose backgrounds have not prepared them as well as others for the unit. However, preparation should be assessed to encourage everyone to do it. It is important to provide a learning space in which everyone feels respected and confident to speak. Students' progress should be monitored in order to act quickly to address problems.

Recommendation 3. Design an optimal learning space and environment.

To realise the opportunities of intensive mode, the learning space should be intentionally designed for interactive, practical, and authentic (meaning consistent with professional practice) activities; development of a learning community; and continuity between learning,

applying, being challenged, and practising. This applies to the physical space, the emotional space, and the digital space. The recommendation was rated third most important by the students who reviewed the guide.

Recommendation 4. Design appropriate activities.

Learning activities should be interactive, authentic, and with opportunity for practice, reflection, and asking questions. This is good teaching practice generally. Intensive mode provides opportunities here but only if the curriculum is carefully designed.

Recommendation 5. Support development of a learning community.

Bonding in class and learning from and with each other was reported by participants in all stages as a benefit of intensive mode. However it must be supported. Students can easily be isolated during interactive activities and therefore strategies must be used to ensure everyone is comfortable and has an opportunity to engage.

Recommendation 6. Design appropriate assessment.

This recommendation was rated as the most important by the students who reviewed the guide. Early assessment and feedback can encourage students not to fall behind, which can otherwise easily happen and is costly in intensive mode. Assessments that can be marked quickly for timely feedback must be designed carefully because time for marking can be limited in intensive mode.

Recommendation 7. Support students to prepare.

Supporting students to prepare before class was the fourth most important recommendation as rated by the student reviewers of the guide. As noted, lack of preparation is especially costly in intensive mode. The theoretical framework provides a conceptual explanation; students who are unprepared are likely to be delayed in entering the liminal space and miss opportunities to be supported in traversing the liminal space.

Recommendation 8. Optimise learning.

This recommendation is consistent with general good teaching practice and important with long classes. Students must be supported to take responsibility for their own learning. Strategies should be used to motivate students by helping them to understand the purpose of the unit and how it aligns with their interests.

Recommendation 9. Consider important resources.

Resources required by students can be missing because intensive mode units are taught outside normal teaching periods. Nevertheless, students' needs such as transport, safety, food, learning management systems and libraries endure.

Recommendation 10. Design to reap the potential benefits of intensive mode teaching and mitigate the potential disadvantages of the mode.

Students experience the complete curriculum, and the mode (intensive or otherwise) is only one part of this. The teacher determines whether the potential benefits and/or risks of the mode will be realised.

Recommendation 11. Review

As always, the students' experiences of learning should be evaluated to inform continuous improvement of the unit. The framework of threshold concepts and threshold capabilities is recommended.

Recommendation 12. For administrators: manage workloads

The recommendation to manage the workloads of students and staff members was rated second most important by students who reviewed the guide. Timetabling and student numbers can have critical consequences in intensive mode. Acute problems were experienced by students who were in enrolled in intensive units concurrently with traditional units.

Deliverables

Website (www.uwa.edu.au/imt)

The project website includes access to or details about all deliverables.

Intensive Mode Teaching Guide (www.uwa.edu.au/imt/guide)

The guide begins with two curriculum design questions for intensive mode teachers.

1. Why are you using intensive mode teaching?

It is important to identify the reason because the potential benefits of intensive mode are realised only if the curriculum is intentionally designed for the purpose.

2. Which model of intensive mode teaching will you use?

A map of the range of models is provided in an appendix to the guide, and questions are posed to alert the reader of the guide to unnecessarily limiting assumptions they could be making, and possibilities they might not have considered.

The theoretical framework is introduced so that readers of the guide can use this as a framework to design, improve, and evaluate their units. It provides a conceptual explanation for the recommendations. Links to resources are provided.

The full guide, including the 12 recommendations is available for downloading as a pdf from the project website, or viewed online.

Video vignettes (www.uwa.edu.au/imt/guide/vignettes)

The online version of the guide includes brief interviews on video with ten teachers who have used intensive mode. The teachers outline what they have taught in intensive mode, the intensive mode model they used, what they liked and disliked about the mode, and any recommendations they had for teachers or students. They were from the disciplines of accounting, education, engineering, computer science, management, and research training, and are from seven institutions.

Interest group (https://www.linkedin.com/groups/6937072)

Participants at the workshops to review the guide expressed a desire to continue the conversation between people using and considering using intensive mode. A LinkedIn© Group has been formed. (https://www.linkedin.com/groups/6937072).

Publications

Two journal papers and two conference papers have been published (Crispin et al., 2016; Male et al., 2016; Male et al., 2015; Smith, Compston, Male, Baillie, & Turns, 2016). These are about the investigations in units. A book chapter has been submitted on the significance of the theoretical framework for the study and recommendations. The final report was submitted in January 2017 and will be available on the project website once approved.

Outcomes

Supporting enhanced student achievement

The project aimed to promote and support achievement of students when teaching with intensive mode. The teachers who participated in the studies about their units have adapted the units based on findings. One of these units was investigated again using the same approach as previously, and the students' focus on the teacher's intended threshold concepts and capabilities had improved.

Promoting understanding and skills to enhance student achievement

One hundred and sixty-one people reviewed the guide at workshops which were designed to model recommendations in the guide. Participants reported their responses to the workshops in posters, a sample of which is presented in the final report. On the posters, participants identified plans for improving student achievement in intensive mode.

Over 450 people attended presentations to learn about the project findings and recommendations as listed in the final report. The LinkedIn© Group has more than 80 members. The website had received 4,481 page views to 17 January 2017.

Future impact

In addition to supporting student achievement in intensive mode units, teachers who follow the recommendations are likely to support student inclusivity and student transitions as described below.

Students

The results of the survey of coordinators of units taught with intensive mode revealed that the most common reason the mode was used was to support students to fit study around other activities. It can be assumed that these activities include work, practical requirements for their courses and possibly family, sports and other interests. With many students working significant hours, and many Australian students commuting significant distances to attend university, it is likely to be easier to attend classes on fewer days for longer periods than to trek in to short classes multiple times weekly. Furthermore, with the necessity for lifelong learning, the numbers of students seeking to fit classes around other commitments is likely to continue if not increase. Therefore understanding how to enhance achievement of students studying in intensive mode is likely to have a continued impact.

Teachers who follow the recommendation to support development of a learning community are likely to support students to experience a sense of belonging. Students are less likely than decades ago to be in a tight cohort because student numbers have increased and flexibility around the choice and timing of units has increased. In our study students reported that it was easier to meet and make friends with people in intensive mode units than in other units. Student comments also revealed that students had experienced a sense of communitas through sharing the challenging experience of an intensive mode unit (Crispin et al., 2016)).

Transitions

Teachers who follow the recommendation to support students to prepare for class will be supporting student transition to intensive mode units. Students and teachers in this study reported that students did not understand the workload involved. When reviewing the guide, in response to the question 'What would you put in an intensive mode teaching guide for students?' a student replied,

> First and foremost, recognise from the start that it is different and you will have to put more effort into the intensive unit while it is running.

Future

Readers are invited to inform development or refinement of their intensive mode units by visiting the website, downloading the guide, reading the publications, and viewing the video vignettes. Readers are also invited to join the LinkedIn Group, and consider participating in a video vignette. The project team welcomes contact from people interesting in discussing intensive mode units, programs, developing a workshop for intensive mode teaching staff, or investigating the student experience of learning in units using threshold capability theory.

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