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Student and faculty perceptions of summative assessment methods in a Block and Blend mode of delivery

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Student and faculty perceptions of summative assessment methods in a Block and Blend mode of delivery

Abstract

The recent increase in the number of higher education institutions adopting block teaching has prompted questions about the appropriateness of assessment methods that were commonly used in a semesterised delivery model. This paper explores student and faculty perceptions of summative assessment methods in a block and blend mode of delivery at a higher education institution in the United Kingdom. In this study, we used a convergent mixed methods approach to explore student and faculty perceptions of different assessment methods as accurate evaluations of learning using surveys, combining Likert-type and open-ended questions. The findings highlight how traditional, single assessment methods occurring at the end of a block were perceived as less accurate in evaluating learning when compared to multiple smaller assessments that occur throughout a block. The thematic analysis revealed the latter was perceived as allowing for a broader range of skills to be evaluated while simultaneously facilitating effective workload management and timely feedback. These outcomes indicate the need for assessment redesign that considers the characteristics of a block and blend mode of delivery and illuminates the shared perception of students and faculty that multiple smaller assessments are more accurate evaluations of learning. Further research with larger, more diverse samples, accommodating for different fields of study, could further our understanding of effective assessment methods and inform our practice in a block and blend mode of delivery.

Practitioner Notes

1. Multiple smaller summative assessments should be considered for block teaching, as both faculty and students perceive this method as more inclusive and as the most accurate in evaluating the learning of a module.
2. Regular and timely feedback should be provided to students throughout a block, as students and faculty perceive feedback as pivotal in improving learning and achieving better outcomes.
3. Continuous professional development should concentrate on developing skills in designing assessments with educational technologies and exploring alternative modes of assessment, as faculty have concerns about the time pressures of multiple smaller assessments in block and blend.
4. Targeted educational initiatives should be considered to enhance students' understanding and familiarity with synoptic assessments, as this study found a significant variance in perception between students and faculty.

Keywords

perceptions of summative assessment, summative assessment, block and blend, block teaching, perceptions

Introduction

As higher education institutions (HEIs) seek to enhance their teaching practices and adapt to a changing student population, block teaching has become more prevalent in higher education (HE; Samarawickrema et al., 2022), given its role in increasing student satisfaction, engagement, and achievement, particularly among equity groups (Kucsera & Zimmaro, 2010; Loton et al., 2022; Murray et al., 2020). However, block teaching as a concept experiences definitional ambiguity and non-uniformity, particularly in HE (Harvey et al., 2017). This ambiguity is highlighted by the numerous terms attributed to block teaching in the literature, such as “intensive mode”, “immersive learning”, “modular learning”, “compressed scheduling”, and “accelerated learning”. Furthermore, block teaching does not present a set format and there are various types that have been used in different contexts. In HE, the prevalent format involves students studying one module (i.e., the units of study within a course) at a time for a number of weeks. An example includes that used by Colorado College (2023), where the academic year consists of eight blocks, each having a duration of 3.5 weeks. Despite the variety of formats encountered in the literature, the premise of block teaching remains consistent, which is to provide a more intensive and immersive experience for students by extending the teaching time of fewer modules over a shorter period. On the other hand, blended learning, in different variations, has become common practice in HE and involves the strategic use of the online learning environment, including asynchronous materials and activities that provide flexibility and agency. The union of block teaching and blended learning, hereafter referred to as block and blend, presents an alternative HE experience for students and faculty, with implications on teaching and learning, the organisation and management of courses, and assessment and feedback practices. Although there is a particular scarcity of assessment practices research in block and blend, a recent study suggests different assessment methods may influence students’ academic achievement (Buck et al., 2023). Subsequently, this study aims to build upon previous literature by investigating student and faculty perceptions of different assessment methods in one UK university adopting a block and blend approach to learning and teaching across all undergraduate courses from the 2021–2022 academic year. The university’s unique context in supporting a large proportion of mature students (i.e., over 60%), students from deprived areas (i.e., 40%), and students with special educational needs and disability (i.e., near 30%) presents an additional opportunity to understand assessment methods from the perspectives of different equity groups. Understanding faculty and student perceptions of assessment in an increasingly prevalent mode of delivery is important for enhancing future pedagogical practice.

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Literature

Early block teaching literature focuses predominately on the context of secondary education in the USA and was most notably introduced by the work of Brown (1940) and Trump (1958). Although alternatives to the traditional academic schedule were researched in the 1960s, the adoption of block teaching accelerated in the 1990s, with Canady and Rettig (1996) highlighting that half the high schools in the USA had adopted or considered adopting a block approach. In terms of HE, block teaching has received more interest in recent years, as universities explore alternative course offerings that accommodate a changing student population and their need for flexibility. Assessments, be it formative or summative, play a critical role in education, as they serve as a mechanism to measure student learning, provide feedback for learning, and inform instructional decisions (Mekonen & Fitiavana, 2021). However, when there are changing modes of delivery, such as block and blend, revisiting the efficacy of assessments within the context of the new delivery approach aids the evolution of their reliability and validity. In this literature review, we explored research on block teaching and assessments in HE contexts, examining their intricacies, purposes, challenges, and best practices.

Perceptions of Block Teaching

Although the increased interest is relatively recent within HE, there are examples of institutions who have fully adopted a block approach, observing positive perceptions of block delivery among students and faculty. For example, Colorado College (2023), which has been offering block-taught courses for over 50 years in all their undergraduate programs, identified that 2-years post-adoption, 90% of their students and 73% of their staff preferred the new structure to the old, indicating a positive perception of block teaching (Drake, 1973). More recently, Burton and Nesbit (2002) suggested that students who experienced block teaching would choose to take block in the future, preferring the convenience and flexibility to manage work around their studies. Additionally, evidence suggests that students report an enhanced student experience and increased course satisfaction (Buck & Tyrrell, 2022; Grant, 2001; Kofinas et al., 2017; Kucsera & Zimmaro, 2010; Murray et al., 2020). A possible reason for this could be that students perceive studying in blocks to be the most efficient studying method (Kirk-Johnson et al., 2019).

Although most of the current literature highlights positive perceptions pertaining to block teaching, some studies highlight concerns for students, such as time management issues and workload strains relating to assessment tasks (Chau et al., 2023), and increased concerns and reservations for students unfamiliar with block teaching formats (Burton & Nesbit, 2002). In terms of faculty, the evidence is less consistent, highlighting opportunities for effective time management (Dixon & O'Gorman, 2020), alongside contradictory evidence suggesting concerns related to time constraints in providing marking and feedback, as well as limiting flexibility to experiment with novel teaching approaches (Chau et al., 2023; Dejene, 2019; Sewagegn & Diale, 2021).

Overall, from a student perspective, the perceptions of block teaching appear mostly positive in the literature. However, from a faculty perspective, there is conflicting evidence and a scarcity of research. In terms of student outcomes, there are few studies, and of these, most reported block teaching as positively impacting outcomes. However, these studies were generally conducted in a specific context within a university, such as a pilot study or a specific course, which limits the

generalisability of the findings. Lastly, when adopting a block approach, the importance of meticulous planning and preparation was reiterated in the literature (Burton & Nesbit, 2002; Chau et al., 2023), as adapting materials once teaching begins is impractical. The need for staff development was also highlighted (Nerantzi & Chatzidamianos, 2020), and Sewagegn and Diale (2021) identified that educators believe the use of educational technologies would improve the overall quality of block teaching, corroborating the positive perceptions and outcomes identified in the studies that were conducted within a block and blend mode of delivery (Buck & Tyrrell, 2022; Kofinas et al., 2017; Kugler et al., 2019; Loton et al., 2022; Murray et al., 2020). In these instances, blended learning, with a combination of online and offline asynchronous and synchronous activities, could enhance block teaching (Nerantzi & Chatzidamianos, 2020) by providing increasing flexibility and opportunities for students to consolidate knowledge, particularly when moving from directed face-to-face study to online asynchronous activities (Gilpin, 2020; Köse, 2010).

Block and Assessment in HE

Assessment in a HE context has been defined as the "systematic collection, review, and use of information about educational programs undertaken for the purpose of improving learning and development" (Palomba & Banta, 1999, p. 4). Additionally, assessments play a role in formally crediting aspects of learning, which impact the process of learning and teaching (Baird et al., 2017). However, not all assessments are perceived as fair or authentic, especially from students' perspective. Students often viewed traditional assessment methods, such as one-off exams and essays, as detached and not truly reflective of their abilities, feeling these methods test memory or fact-listing skills more than understanding. In contrast, continuous assessments were perceived as a fairer, more authentic way to evaluate valuable, real-world skills and competencies beyond the test environment (Struyven et al., 2005). This could be a reason why students learning in a block and blend mode of delivery achieved higher grades where multiple smaller summative assessments, a characteristic of continuous assessments, were used throughout a module, compared to a single essay or report at the end of a module (Buck et al., 2023).

In traditional, semesterised delivery, McSweeney (2014) highlights students' critical views of assessment, making reference to poor assignment scheduling, where assessments typically due at the end of a semester generated additional adverse pressures. Instead, students suggested that a larger percentage of marks should be awarded to continuous assessments occurring throughout a module (McSweeney, 2014). Although block teaching can negate the issue of overwhelming end-of-semester assignment deadlines across multiple modules, Kofinas et al. (2017) discovered that in block teaching, students still express concerns about assessments and feedback – in particular, feeling pressed for time. Subsequently, continuous assessments in block teaching, similar to a traditional delivery, could be preferred by students by alleviating time pressures related to end-of-module assessments.

In terms of designing assessments for block teaching, Loton et al. (2022) observed an increase in course satisfaction among students whose assessments were redesigned for block teaching, corroborating Chau et al.'s (2023) findings, which emphasised the need to carefully design assessments for block. Nonetheless, there is still limited research investigating assessments within the context of block and blend. An existing study indicated multiple smaller assessments

throughout a module could lead to higher student grades (Buck et al., 2023), which may be reflective of enhanced learning experience associated with continuous assessments (Hernández, 2012; Pereira et al., 2016). However, how students and faculty perceive the efficacy of different assessment methods in a block and blend mode of teaching is absent in the literature. Since student perceptions of assessment are closely tied to their learning approaches (Struyven et al., 2005), further research alongside students engaging with assessments directly, and the faculty members who design them, would enhance our understanding of the perceived efficacy of assessment methods in a block and blend approach.

Study Aim and Research Questions

In this study, we aimed to explore undergraduate student and faculty perspectives to identify which assessment methods are perceived as accurate forms of evaluating learning in a block and blend mode of delivery. For this purpose, the study consisted of two research questions:

RQ1: What are student and faculty perceptions of different assessment methods as accurate evaluations of learning in a block and blend mode of delivery?

RQ2: What are student and faculty reasons for their perceptions of the accuracy of different assessment methods in evaluating learning in a block and blend mode of delivery?

Method

Study Design

A convergent mixed methods approach was adopted, utilising quantitative survey outcomes and qualitative responses. The University of Suffolk Research Ethics Committee approved this study (RETH(S)22/040). Informed consent was obtained via an online form from all participants involved in the study. After ethical approval was obtained, two anonymous online surveys were distributed: one directed to students and one directed to faculty members.

Sample and Participants

The target population included faculty and students at the research university taking part in undergraduate courses that were delivered using a block and blend mode of delivery during the academic year 2022/2023. To ensure eligibility of respondents, two screening questions were embedded at the start of the survey (i.e., “Do you teach undergraduate students?”/“Are you an undergraduate student?” and “Are the modules that you teach delivered in blocks?”/“Are you enrolled in a course that follows block teaching?”).

A total of 69 students and 51 faculty members completed the survey. Students in their second year of study represented 43% of the student participants, and 94% of faculty participants taught multiple study levels. Furthermore, most participants were in the “arts, humanities, and social sciences” and “health and sports sciences” categories (Table 1), potentially limiting the generalisability of the findings to a more diverse or representative population.

Table 1

Descriptive Statistics of Participants

	Participant breakdown	Students (*n* = 69)		Faculty (*n* = 51)	
		n	%	*n*	%
Study level or Study level taught	Level 3 (foundation year)	2	3%	0	0%
	Level 4 (first year)	19	28%	0	0%
	Level 5 (second year)	30	43%	4	6%
	Level 6 (third year)	18	26%	2	1%
	Multiple study levels	–	–	45	94%
Field of study	Arts, humanities, and social sciences	33	48%	30	60%
	Business	2	3%	7	12%
	Engineering, maths, technology, and science	5	7%	3	7%
	Health and sports sciences	29	42%	11	22%

Instruments and Measures

Participants completed a self-administered survey with standardised questions to assess their perceptions of various assessment methods and feedback. Chosen for its efficiency in surveying a broad population quickly (Schilling, 2013), the survey was organised into distinct sections to facilitate completion (Dörnyei & Taguchi, 2009). These sections focused on views regarding single essays or reports, exams, multiple smaller assessments, synoptic assessments, and feedback.

The survey employed four Likert-scale items, each with five response options ranging from *extremely inaccurate* to *extremely accurate*, to gauge perceptions of the accuracy of each assessment method. For feedback, a similar item with options from *strongly disagree* to *strongly agree* measured perceptions of its timeliness. Each Likert item was paired with a mandatory open-ended question probing the reasons behind the responses, and another optional question for additional comments.

Five response options were used for Likert items to increase reliability (Weng, 2004). The questions were singular in focus, positively worded, and had clearly labelled scale options to reduce measurement errors (Dillman et al., 2014; Swain et al., 2008). To ensure the survey's validity, a pilot test was conducted with student ambassadors and faculty, whose feedback affirmed the adjective "accuracy" in the scale items, as opposed to "fairness" or "authenticity", enhancing the survey's clarity and design.

Considering the recency of the synoptic assessment method (Constantinou, 2020), the following description was provided to support participants' understanding: "Synoptic assessments require students to synthesise their learning from two or more modules within a course. This synthesis is used for the students' grade of the modules or is a weighted contribution towards the grade of the modules".

Data Analysis

As a non-experimental investigation intended to measure perceptions and generalise findings (Babbie, 1990; Creswell & Creswell, 2018), descriptive and non-parametric quantitative analyses were undertaken using SPSS. Participant responses to each survey item were classified as either accurate/agreed, inaccurate/disagreed, or neutral to the proposition. These categories were selected as they supported the statistical analysis by enhancing interpretability and avoiding sparsity.

The qualitative data analysis was performed using Atlas.ti. A thematic analysis approach was followed based on descriptive phenomenology, which enabled the identification of recurrent themes that represent participants' experience and perspectives regarding assessment methods in a systematic manner (Adu, 2019). The thematic analysis followed the six phases of reflexive thematic analysis suggested by Braun and Clarke (2021): familiarising yourself with the dataset, coding, generating initial themes, developing and reviewing themes, refining, defining and naming themes, and writing up. The coding process followed an inductive approach and involved two cycles. The first cycle involved descriptive and in vivo coding that helped to generate initial codes, and the second cycle involved focused coding, which allowed the researchers to look for recurrent topics without preconceived categories in mind (Saldaña, 2013). The coding process was initially conducted by two researchers independently, followed by a process of "collaborative coding" (Braun & Clarke, 2021, p. 8) to enhance initial understanding and interpretation of data, and encourage reflexivity to contribute towards greater intercoder reliability (O'Connor & Joffe, 2020) prior to collective theme development.

Results

Quantitative Results

Results regarding the student and faculty perceptions of different assessment methods as accurate evaluations of learning have been summarised in Table 2. Additionally, Mann–Whitney *U* tests were conducted to determine if there were statistically significant differences in perceived accuracy between students and faculty for each assessment method.

Table 2

Student (n = 69) and Faculty (n = 51) Views of Different Assessment Methods

	Percentage viewed as accurate		Percentage viewed as inaccurate	
	Students	Faculty	Students	Faculty
Accuracy perception of having multiple smaller assessments throughout a module	67%	61%	16%	18%
Accuracy perception of a single essay or report at the end of a module	58%	35%	29%	39%
Accuracy perception of a single exam at the end of a module	36%	24%	42%	45%
Accuracy perception of synoptic assessments	19%	53%	17%	14%

Overall, students and faculty perceive multiple smaller assessments occurring throughout a module as the most accurate assessment method, which is supported by the perceived accuracy of students (*Mdn* = 4) and faculty (*Mdn* = 4) not being statistically significantly different, $U = 1752$, $z = -.042$, $p = .966$. Similarly, both groups perceived single exams at the end of a module as the most inaccurate assessment method for evaluating learning, with perceived accuracy of students (*Mdn* = 2) and faculty (*Mdn* = 3) not being statistically significantly different, $U = 1835$, $z = .413$, $p = .680$.

In relation to single essays or reports occurring at the end of a module, the difference in perceived accuracy between students and faculty was not statistically significant ($p = 0.069$). However, there was a trend towards significance, with faculty rating it slightly lower in terms of accuracy compared to students (students: *Mdn* = 4; faculty: *Mdn* = 3), $U = 1435$, $z = -1.817$.

The only assessment method with statistically significant differences was synoptic assessments, where the perceived accuracy for faculty (*M* rank = 73.48) was statistically significantly higher than for students (*M* rank = 50.91), $U = 2421$, $z = 3.802$, $p < .001$. It's important to highlight that 64% of students reported synoptic assessments as "neither accurate nor inaccurate", suggesting a potential unfamiliarity with this assessment method compared to faculty, where 53% viewed it as an accurate method for evaluating learning. This raises questions about the students' understanding of synoptic assessments and the need for further education or exposure to this assessment method.

Furthermore, students and faculty perceptions of rapid or immediate feedback were collected in the survey to gauge how feedback was perceived in terms of enabling students to improve and achieve higher grades in a block and blend mode of delivery. Results from this Likert-type question have been summarised in Table 3.

Table 3

Student (n = 69) and Faculty (n = 51) Views on Rapid or Immediate Feedback

	Percentage that agreed		Percentage that disagreed	
	Students	Faculty	Students	Faculty
Views of rapid or immediate feedback allowing for students to improve and achieve higher grades	84%	69%	6%	10%

As it can be seen in Table 3, most students and faculty agreed that rapid or immediate feedback would allow for the improvement and achievement of higher grades. Although a larger proportion of students agreed compared to faculty, 84% and 69% respectively, there was no statistically significant difference between students (*Mdn* = 4) and faculty (*Mdn* = 4), $U = 1475$, $z = -1.611$, $p = .107$.

In summary, the results indicate that there are differences in the perceived accuracy of assessment methods between students and faculty. Despite there being agreement on multiple smaller assessments and single exams, there was a trend towards significance in the case of single essays or reports, and a significant difference for synoptic assessments, with faculty rating them as more accurate. However, it is noteworthy that both groups generally agreed on the effectiveness of feedback.

These findings underscore the importance of considering both student and faculty perspectives when designing assessments in block and blend, as differing perceptions could impact the effectiveness of educational courses. The proceeding thematic analysis explored the reasons behind these differences to deepen the understanding of these perceptions.

Qualitative Results

Five themes were developed from the open-ended questions, highlighting reasoning behind faculty's and students' choices in the Likert-type items in regard to the accuracy of the different assessment methods. These include experience, time considerations, effectiveness, design, and student wellbeing. Furthermore, the references to participants in this section follow a coding system whereby faculty and students were represented as "F" or "S", respectively, preceded by their participation number and discipline (e.g., "F12, health and sport sciences" or "S7, arts, humanities, and social sciences").

Experience

Both students and faculty tended to base their responses on the familiarity and experience with the assessment method, with some respondents limiting the open-ended answer to comments such as the response from F37 when asked about synoptic assessment methods: "We do not use this" (F37, health and sports sciences); or the response from S68 when asked about essays: "It's the only way that I have studied at HE so know no different" (S68, health and sports sciences).

Participants who were familiar with non-traditional assessment methods perceive essays and exams as outdated and suggest that the only way forward is to embrace more innovative methods, particularly considering the recent advancements in artificial intelligence:

> *Some people struggle with exams and the time pressures that come with it. It's an unfair and outdated form of analysing a student's knowledge and capabilities.* (S1, health and sports sciences)

> *Essays/reports have not been a robust or effective measure of student attainment of learning outcomes for some time. Part of this is down to issues with essay mills and tools like ChatGPT, but my belief (reinforced by a substantial body of pedagogical literature) that other forms of assessment are more authentic in accessing students' higher-level skills required at university level.* (F27, arts, humanities, and social sciences)

Contrarily, faculty who were not familiar with non-traditional methods tended to consider assessment as pre-established and unmodifiable and see non-traditional methods as difficult to use. For example, when asked about essays, F36 and F26 answered as follows:

> *Our nursing assessments were not designed for block delivery. The work required for nursing assessments cannot be undertaken in one assessment week.* (F36, health and sports sciences)

> *It depends which level is under discussion, and which discipline is being assessed. In arts and humanities, an essay at level 5 is a very accurate indicator of a student's progress in research, reflection and critical thinking. It may not be the same for science subjects*. (F26, arts, humanities, and social sciences)

As seen from these quotations, this idea is often linked to the assessment method dependability on level, module, course, or subject area. Exams are commonly seen as an accurate assessment method in science subjects, whereas essays are considered accurate in the field of arts and humanities. However, there are contradictory views regarding the aforementioned assertion:

> *Exams, especially for science are not particularly good at displaying whether learning has taken place as there are many practical skills for most of the units.* (S20, engineering, maths, technology, and science)

> *Arts students do not normally submit essays or reports.* (F18, arts, humanities, and social sciences)

> *Artistic/creative subjects require ongoing formative assessment and practical, creative work developed across a number of weeks. … Essays are not an appropriate form of assessment for practical work.* (F29, arts, humanities, and social sciences)

Time considerations

Time considerations were another recurrent factor reflected in the open-ended responses as impacting student and faculty perspectives on assessment methods in block delivery. Single essays/reports or exams at the end of the block were considered by students and faculty as traditional methods that do not suit block delivery. This was attributed to the 5-week delivery system being perceived as not allowing enough time to work on essays/reports or revise for a single exam:

> *I think the key is enough time to prepare for assessments. 2 weeks to complete a report is not long enough and more time is really needed to consolidate information to prepare for exams.* (S62, engineering, maths, technology, and science)

> *I don't feel that block delivery works well with exams. Not enough time to put the learning into practice. It leads to cramming facts in and there is also a temptation to teach to the exam.* (F16, health and sports sciences)

Multiple smaller assessments were, therefore, regarded by both students and faculty as more accurate at evaluating learning in block, compared to single assessments, as well as a more effective way of managing student workload:

> *The block is such a short period of time. Having smaller assessments enables students to begin on the first part of the assessment right at the beginning of the module and not have to wait for a particular lecture to occur before they can make a start.* (F39, arts, humanities, and social sciences)

> *I think by having multiple smaller assessments it would be more beneficial as it allows students to have more manageable increments of academic work to do as opposed to one singular exam or essay. I think it would also give a truer reflection of their ongoing progress.* (S28, health and sports sciences)

In addition, some students regard block teaching as beneficial for time management due to the one-module-at-a-time approach resulting in non-overlapping assessment periods:

> *I do think however, block learning enables me to balance my busy lifestyle.* (S19, arts, humanities, and social sciences)

> *The block delivery is perfect for reinforcing learning and outcomes. Moreover, it looks after mental health by not being interconnected to many modules or deadlines all at the same time.* (S54, arts, humanities, and social sciences)

Some participants consider the block approach as not allowing enough time to include multiple assessments for one module. This is commonly related to the idea of having multiple summative assessments resulting in an increase in workload for both faculty and students:

> *It [multiple assessments] might be more accurate in giving an idea of progress, but 4 weeks with multiple, smaller assessments would make faculty workload in marking them oppressive and completely unmanageable. I imagine the students would be pretty stressed-out too.* (F9, arts, humanities, and social sciences)

However, multiple assessment methods in one module are seen as a positive aspect when considering a variety of methods, such as those involving automated feedback, smaller scaffolded assessments that build to a larger one, and the advantage of block delivery as allowing for more in-class formative feedback:

> *I feel that this takes place where the student engages and works with tutorial support. Here you could substitute "rapid" for continuous as it would have to be a number of times over a number of "assessment points". I feel that our formative assessments provide this to a degree and our MCQs* [multiple-choice questions] *punctuated throughout some*

> *modules which form a lesser part of the summative, but the student has to engage.* (F7, health and sports sciences)
>
> *Students can build the assessment through the block, in pieces that, individually, are low stake (if they score low on one, does not have a terminal effect on the final grade).* (F49, arts, humanities, and social sciences)
>
> *I also think the block format means that there is room for formative assessment to occur more frequently in class.* (F14, arts, humanities, and social sciences)

Effectiveness

The effectiveness of assessments as demonstrating and consolidating knowledge also influenced participant perceptions. Students and faculty regarded single essays/reports and exams as lacking the ability to show depth of knowledge, since essays/reports are seen as a limited assessment method to cover a range of topics or learning outcomes and exams are considered as evaluating memory rather than knowledge:

> *If they are purely focused on the essay or report when there is a range of topics covered it could well lead them to skip over content that does need to be looked at more closely.* (F16, health and sports sciences)
>
> *Exams test for memory and the ability to perform well under extreme pressure: this only slightly reflects what a student has learnt. I feel this assessment method is quite poor.* (S56, engineering, maths, technology, and science)

Traditional essays and exams were also seen as assessing academic skills in lieu of more practical skills that are applicable to the real-life or workplace setting:

> *As Adult Nursing is such an intense academic course, my cohort alone has halved in size since the beginning as students aren't performing well in their essays … . This feels a real shame as on placement and in practical settings these same colleagues make brilliant Nurses who are perfectly competent and capable. As we know there is a huge need for Nurses now more than ever but these gaps aren't able to be filled as not enough of us are getting through the other end of the degree due to the being assessed on our writing abilities.* (S28, health and sports sciences)
>
> *Essays are confined to academia – in the "real world" we don't write essays. While this may demonstrate some critical analysis and research ability, I don't think essays truly capture learning outcomes.* (F47, arts, humanities, and social sciences)

As seen in this quotation from F47, some participants highlighted the relevance of academic skills to real life, including higher order thinking skills such as criticality and reflection, as well as behaviours such as time management skills. This is also reflected in the answer by F10 when asked about exams:

> *If you can't practise working under timed conditions in a safe space such as university, skills in working to tight deadlines or under pressure with confidence will not be explored …* (F10, health and sports sciences)

Multiple and smaller assessments were regarded as providing students with the opportunity to show a variety of skills, consolidate knowledge over time, improve engagement, and assess progression:

> *I think by having multiple smaller assessments it would be more beneficial as it allows students to have more manageable increments of academic work to do as opposed to one singular exam or essay. I think it would also give a truer reflection of their ongoing progress.* (S28, health and sports sciences)

This is linked to the importance of receiving timely feedback, since it allows for improvement during the block, as opposed to a single assessment method at the end of the block, in which improvement is limited to upcoming modules:

> *I understand it takes time for work to be marked but if there was opportunity for immediate feedback I feel it would be more beneficial as the work you have completed is fresh in your mind and you are in the mindset of that module. Having to wait several weeks can mean that once you've submitted the essay or work you can forget it as it is workload off your plate so by the time you receive feedback you have disconnected from it and may not take the feedback as intensely.* (S28, health and sports sciences)

> *It [feedback] does not need to be immediate but 3 weeks means that by the time you receive feedback, you have almost finished completely different module. It no long really applies and has much less effect.* (S29, arts, humanities, and social sciences)

However, some faculty members viewed the use of multiple assessments as a hindrance to gaining comprehensive knowledge and intellectual understanding, and advocated for the inclusion of a larger assessment at the end of the block:

> *Smaller assessment means necessarily, due to time, less intellectual depth. A balance between assessments is fundamental, but a simplified structure means a simplified line of thoughts, in which the necessary time to let the knowledge ground to the practice is impossible.* (F11, arts, humanities, and social sciences)

> *It depends on the assessment. Some smaller, more frequent assessments could work well but I think they would have to be combined with at least one longer, more sustained piece of research or writing.* (F4, arts, humanities, and social sciences)

Design

The importance of assessment design and structure was widely acknowledged among participants, especially among faculty, as key to ensure assessment accuracy. Faculty highlighted their responsibility to design effective assessments and the negative impact that poorly designed assessments might have on the student:

> *If done well by the academic, the assessment method is great. If done poorly, with little thought (which I have also seen the shall we say "recalcitrant and less adaptive" colleagues do) yes it does create problems.* (F25, arts, humanities, and social sciences)

Assessment designed as a single individual assessment at the end of the block was seen as a disadvantage to some students who might have difficulties with certain methods of assessment, which might be even more prevalent among students with special educational needs and disability

or students whose first language is not English. Contrarily, multiple assessments during one block were regarded as more inclusive, as they allow students to demonstrate their knowledge through a variety of skills as well as in a more scaffolded gradual way:

> *As a disabled neurodivergent student, exams are the worst way to assess me. I struggle with memory and concentration, as well as feeling extremely uncomfortable and on edge in such an environment. I am also chronically ill, so if I was in a symptom flare on the day, it would make it extremely difficult, if not impossible, to complete an exam. I was pleased when my course ditched exams.* (S8, arts, humanities, and social sciences)

> *It's very hard with only one assessment method to make sure students are being fairly treated. Some are much better at verbal presentations, others are better at written. Offering a range of methods is a way of evening out that disparity.* (F3, arts, humanities, and social sciences)

The idea of designing assessment in a way that allows for multiple scaffolded assignments was also connected to the relevance of the use of synoptic assessment in block. Synoptic assessment was highlighted as providing a holistic approach that avoids silo thinking and ensures a more authentic and comprehensive assessment:

> *I always use synoptic assessments whenever possible. Feedback from students clearly indicates it is the form of assessment they most enjoy and get the most value from in terms of preparing them for the workplace. Feedback from students indicates that they understand more clearly the value of the content in each module if they can see how it all links together and synoptic assessment are the best way to achieve this.* (F24, engineering, maths, technology, and science)

> *What would work best in my view is if course teams would look holistically at the assessment over the course of a given year and design the individual module assessments to reinforce the key skills students need to develop from one module to another. Unfortunately, many teams don't organize themselves and their learning that way, at least not yet.* (F25, arts, humanities, and social sciences)

As seen in this quotation from F25, although regarded as positive, synoptic assessment is seen by some faculty members as difficult based on the need for coordination among team members when designing curriculum and the lack of familiarity of some faculty members with the method. Furthermore, the comments extend beyond accuracy, highlighting the synoptic assessments being perceived as more comprehensive and supportive of learning, creating deeper understanding as students see how their modules link together.

Student wellbeing

Student wellbeing was another factor impacting faculty and student perspectives on assessment methods. Single assessment methods, including exams and essays, were regarded as having a negative impact on students' mental health, including stress and anxiety, as opposed to multiple smaller assessments. This is because multiple assessments allow students to check their progress as well as receive and act on the feedback during the block, which can positively impact their confidence and performance:

> *You would spend less time panicking and waiting for large chunks of formal feedback on assignments. Having feedback throughout helps gain an understanding of where you're at.* (S32, arts, humanities, and social sciences)
>
> *Rapid feedback allows students to build confidence and realign their approach to the subject if they need direction. This method may allow students to achieve better grades.* (F48, business)

However, although multiple assessments were seen as decreasing anxiety and stress, a small number of participants considered the possibility of multiple assessments as being detrimental to the students' mental health due to the increase in the workload and/or the number of deadlines:

> *Can get too overwhelming and might not have a clear enough idea of the period yet to be able to answer small assessments in depth.* (S31, arts, humanities, and social sciences)
>
> *Allows different topics to be covered meaning everyone gets a chance at showing the ones they understood best and a range of the ones they maybe didn't understand so well. However, it does add more stress as multiple deadlines.* (S41, arts, humanities, and social sciences)

Discussion

Understanding student and faculty perceptions of assessment methods is crucial, as these perceptions significantly influence learning approaches, aiming to ensure learning is both deep and meaningful, and assessments are seen as fair and authentic (Struyven et al., 2005). Despite the dearth of research on assessment methods in a block and blend context, a recent study revealed that students achieve higher grades when multiple smaller assessments (arguably continuous assessments) occur throughout a module compared to single essays or reports at the end of a module (Buck et al., 2023). However, in this study, we did not delve into the perceptions of students and faculty on these methods, an area our research aimed to address.

Our results indicate that both students and faculty regard multiple smaller assessments as the most accurate in evaluating the learning of a module. Interestingly, despite this method being perceived favourably, its implementation makes up less than half of all assessments in some instances (Buck et al., 2023). This could be due to the structural constraints of block, such as having an allocated "assessment week", or perceived increase in teaching and assessing workload, a concern raised by faculty in our study. This is notable, as multiple smaller assessments were preferred over traditional methods, which were often viewed as "outdated" and "unfair", corroborating perceptions in the wider assessment literature (McSweeney, 2014; Struyven et al., 2005). Furthermore, students and faculty perceived multiple smaller assessments as providing a "truer reflection" of the learning in a module while allowing for "more manageable increments of academic work".

The preference for continuous or multiple smaller assessments holds true regardless of the mode of delivery. However, its adoption in a block and blend context presents unique challenges. For instance, some faculty members in our study believed this assessment method would make workload "completely unmanageable". Such challenges lead to precarity, as traditional assessment methods appear to be disadvantageous in this context, due to students describing limited time at the end of a block to consolidate their learning and prepare for assessment, and

faculty highlighting the “temptation to teach to the exam” because of time pressures. Therefore, implementing multiple smaller assessments is likely to require new approaches for faculty, such as utilising educational technologies to automate marking and feedback (e.g., multiple-choice and multiple-attempt assessments; Faulconer et al., 2021), and adopting alternative assessment modes, namely presentations, peer or group marking, and feedback (Pereira et al., 2016).

Our study adds to the limited literature on assessments in a block and blend context and aligns with the findings of the wider assessment literature; however, it has limitations. First, the study’s sample size was relatively small, and the overrepresentation of certain groups, such as second-year students and those in the arts, humanities, and social sciences, limits the generalisability of the findings. Second, our research relied on participants’ perceptions regarding the accuracy of assessment methods. Although these perceptions offer valuable insights, the use of self-reported measures is subject to potential biases and inaccuracies inherent in self-assessment. These limitations accentuate the need for further research with larger, more diverse samples, and the triangulation of data sources to enhance the robustness and generalisability of future studies in this domain.

Conclusions and Implications

The rapid advancement of artificial intelligence is prompting HEIs to reconsider their assessment designs and how alternative assessment methods may offer more accurate evaluations of learning. This, together with the unique challenges and opportunities of a block and blend delivery, highlights the importance of creating assessments that are perceived as fair and authentic, while considering the implications on faculty workload.

The use of multiple smaller assessments has been shown to improve student grades and is regarded as a highly accurate way to evaluate learning within a module, and as such should be considered by practitioners in a block and blend context. However, the intensity of block teaching and the implications of this assessment method on faculty workload necessitate a shift in practices for the implementation to be successful. One approach to facilitate the necessary shift could be for professional development programs to include training in educational technologies to streamline assessment design and automate marking and feedback. Furthermore, these programs could also include the exploration of alternative assessment modes, such as peer or group marking.

As HEIs evolve their assessment practices, the role of incorporating student feedback cannot be understated as their perceptions directly impact their approach to learning. Engaging with students about new practices not only deepens their understanding but also provides valuable insights into how they might be viewed in terms of fairness and authenticity. Such engagement is crucial in shaping an educational environment where assessments are tools for both grading and meaningful learning. Ultimately, the goal is to create an academic atmosphere where continuous innovation and student-centred approaches work in tandem to enhance the quality and relevance of HE.

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Conflict of Interest

The authors disclose that they have no actual or perceived conflicts of interest.

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