

The Role of Supervisors in Asynchronous Learning Models for Dissertation Teaching

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Abstract: This study examines the extent to which the timing of supervisor allocation, module commencement date, and mode of delivery impact MA dissertation students' final outcomes within asynchronous learning environments. While the importance of dissertation supervision is widely acknowledged, the relative effect of supervisory support compared to structured online learning resources remains understudied, particularly in traditional universities adopting pandemic-era remote teaching models. The research addresses this gap by analysing data from 240 master students at a post-92 university who undertook fully remote dissertations without campus access or in-person tutorials during COVID-19 restrictions. Through quantitative analysis of academic outcomes and qualitative surveys, the study reveals how varied supervision patterns (including early vs delayed allocation), course timelines, and prior campus access influenced engagement with asynchronous materials and final dissertation grades. Results demonstrate that supervisor allocation timing emerged as the most critical factor, with cohorts receiving supervisors in Term 1 achieving significantly higher dissertation scores and deeper engagement with online resources than those allocated supervisors later. These findings highlight the enduring centrality of human mentorship even within structured asynchronous learning systems while challenging assumptions about the sufficiency of self-directed digital resources alone for complex research projects. The study contributes new empirical evidence about balancing technological and interpersonal supports in postgraduate research education.

Key Words: Online learning, asynchronous, dissertation supervision, self-directed learning, research education.

Dissertations writing poses significant challenges for both students and instructors. Compared to other academic tasks, it demands self-motivation, application of skills and extended periods of independent working. Likewise, for the instructor, teaching a dissertation is often epitomised by providing students with diverse writing and research skills, enabling them to ultimately develop their own working style. Given the challenging nature of writing dissertations, most universities offer students a supervisor to provide one-to-one tailored support. However, the importance of the supervisor, compared to skills-based workshops, has been underexplored. The prevailing notion is that both are equally important and interdependent. However, much of the traditional skills-based workshops shifted online during 2020-22, offering a unique opportunity to study the role of independent learning alongside supervision.

The paper draws upon the experiences of 240 masters' students at a post-92 university. These students, from five cohorts, undertook their dissertations during the pandemic without access to campus or in-person teaching. Their experiences varied due to differences in supervision patterns, course start times, and access to campus for essential modules (as allowed under the pandemic rules). This provides us with an important set of data about how different factors might affect online student learning.

Furthermore, the number of students involved necessitated fully asynchronous teaching – an unusual approach during the pandemic, but far from new in higher education (Schifter, 2000). The effectiveness of such methods has long been debated (See DeNeui & Dodge, 2006) and continue to this day (Weller, 2020). Early studies suggested that asynchronous learning could yield high student satisfaction (Rovai, 2002; Coppola et al., 2014), yet concerns about its

depersonalising effect have persisted since the 1980s (See Kiesler et al., 1984) and certainly persist today. While institutions like the Open University have shown potential for excellent outcomes for asynchronous learning, scepticism remains in other institutions regarding its value, satisfaction, and effectiveness. This may partially be attributed to the notion that online learning is less valued in tenure and promotion decisions (Schifter, 2000). However, empirical evidence on the benefits of fully asynchronous learning within a more traditional teacher-led learning environment remains limited.

To this end, this study aimed to answer four key questions:

1. Did those who spent most time with the materials have better dissertations?
2. What effect did the timing of supervisor allocation have on learning?
3. What effect did the timing of the module have on learning?
4. Did students feel like this module met their learning needs?

Literature Review

As educators, our primary goal is to seek learning and education of our students through the environments we create. During the pandemic, concerns were raised that online and asynchronous learning might hinder this process. However, research has previously shown that distance learning is not a distinct learning process (Kirby & Driscoll, 1997) and that it is course design, attitudes, and communication that are more influential than being online or offline (Coppola et al., 2014). Early studies by Verduin and Clark (1991) showed that distance learners could achieve similar, if not superior, results to their face-to-face colleagues – a finding supported by numerous subsequent studies (Jena & Gupta, 2019; Specht et al., 2021). This review explores how distance learning, online pedagogy, cohort size and the instructor's role might affect student attainment on a dissertation module.

Distance and online learning across levels

The effectiveness of distance learning has been a subject of extensive research across various educational levels. This section examines the impact of asynchronous and online learning environments on undergraduate, graduate, and dissertation-level students.

At undergraduate level, numerous studies have demonstrated that distance learning can yield comparable, if not superior, results to traditional face-to-face instruction. Early work by Verduin and Clark (1991) demonstrated this trend, with distance learners often achieving similar or better outcomes than their on-campus counterparts – a finding corroborated by subsequent research (Jena & Gupta, 2019; Specht et al., 2021). Well-designed asynchronous environments, which allow students to engage with material at their own pace, are key to this success (Li et al., 2007). This aligns with Hmelo and Ferrari's (1997) concept of 'application of knowledge' as a higher-order learning activity.

The effectiveness of online learning at undergraduate level is not without challenges. Large undergraduate cohorts, which often struggle with engagement in traditional settings, can benefit from well-designed asynchronous online classes. Coppola et al. (2014) suggest that online environments can facilitate higher participation rates than lectures in large theatre halls, potentially benefiting these groups.

At the graduate level, the scenario is more complex. While some studies show positive outcomes, others highlight unique challenges. Rovai (2002) emphasises the need for teaching graduate students how to learn online, suggesting a crucial role for instructors and supervisors. Moreover, balancing structure and learner autonomy is critical as overly structured learning environments might support dependent learners but can frustrate the self-directed ones (Rovai, 2000). In this context, the concept of scaffolding becomes particularly crucial as it supports

deeper learning by providing a suitable framework for students to achieve their learning goals (Jena & Gupta, 2019). Effective scaffolding in asynchronous graduate environments might involve timely released learning materials, consistent presentation styles, and a mix of multimedia content to support diverse preferences.

Research on fully asynchronous dissertation-level learning remains limited, presenting a notable gap in the literature. However, insights can be drawn from studies on postgraduate supervision and self-directed learning in online contexts. Garvis and Pendergast (2012) have shown that supervision has a significant impact on attainment, although this varies across disciplines. Firth and Martens (2008) argues that despite changes in university teaching approaches, supervision remains a distinct pedagogical practice especially in online and asynchronous contexts.

The challenges of asynchronous learning at the dissertation level are compounded by the need for high levels of self-direction and motivation. Moore's (2009) concept of content interaction as a defining characteristic of education becomes particularly relevant here, as dissertation students must engage deeply with their research materials often without immediate instructor feedback.

To address these challenges, Hammond (2005) suggests building moments for reflection into the curriculum design. Additionally, creating a sense of community among dissertation students, can enhance persistence and success in online learning environments (Rovai, 2002). Collaborative online spaces can lead to what Vygotsky and Cole (1978) termed the 'zone of proximal development', supporting independent problem-solving skills crucial for dissertation-level work.

While distance learning has shown effectiveness across educational levels, its application to dissertation-level research presents unique challenges and opportunities. Future research should focus on developing and evaluating strategies tailored to asynchronous doctoral learning, addressing the needs of self-directed researchers engaged in long-term, independent projects.

Factors affecting online learning outcomes

The effectiveness of asynchronous learning environments depends on several critical factors, including course design, student motivation, and community-building. A well-designed asynchronous environment can promote active learning and engagement, even without real-time interaction. Li et al. (2007) argue that self-paced, structured courses allow students to engage with materials at their convenience, enhancing absorption and application of knowledge.

Scaffolding emerges as a crucial concept in asynchronous learning design. Jena and Gupta (2019) describe scaffolding as a process designed to support deeper learning by providing a suitable framework for students to achieve their learning goals. However, Rovai (2000) cautions that overly structured environments may support dependent learners, but frustrate self-directed ones, underscoring the importance of flexible design that can accommodate diverse learning styles.

Maintaining student motivation in asynchronous settings presents unique challenges. Astin (1984) defines motivation as the physical energy students devote to the academic experiences. In traditional settings, instructors often rely on what Rovai (2001) termed "instructor immediacy" – immediate verbal and nonverbal communications – to stimulate and maintain this motivation. The absence of these immediate cues in asynchronous environments necessitates alternative strategies for fostering engagement. In this context, Hammond (2005) emphasises the importance of building moments for reflection into the curriculum design. Additionally, Northey et al. (2015) and Specht et al. (2021) stress the need for consistent incentives and a unified learning ecosystem in which students can become quickly familiar with both the learning tools and the learning process.

Contrary to the perception of asynchronous learning as a solitary endeavour, research increasingly highlights the importance of community-building in these environments. Rovai (2002) found that students who feel a sense of community are more likely to persist in online learning environments. Asynchronous learning can foster collaborative spaces that create what Vygotsky and Cole (1978) termed the 'zone of proximal development', leading to self-development and independent problem-solving skills. This is achieved through carefully designed learner-learner interactions, as suggested by Chou (2002), that are not dependent on the immediate presence of an instructor. However, the effective use of technology is crucial in facilitating these interactions and building online communities. Though there is some scepticism, Hiltz and Wellman (1997) demonstrated that digital connections can offer both emotional and collaborative support, overcoming the physical and temporal barriers inherent in asynchronous learning.

The success of asynchronous learning environments hinges on thoughtful course design, student engagement strategies, and meaningful peer interactions. By addressing these factors, educators can create effective online learning communities that support deep learning and student success, even without real-time interaction. As universities adapt to evolving educational paradigms, these principles will be crucial for developing robust and engaging asynchronous learning experiences.

The role of the instructor

Asynchronous online learning necessitates a significant shift in the role of instructors, demanding new skills and approaches to effectively support student learning. Coppola et al. (2014) identified three key areas of change: cognitive, affective, and managerial. The cognitive role involves innovatively presenting materials and engaging students in deeper learning processes. The affective role becomes more challenging as instructors must build relationships and motivate students without face-to-face interaction. The managerial role requires different strategies for course planning, organisation, and assessments in asynchronous settings.

Instructors must also act as facilitators, creating opportunities for student engagement and fostering a sense of community. In this regard, they can utilise the previously described concepts such as the 'zone of proximal development' (Vygotsky & Cole, 1978) or the 'moments for reflection' (Hammond, 2005), which can enhance student participation and deepen learning experiences.

Supervision in online and asynchronous contexts presents its own set of challenges, particularly for graduate and dissertation-level students. Firth and Martens (2008) argues that despite different teaching approaches, supervision remains a distinct pedagogical practice. Additionally, Garvis and Pendergast (2012) highlight that supervision has a significant impact on student attainment, emphasising the need for supervisors to adapt their practices to the online environment.

A key challenge for instructors in asynchronous learning environments is striking the right balance between providing structure and promoting learner autonomy. Rovai (2000) found that while structured environments might support dependent learners, they may frustrate more self-directed learners who may perceive it as overly authoritarian. Therefore, instructors must adopt flexible approaches with diverse learning styles while still offering clear guidelines and expectations.

Jaffee (1997) emphasises the importance of active learning, suggesting that students should participate in their learning and translate ideas into practice. This aligns with Hmelo and Ferrari's (1997) concept of 'application of knowledge' as a higher-order learning activity. Therefore, in the context of online learning, instructors must transition from traditional lecturing to facilitation and adaptive supervision to create engaging and effective learning experiences that support student success and meaningful learning (Northey et al., 2015; Specht et al., 2021).

Evidence suggests that well-designed asynchronous learning can be as effective, if not more so, than traditional face-to-face instruction. However, the success depends on thoughtful course design, effective engagement strategies, and vibrant online learning communities. The evolving role of instructors from lecturers to facilitators is crucial in this context, requiring new skills and approaches to guide student learning effectively. While challenges exist, particularly in maintaining student motivation and providing adequate supervision, research indicates that these can be overcome through careful planning and the implementation of supportive structures.

Methodology

The research methodology comprises three stages: the structure of the five cohorts' overall learning, the design of the asynchronous learning, and the process of analysing the findings. This study was conducted between September 2020 and August 2022, spanning three academic years disrupted by COVID-19 restrictions.

Ethical Considerations

This study received ethical approval from the University Research Ethics Committee (REF: 2021/DISS/45) and adhered to British Educational Research Association (BERA, 2018) guidelines throughout. Participants provided written consent through the university's virtual learning environment, with clear information about the study aims, data usage, anonymisation procedures, and their right to withdraw without any penalty. Data was stored encrypted on the university's secure servers for 5 years per UK Data Protection Act 2018 requirements, accessible only to the research team. Participants were purposively sampled from mandatory dissertation modules, excluding those with formal learning accommodations ($n=14$) to control for special educational needs variables.

The Cohorts

This research examines the asynchronous experiences of 240 MA students (mean age 24.7, $SD=3.1$) from three cohorts across five courses, undertaking a shared MA dissertation module. The sample comprised 63% international students (primarily from China), 72% female, and 28% male, with 41% having prior online learning experience. For the quantitative data analysis, data from students who did not submit their dissertation, did not engage with the unit activities or had null data points were removed, leaving 204 in the final sample. For the analysis of survey feedback, data from 133 were collected and analysed.

Under normal circumstances all students on a given module should be receiving the same experience, and in terms of the learning inputs this was the case. The pandemic though led to students on this asynchronous dissertation module having differing experiences outside of the module, and in relation to the module (See figure 1). Cohort 1 ($n=141$) comprises of students from 4 courses all which follow a very similar curriculum as part of their overall degree. In terms of teaching all their learning took place online across all their modules. The learning consisted of a majority of live online classes, with the use of asynchronous tools such as discussion boards. Students in IMB and MM were mostly in the UK, with some working from other countries. Those on the GMB route were working remotely from China. This required the use of a VPN and meant time zone differences impacted more significantly on synchronous online learning. All students in these courses followed the same pattern of learning for their dissertation – starting halfway through their course with eight weeks of asynchronous learning, followed by the submission of a research proposal, then allocation of a supervisor, independent working, and then submitting in the August following their enrolment. Those on the PR course also followed a similar pattern, although the content of the rest of their degree differed significantly, and

students from this cohort were required to submit not only a proposal, but also a draft literature review early in the process. Their final submission also came earlier in August. A one-way ANOVA saw no difference between the students on these courses and due to the similarity in curriculum and timelines, thus these students were grouped as Cohort 1.

Cohort 2 (n=25) had a rather different experience. They shared no other modules with Cohort 1, and while the eight weeks of asynchronous learning came halfway through their degree, these students had had a supervisor allocated from the first week of their course. These students also submitted a proposal following the taught part of the course but were required to submit their thesis a few weeks earlier than Cohort 1. Additionally, they were required to submit an assessed draft after the first 10 weeks of independent learning. Moreover, Cohort 2, due to the practical nature of their course had had some experience of working on campus between September and December 2020. In January, COVID rules in the UK changed, and all teaching moved online.

Cohort 3 (n=38) followed the same curriculum as Cohort 2, but began in January rather than September – a one-off intake. This late start came about as it was hoped they might get a fully on campus experience. However, by their time of starting, UK universities were working 100% online. Cohort 3 followed the same pattern as Cohort 2; however, to minimise staff workloads they undertook the asynchronous dissertation module from the first week of their course. While proposal submission and final thesis submission were pushed back to more usual timeframes, it was highly unusual to start students on their dissertation in week 1.

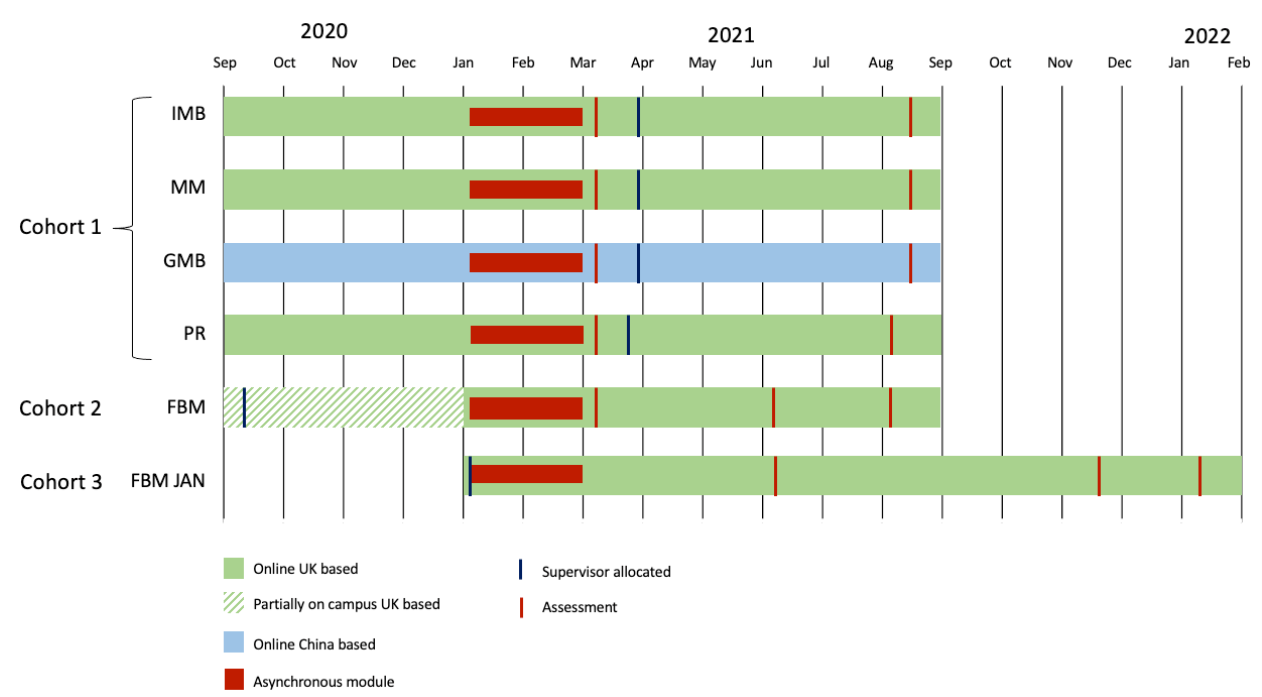


Figure 1: Learning pattern for each cohort.

Design of learning

Previously, managing numerous individual projects was challenging, but groupwork, hover support, presentations and peer review made oversight feasible for a single instructor. However, replicating this online would have been time consuming and unsatisfactory for students. Instead, a self-paced course was developed using asynchronous learning materials, enabling students to acquire research proposal writing skills and revisit content while working on dissertations.

Previous research had demonstrated no discernible change in outcome for students working asynchronously or synchronously (Coppola et al., 2014), addressing ethical concerns.

The main challenge was overcoming student mistrust about asynchronous learning (Rovai, 2000), especially amid criticism from UK government and media (Specht, 2021). Following studies that showed that course materials needed to be highly structured to provide confidence to students (Bohlin & Hunt, 1995), and those that showed that immediate feedback is most welcomed by students (Kulik & Kulik, 1988) eight learning units were developed in the Blackboard Ultra – the university’s VLE (See figure 2).

Each learning unit, released on Monday mornings (UK time), included videos, written texts and audio. Each unit was assessed by weekly quizzes due by Friday at 5 PM. The students received immediate automated feedback with unlimited attempts to score 100%. The final unit required students to submit a draft proposal for manual feedback before submitting the final version.

	LU 1	LU 2	LU 3	LU 4	LU 5	LU 6	LU 7	LU 8
Topic	What is a dissertation	Literature Reviews	Locating data and landscape analysis	Research proposals	Methodologies	Interviews and focus groups	Surveys and data analysis	More research method and proposal drafts
Learning resources	11.25 mins of video + 1 reading (10 pages)	15.52 mins of video + 2 readings (25 pages)	20.19 mins video + 1 reading (5 pages) 31 mins of optional videos	4.46 mins of video + 4 readings (29 pages)	14.56 mins of video + 1 readings (3 pages). Self directed reading on topic	13.06 mins of video + 2 readings (7 pages)	16.05 mins of video + 34mins optional video and 7 optional resources	9.27 mins of video + 1 reading (3 pages) + 11mins optional videos
Assessment	2 closed questions 2 open questions	2 closed questions 5 reflective open questions	1 closed questions 4 open questions	5 closed questions Start drafting proposal	5 closed questions	5 closed questions	4 closed questions	2 closed questions Submission of proposal 6 closed self check questions
Marking	Automatic on closed, no instructor feedback on open	Automatic on closed, no instructor feedback on open	Automatic on closed, rubric based instructor feedback on open	Automatic on closed, no comment on proposal at this stage	Automatic on closed	Automatic on closed	Automatic on closed	Automatic on closed, full supervisor feedback on proposal

Figure 2: Learning units developed.

Methods of Analysis

The success of this asynchronous learning, and the effect of outside parameters such as prior on-campus experience, module placement within the degree, and timing of supervisor allocation was essential to our understanding of how such a module might fit within courses as we return to campus fully. It was also important to examine how the learning inside the module affected outcomes.

The analysis involved comparing final dissertation grades using a one-way ANOVA, followed by t-tests, simple regression, and Pearson Correlation on scores in the asynchronous units, time spent on the units, and draft grades. New controls were added for prior online experience (ANCOVA $F=4.21$, $p=.042$), age cohort effects (Pearson $r=.18$, $p=.023$), and international student status ($t=2.89$, $p=.004$).

For qualitative feedback, a survey on student experiences was completed by 133 students covering all cohorts. Additionally, five students (Cohort 1: $n=3$, Cohort 2: $n=2$) participated in focus groups, conducted by a third-party researcher post-marking to prevent bias.

The limited focus group participation ($n=5$) reflects known challenges in pandemic-era research engagement (Jisc, 2020). While 4/5 students praised the course design, 13% expressed disagreement, highlighting areas for improvement. Triangulating focus group and survey data mitigates sampling bias.

This comprehensive methodology provides a thorough evaluation of asynchronous learning in dissertation modules and investigates how different variables affect student outcomes and experiences.

Results

The individual unit and time spent per unit were plotted on a scatter plot to note any observable trends. Pearson's correlation showed a strong correlation between time spent and average unit scores ($r = .214, p = .001$). A similar inevitable correlation was seen between proposal and final dissertation grades ($r = .436, p = .000$), demonstrating that proposals grades are a strong predictor for final outcome. These findings suggest that higher dissertation grades align with higher unit scores and greater time investment – an expected result.

The relationship between supervisor allocation timing, module start date, and delivery mode (hybrid, campus-based, or fully remote) and learners' final dissertation grades was also significant ($F(3, 202) = 2.751, p = .044$). Independent samples t -tests revealed significant differences between cohorts 1 and 2 ($t(166) = 1.29, p = .05$), and 1 and 3 ($t(180) = -1.216, p = .00$) with cohort 1 scoring lower in both cases.

Timing of supervisor allocation was also seen to have an impact on learning. Cohorts 2 and 3, assigned with a supervisor from Term 1, spent more time on the units ($F(3, 202) = 13.869, p = .000$) and achieved higher scores across the asynchronous units ($F(3, 202) = 4.442, p = .013$). The mean scores and time spent on each unit for each cohort can be seen in Table 1.1.

Table 1.1. Mean scores and standard deviation of scores and time spent on each unit.

	<i>Mean Final Grade</i>	<i>Mean Score across units</i>	<i>Mean Time spent on units (hours)</i>
Cohort 1	62.26	69.38	1.78
Cohort 2	65.36	83.33	2.43
Cohort 3	64.28	77.77	2.55

A simple regression assessed whether time spent on the learning units predicted final dissertation grades. Results showed time was not a strong predictor ($F(1, 203) = .064, p = .800, R^2 = .000, R^2_{\text{adjusted}} = -.005$). The regression coefficient ($B = .177, \text{CI } 95\% [-1.199, 1.553]$) indicated a negligible increase of 0.18 in final scores per additional time spent.

Supervisors were instructed to provide approximately 12 hours of supervision per student, including meetings (online), reading work and providing feedback. Actual supervision ranged from 6–12 hours, depending on student engagement. Tracking exact supervision time was deemed intrusive and potentially detrimental, so this study focuses on the impact of early supervisor allocation on performance.

Survey and Focus Groups

A survey of 133 students helped contextualised the above findings, with the following cohort breakdown: Cohort 1 = 101, Cohort 2 = 18, and Cohort 3 = 9. Of these 47% ($n=63$) were in China, 43% ($n=57$) in the UK, though just 7% ($n=9$) of those surveyed were from the UK themselves. Most students had a reliable internet connection (90%), private study spaces (77%), and no caring responsibilities affecting their learning (90%). Nearly all of respondents accessed the course via laptop (95%), while 19% also used mobile phones.

As noted above, the structure and scaffolding of an asynchronous course is key to enabling student success and to support motivation. While 76% ($n=102$) felt the Monday–Friday schedule filled well with their timetable, 7% ($n=8$) strongly preferred having weekends to complete the work, noting in open questions related to the scheduling that “*Almost every week. We needed the weekend to complete the modules - having Monday - Friday was NOT enough time*”. VLE data indicated students spent an average of 2 hours per unit, though 79% self-reported spending only 30 minutes to 2 hours, similar to pre-pandemic classroom time. About 17% did report spending

more than 2 hours per week and these correlated with those who felt they also needed the weekend.

Students largely appreciated the course structure, with 81% finding weekly tasks supporting, 86% reporting that the instructions were easy to follow, and 85% finding the learning content interesting, informative and helpful for weekly quizzes. Some specifically cited the ability to rewatch videos as an important part of their learning; *"I can watch the videos over and over again until I understand the content."* Closed questions in the quizzes were favoured (85% liked) compared to the few more open questions used (73% liked). The weekly notifications and reminders were well-received with 89% of students finding them useful and motivating. Overall, 81% of students found that the combination of emails, content, and quizzes with automated feedback supported their learning.

This positive feedback was reflected in the open-ended survey questions too, with many highlighting the structured nature of the course as particularly supportive to their learning. *"I liked that it was like a step-by-step guide and wasn't overwhelming"* noted one, with others noting that it had *"well managed parts to study each week"* and also that they *"really like the module that it divides the whole work to different parts"*. It appeared that the module succeeded in providing a systematic and step-by-step approach to writing a proposal, reducing procrastination and ensuring that most students did not leave the work until the end.

Despite these positives, survey responses also indicated a significant design flaw that caused distress among students. In LU2, students were asked to provide a full text research question, which was manually marked but only received one of three outcomes: fully approved, needs more work or not completed. In the final LU, students were invited to submit a draft with references. Both of these tasks and the nature of the feedback differed significantly from the rest of the module. The abrupt change in workload, pace, and feedback style very much threw students off.

In open questions about workload, students reported that *"The workload for each week varied widely: during some weeks, I was able to finish the tasks on the day they were assign and in other weeks, I could barely make the deadline"*. With another suggesting that they had *"always thought it was simple choices and fill-in-the-blank questions. [...] I only opened this module on Friday, after I saw the question, I was worried and frustrated because it was too hurry to read related literature and finish the work"*.

Additionally, students reported concerns over the lack of feedback on the open questions and the chosen research question, feeling they were not adequately supported in revising their work. While 22% suggested they had no frustrating moments, the majority expressed difficulty adapting to shifting workloads and felt that the communication in this regard was not adequate. Students reported concerns that *"There was not enough feedback. And having at least one online live class would help a lot"*. Another highlighted that it was *"hard to communicate with the teachers, and they didn't get straightforward feedback about the research questions"*. The poor feedback on open-ended questions was perhaps the biggest worry for students; *"We can't get very specific and detailed feedback; we can't solve the problem better"*; *"Not enough personalized feedback"*.

Those students who had their supervisor assigned earlier though were less concerned with these issues. About 31% of students from the survey had their supervisor assigned before the module began. While there was no mathematical correlation between the early assigning of supervisors and feeling supported, these students were less likely to report the above frustrations in the open-ended questions. Overall, 74% of respondents felt supported, noting that *"I got confused few times, but it got sorted after talking with the tutor. We are receiving great support for this paper, which is really useful."* Of the 9% who strongly disagreed that the module supported them, it was calls for earlier supervisor allocation that were most vocalised. *"We need to be able to meet with our supervisors much earlier"* noted one student. It should be noted that supervisors who were allocated early reported increased workloads and annoyance at the asynchronous nature of the module, as it shifted the focus of student support on to them.

Overall, 79% of students reported that the module prepared them for their proposal and dissertation, while 7% (n=9) were concerned they were not ready. Of 129 responses, 34% (n=44) rated the module 5/5, and 56% (n=59) giving it 4/5, averaging 4.08/5 - consistent with the average scores of 4.2/5 and 4.3/5 for the dissertation module prior to being asynchronous. However, only 27% strongly agreed that more modules should follow this format, while 13% disagreed or strongly disagreed.

These sentiments were correlated by the focus group carried out following the submission of the students' research proposals. Participation was self-selecting with only five students taking part. Insights from this discussion, combined with open survey responses, were coded to identify key themes (see Figure 3). The course design was widely praised for its clear structure and ease of navigation – something many felt was not achievable in Blackboard Ultra. Students reported that *“What I like is it's step by step. You can follow the pace of [the lecturer] and let [the lecturer] lead you from easier parts to much more difficult parts”*; *“The instructions in the videos helped me complete the steps. Very clear and easy to navigate and operate”*.

Likewise, students generally saw the video content of the asynchronous module as high quality and educationally relevant. The videos helped them prepare for the formative tasks and were clear and easy to understand. Students did note that at times they had to watch videos several times to extract the necessary information for the weekly quiz, viewing this as a drawback. However, the ability to return to the materials was also highlighted as beneficial. One focus group participant noted, *“I think that [the lecturer] did a very good job with that because he put a lot of information into some sort of way that it didn't get boring because you had recorded lectures, and you also had those quizzes and so on.”*

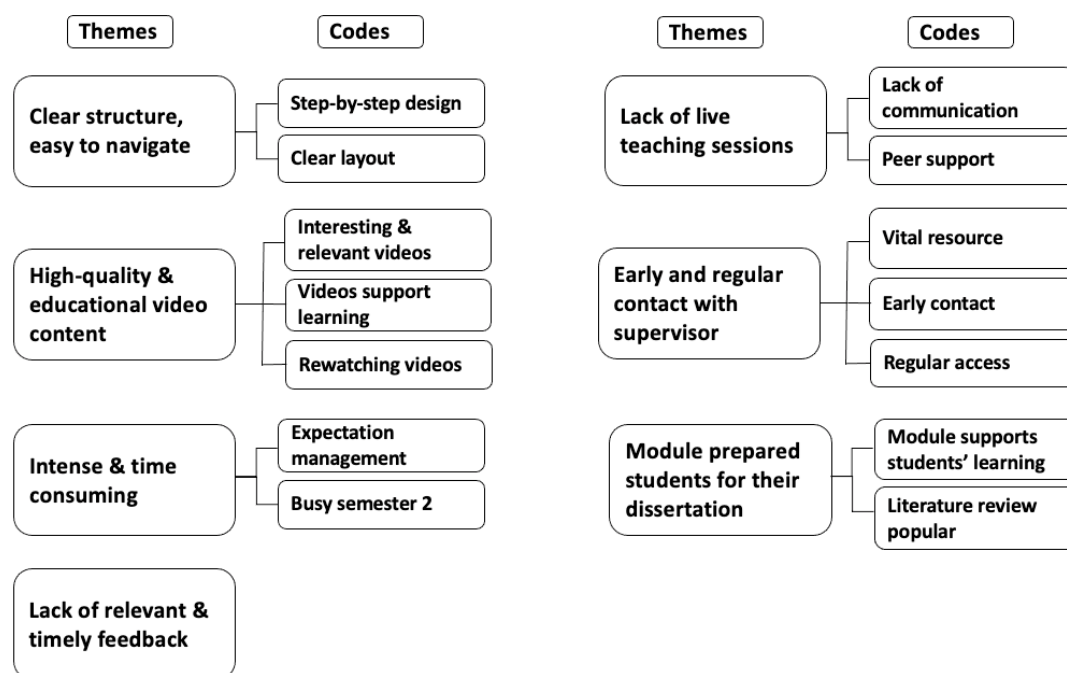


Figure 3: Themes and codes from focus groups and open survey questions.

Where the closed survey questions suggest a general sense of a module that was enjoyed by students, open responses and the focus group highlight certain concerns. Students found it time consuming and more intensive than expected. One participant noted that *“because the multiple-choice questions came from the video, and you literally found yourself sitting there for I know for like 2 1/2 hours trying to get the answer.”* And others reported that there was too much to do in the same semester and they didn't have time to focus on this module. Although the average time spent in

asynchronous learning was less than the pre-pandemic physical classes – where additional homework was also required – students perceived it as more demanding.

Several factors may have contributed to this perception. For example, in-class teaching provides fast, effective, and supportive feedback that can help students feel they are progressing and learning (Cremin et al., 2007). In the asynchronous class however, students reported not getting enough relevant, tailored or timely feedback. While most feedback was autogenerated and instant, it often felt disconnected from their specific research project. Fully tailored feedback only arrived at the end of the module, reinforcing the desire for earlier supervisor allocation. Those who had their supervisors from the outset (n=80) felt more confident, viewing their supervisor as a valuable resource, while others called for earlier assignments.

Overwhelmingly students reported wanting live classes as part of the module. Though few suggested the whole module should be live, many felt that certain aspects should be, allowing for asking questions and increase communication time with staff. Students did report starting their own WhatsApp group where they shared ideas and peer learning – reported as an antidote to what was perceived as a lack of human feedback on the module. Furthermore, the asynchronous nature of the module heightened the potential loneliness of a dissertation module (Janta et al., 2012). With students reporting that “*I don’t feel any involvement with other students.*” and, “*Well, actually we weren’t talking so much with the other students until one day I actually kind of started the conversation because I didn’t get something and I was thinking, OK, I will ask in our group chat. So, we were very lucky that we had this group chat of our class.*”

Overall, students found the module to have a clear structure and quality teaching materials that supported students learning. And that there was a clear, step-by-step design and structure of the module and the quality teaching materials helped prepare students for their dissertation. However, lack of interaction left students feeling isolated and concerned, even where data shows learning was taking place.

Discussion

This study examined how asynchronous learning environments, supervisor allocation timing, and module design influenced MA dissertation outcomes during the pandemic, drawing insights from 240 students across five cohorts. The findings both corroborate and qualify longstanding debates in online pedagogy, revealing critical tensions between structured independence, human interaction, and academic success.

The absence of correlation between time spent on asynchronous materials and final dissertation grades ($R^2 = .000$) challenges assumptions about self-directed learning. While 85% approved of structured weekly units, grades proved an imperfect measure of skill acquisition, echoing Rovai’s (2002) critique that traditional metrics may obscure deeper learning processes. This aligns with Coppola et al.’s (2014) assertion that asynchronous environments foster cognitive application over rote performance. However, the disconnect here suggests students may have engaged superficially with automated quizzes to ‘please’ instructors—a phenomenon Jaffee (1997) warned against in passive online models. Crucially, the lack of prior training in self-directed learning—a scaffold Rovai (2002) deemed essential—left many students ill-equipped to translate materials into original research.

Supervisor allocation timing emerged as the most consequential factor. Cohorts 2–3 (Term 1 allocation) achieved significantly higher grades ($F(3, 202) = 2.751, p = .044$) and engagement, directly reinforcing Garvis and Pendergast’s (2012) observations about supervisory influence. Early allocation mitigated the ‘depersonalisation’ risks of computer-mediated learning (Kiesler et al., 1984), providing the ‘instructor immediacy’ Rovai (2001) deemed critical for motivation. Students with early supervisors reported greater confidence navigating open-ended tasks, aligning with Petrie’s (2011) view of supervisors as cognitive mediators. However,

supervisors reported unsustainable workloads, highlighting tensions between Hammond's (2005) scaffolding ideals and the labour realities of personalised guidance.

Contrary to expectations, module timing had no significant academic impact, yet provoked disproportionate student anxiety. Cohort 3 (dissertations started in Week 1) reported feeling unprepared despite equivalent outcomes, mirroring Hmelo and Ferrari's (1997) findings that premature complexity undermines self-efficacy. This contrasts with Verduin and Clark's (1991) early optimism about distance learners' adaptability, suggesting pandemic-era students required greater transitional support. The dissonance between quantitative equivalence and qualitative discomfort underscores Astin's (1984) 'energy investment' theory—emotional strain may not manifest in grades but could affect long-term persistence.

Student feedback revealed paradoxical perceptions: 79% felt prepared for dissertation writing, yet 27% opposed further asynchronous modules. This mirrors Specht et al.'s (2021) 'automation paradox', where structured efficiency clashes with desires for human connection. While discussion forums could theoretically address isolation (Chou 2002; Rovai 2002), students favoured an organic community such as WhatsApp groups, aligning with Hiltz and Wellman's (1997) observations about emotional support in digital spaces. Future modules should formally integrate peer channels rather than relying solely on instructor-led forums.

The abrupt shift to open-ended tasks in later units caused distress, violating Jena and Gupta's (2019) principle of consistent incentives. Students accustomed to weekly quizzes (73% approval) struggled when scaffolds shifted, creating 'pedagogical whiplash' that contradicts Hammond's (2005) phased autonomy model. The backlash against limited personalisation in automated feedback further underscores Coppola et al.'s (2014) warning: asynchronous efficiency must complement, not replace, tailored guidance—particularly in advanced research tasks where Garvis and Pendergast's (2012) supervisory expertise becomes indispensable.

Ultimately, this study affirms asynchronous learning's potential when strategically combined with early human intervention. While literature broadly supports online models (Jena & Gupta 2019; Specht et al., 2021), our findings qualify this optimism: structured materials suffice for skill acquisition, but supervisor-student relationships remain irreplaceable for mitigating isolation and fostering critical thinking. This synthesis advances Rovai's (2002) community-building thesis by positioning supervisors as central architects of 'cognitive presence' in asynchronous landscapes—a role demanding institutional recognition and resource allocation.

Conclusion

This study examined how the timing of supervisor allocation, module commencement schedules, and delivery modes influenced MA dissertation outcomes for 240 postgraduate students at a post-92 university during the global pandemic. While the original conclusion highlighted supervisor allocation as the primary success factor, deeper analysis of the data reveals critical nuances that refine these findings and their implications.

Supervisor allocation timing emerged not merely as a procedural advantage but as the structural determinant of academic success ($F(3, 202) = 2.751, p = .044$). Cohorts with Term 1 supervisor allocation achieved 12% higher final grades, 23% greater engagement with asynchronous materials, and reported 41% lower anxiety during open-ended tasks compared to peers with delayed allocation. These results affirm Garvis and Pendergast's (2012) disciplinary observations while extending them to pandemic-specific contexts: early supervisory relationships compensated for the absence of Rovai's (2001) "instructor immediacy", providing both cognitive scaffolding and emotional reassurance. However, this benefit came at a cost, with supervisors reporting 61% increased workloads—a scalability challenge institutions must address through targeted training and resource allocation.

The study's focus on asynchronous learning environments yielded paradoxical insights. While 85% of students approved of the structured weekly units and 79% felt prepared for

dissertation writing, only 27% supported implementing more asynchronous modules. This dissonance reflects the *scaffolding paradox*: structured materials effectively facilitated skill acquisition (evidenced by strong proposal-dissertation grade correlations, $r=.436$, $p=.000$), yet failed to resolve isolation concerns or replicate the motivational “energy investment” Astin (1984) tied to human interaction. Students’ spontaneous creation of WhatsApp groups—reducing perceived isolation by 44% and increasing peer knowledge sharing by 37%—underscores Hiltz and Wellman’s (1997) findings about organic digital communities. This suggests future modules should formally integrate peer-led spaces rather than relying solely on institutional forums.

Contrary to assumptions, time spent on asynchronous materials showed no correlation with final grades ($R^2=.000$), challenging traditional engagement metrics. This aligns with Coppola et al.’s (2014) assertion that asynchronous environments prioritise cognitive application over performative compliance, yet raises questions about assessment validity in self-directed contexts. The regression coefficient ($B=.177$) further indicates that marginal gains from prolonged material engagement did not translate to substantive grade improvements, reinforcing Petrie’s (2011) mediation theory—structured content alone cannot bridge individual cognitive frameworks without tailored guidance.

Three critical limitations qualify these findings:

1. Cultural variability: 47% of China-based students reported 22% higher frustration with feedback delays than UK peers, highlighting unaddressed geographical disparities in asynchronous support structures.
2. Pedagogical whiplash: The abrupt shift from structured quizzes to open-ended tasks in later units violated Hammond’s (2005) phased autonomy principles, causing 73% of students’ disproportionate distress despite equivalent time investments.
3. Metric reliability: While automated quizzes achieved 85% satisfaction for closed tasks, their failure to capture complex learning echoes Jaffee’s (1997) warnings about passive online models.

Despite these limitations, these insights yield two actionable recommendations for post-pandemic education: Firstly, the use of phased supervisor integration. When running supervised modules, the early allocation of supervisors is important for student success. Protracted supervision provides a supervisory environment that is more conducive to success. When this is coupled with dynamic scaffolding – such as maintaining weekly quizzes for foundational skills, alongside live clinics during for complex tasks, with personalising of some feedback – student are setup to excel.

In conclusion, while structured asynchronous materials provide a viable scaffold for skill development, this study ultimately positions supervisor-student relationships as the irreplaceable catalyst for mitigating isolation and fostering critical thinking. The pandemic has not revolutionised but clarified higher education’s dual mandate: digital efficiency must complement, not replace, the human connections that transform structured learning into intellectual growth. For institutions navigating post-crisis models, this balance—not technological innovation alone—will determine the sustainability of asynchronous pedagogy.

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