Using a Hyper-Flexible Online Teaching Approach: A Mixed-Methods Evaluation

Jodie Brabin and Samantha Jakimowicz
Charles Sturt University, Australia

Abstract

In higher education the COVID-19 pandemic has accelerated a shift to online learning. Despite its uncommon practice in universities, designing courses with both flexible delivery and assessments has demonstrated enhanced understanding and improved application to professional contexts, particularly benefiting older students working full-time and managing caregiving responsibilities. Using a mixed methods approach, combining qualitative and quantitative feedback through student surveys and learning management system data, this study reveals that a hyper-flexible approach effectively accommodates students, particularly those with conflicting family and professional commitments. While peer-to-peer engagement was reported to be negatively affected, students perceive this as an acceptable trade-off to flexible learning. Although not universally applicable, hyper-flexible teaching proves highly beneficial for non-traditional students with professional and personal obligations, fostering a positive learning environment conducive to deeper understanding.

Introduction

The online delivery of postgraduate courses has been fast-tracked since the COVID-19 pandemic, with an increasing number of students choosing to participate in higher education online rather than through traditional face-to-face delivery models (Australian Education Network, 2023). Being an early adopter, the Health Management and Leadership (HML) program at Charles Sturt University has gained significant expertise in online delivery, offering subjects through online platforms in its current iteration since 2018. Students engaging in online postgraduate programs are more likely to be older, working full-time and have conflicting caring responsibilities impacting their availability to study (Dyrbye et al., 2009). While greater attention has been given to the importance of delivering education that is flexible and student-centred (Campbell et al., 2022; Pelletier et al., 2023), much of the focus has been on the program structure and delivery mode rather than considering the entire learning experience which includes assessment, learning and administrative processes (Roberts, 2002). In particular, there is a prominent omission when it comes to the design and delivery of flexible assessments (Morgan & Bird, 2007).

At Charles Sturt University, HML students predominantly work in healthcare organisations, providing frontline clinical care to the community across the primary to tertiary care spectrum. Regardless of the clinical setting, the management and workplace challenges experienced by these students are similar – workforce shortages, increased workload (National Skills Commission, 2021), staff burnout and workplace stress (Armstrong et al., 2022; Macaron et al., 2023; Tham et al., 2023), which makes managing their studies challenging. To better support students, a hyper-flexible teaching model was introduced

into two four-credit point micro sessions in the HML Graduate Certificate.[1] Delivered entirely online, students' self-pace and submit assessments at their discretion. This approach reflects a constructivist approach to teaching and learning as it focuses on self-directed, student-led learning and provides students with the content and structure, but also the space and freedom to construct their learning by building on their existing understandings and professional experiences (Fry et al., 2008).

The subject design was inspired by a 2021 study by Jones and Johnson (2022), which trialled a hyper-flexible delivery with a small sample of undergraduate students at an Australian university. Adopting the principles from this trial, our study has built on their work but explored the benefits of this model within an online postgraduate context. Although flexible design principles are often incorporated into contemporary online course delivery, there are limited published trials in which assessments are designed using hyper-flexible principles.

Using a mixed methods approach, this evaluation aimed to understand the students' experience of the hyper-flexible delivery model and whether they preferred this flexible approach. The teaching staff experience and workload implications was not studied during this initial trial due to the subject delivery model (the subject convenor is also the lead researcher). A concurrent data analysis design was used in which both qualitative and quantitative data are equally prioritised and used to gain an in-depth understanding of the focus area of the study (Liamputtong, 2022).

Background

The delivery of university courses using online technologies has continued to expand over the last two decades, however, studies have demonstrated that courses delivered entirely online generally demonstrate higher rates of attrition than face-to-face courses (Greenland & Moore, 2014; Moore & Greenland, 2017; Safford & Stinton, 2016; Sener & Hawkins, 2007). What is not evident from these studies is whether it is the delivery mode itself that is the reason for the higher attrition, or the cohort of students who are attracted to this delivery mode whom are more likely to be older, employed and with caring responsibilities which all impact their commitment and time to study (Safford & Stinton, 2016; Sener & Hawkins, 2007).

Studies by Sener and Hawkins (2007) in the United States and Moore and Greenland (2017) in Australia revealed that time constraints and conflicting work priorities significantly influenced completion and attrition rates in online courses. Moore and Greenland (2017) found that 35% of interviewees cited employment commitments as the primary reason for dropping out. The research further examined the flexibility of the programs to accommodate extensions due to employment commitments. Only half of the education providers included in the study accepted work commitments as extenuating circumstances for granting an extension, indicating that for professionals engaging in additional study, even minor work changes can harm their studies.

Additionally, macro-level trends in higher education such as mental health and wellbeing are highlighted as concerns from both teacher and student perspectives (Campbell, et al., 2022). The report highlights the importance of educational institutions having policies and strategies in place to ensure they prioritise the mental health of their students. Recommendations from the report included adapting pedagogies to focus on teaching and learning practices that place student wellbeing at the centre and promote inclusivity and accessibility for all students (Campbell et al., 2022).

Amidst the exploration of more innovative student-centred delivery approaches, flexible delivery has gained traction. There is, however, a lack of consensus on its definition, with Beer et al. (2023) arguing that the term has been diluted through university marketing using the term to describe the learning modality rather than encompassing the whole of student experience in higher education. Flexibility is a concept open to many interpretations. According to Morgan and Bird (2007), a truly flexible course requires pedagogical flexibility, flexible delivery, and flexibility in institutional policies, systems and structures. However, the authors acknowledge the inherent tensions in embedding flexibility into university education in which greater flexibility in one area may compromise it in another. For example, more flexible delivery may then limit collaborative student opportunities, while online subjects' asynchronous delivery can impact and restrict peer-to-peer engagement and learning.

A study into modes of delivery in higher education (Lodge, et al., 2022) highlighted the significance of flexibility and control over learning in facilitating effective online learning. It identified two forms of flexibility – *locational* and *temporal* – which are particularly beneficial for online programs with diverse, geographically dispersed students who must often travel for work

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[1] Charles Sturt University runs several different types of teaching periods throughout the year, including: Sessions, Terms, Year-long Periods, and Micro Sessions.

or reside in regional locations. The research emphasised that improved locational and temporal flexibility improved student diversity and equity (Lodge et al., 2022). Notably, women consistently show higher engagement in online learning than men and given the predominance of women in the health profession, accommodating learning preferences is crucial for delivering student-focused programs.

In much of the literature, flexible assessments are limited to student choice of demonstrating their learning (Irwin & Hepplestone, 2012), deciding which exam and/or assessment is counted towards their overall subject grade (Cook, 2001), or flexibility with the topic or focus of their assessment (Wanner & Palmer, 2015). While these approaches are student-centred by empowering and engaging students to take an active role in their learning, they do not go as far as to enable a flexible learning schedule. Morgan and Bird (2007), for example, argues that truly flexible assessments provide both diversity in the assessment methods as well as authentically designed assessment tasks. They argue that flexible assessments, in contrast to traditional assessments, prioritise students' own reflections and the practical application of theory as well as content coverage and demonstrating knowledge.

Assessments serve as the sole grading tool for subjects within the HML program and exert substantial pressure on students, playing a crucial role in shaping their learning behaviours. The assessment methods and designs, often determined by broader organisational level policies and pressures, therefore, heavily influence the students' experience of learning and for traditionally designed assessments, may in fact undermine the value and benefits intended when adopting a constructivist design approach (Morgan & Bird, 2007).

Irwin and Hepplestone (2012) assessed the value of giving students flexibility in the format in which they demonstrate their learning. They argued that this flexibility addresses challenges with diverse learners and promotes autonomous learners. Additionally, they found that when students chose non-traditional assessment modes, their learning was deeper, enabling more workplace-relevant skills to be developed. The authors identified three potential obstacles that may impact the effectiveness of this approach: the need for new marking practices, stakeholder attitudes, and ensuring students are still developing key graduate and professional skills (Irwin & Hepplestone, 2012). They argue that flexible design is a step toward more student-led teaching.

Subject Design

As the HML program has always been delivered online, adapting to a hyper-flexible approach, required only three significant adjustments to the traditional online delivery approach. Firstly, all topics and assessment resources are available at the time of the subject outline release. Secondly, tutorials were replaced with question and answer (Q&A) sessions. As students are all progressing at different paces, the Q&A session enabled students to engage based on their progress. And finally, assessment due dates were eliminated. Turnitin portals[2] were available from the first day of session and did not close until the last day of session. Assessments were designed using authentic design principles including allowing students to select their own topics (Meyers & Nulty, 2009), which addressed academic integrity concerns. Additionally, the study utilised Robert's (2002) flexible assessment test to ensure an authentic and flexible design meeting the three flexibility principles: location, time and method. This was achieved by ensuring Turnitin portals were accessible from anywhere, at any time and the assessment design enabled students a degree of flexibility in their submission design and topic. Assessments were marked within ten days of submission and assessment one papers were returned to the students so the feedback could be used to inform their next assessment. Final assessments were not released until the end of the session to accommodate moderation processes.

Aims

The evaluation of the course delivery focused on answering two questions:

- *Were students' overall experiences of studying impacted due to the hyper-flexible delivery approach?*
- *Did the hyper-flexible delivery approach enable greater accessibility and engagement with the learning content?*

Originally, the study had three aims. However, due to a lack of additional qualitative data during the research phase, there wasn't enough evidence to explore the impact of the hyper-flexible teaching model on student anxiety and stress.

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[2] Turnitin is a web-based plagiarism prevention system used by some universities.

Study Context

This study focused on online only delivery, with students across Australia, from various health backgrounds and at different stages in their management careers.

The two subjects used as a pilot were *Leadership Practice and Influence in Health Services (Subject A)* and *Management Practice for Health Services (Subject B)*. They are worth four credit points (half a traditional subject weighting) and are delivered over eight weeks. Twenty-five students completed both subjects simultaneously. The following table provides an overview of the student demographics.

Table 1

Student Demographic Data

Student demographics	Subject A	Subject B
All students	35 (100%)	30 (100%)
Minium age	23	23
Median age	34	30
Maximum age	50	49
Female	24 (69%)	18 (60%)
Male	11 (31%)	12 (40%)
Rural or remote	13 (37%)	11 (37%)

Method

A mixed methods approach was used in this study. Data collection included the use of quantitative and qualitative student subject survey data available through the University's student survey program Anthology Course Evaluations. Additional quantitative data was gathered through Turnitin assessment statistics and student cohort data captured through student administrative systems. In the initial study design, qualitative interviews with students were planned to gain more depth and understanding of the student experience, however, a lack of student participation meant this experiential data was not obtained. The available data was then interpreted and presented simultaneously in alignment with a concurrent design method. While some demographic data was available through student administration systems, students' family and professional commitments was not available.

The mixed methods concurrent design method was selected because the sample size used was small, and the quantitative data was readily available, as it was a usual, standardised survey provided to all students at the end of each subject. Concurrent design is a less time-consuming method, which enables faster translation of research into academic and teaching practice (Liamputtong, 2022). Descriptive statistics were used to explore the student results and survey data.

Results

Student Experience of Hyper-Flexible Study

The overall feedback from students across both subjects was overwhelmingly positive with all participants reporting positive responses to all questions except those relating to peer engagement. Students expressed strong approval when asked about how the course format and delivery impacted their learning experience. They noted specifically how the hyper-flexible structure helped to facilitate them to successfully complete their assessments. The following table provides a summary of the results of the most pertinent questions to this evaluation.

Table 2

Summary of Responses to Student Survey Q8: "Overall, I found the subject resources and content helpful to my learning"

Overall, I found the subject resources and content helpful to my learning		
Response	**Subject A**	**Subject B**
To a very large extent	10	7
To a large extent	2	3
Somewhat	0	0
To a small extent	0	0
To a very small extent	0	0
TOTAL	12	10
Subject mean	4.83	4.7
N2	22	22
School mean	4.77	4.77

All students who participated in the subject evaluation found the subject helpful in facilitating student learning to a very large or large extent. Additionally, most students liked the hyper-flexible format of the course and believed that the course structure motivated learning.

Table 3

Summary of Responses to Student Survey Q17: "I liked the format of the course"

I liked the format of the course		
Response	**Subject A**	**Subject B**
Definitely false	0	0
More false than true	0	0
In between	0	0
More true than false	2	2
Definitely true	10	8
TOTAL	12	10
Subject mean	4.83	4.8
N2	22	22
School mean	4.82	4.82

Students were surveyed with a set of open-ended questions regarding their favourite aspects of the subject. Overwhelmingly, the feedback was related to the structure and hyper-flexible delivery of the subjects and its impact on their studying experience. Comments could be categorised into two key themes. Firstly, the subject design and delivery enabled students to better balance their various commitments, as highlighted in the following free-text responses:

> I have learnt a lot in this session, and I really appreciated the super flexible delivery of this session. Without that I might have [had] to drop the subject with all the things [that] happened recently. (Subject B)

> [The] hyper-flexible approach made the subject easier to manage with family, work and life commitments alongside study expectations. (Subject A)

The second key theme related to the pace and flexibility of the course, which allows students to progress in their own time and how that had a positive effect on their learning, as evident in the following comments:

> This subject and its contents were very well thought-out. I enjoyed the hyper flexibility this subject provided. I feel as though I was able to learn and submit assignments at my own pace which helped me understand and absorb the content better. (Subject A)

> At the beginning I was wary about the hyperflexible approach but as the session went on, I felt much more comfortable. I was learning at my own pace as well as being able to submit assignments when it suited me! (Subject B)

The overarching feedback from the students indicated a broad preference for this teaching approach, however, one area that is lacking when adopting hyper-flexible delivery is the opportunity for peer-to-peer engagement. Through the student evaluation survey, students were asked to rate the importance of engaging with other students through the course as well as how much their learning was enhanced through the peer engagement opportunities made available to them through the subject delivery.

The results from the students are mixed. Peer engagement and involvement in arranged student groups were not a high priority for 15% of students, who found the statement false. However, 47% of students believed the statement to be 'more true than false'. No students reported the statement as 'definitely true', so while there is somewhat of a broad consensus on the importance of peer involvement, it is not felt strongly by students.

Figure 1

Subject A and Subject B Responses to Q18: "Being involved in an online learning/study group with other students is important to me"
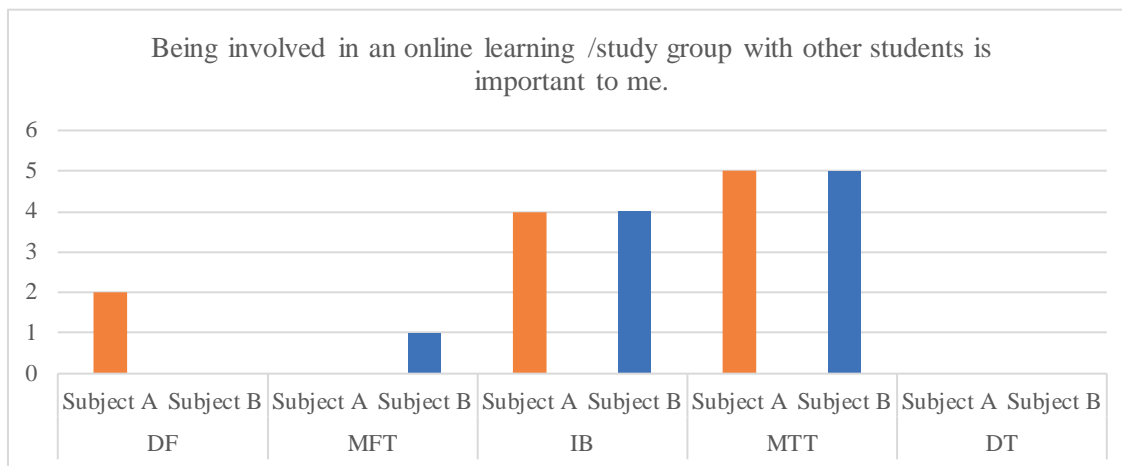

Note: Responses: Definitely False- DF, More False than True- MFT, In Between- IB, More True than False- MTT, Definitely True- DT

Interestingly, although the nature of the course design limited synchronous peer-to-peer engagement, students still felt that the limited opportunities for interactions did enhance their learning to a large or very large extent.

Figure 2

Subject A and Subject B Responses to Q3: "My learning was enhanced through created opportunities for interaction with other students in discussions, projects or other learning activities
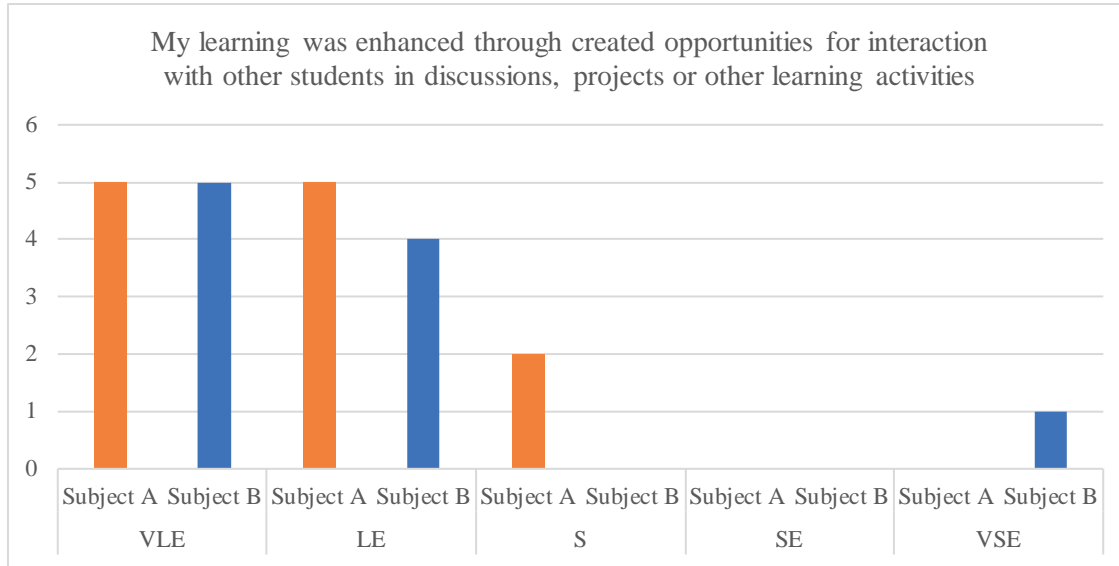
Note: Responses: To a very large extent- VLE, To a large extent- LE, Somewhat- S, To a small extent- SE, To a very small extent- VSE

Student Accessibility and Engagement

Examining the cumulative logins to the learning management system (LMS) subject page over the session illustrated a noticeable difference between the 2023 hyper-flexible session compared to the previous offering, which followed a traditional delivery approach. Overall, students logged in less frequently, and their initial login was later than in the 2022 session. In both subjects, there was an overall lower rate of views each week compared to traditional delivery, except in the pre-session period, which reflects the earlier access under the hyper-flexible model.

Figure 3

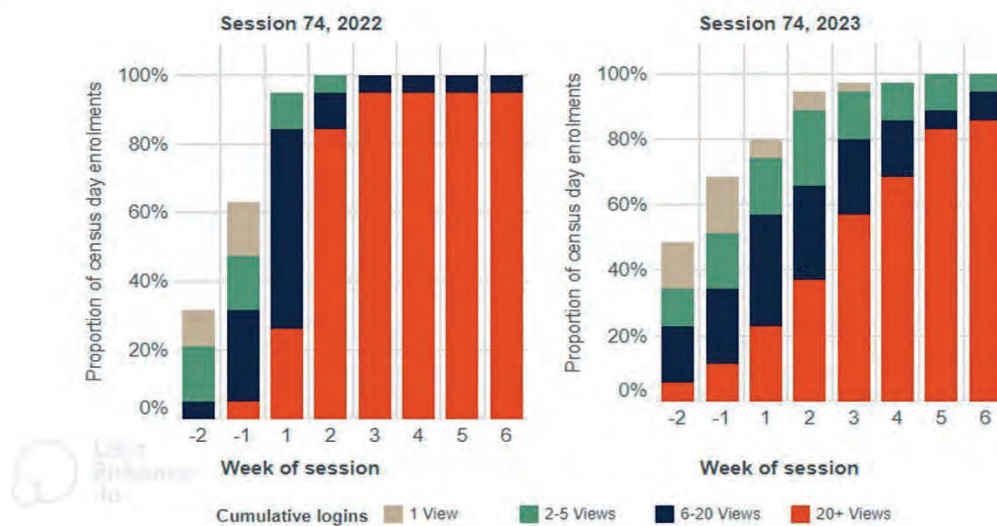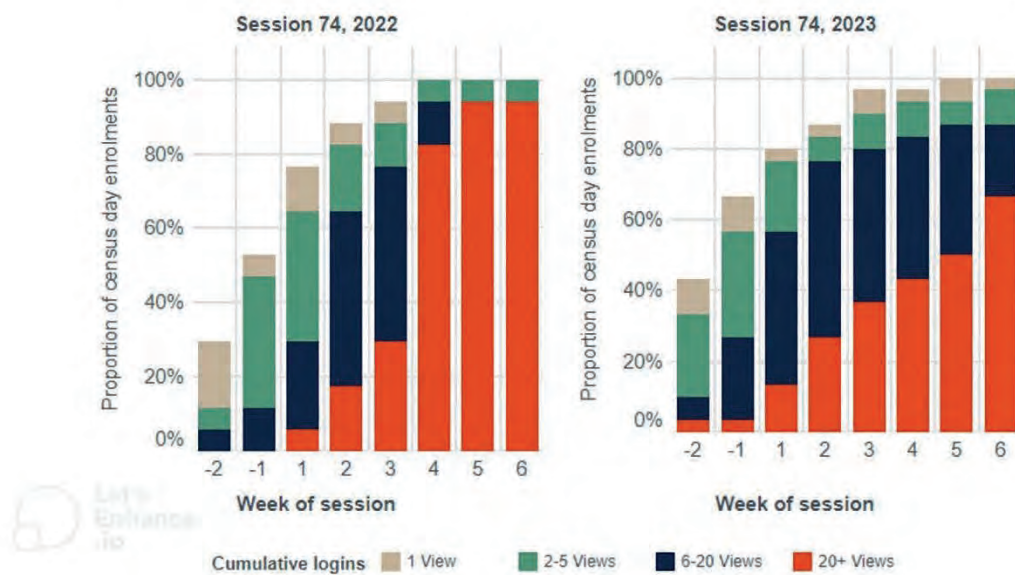*Subject A Site Cumulative Login Data 2021–2023*

Figure 4

Subject B Site Cumulative Login Data 2021–2023

Overview of cumulative student logins to the HML408 site in Session 74 for the last two years

This difference in early engagement may explain the lower engagement rates in the second half of the 2023 session. Interestingly, however, although the unique logins may have decreased compared to 2022, the time spent on the subject pages increased, as shown in the table below. Students were more engaged and spent more time using subject resources when they had logged in, so although they logged in less frequently, the time spent overall increased per student.

Table 4

Student Engagement Time on Subject Sites Comparison with 2022

	# of students	Total time in subject	Avg time per student
2022 Subject A	15	191.26	12.75
2023 Subject A	35	518.84	14.82
2022 Subject B	16	193.36	12.09
2023 Subject B	30	413.09	13.77

The graph below shows the submission date of the four assessments across Subject A and Subject B by week of session. There was a significant increase in submissions in the last two weeks of the semester. In a traditionally run session, assessments would be due in weeks 3, 4, 7, and 8. Due to administrative requirements, all assessments needed to be submitted by the last day of week 8. As most students complete Subjects A and B simultaneously, staggering the assessments is important not to overwhelm students and to ensure enough time to complete both subjects effectively.

Figure 5

Turnitin Submission Data for Subjects A & B by Session Week
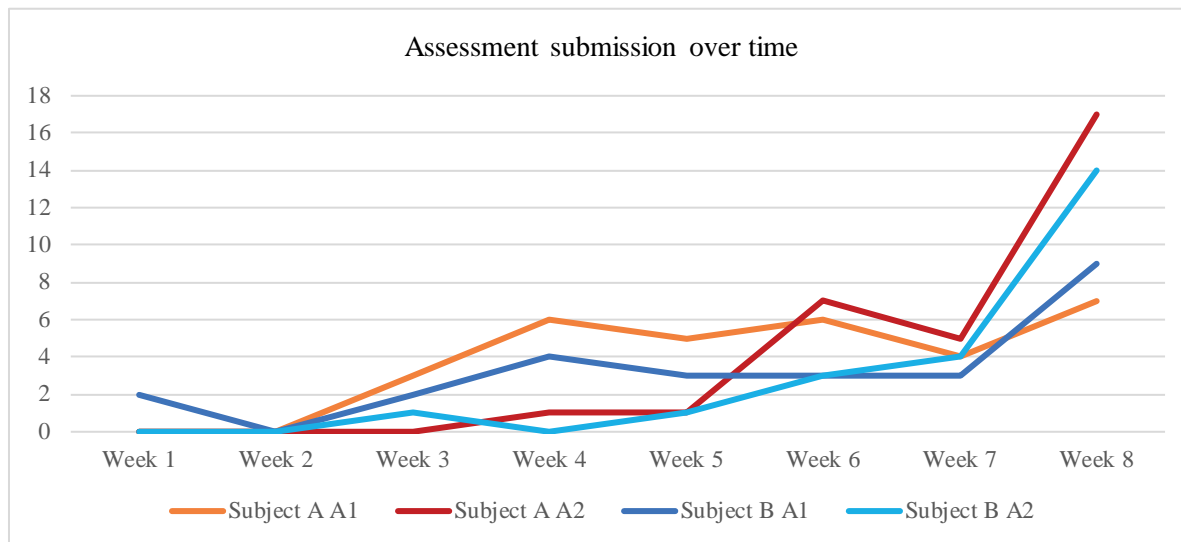
Students began submitting assessments as early as week 1 of the session, with most assessment one submissions occurring between weeks 3 and 5 across both subjects. Assessment two was mostly submitted between weeks 6 and 8; however, it is worth noting that the earliest submission occurred in week 3. From week 2 onwards, a stable number of assessments were submitted each week, rather than assessment submissions occurring during only four weeks of the session. This has workload implications for the marking team, which are not discussed in detail in this evaluation.

Discussion

Overall, students found the content and resources helpful to their learning. The overarching student experience of this approach was positive, and it particularly accommodated those students with complex or conflicting priorities, as illustrated in the sample of free text responses. This aligns with the previous findings from Beer et al. (2023) that demographic factors, such as age, work commitments, family and caring responsibilities, socio-economic status, and rural and remoteness magnify the challenges for students attempting to balance the rigid timelines of their academic studies with numerous personal and professional commitments. They found that "there appears to be little doubt that the imposition of deadlines onto students with multiple competing priorities can inhibit course completion and impose stresses upon the students" (Beer et al., 2023, p. 262). While this study had limited demographic student data, similar factors highlighted by Beer et al. such as age and rural and remoteness was evident within those in the trial study. By using a flexible approach, students were more motivated to learn, and the self-determined submission dates reduced some of the externalised pressure from rigid deadlines. It was not possible to compare assessment marks as the assessment task had changed between sessions. However, this flexibility did enable students to study at their own pace and absorb the content more effectively. This is a significant achievement given the speed of the micro session delivery and the broader commitments students experience in their personal and professional lives. Students however are not all equally capable of adapting to the flexible approach immediately, and hesitation and apprehension were noted in the study. This did not impact student attrition rates however. Wanner and Palmer (2015) found that when trialling a flipped-classroom and flexible assessment submission, their undergraduate students overwhelmingly supported the hyper-flexible approach; however, there were some reservations and only limited support by the teaching staff. The authors concluded that the transition to flexible learning is a process and not all students are ready for a self-directed learning experience. Students need to be supported and scaffolded into becoming 'flexible learners', something this postgraduate cohort was able to adopt readily.

Student Experience of Hyper-Flexible Study

Education in a format that accommodates a greater diversity of learners through flexible design has positive student outcomes. HML survey respondents valued the hyper-flexible delivery method of the subjects. This aligns with previous findings that convenience and flexibility are key motivators for students completing their studies (Dyrbye et al., 2009). In this study, researchers found that beyond individual student motivation, both the subject matter and assessments should align with flexible

teaching principles rather than merely adhering to a traditionally designed program. For example, group-based projects or activities that require synchronous coordination limit the flexibility of the subject and undermine the capability of students to best plan and manage their respective commitments. Flexibility is more than simply removing due dates. Assessments must be designed leveraging authentic design principles and experiential learning, in which students can apply their learning to their own professional context (Fry et al., 2008). This was confirmed in this study. Learning was enhanced by giving students greater control and the space to process and apply their understanding rather than seeing assessments as simply tasks to pass the course (Kay, 2001).

Using Roberts' (2002) flexibility classification model, the hyper-flexible approach taken in this study scores highly on flexibility in learning and assessment processes with students able to complete the subject remotely, at a time of their choosing and with some flexibility in the method of engagement (but somewhat limited due to broader university requirements). Administrative flexibility continues to be challenging, as enrolment, census, and course finalisation timeframes are non-negotiable and restricted in their process. This aligns with the findings from Beer et al. (2023), who, also using Roberts' 2002 framework, evaluated the flexibility of 12 postgraduate courses and one Massively Open Online Course (MOOC) based on administrative flexibility, learning flexibility, and assessment flexibility. According to Beer et al. when assessing the flexibility of the courses from a place, time, and pace perspective, the traditionally delivered programs were relatively inflexible. There was little scope for student-led timeframes or pacing, and numerous deadlines associated with the administration of the course further limited the flexibility of the courses. While the trend towards more student-centred design and flexible delivery continues (Campbell et al., 2022; Pelletier et al., 2023), the broader university administrative and policy landscape creates internal barriers to a fully flexible student experience (Beer et al., 2023).

Student Accessibility and Engagement

The regional university in this study has over 22,000 students enrolled in online programs. Eighty-one per cent of postgraduate students at the university are engaging with online studies. While the average number of students studying online across Australia is 13.8%, postgraduate numbers are at 23.7%, substantially higher than undergraduate students (Australian Education Network, 2023). This shift to online may reflect the broader trends demonstrated during and after the COVID-19 pandemic lockdown, which has seen flexibility and capacity to accommodate students' complex lives as an increasingly important factor in selecting an education provider (Campbell et al., 2022). The ASCILITE findings are reinforced by the findings from the EDUCAUSE Horizon Report 2022 (Pelletier et al., 2023), which also found the student demand for flexible and convenient learning a continuing trend. Student preferences are now more mixed, with the convenience of online learning benefiting students over the traditional face-to-face program delivery. This indicates that a one-size-fits-all approach to educational delivery is no longer adequate.

Data from the LMS subject page indicates that flexibility does influence the frequency that student's login and engage with the learning material (*Figure 4*). The flexible delivery style allowed students to engage with content for longer at times that better suited their schedule. This is confirmed as students found their understanding deepened by the flexible design. These results reinforce the findings from Lodge et al. (2022) that greater student control increased the accessibility of the courses and enhanced student wellbeing, engagement and grades.

Peer-to-peer engagement may be a priority for undergraduate students who gain social as well as academic value from their interactions (Stigmar, 2016). However, these findings indicate postgraduate students are willing to sacrifice synchronous peer support for greater flexibility. Sener and Hawkins (2007) agreed; however, they were examining online peer-to-peer engagement among undergraduate mature-aged social work students. They discovered that temporal flexibility ranked highest in importance for this student demographic. Peer-to-peer interactions and engagement were not highly regarded; instead, they were viewed as obligatory tasks. Therefore, it may be less of a postgraduate trait, but rather, reflective of an individual student's personal and professional circumstances. Flexible course design may be an approach that is more inclusive of non-traditional students with whom the highly structured teaching method is unsuitable.

Limitations and Future Research

The HML graduate program uses micro sessions for four-credit point subjects, a feature uncommon in postgraduate programs. The applicability of this delivery approach to more conventional subjects is uncertain. Furthermore, programs with traditional didactic teaching styles or prescriptive assessment design may not align with this model. The results as presented here do however, indicate a preference for this teaching approach for this cohort of postgraduate students which may translate into more traditionally structured programs.

To gain deeper insights, additional research through focus groups or interviews with students is recommended. Additionally, this study focused only on the student experience of the course, analysing the workload implications and experiences of teaching staff would provide a more comprehensive picture for those interested in pursuing this teaching approach.

Conclusion

Hyper-flexible education delivery offers education providers a potential 'point of difference' that could accommodate diverse student cohorts who may not be served by traditional teaching methods. Flexible delivery aligns with experiential teaching principles, empowering students to learn at their own pace, and meeting individual needs and circumstances. The key is not just accommodating differences but designing courses that are seamlessly integrated into the students' complex lives. Students involved in this trial found hyper-flexible delivery, allowed greater control over their studies, enhancing their learning experience. In an increasingly competitive environment, the adoption of student-centred flexible approaches is already occurring across educational settings and providers. By designing truly flexible, student-centred programs may become an important strategic point of difference for universities.

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