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An Examination of Postgraduate Student Academic Success and Satisfaction Outcomes Across Unit of Study Block Delivery Modes

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An Examination of Postgraduate Student Academic Success and Satisfaction Outcomes Across Unit of Study Block Delivery Modes

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Abstract

This study examined student academic achievement outcomes and satisfaction ratings within Semester mode, and three distinct sub-variants of Block Mode (BM) delivery, of postgraduate courses. BM design principles involve students completing one unit at a time, small classes to support active learning, and engaged learning and teaching practices. In the postgraduate BM format at Victoria University, three sub-variant models recently replaced the traditional 12-week semester approach of the completion of four simultaneous units. Two of these Block models are undertaken as single units, but delivery duration varied: a 4 Week 12 Credit Point and 8 Week 24 Credit Point format. The third sub-variant, 8 Week 12 Credit Point model, is completed as two units simultaneously. Outcomes of matched units on key metrics of academic success and student satisfaction for Semester and BM sub-variants were compared. Student marks were found to be significantly higher ($p < .05$) for overall BM results compared to Semester mode, and BM students were significantly more likely ($p < .05$) to pass units. Differences were apparent between BM sub-variants, with students in Block 4W and Block 8W24 credit point achieving higher marks than students in both Semester and Block 8W12. Student satisfaction was also significantly lower ($p < .05$) in BM than in Semester delivery. Although students displayed higher levels of academic performance in BM compared to Semester mode, this was accompanied by lower student satisfaction levels, which may be expected from the adjustment to a new pedagogical approach. Overall, results evidenced that BM appears to be a viable delivery model for postgraduate units.

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block design, intensive delivery, postgraduate, academic performance, student satisfaction

Introduction

Block Mode (BM) is a pedagogical model that aims to recognise, respect, and accommodate the complexity of student lives and facilitates a predictable, manageable, and connected university experience (McCluskey et al., 2019). The block format has gained traction as an alternative to traditional semester-based learning due to its student-centred and immersive structure, where students focus their learning within a shorter teaching period, one unit at a time. The VU Block Model™ was originally implemented at Victoria University (VU); the “University”) in 2018 to support the needs of first year undergraduate students entering higher education (HE). However, while this structure can support academic success, it does not always result in higher student satisfaction, as other factors such as workload intensity and student expectations play significant roles in shaping the overall experience (Dempsey, 2023; Liu, 2024; Loton et al., 2022; Zineldin et al., 2011).

Ambler et al. (2021) described the BM as a curriculum delivery system in which a “block” of study lasts 4 weeks, allowing students to complete one unit at a time, with a maximum of four units (four blocks) covered in a semester. Each block consists of three weekly teaching sessions, each lasting 3 hr in small classes, with assessments completed within the block (Dempsey, 2023). Each block unit constitutes an element of the set of subjects for a degree, diploma, or certificate course. Block units require the completion of disciplinary study and incorporate the opportunity to undertake complementary activities such as academic support services, technology assistance, and employability guidance (Ambler et al., 2021). Teaching involves staff working within classes of up to 35 students and managing learning to align with needs and expectations of the students. The immersive and focussed context of the model is thought to allow students to engage solely in the skills and knowledge of their current domain of study and establish stronger relationships with peers and with teaching staff. However, some students and academic staff have raised concerns that the rapid pace of learning in BM minimising deeper reflection and engagement with the course material, leading to perceptions of an overly demanding workload (Dempsey, 2023; Dixon & O’Gorman, 2020; Liu, 2024; Lutes & Davies, 2018).

A key focus of the BM was to ensure a consistent process of unit design and delivery, with unit refinement undertaken and maintained in accordance with a set of teaching and learning principles. Important primary level design elements involved an emphasis on active learning in small groups and flipped classroom models, so as to foster deeper engagement through highly concentrated student focused teaching practices (Goode et al., 2023a; Hew et al., 2021; Turner et al., 2021; Winchester et al., 2021). Existing definitions of active learning can be considered representative of the BM approach to teaching and learning. For example, Freeman et al.’s (2014) definition highlights the key characteristics incorporated within the model. Freeman et al stated that “active learning engages students in the process of learning through activities and/or discussion in class, as opposed to passively listening to an expert. It emphasises higher-order thinking and often involves group work” (pp. 8413–8414). Recent research involving a sample of academics teaching in BM reported that participants perceived active learning as an important component of the delivery model (Dawson & Dawson, 2018; Hew et al., 2021). Qualitative results reinforced that BM served as a practical approach to meet the immediate learning needs of students by operating within a learner-centred, engaging, and authentic context (Thomas et al., 2025). Large scale quantitative research examining a BM delivery emphasising the importance of active learning in HE found

significant differences in student academic performance within the student-centred design (Wilson et al., 2024). The authors concluded that focused and active learning prioritised within BM designs are “proving to be a compelling way forward for universities to better engage and support students from heterogeneous and non-traditional backgrounds in a time of rapid and complex change in HE” (p. 17).

Additionally, the design utilised evidence-based practices that have a high impact on student learning (e.g., Kift, 2009; Nelson et al., 2014). The key set of principles that support the efficacy of Block units include: (a) unit design based on skills and knowledge immersion with a clear beginning and clear ending; (b) preferencing knowledge exploration and application over content transmission; (c) incorporating a variety of inquiry-led and problem-based learning opportunities and assessment tasks embedded within authentic contexts; (d) sessions are student-centred, active and engaging; (e) scaffolding assessment opportunities that contribute to personalised and adaptive learning; (f) learning activities reinforce the connection of units to course and career; provision of early and ongoing feedback; and (g) determining and focusing on students’ interests, needs and expectations (McCluskey et al., 2019).

Recent research has reinforced the benefits of BM for student performance and satisfaction (Loton et al., 2022; Muscat & Thomas, 2023). Specifically, studies have indicated that the introduction of BM resulted in improvements in academic performance as measured by marks in units, particularly for students from equity group backgrounds such as low-socio-economic and non-English speaking backgrounds (e.g., Goode et al., 2023a; Loton et al., 2022). Effects on satisfaction were variable, with small improvements in teaching satisfaction and small decline in unit satisfaction as measured by internal end-of-unit surveys that measure teaching and unit satisfaction separately. The largest satisfaction effect was a decrease in perception of the unit workload being reasonable (Loton et al., 2022). Units that redesigned assessments prior to implementation of BM offset some of this unit satisfaction decline, and further increased the already large effect on student achievement compared with semester mode.

Following indicators that BM can effectively support student academic performance and satisfaction at undergraduate level, BM was subsequently implemented within postgraduate coursework units across 2020 and 2021 (e.g., Loton et al., 2022). Postgraduate HE in Australia has grown significantly since the HE market was deregulated in the 1990s (Palmer et al., 2018). Increased market competition (Towers & Towers, 2020), with effective recruitment into postgraduate coursework programmes is an important strategic initiative for Australian universities (Larkins, 2021), with prioritisation on exploring how to support student transition into and through postgraduate study. However, there is limited knowledge of how BM delivery mode might influence the academic outcomes of postgraduate students. Emerging evidence from qualitative research indicates that while undergraduate and postgraduate students value the structured support provided in BM, the condensed nature may lead to increased stress and workload concerns, negatively impacting their overall satisfaction (Dempsey, 2023; Liu et al., 2024).

HE delivery design necessitates the need to be a “life-long learner” to ensure that students are capable of maximising opportunities as they arise and be agile and adaptable in the 21st century. For mature-age students commencing a postgraduate course, balancing continuous study with work and family responsibilities can be particularly challenging (Baharudin et al., 2013; Goode, Roche, et al., 2024). It has become clear that additional strategies are needed for student cohorts such as mature-age students returning to study and working professionals looking to further their knowledge and qualifications (Janecy & Burns, 2013; Lamon et al., 2020). Therefore, several BM sub-variants were introduced, which vary both in duration and in the presence of parallel units of study. Extended duration large credit point units were introduced to cater for complex learning experiences, which are typical of postgraduate courses. One sub-variant departs from the

one-unit-at-a-time model that has dominated BM to date, by introducing a two-unit-at-a-time mode. It is important to acknowledge the conflict of the design of this model as a pure form of BM. However, the university presented the model as a format to be implemented within the postgraduate transition to Block delivery. Units of study were expected to adopt a delivery mode if that was the preference of the course manager. As a consequence, different courses adopted the mode the course manager concluded would be most appropriate for the student cohorts who were enrolled in that course. For example, in the postgraduate business courses, it was decided that many students would enrol on a part-time basis and this model would suit that cohort. Consequently, this resulted in full-time students needing to complete units simultaneously in the two-unit-at-a-time mode.

Overall, BM approaches adopted at the postgraduate level have key elements of the undergraduate design that support the opportunity for students to focus on the content and assessment of skills and knowledge within one or two units and within a shorter study period. The postgraduate Block delivery format is specifically oriented to allow for direct connection and liaison with the academic staff teaching the unit to foster more frequent teaching and learning interactions and facilitate student success.

Investigations of intensive learning models undertaken at other institutions have similarly demonstrated positive outcomes for undergraduate students, including improvements in retention, reductions in study deferral rates, and increased student engagement (Buck & Tyrrell, 2022; Goode et al., 2023b). Studies exploring BM in postgraduate programmes remain limited, though preliminary findings underlined that Block based teaching could enhance pass rates and student satisfaction (Goode, Roche, et al., 2024; Kofinas et al., 2017). One study conducted within a postgraduate business course has reported preliminary results that block type teaching supported improved student academic performance (pass rates) and student satisfaction (SEU surveys) (Kofinas et al., 2017). Specific BM impacts on student performance and satisfaction have yet to be investigated at a postgraduate level, particularly at a level beyond the individual unit or course.

Research on postgraduate coursework students is not as prolific as that with undergraduate students (Bunce et al., 2017; Kandiko & Mawer, 2013). One study of postgraduate coursework student satisfaction in Australia used a case study of 51 students enrolled in a School of Public Health (Jancey & Burns, 2013). Jancey and Burns reported that the postgraduate students came from a variety of career backgrounds (e.g., health professions, teaching, research, and administration), with 80.3% of students currently employed while completing their course. These academic factors align with broader holistic models of tertiary experience, which identifies institutional reputation, pedagogical engagement, and administrative support as critical pillars that drive student success and institutional outcomes (Bowden et al., 2021).

Aim of the Study

Evaluation of institutional progression in operationalising the immersive block format at the postgraduate level necessitates the careful consideration of the profile and characteristics of postgraduate students and the monitoring of their teaching and learning experiences, expectations of achievement, and their transition through study. Consequently, the aim of this study was to explore academic success and student satisfaction in BM delivery in postgraduate courses. The BM design principles are characterised by students completing only one unit at a time to allow focus on that unit, small classes to support more active learning, building learning communities where students help each other, and developing transferrable skills through complementary activities in either 4-week or 8-week study blocks. This research also involved the contrasting of the three sub-variant postgraduate models: 4 Week 12 Credit Point (4W), 8 Week 24 Credit Point (8W24), and 8 Week 12 Credit Point (8W12) completed as two units at a time. Outcomes of the investigation can be

used to expand the teaching and learning evidence base of postgraduate student performance within new immersive mode designs of unit of study delivery.

Research Questions

This aim was addressed through the following research sub-aims:

1. To evaluate the influence of delivery mode on postgraduate student academic success in units delivered in traditional Semester mode and subsequently in BM delivery as measured by student marks and grades.
2. To evaluate the influence of delivery mode on postgraduate student satisfaction in units delivered in traditional Semester mode and subsequently in BM delivery as measured by the SEU.

Method

Study Design

The study adopted a matched unit and non-matched student cohort comparison as the basis of analysis. This involved the comparison of the key metrics of student satisfaction and unit results (i.e., academic grades or marks) across Semester and BM including the three postgraduate BM delivery sub-variants (i.e., 4W, 8W24, 8W12). Cohorts were considered as non-matched at the student level, in the sense that postgraduate students studying in Semester mode in years 2019, 2020, and 2021, were compared on key metrics to cohorts of students studying in BM in 2021 and 2022, including BM sub-variants. Unit codes, however, were matched; only units that had at least 10 unit attempts in both Semester and BM were included in the study.

Measures

This study involved the examination of pre-existing institutional student academic performance data and student satisfaction data. Student academic performance data comprised the marks achieved for a unit attempt (final, weighted, summative mark for a unit enrolment [0%–100%]) and grade achieved in the unit (Fail [N]—0%–49%, Pass [P]—50%–59%, Credit [C]—60%–69%, Distinction [D]—70%–79%, and High Distinction [HD]—80%–100%).

Student satisfaction was measured by the SEU survey. The timing of student satisfaction survey is set in accordance with regulations outlined by the national university funding frameworks of Australia. This necessitates that the student satisfaction surveys must be completed by the students prior to them receiving their final grade for a unit of study. In Block mode design, it requires students to complete the survey by the commencement of the final week of a unit. For the current research, the SEU is completed anonymously by students during a designated survey period. For example, within 4W Block units, the survey invitation is sent usually on the Wednesday of the third week, and the survey remains open until the last day of teaching (Friday of the fourth week). The survey comprises six items related to satisfaction with the unit. The six items students respond to comprise the following items: “Overall, I am satisfied with the quality of the unit” (SEU1—Overall satisfaction); “The expectations were clear (SEU2—Clear expectations); “The activities helped me to learn” (SEU3—Helpful learning activities); “The learning resources were relevant and up to date” (SEU4—Learning resources up-to-date); “The assessment tasks clearly evaluated the learning outcomes” (SEU5—Assessment tasks aligned); and “The workload in this unit was

reasonable” (SEU6: Workload reasonable). Students are asked to respond to each item on a 6-point scale: 1=“Strongly disagree,” 2=“Disagree,” 3=“Neither (disagree/agree),” 4=“Agree,” and 5=“Strongly agree.” Loton and colleagues tested some aspects of validity and reliability for the VU SET and SEU scales (2022). The VU SET and SEU surveys have demonstrated excellent model fit in confirmatory factor analysis, discriminant validity between scores for unit and for teaching satisfaction; and some predictive validity with large relationships to achievement. However, aggregate SET and SEU indicators showed mostly small correlations with the nationally administrated Student Experience Survey, in matched student samples, suggesting the two sets of measures diverge in what they target.

Procedure and Data Collection

Ethical approval was obtained to extract and analyse a dataset of postgraduate institutional unit assessment and student satisfaction results spanning years 2019 to Semester 1, 2022 (Victoria University, HRE22-005). Data was sourced from institutional systems at the unit enrolment level, with each individual data element reflecting the result of a unit, for a given student and the unit they attempted, in addition to the delivery period and mode. While the student cohorts were non-matched, and the majority of students appear in only one mode of study throughout the dataset, a small number of students completed units in semester mode prior to commencing BM within the timeframe of data collection.

Several data cleaning steps were undertaken. First, unit codes were matched based on being delivered in both Semester and any BM mode, and units with no matching code in both Semester and any Block variety (i.e., 4W, 8W12, and 8W24) were removed. Additionally, to ensure sample sizes for a given unit were adequate, units with fewer than 10 enrolments in either mode were removed. Records associated with placement units were removed. Only results from units with the key grade categories of N, P, C, D, and HD were retained in the analysis. A count of post-cleaning observations that reflected actual unit attempts against each delivery mode is presented in Table 1. Note the much smaller sample of records for 8-week, 24 credit point units.

Data Analysis

As an exploratory study, descriptive and inferential comparative analysis was undertaken, comparing Semester mode results to BM results, and comparing the different BM sub-variants to each other. Analysis primarily involved using descriptive statistics, visualising and comparing mean scores and frequencies of categories across Semester and BMs. Data was compared for academic success (marks and grades) and student satisfaction (SEU survey ratings). Parametric and non-parametric inferential statistics were applied to test for statistically significant differences and effect sizes across the mode of study on each metric. Where extensive control variables including for nested structures in the data have been applied in the past in some studies of BM (Loton et al., 2022), the end-result in estimating the effect of the block was actually very small, compared to a more straightforward mean comparison (excluding moderators). In other words, the control variables exerted little change over the estimated effect of the model in prior studies. While this does not conclusively demonstrate that adding such control variables would alter the estimated effects in the present study, with the emphasis on exploring multiple BM sub-variants and the first analysis of post-graduate data, the analysis took a descriptive and mean-comparison inferential approach. In addition, most other studies on the topic adopted similar, mean comparison inferential tests to estimate effects of introducing a BM (Goode, Syme, & Nieuwoudt, 2024).

Table 1. Post-Cleaning Sample Size: Delivery Mode Sub-Variants.

Delivery mode	Unit attempts
Semester	29,392
Block 4W	8,611
Block 8W12	2,839
Block 8W24	293

Results

Academic Success—Student Marks

Overall Marks for Block Versus Semester. Marks were significantly higher in BM ($M=73.36$, $SD=16.52$) than Semester ($M=68.24$, $SD=15.47$) delivery, $t(20180.5)=-28.5$, $p<.001$, $d=-0.33$.

Marks for Block Delivery Sub-Variants. In comparing the BM sub-variants, the following descriptive results were generated for each mode: Semester 68.24 (15.46); 4W 74.86 (15.43); 8W12 68.12 (18.62); and B8W24 79.40 (14.25). Marks were significantly higher for Block 4W and 8W24 modes than for Semester and Block 8W12; $F(3, 40006)=434.35$, $p<.001$, $\eta_p^2=.032$. Post-hoc tests of Least Significant Difference indicated 4W (mean difference = -6.62) and 8W24 (mean difference = -9.34) significantly differed from Semester mode ($p<.001$), however Block 8W12 did not ($p<.69$).

Academic Success—Student Grades

Pass/Fail Rate. For pass/fail rate, there was a significant relationship between delivery mode and pass rate, $\chi^2(1)=49.12$, $p<.001$, Cohen's $w=0.03$, with students in BM more likely to pass (95.54%) compared to those in Semester delivery (94.94%). The failure rate was slightly higher for Semester mode (5.06%) compared to BM (4.46%) (see Table 2).

When comparing Semester and BM delivery sub-variants on pass/fail rate, there was a significant relationship between delivery mode and pass rate, $\chi^2(3)=131.944$, $p<.001$, Cohen's $w=0.05$, with 4W and 8W24 delivery modes more likely to pass than Semester or Block 8W12 delivery. Specifically, the pass rates were highest for 8W24 (96.90%) and 4W (96.39%), followed by Semester (94.94%), and the lowest pass rate was observed in Block 8W12 (92.77%). Similarly, the failure rate was highest for 8W12 (7.23%) and lowest for 8W24 (3.10%).

Grade Categories—Overall Comparison of Semester and Block Delivery Sub-Variants. BM delivery appeared to result in more HD and fewer P grades than Semester delivery. A Mann-Whitney U test indicated the grade distribution was significantly higher in BM than Semester mode, $U=131213288.5$, $Z=-39.26$, $p<.001$, $r_{\text{pb}}=-0.19$. Notably, students in BM achieved a higher proportion of HD grades (39.80%) compared to Semester mode (22.31%), indicating a potential performance advantage in the immersive learning environment. Additionally, Semester delivery showed a higher percentage of students attaining P grades (15.05%) compared to BM (6.92%), indicating that BM students were more likely to achieve higher grades overall.

Block 4W and 8W24 delivery modes appeared to result in more HD and fewer P grades than Semester or Block 8W12 delivery: Kruskal-Wallis $H(3)=1946.93$, $p<.001$, $\varepsilon^2=0.04$. Specifically, 8W24 demonstrated the highest proportion of HD grades (59.66%), far exceeding the rates

Table 2. Summary of Delivery Mode Pass Rate, Fail Rate and Grade Distributions.

%	Pass rate	Fail rate	HD	D	C	P	N
BM	95.54	4.46	39.80	31.79	17.03	6.92	4.46
SEM	94.94	5.06	22.31	31.14	26.44	15.05	5.06
4W	96.39	3.61	43.49	31.63	15.34	5.92	3.62
8W12	92.77	7.23	26.37	33.02	22.90	10.48	7.23
8W24	96.90	3.10	59.66	24.83	10.34	2.07	3.10

observed in 4W (43.49%), 8W12 (26.37%), and Semester (22.31%). Conversely, the proportion of students achieving a P grade was highest in 8W12 (10.48%), followed by Semester (15.05%), showing a greater spread in performance outcomes within these delivery modes (see Table 2). The data indicates that while the intensive 8W24 mode may promote high achievement, 8W12 appears to present more challenges for student success.

Student Satisfaction

Student Satisfaction – SEU Ratings Across Delivery Modes. A comparison of scores on SEU are presented in this section. Scores were significantly higher for Semester than BM for SEU item 1 ($t(5009.9)=4.86$, $p<.0001$, $d=-0.12$), item 2 ($t(5044.1)=4.10$, $p<.0001$, $d=-0.10$), item 3 ($t(5250.9)=2.05$, $p<.05$, $d=-0.05$), item 5 ($t(5149.3)=2.23$, $p<.05$, $d=-0.05$), and item 6 ($t(4887.6)=8.55$, $p<.0001$, $d=-0.19$), with the largest declines in items 6, 1, and 2, in that order.

When comparing Semester and Block delivery sub-variants, SEU scores were lower for 4W across most satisfaction items, particularly in overall satisfaction (SEU item 1 $M=3.94$, $SD=1.13$) and workload reasonableness (SEU item 6 $M=3.77$, $SD=1.18$). Conversely, Block 8W24 demonstrated the highest satisfaction ratings across all items, including overall satisfaction (SEU item 1 $M=4.20$, $SD=1.14$), clarity of expectations ($M=4.31$, $SD=0.97$), and workload reasonableness (SEU item 6 $M=4.28$, $SD=1.00$).

Compared to BM overall, Semester delivery yielded slightly higher satisfaction scores across all SEU items, with the largest advantage observed in workload reasonableness (SEU item 6 $M=4.08$, $SD=1.00$ for Semester vs. $M=3.87$, $SD=1.16$ for BM). However, within BM sub-variants, Block 8W24 consistently outperformed both BM overall and Semester in student satisfaction, particularly in terms of clarity of expectations (SEU item 2 $M=4.31$, $SD=0.97$) and engagement in learning activities (SEU item 3 $M=4.26$, $SD=0.88$).

In contrast, 8W12 produced more balanced satisfaction scores, closely aligning with Semester delivery for most items, including overall satisfaction (SEU item 1 $M=4.13$, $SD=1.04$) and learning resource relevance (SEU item 4 $M=4.23$, $SD=1.00$). This indicates that while intensive formats such as 8W24 could lead to heightened satisfaction, shorter block durations such as 4W may present challenges in workload management and overall student experience (Table 3).

Discussion

The results of this research clearly reinforced that the change in delivery model from Semester to BM had a significant impact on the assessment outcomes and student satisfaction levels reported for postgraduate students. Major institutional change in delivery has previously highlighted a positive change in outcomes for undergraduate students (Dempsey, 2023), however, less information has been reported in relation to postgraduate coursework and the impact of intensive delivery

Table 3. Summary of Delivery Mode Student Satisfaction Scores by Item.

Mean (SD)	SEU.Q1	SEU.Q2	SEU.Q3	SEU.Q4	SEU.Q5	SEU.Q6
BM	4.02 (1.11)	3.97 (1.12)	4.11 (1.03)	4.18 (0.98)	4.06 (1.08)	3.87 (1.16)
SEM	4.13 (0.99)	4.08 (1.00)	4.16 (0.97)	4.16 (0.96)	4.11 (0.99)	4.08 (1.00)
4W	3.94 (1.13)	3.88 (1.15)	4.03 (1.06)	4.15 (0.97)	3.99 (1.10)	3.77 (1.18)
8W12	4.13 (1.04)	4.13 (1.04)	4.23 (0.97)	4.23 (1.00)	4.17 (1.03)	4.02 (1.11)
8W24	4.20 (1.14)	4.31 (0.97)	4.26 (0.88)	4.28 (0.91)	4.22 (0.98)	4.28 (1.00)

designs. The main findings of the current study are discussed in sections relative to the impact of delivery mode on postgraduate students' marks, pass rates, grades, and unit of study satisfaction.

Differences in Student Performance Between Delivery Modes

The finding of higher marks in the overall BM delivery result is comparable with earlier studies that indicate intensive modes of course delivery, such as Block, can produce equivalent or superior learning outcomes when compared with Semester mode (Burton & Nesbit, 2008; Dempsey, 2023; Scott, 2003; Scott & Conrad, 1992). Results of the current study align with previous quantitative research on undergraduate BM courses, which also demonstrated that BM improved pass rates and students' academic performance (Dempsey, 2023; McCluskey et al., 2020, 2021). Findings highlighted that the overall BM postgraduate student marks were significantly higher in comparison to the marks for students who completed the same units in Semester delivery mode. This outcome provides further evidence to support the argument that immersive learning environments enhance student performance (Buck & Tyrrell, 2022; Klein et al., 2019; Loton et al., 2022). The impact of BM's primary design elements of focussing on active learning and engagement within one unit of study, navigating a single group of learning outcomes, and negotiating an aligned set of assessment tasks is clearly demonstrated by the high level of student academic success within this postgraduate sample.

Influence of Block Mode Design on Grade Distribution and Marks

Further substantiation of the favourable influence of BM on the marks achieved by students, was highlighted by the pattern of grade distribution. Results revealed clear increases in the number of students who received a HD for units of study completed in BM in comparison to Semester mode. These types of sustained improvements across the academic performance of an entire cohort reinforce how an increase in learning is imparted on postgraduate students while engaging within a BM mode design (Jackson et al., 2022; McCluskey et al., 2020). The acknowledgement of the importance of higher grades to students at the individual level is an integral element of the Block educational reform, through an emphasis on improving student academic outcomes by the targeted renewal of curriculum and pedagogy in transitioning from semester to BM (Weldon, 2022). Furthermore, focused learning approaches within intensive BM deliveries can be beneficial to students, as it can develop their learning confidence through having to typically manage only one unit in a study period, rather than grappling with the multi-requirement expectations of Semester mode designs. BM as a HE delivery approach can contribute to a functional management of their competing time demands for study and other life commitments (e.g., work and family) (Liu et al., 2025) and contribute to enhanced student learning outcomes such as an improvement in grades

(Burton & Nesbit, 2008; Goode et al., 2023a; Kucsera & Zimmaro, 2010; Scott, 2003; Tripodi et al., 2020; Turner et al., 2021).

Results showed that grade distribution was higher for 4W and 8W24 delivery, with an increase in the number of HDs and fewer P grades, than for Semester and 8W12 delivery. Both the 4W and 8W24 modes apply the delivery format of one unit at a time within a teaching period. An important postgraduate design consideration behind the inclusion of the 8W12 model was for part-time students to engage in one unit in one study period over a longer time period with fewer weekly contact hours, however, for full-time students, the implementation of the design contributes to a deviation from the ideal model with students needing to engage with two units in a study period. This variation in scores across the four delivery modes reinforces that a critical factor of student academic success appears to be an immersive model for students undertaking a single unit in one teaching period rather than balancing multiple competing demands. Specifically, this aligns with previous evidence outlining that intensive delivery formats can optimise learning outcomes. For instance, Huber et al. (2022) noted that students in intensive mode science subjects frequently achieved higher grade distributions and reported greater engagement than those in standard semester-long delivery. Additionally, McCluskey et al. (2019) concluded that the BM's focus on a single unit at a time significantly enhances student pass rates and performance by allowing for a more manageable and connected learning experience.

Specific academic performance analyses of the set of BM delivery designs indicated that the pass rates and grade distribution improvement was greatest for students in 8W24, noting the smaller size of the sample. The observed change in pass grade percentages among students enrolled in 4W12 and 8W24 reinforces the outcomes of previous research demonstrating positive progression in academic success for undergraduate students completing unit of study in BM across a range of subject areas (Howe et al., 2019; Jackson et al., 2022; McCluskey et al., 2021). Further positive changes were clearly highlighted in all BM designs showing higher combined percentages for HD and D grades. Huber et al. (2022) reported that for a mixed sample of undergraduate and postgraduate students studying in either an intensive mode design or semester mode design that the largest set of positive changes in grade distribution were found for the intensive mode design. Overall, the pattern of results in the current study supports the efficacy of BM designs, however, Huber et al. also identified a negative outcome on change in grade within intensive mode that was influenced by discipline area.

Further interrogation of the results contrasting both mark and grade distributions for the three types of BM design indicated that the 8W12 model had the lowest average mark and highest failure rate. As highlighted earlier a key element of this version of a BM design was the delivery of two units of study simultaneously. This lower performance result contrasts with the findings of Roche et al. (2022) and Goode et al. (2023a) who reported that a six-week immersive undergraduate delivery mode, described as the Southern Cross Model, significantly improved academic success rates despite requiring students to undertake two units of study at a time. Specifically, the current findings for the 8W12 postgraduate cohort reinforce the notion that without a systemic curriculum redesign approach, such as framed in the Southern Cross Model, a delivery focus on a single unit at a time is often more effective. This aligns with broader evidence on intensive delivery; for instance, Huber et al. (2022) demonstrated that the academic advantages of condensed formats are closely linked to higher levels of pedagogical immersion. Furthermore, McCluskey et al. (2019) argued that students focusing on one unit at a time reduces the cognitive complexities of managing multiple subjects, thereby contributing towards an improved academic experience. Ongoing consideration of the efficacy of design frameworks within the BM paradigm is critical to support the strongest outcomes for students engaging in new formats of intensive delivery.

Student Satisfaction in Relation to Delivery Mode

The current findings showed that the substantial re-design of units to BM did not necessarily transition to improved student satisfaction ratings. Results clearly highlighted that the 4W mode was reported as the least satisfying for students, particularly, in relation to the traditional semester mode. This aligns with previous research indicating that while BM can improve academic performance in some units, it does not always translate into higher student satisfaction, as other factors such as workload, student expectations, and course design play significant roles (Dempsey, 2023; Liu, 2024). Support for the negative change in SEU was sourced from a study of student satisfaction associated with the BM at the same University. McCluskey et al. (2019) found that BM alone does not appear to be a “predictor of improved student satisfaction” (p. 7). This perspective is reinforced by findings from qualitative interviews with First Year students, where some participants expressed that while they appreciated the structured support in BM, the condensed nature of the unit led to increased stress and workload, ultimately impacting their overall satisfaction (Dempsey, 2023). Similarly, Goode et al. (2023a) found in the pilot year of transition and implementation of a 6-week immersive model that the analysis of student satisfaction data revealed variances across different student cohorts, and that changes to student satisfaction ratings (positive or negative) were not clear or identifiable from the data and could also be attributed to other factors (e.g., institutional or implementation factors).

Variation in student satisfaction with mode of delivery has been reported across studies of intensive mode delivery. Kucsera and Zimmaro (2010) found that student evaluations of instructor ratings of teaching effectiveness revealed no significant difference between comparable intensive and traditional mode courses taught in the same year. In comparison, Whillier and Lystad (2013) determined that students were equally satisfied between their new intensive delivery mode (one seven-week block) compared with the traditional mode (two 13-week sessions). They also found that the intensive mode students were more satisfied with their practical laboratory classes, compared to traditional mode students. The current findings are also representative of the possibility that the change in model design incorporates insufficient opportunity for students to reflect on and fully discern the effect on satisfaction of the shorter delivery time period.

Mode of Delivery Contrasts for Student Satisfaction

A clear pattern of preference was also presented through the contrasts of individual SEU item scores between the modes of delivery. Overall, the highest level of satisfaction was reported for the 8W24 mode. Students across all elements of the SEU were least satisfied with the 4W mode. One key reason for this dissatisfaction appears to be the workload intensity. Aligned research has identified that both students and academic staff reported that the rapid pace of learning in 4W left little time for deeper reflection and engagement with course material (Dempsey, 2023; Liu, 2024). Variation in student satisfaction with mode of delivery has been reported in a range of intensive mode studies. In their study exploring the perceptions of postgraduate students undertaking intensive business units of study Crispin et al. (2016) found that students lacked awareness of what intensive mode units involved. Postgraduate students in this study reported that they were “mentally unprepared” (p. 530) for the intensive mode of study and that the mode increased the pressure they experienced on other commitments (e.g., paid work). Recommendations as a result of this study included clearer university processes to support students requiring leave of absence, and clearer information and advice to students regarding time management for intensive mode learning. Kops (2012) in their US study of strategies to assist students with their time management during intensive courses highlighted techniques similar to coaching to regularly remind students to keep a “pace” (p. 53) with their learning and not over-commit outside of study.

Recommendations

Based on the findings of this study, overall evidence of student success reinforces that the underpinning pedagogical design principles embedded within BM units of study, such as active learning, should be retained in future iterations of the model. The recommendations drawn from the study, however, are typically focused on practical elements to specifically enhance the effectiveness of postgraduate BM delivery. First, it is recommended to maintain and prioritise the implementation of single-unit immersive delivery wherever possible. Evidence from the current research indicated that modes such as 4W and 8W24, which allow students to focus on a single unit within a condensed timeframe, were associated with higher academic performance and pass rates compared to traditional Semester delivery. Maintaining this single-unit focus appears critical for maximising student success.

Second, further investigation is needed into delivery designs that deviate from the original BM design principles. In particular, the 8W12 model, which required some full-time students to engage in two units concurrently, was associated with lower academic performance and higher failure rates than either the 4- or 8-week block sub-variants. Ongoing evaluation of such deviations is essential to ensure that any modifications to the core design principles do not compromise the educational benefits observed with single-unit immersion.

Third, it is important to consider the impact of workload intensity within BM structures and academic discipline contexts. The findings highlighted that workload pressure, particularly in shorter block formats, may negatively affect student satisfaction, although effects are relatively small. Therefore, continuous monitoring of assessment design and workload distribution is recommended to ensure that learning activities are appropriately balanced, promoting deep engagement without overwhelming students. Regular review and adjustment of assessment schedules within immersive designs will be crucial to sustaining both academic success and student wellbeing.

Limitations

While the findings of this study offer valuable insights into the impact of varied BM delivery on postgraduate student outcomes, several limitations must be acknowledged. One limitation relates to the unequal sample sizes across groups, particularly the smaller sample size for the 8W24 mode, which necessitates caution in the interpretation of results for this subgroup. Future research with larger and more balanced sample sizes across all delivery variants is needed to strengthen the generalisability of findings.

Furthermore, significant limitations relate to the use of non-matched student cohorts and that students did not self-select into a specific delivery mode. The transition to Block Mode was a mandatory institutional reform, and mode allocation was determined solely by the year of enrolment and unit of study alignment to a specific mode (i.e., 4W, 8W12, 8W24) as determined by course managers. However, as the study relied on existing institutional data rather than a controlled experimental design, the observed outcomes may be influenced by forced selection bias. Variations in student mode preference, the balance of cohort sizes in relation to demographic variables, or specific course delivery schedules were unable to be controlled. Students in the various delivery modes may differ in ways that affect their academic success or satisfaction independent of the delivery mode itself. These factors constrain the generalisability of the findings. Results could be interpreted with consideration of these potential confounding variables.

Another limitation concerns the timing of student satisfaction data collection. The SEU surveys were open from the second last week of the Block until the final day of teaching. For intensive Block deliveries—particularly the 4W—this window directly coincided with peak periods for the

final submission of assessment, which are typically due in the last week. This timing may have contributed to lower satisfaction ratings due to heightened academic stress and workload intensity at the point of survey completion, contrasting with Semester mode where survey timing may be less condensed relative to assessment deadlines.

Finally, potential differences across academic disciplines were not examined in this study. Previous research reported that the effectiveness of intensive delivery modes may vary depending on the field of study (Dempsey, 2023; Liu, 2024; Loton et al., 2022). As such, further investigation into discipline-specific outcomes would provide a more nuanced understanding of how BM design impacts student success across diverse postgraduate programmes.

Conclusion

Institutional change in HE curriculum delivery constitutes a significant challenge for universities. The current results reinforce that students as the recipients of change may be impacted both positively and negatively. This was indicated through positive outcomes in relation to academic performance, but less positive outcomes in reported student satisfaction. Academic performance data indicated that for two of the three modes of block delivery, students achieved higher unit of study scores than within the traditional semester model. The 8W12 mode, which was a hybrid of block and a longer period delivery, but which also meant that full-time students were completing two units at the same time, did not result in scores that were significantly different from the traditional mode. This could be due to the key feature of block delivery “one unit at a time” failing to be observed in the 8W12 mode, which is also more characteristic of traditional delivery modes. A second key outcome of the current study of postgraduate unit delivery development was that students reported lower satisfaction with their experience of engaging in 4-week Block modes of delivery. Higher satisfaction scores were generally aligned with traditional semester modes. This study represents a preliminary investigation of BM delivery in postgraduate HE, with further research warranted, particularly to explore the generalisability of the findings around academic performance and student satisfaction.

As universities continue to work towards the refinement of models of unit of study delivery, designs such as BM, that are based on strong student-centred principles of active engagement, may become more popular. The findings in 4W BM delivery modes provide support for the efficacy of immersive approaches to the postgraduate students’ HE learning experience in terms of academic performance, however, lower student satisfaction outcomes represent an area of consideration in transitioning from traditional to immersive delivery modes in postgraduate HE.

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