Journal of University Teaching & Learning Practice

Volume 21
Issue 2 *Intensive Modes of Learning and Teaching in Higher Education*

Article 09

2024

Exploring academic perspectives on immersive scheduling in a UK university

Rebecca Turner
University of Plymouth, UK, rebecca.turner@plymouth.ac.uk

Debby R.E. Cotton
Plymouth Marjon University, UK, dcotton@marjon.ac.uk

Emily Danvers
University of Sussex, UK, e.danvers@sussex.ac.uk

David Morrison
University of Plymouth, UK, dave.morrison.edu@GMAIL.COM

Pauline E. Kneale
University of Plymouth, UK, pauline.kneale@plymouth.ac.uk

Recommended Citation

Turner, R., Cotton, D. R., Danvers, E., Morrison, D., & Kneale, P. E. (2024). Exploring academic perspectives on immersive scheduling in a UK university. *Journal of University Teaching & Learning Practice, 21*(2). https://doi.org/10.53761/1.21.2.09

Exploring academic perspectives on immersive scheduling in a UK university

Abstract

This study examined how academic staff responded to a cross-institutional change initiative to integrate immersive scheduling into the first-year undergraduate curriculum. Immersive scheduling, also referred to as block or compressed delivery, sought to create a supportive first-year experience, to ease students' transition to university. Adopting an immersive approach is associated with considerable change as academic staff adapt their practice to accommodate the compressed time frame of modules and embrace learning and assessment methods associated with this delivery format. In this study, we undertook semi-structured interviews with 17 academics who were leading the development and delivery of immersive modules or supporting the teaching and learning initiative. Our data indicated that academics played a significant role in the acceptance or rejection of the vision for immersive scheduling. Acceptance was reliant on academics recognising value in the vision, and this varied depending on the extent to which it resonated with local practice. In some cases, the move to immersive scheduling represented a valued opportunity to update pedagogic and assessment practices. However, in other contexts, academic resistance led to dilution of key elements of the vision, with compliance rather than innovation being the outcome. This study also highlights the value of using a combination of module delivery formats to mitigate recognised drawbacks associated with immersive delivery. We conclude this paper by proposing recommendations to support the future development of immersive scheduling in higher education institutions.

Practitioner Notes

1. Recognise that immersive or block scheduling involves a significant change in delivery of the curriculum to one where students engage in a module more intensively, over a shorter time frame.
2. Promote the application of interactive pedagogies and link to a wider curriculum such as interdisciplinary learning.
3. Be aware that immersive scheduling can enhance retention and attainment. Learning designs must focus on managing staff and student fatigue and facilitate time for reflection between sessions.
4. Acknowledge academics' varying responses to immersive scheduling. Some enthusiastically embrace the new model, and others insist that it will not work for their discipline.
5. Plan for change resistance. Include consultation and lead-in time, provide clear guidance principles (with some flexibility for disciplinary nuances), and offer support for implementation.

Keywords

block delivery, immersive scheduling, curriculum change, widening participation, first-year experience

Introduction

Cross-institutional curriculum change is increasingly used by universities to distinguish themselves in a competitive marketplace (Shay, 2015). Large-scale change is often associated with the adoption of new delivery modes, or teaching or assessment methods, and is used to encourage news ways of working for academics and students (Andrade, 2020; Roberts, 2015). Yet change management is complex, reliant on the clarity and flexibility of the top-down vision, and engagement from those enacting the change (Andrade, 2020). Academics are at the forefront of enacting changes to teaching and learning, and research indicates diverse perspectives on such work (Andrade, 2020; Roberts, 2015). Many academics report closer affinities to their discipline than their institution, making cross-institutional change challenging (Trowler, 2012). Some academics are reported as perceiving requirements to embrace new pedagogies, technologies, or delivery modes as threatening the integrity of their disciplinary practice (Abbas et al., 2016; Trowler, 2012). Others argue such views are outdated, citing the value of pedagogic change to prepare students for the challenges and uncertainty facing the modern world (Andrade, 2020; Barradell et al., 2018). Curriculum change can therefore be perceived as either an innovative process that enhances agency and promotes development, or a process that requires compliance, leading to the loss of autonomy, resulting in fear and resistance (Annala et al., 2022; Roberts, 2015).

Changes in higher education (HE) can be contentious, reflecting the variables involved in reshaping teaching and the multiple outcomes that can result (Andrade, 2020; Louvel, 2013). Kandiko Howson and Kingsbury (2021) describe pedagogic change work as a series of intentions and a process of implementation, where the reality of these intentions is realised. The implementation process involves the filtering down of the new vision to academic departments, during which it is interpreted through disciplinary lenses (Andrade, 2020). Change theorists such as Kotter (1996) highlight steps including creating a sense of urgency to motivate people to change, convincing people to engage in change with the support of change leaders, and creating a clear vision that is communicated far and wide. As transformation happens, Andrade (2020) reports a process of negotiation and compromise playing out. This can dilute the vision institutional leaders conceptualise, towards a reality framed by departmental power relations, and the pedagogic and strategic allegiances of those responsible for enacting the vision within each discipline (Louvel, 2013; Roberts, 2015).

Immersive Scheduling

In immersive scheduling (which is also known as block or compressed delivery), students are taught a single topic or module in concentrated bursts (Burton & Nesbit, 2008). This contrasts with the traditional “long, thin” model, where students simultaneously study multiple modules over several months. In both models, the time spent learning is the same; however, proponents of immersive scheduling argue it allows students to

Academic Editors

Section: Special Issue
Editor in Chief: Joseph Crawford
Senior Editor: Jo-Anne Kelder

Publication

Received: 20 April 2023
Revision: 12 September 2023
Accepted: 30 September 2023
Published: 31 January 2024

achieve mastery in particular elements of the curriculum before moving on (Daniel, 2000). Block delivery was first introduced in the USA at Colorado College in the 1970s to enhance learning, teaching, and the student experience for the future. It was described as offering students and lecturers the ability to manage their time so that a subject could be explored, and new ways of learning implemented that allowed both parties to focus on the subject being taught (Hayward, 2023). Other institutions followed suit; Davies (2006) reported adoption of this format in the Australian tertiary sector due to changing student demographics (e.g., increased numbers of mature, part-time learners who want more flexibility in the HE offer they access). Likewise, US colleges reported moving to block scheduling to address student retention issues and contribute to developing key academic skills such as critical thinking and self-efficacy (Burton & Nesbit, 2008).

In parallel, research on compressed delivery has grown, mainly focused on students' experiences with the format and impacts on attainment (see, e.g., Buck & Tyrrell, 2022; Turner et al., 2017). Attention has also been paid to the changes staff are required to make, including the adoption of active learning and differing assessment practices (Hyun et al., 2006; Kretovics et al., 2005). Generally, though, research into staff experiences has not been as extensive, often positioned with respect to the successes reported for students (e.g., Lee & Horsfall, 2010) or based on studies associated with summer schools (e.g., Pritchard & MacKenzie, 2011). To inform contemporary policymaking around compressed formats, further insights are needed that include staff experiences. In this paper we examine the implementation of immersive scheduling in the first-year undergraduate curriculum from the perspective of academics involved; we consider academic staff's reaction to this curriculum design model and the opportunities and challenges it created. We conclude by reflecting on the lessons learned, making recommendations for further development. The paper contributes to the literature by illustrating the importance of staff engagement for large-scale change management such as immersive scheduling.

Context of the Study

Framing the curriculum innovation context

The context for the study was a public university in southern England with a long history of teaching innovation and a student body characterised by those from widening participation backgrounds (sometimes known as non-traditional students). At the time of this work, 29.7% of first years originated from lower socio-economic backgrounds, and 12.6% of the total full-time undergraduate population had a declared disability (against a sector benchmark of 5.8%). Transition to university for such students, and retention of them once they are enrolled, is recognised as challenging (Leese, 2010). Students may feel unprepared for higher study or lack a sense of belonging at university – hence the curriculum they encounter on arrival is crucial to helping sustain them on their student journey (Leese, 2010). Underpinning this curriculum development model was creating a supportive and structured first-year experience.

Introducing immersive scheduling

Drawing on the work of early advocates on immersive scheduling, we adopted a revised delivery format, centred on immersive learning. At the study university, each semester covered 60 credits, normally comprising three 20-credit modules. Under the new model, each semester of the first-year curriculum would begin with one immersive "short, fat" module, after which students spent

the rest of the semester studying two simultaneous “long, thin” modules shown in Figure 1 (adapted from Turner et al., 2021). This limited the initial cognitive load placed upon students (Richmond et al., 2015), allowing students to experience a supported transition to university-level study, but also heeded concerns about the appropriateness of immersive delivery for all aspects of disciplinary practice (Kops, 2014; Kucsera & Zimmaro, 2010).

Figure 1

Structure of the Academic Year Under Immersive Scheduling

<table>
<tr><th>Semester</th><th>Week number</th><th colspan="2">Module format</th></tr>
<tr><td rowspan="3">1</td><td>1–4</td><td colspan="2">Immersive Module 1 (20 credits)
Short and fat, immersive delivery
Assessment completed and submitted at the end of module</td></tr>
<tr><td>5–13</td><td>Traditional module (20 credits)</td><td>Traditional module (20 credits)
Long and thin, parallel delivery</td></tr>
<tr><td>14–15</td><td colspan="2">Assessment period for traditional format, Semester 1 modules</td></tr>
<tr><td rowspan="3">2</td><td>16–19</td><td colspan="2">Immersive Module 2 (20 credits)
Short and fat, immersive delivery
Assessment completed and submitted at the end of module</td></tr>
<tr><td>20–28</td><td>Traditional module (20 credits)</td><td>Traditional module (20 credits)
Long and thin, parallel delivery</td></tr>
<tr><td>29–30</td><td colspan="2">Assessment period for traditional format, Semester 2 modules</td></tr>
</table>

Each immersive module was themed. The first immersive focused on founding principles of the discipline to foster students’ academic identity. The second immersive centred on interdisciplinarity, designed to prompt students to contextualise their program of study more broadly – acknowledging the need to prepare them for the complexity of life outside university (Lyall et al., 2016). As this was an ambitious and fast-paced curriculum transformation project, it

was piloted in the 2014–15 academic year in 19 programs, then rolled out across 16 of the 18 departments operating undergraduate programs in the 2015–16 academic year. The decision to pilot immersive scheduling in a sample of programs was based on recommendations from change management literature. For example, in Kotter's (1996) "8-step model for leading change", the importance of recognising, collecting, and communicating early successes is advocated. Such actions are cited as important in fostering buy-in and creating the impetus for change.

At the point at which immersive scheduling was rolled out across the first-year curriculum, 65 modules had been designed for Semester 1 and 52 interdisciplinary modules for Semester 2. An atypical program structure prevented immersive scheduling to be implemented within the medical and dental programs. Since effective development of immersive scheduling involves staff embracing new practice based on active learning and alternative modes of assessment (Hyun et al., 2006), guidance and staff development were provided (Turner et al., 2015). Faculty advocates facilitated local interpretation. This program of support aligned with external practice to create a supportive environment to promote change and foster local ownership (Blackmore & Kandiko, 2012; Kotter, 1996).

Research Design

An evaluation was designed to capture the experiences of key groups (students, academic staff, managers). The evaluation was informed by the work of Bamber (2013), who advocates drawing on measures of hard and soft outcomes (e.g., qualitative and quantitative measures of impact) to ensure insights are cognisant of context. A multifaceted, in-depth empirical evaluation was implemented throughout the project. We have previously reported on the outcome from the pilot year (Turner et al., 2017) and the development of the immersive interdisciplinary modules (Turner et al., 2022), and have examined student attainment on immersive modules (Turner et al., 2021). Here, we report staff experiences, addressing the following research questions:

> RQ1: How did staff react to the introduction of immersive scheduling?
>
> RQ2: What opportunities were created through the introduction of immersive scheduling and how were these embraced?
>
> RQ3: What challenges emerged in the design and implementation of immersive scheduling and how were these negotiated?

Data Collection

Staff experiences were captured through semi-structured interviews, an approach selected to open up what Cousin (2009) refers to as a "third space" (p. 73), where the lecturer and researcher worked together to develop an understanding of their experiences. Extant work focusing on staff perspectives (e.g., Dixon & O'Gorman, 2020) has been small scale and/or survey based (e.g., Hyun et al., 2006), whereas this study provided an in-depth qualitative investigation.

The research team purposefully identified a sample of lecturers involved in the pilot; 10 agreed to be interviewed, contributing to the first phase of data collection in 2015. Participants were identified to ensure representation of the disciplines involved in the pilot. Johnson et al. (2012) note that key figures (e.g., specialists in teaching, learning, and student support) play an important distributed leadership role in supporting curriculum change. The research team viewed these

individuals as “key players” supporting the implementation of immersive scheduling; hence, four academics in such roles were also invited to participate. In the 2015–16 academic year, when immersive scheduling was rolled out across most of the university, three further program leads were interviewed, representing disciplines not included in the pilot. In total 17 academics were interviewed (Table 1). Interviews explored academics’ experiences of adopting immersive scheduling. Interviewees were invited to consider the strengths and weaknesses of immersive scheduling and lessons learned. The interviews were transcribed verbatim and thematically analysed using NVivo (Version 11). Following Braun and Clarke’s (2006) staged approach, data were systematically analysed, enabling the research team to identify areas of commonality and patterns within the data. These were refined through progressive readings of the data, until the core themes (see Findings) emerged. Ethical approval (reference number: 13/14-72) was gained by the research team from the study institution before commencing the work. In this paper, pseudonyms are used and any identifying features relating to specific programs removed.

Table 1

Respondent Profiles

Respondent	Role	Discipline	Stage of study
John	Immersive module lead	Arts & Humanities	Pilot (2014–15)
Rebecca	Immersive module tutor	Arts & Humanities	
Martin	Immersive module lead	Business	
Alan	Immersive module lead	Business	
Nick	Immersive module lead	Business	
Tamsin	Immersive module lead	Business	
Fran	Immersive module lead	Business	
Sarah	Immersive module tutor	Health	
Ruth	Immersive module lead	Health	
Claire	Immersive module lead	Health	
Judy	Teaching and learning lead	Business	
Geoff	Teaching and learning lead	Business	
Kate	Teaching and learning lead	Business	
Cath	Teaching and learning lead	Health	
Brian	Immersive module lead	Arts & Humanities	Cross-institutional rollout (2015–16)
Thomas	Immersive module tutor	Arts & Humanities	
Susan	Immersive module tutor	Arts & Humanities	

Findings

We now discuss the main findings, exploring the key themes, organised with reference to the research questions. In total nine themes were identified:

- RQ1: Staff reactions
    - Acceptance
    - Rejection
- RQ2: Opportunities
    - Stimulating pedagogic change
    - Inclusive assessment
    - Levelling the playing field
- RQ3: Challenges
    - Moving to active learning
    - Staffing immersive modules
    - Compromising on content
    - Workload and fatigue

How Did Staff React to the Introduction of Immersive Scheduling?

The first immersive introduced students to the principles and practices of the discipline and including activities to foster peer networks (see Turner et al., 2017, for further discussion of the first immersive module). This built on successes reported within the literature (Davies, 2006; Scott, 2003). The second immersive module took an interdisciplinary approach "designed to widen the academic offer by bringing together students from different programmes, with different outlooks and knowledge, to research and investigate a real world or discipline-based problem" (quotation from institutional design guidelines). Detailed discussion of this immersive module is presented in Turner et al. (2022). These differing focal points influenced academics' responses – leading to either acceptance and implementation or resistance and "compliant" behaviours.

Acceptance

Engaging with discipline-specific learning activities (e.g., themed projects or discipline-specific skills) to stimulate identity construction, peer collaboration, and networking (the heart of the first immersive module) offers significant support for students in their early days at university (Abbas et al., 2016). This resonated with respondents who readily accepted the vision for the first immersive module:

> *The first immersive, I genuinely do think is a better experience for students. It's not like we've dumbed it down and made it simple. They have the opportunity to talk about it with each other and to kind of get into it more.* Kate

> *We encouraged them to form study groups and the idea was that they would meet independently to talk about things that they had read, talk about lectures, so there was that shared making sense of things. They got into that habit and continued that into other modules.* John

These quotations evidence staff embracing the new format, aligning with what is described as a progressive response to change, where individuals or departments accept a vision (Annala et al., 2022). This occurs when local agency is felt, resulting in staff adopting new ways of working that benefit the student experience (Andrade, 2020; Roberts, 2015):

> *I think it is important to regularly review what we're doing and just see how we can improve what we're doing, and I understood the move to immersive scheduling as part of that. I*

> *didn't understand it as somebody trying to give us extra work for the sake of giving us extra work.* Martin

Rejection

The second immersive module proved more contentious. No definition of interdisciplinarity was provided, resulting in multiple interpretations coexisting (as explored in Turner et al., 2022). Relevant here are staff reactions; interdisciplinarity is a challenging concept (Lyall et al., 2016) and for many represented a new way of working. Consequently, some respondents viewed this module as beset with hurdles:

> *It feels like the idea was this kind of global village in terms of the students all having the opportunity to work together and spend time together, and then it felt like admin got hold of it and said, "Oh no, how are we going to organise this budget wise?"* John

This module involved students moving outside their program, causing both practical difficulties and concerns about student retention and engagement due to a lack of contact with the program team.

> *I have an item in my away day agenda which I've titled Dry January, because they are doing nothing linked to the program. I think there's a danger this stuff that we're organising doesn't seem core, so some folk might decide that they'd rather earn money or extend Christmas drinking until the end of January rather than engage with [names the interdisciplinary module].* Alan

> *[Names interdisciplinary module] really frustrates me, because we revalidated our degree a couple of years ago, and decided for good pedagogical reasons that our first year should be core, and that we designed a whole suite of modules that fitted together very well. That has been disrupted now and I worry how students will react.* Nick

Here we may be witnessing the emergence of territorial agency (Annala et al., 2022). Staff may not explicitly resist change, rather adopting what Adler and Lalonde (2020) refer to as a "conformist's façade" in that they play the game (i.e., attend meetings, superficially follow university guidelines) but cite barriers to engagement. This is not uncommon; the disorientating nature of curriculum change is documented, especially when academics are being prompted to consider agendas outside everyday practice and disciplinary norms (Kandiko Howson & Kingsbury, 2021; Keesing-Styles et al., 2014). Where academics can express ownership or form connections to disciplinary practice, levels of engagement are greater, and meaningful change occurs (Kandiko Howson & Kingsbury, 2021).

What Opportunities Were Created Through the Introduction of Immersive Scheduling and How Were These Embraced?

Stimulating pedagogic change

Adopting immersive scheduling created an impetus for change (Kucsera & Zimmaro, 2010; Kops, 2014), which some viewed as long overdue:

> *I think it is addressing what our students need. It's addressing big issues that we knew had to be addressed. I think it allows us to engage with students better, manage student assessments and workload in a much more meaningful way.* Judy

Recognising the need for, and impact of, change is essential in promoting engagement (Andrade, 2020; Kotter, 1996). Too often, innovation is local and small scale (Lattuca & Pollard, 2016). Although large-scale change is disruptive, it has the greatest opportunity for consistent benefits (Hasanefendic et al., 2017). Pedagogic innovations, such as the adoption of immersive scheduling, creates the motivation and a framework for change (Fink, 2013). However, pedagogic innovation also creates considerable workload as staff are required to redesign modules and develop new teaching and learning activities (Harvey et al., 2017; Kretovics et al., 2005). Individuals' experiences of this opportunity were complex. Initially, the effect of increased workload and upheaval led respondents to question the viability of immersive scheduling, as Nick recalled:

> *I think everybody wondered whether this was going to work. I was so delighted with the first three lectures and the response from the students, it made me enthusiastic about the module as well. I was able to say, "You know what, it works".* Nick

Discussions of success and failure were prevalent, conveying a sense of risk and uncertainty. This was surprising; most respondents were established academics, yet they perceived a sense of exposure in teaching differently, linked to the emotional labour of their practice (Keesing-Styles et al., 2014; Mangione & Norton, 2023). Success was judged by increased attendance and enhanced student engagement, echoing gains from student-focused studies (Goode et al., 2023; Richmond et al., 2015). For one respondent, success was only realised following feedback from a returning student:

> *It's a little tricky to take student feedback because obviously most of them don't know any different. What was interesting was one student had done the original program without the immersive module and was repeating. She took the opportunity to tell us about how wonderful she thought the changes were, and how much better prepared she thought it was to have started with the immersive module.* Kate

Judging success in teaching is complex; therefore, it is perhaps not surprising that narratives of success were poorly conceptualised. An inability to articulate systematically the impact of these changes indicates a need to foster a culture of critical reflection as part of curriculum redesign work (Fink, 2013). The lack of engagement in such practices is not surprising; a systematic review of teacher expertise in HE reported a lack of a wider engagement with practices such as reflection (van Dijk et al., 2020). Here, as in many curriculum enhancement activities, a focus was placed on providing staff development to support the implementation of immersive scheduling. However, apart from monitoring required to adhere with institutional quality assurance processes, individual module leads did not evidence engaging in any ongoing monitoring and reflection activities. Going forward, integrating this into the professional development offer would signal its importance in curriculum change, and provide staff with a timely refresh of relevant practice. This would, as Kotter (1996) advocates, enable staff to consolidate gains and potentially anchor change through the sharing of success stories.

Inclusive assessment

Inclusive assessment prompts academics to design assessments that minimise the likelihood of students being disadvantaged or excluded through the assessment method used (Tai et al., 2023). Inclusive assessment limits the need for modifications, which can be time-consuming to

arrange. Though inclusive assessment had been encouraged at the study university, adoption of immersive scheduling created impetus for change, with managers such as Geoff using it as a "lever. I could say "Look!" to those colleagues who didn't want to get rid of their exams." Respondents recognised the benefits of early assessment and feedback, for example:

> *It meant that the students didn't have a build-up of "have I been doing this wrong all this time, and someone's going to show me that I should have been doing more?", because within 2 weeks you're getting that kind of feedback.* John

They reported adopting a more practical approach to assessment that could be achieved in the compressed time frame. Such changes resulted in the move to what Martin described as "quite practical assessments really, industry relevant," students were required to produce "a [disciplinary artefact]" but this was paired with a "a reflective element, so they have to show they had engaged with some theory." Taking such an approach seemed to mitigate the limited time students had to engage theoretically with subject content.

Although this is identified as an opportunity, structural issues emerged that threatened to undermine these benefits. For example, the assessment board ratifying outcomes of the first module did not take place until the end of semester, which Geoff was concerned may have an impact on progress and results due to timing issues that were unresolved: "if you fail a module in the first semester, you don't get the chance to resit it until the summer. Why? I mean, it's ludicrous; it defeats the object!" Thus, although immersive scheduling created conditions to foster inclusive assessment, structural issues could impede academics' appetite to engage with future change (Andrade, 2020).

Levelling the playing field

Respondents celebrated the contribution immersive scheduling made to the first-year student experience, citing it as easing the transition to university. John felt "only doing one module for the next 4 weeks you know, them all doing the same thing made it much more manageable." Staff also reported how studying immersively benefited student motivation and the development of critical thinking skills:

> *I think the first years are really focused, far more motivated. They were actually saying to me, "What do I need to do to actually get a first next time? I've got 68, how do I make this a 70?"* Fran

Immersive scheduling is recognised as supporting non-traditional students (Buck & Tyrrell, 2022; Burton & Nesbit, 2008). Respondents recognised its value in supporting students to develop effective study habits:

> *We took in printouts of their timetable over a week, the lecture and seminar times were blocked in on their timetable, and we went through with them, "What else have you got to fit in here, what else do you need to do in a week? You've got time you need to set aside for reading before each lecture, you need time for meeting in your study groups, you need time after the lectures to identify additional reading".* John

Aligning with Lee and Horsfall's (2010) work, respondents reported stronger peer networks forming; students were described as closer and more supportive than in previous years:

> *[Immersive learning] created a better cohort identity. Students felt they knew each other better; they'd formed closer relationships, quickly. So rather than a timetable spread out where you come in for an hour and then disappear, they were in blocks of time. Much of what they were doing was group work, and it facilitated relationships.* Kate

Importantly, these relationships were seen as sustainable:

> *This is the first year I've gone through [immersive scheduling], but I know that that group particularly liked being together – and they organised social stuff, they got to know each other, and they've already worked out their halls for next year. I'm not saying that our second years didn't do that, they just don't seem as gelled.* Ruth

Staff also reported getting to know students better, noting the formation of an academic community:

> *I like having the regular contact with the students – it built up relationships. I see students now and we're on good terms, and it's trying to convey this sense of you are part of our school now, part of this community*. Martin

Knowing students better enabled staff to identify those at risk of withdrawal and target support, as Rebecca highlighted when considering the impacts of immersive scheduling on student support; "we had one person that we were a bit suspicious about whether they'd carry on. I think the immersive module helped because it allowed us to identify those people. We knew them, and we knew their names*."* his development of an inclusive staff and student community aligns with research on "mattering", a concept that underpins belonging (Austen et al., 2021). Mattering indicates that students feel "cared about, accepted, respected, valued by, and important to the campus community" (Strayhorn, 2018, p. 4). That respondents knew students' names, for example, signals to students that their presence is important. Most respondents recognised the value of immersive scheduling in fostering a sense of community and in better meeting the needs of widening participation students – key ambitions of the change initiative.

What Challenges Emerged in the Design and Implementation of Immersive Scheduling and How Were These Negotiated?

Moving to active learning

Adopting compressed delivery often involves increased session length, prompting moves towards active learning (Harvey et al., 2017; Hyun et al., 2006). Active engagement maintains student attention, stimulates deep learning, and provides opportunities for reflection (Kops, 2014). Across both immersive modules, respondents noted existing practices as not fit for purpose:

> *It was the first time that most of us had done 2-hour seminars. In fact, normally our seminars are an hour, and some of us felt, you know, "Actually, this is going to be rather long to keep students going".* John

In some cases, as Fran reflected this stimulated change as giving people a "real opportunity for to get stuck in, to look at what we've got, reshape everything, and come up with a really strong immersive module." However, not everyone embraced the need for change, with some staff resistant to making changes to teaching:

> *There are other staff who really don't want to change the way they've been doing it for the last god knows how many years, or who can't think of other ways of doing it, or who aren't, I'm sorry to say it, aren't really interested in teaching or students, and all they're really interested in is their research.* Geoff

Geoff's observations indicate the challenges posed by pedagogic innovation. Change management can be threatening as it brings into the open conversations about what constitutes good teaching (Keesing-Styles et al., 2014; Mangione & Norton, 2023). As Roberts (2015) observes, the success or failure of a change initiative depends on the extent to which plans align with an individual's philosophical orientations towards their roles as educators. The responses reported here may signal the extent to which some staff felt threatened by the new vision (Mangione & Norton, 2023).

Staffing immersive modules

A strong, experienced teaching team was deemed essential:

> *You need your best players; there might be an argument that everybody should be great, but you really do need those people who are going to be able to go in and give that kind of experience, that have those skills to be interactive, and to take the pressure and demands from those students new to HE.* Kate

Good teachers were defined as those with experience and enthusiasm to support students' transition to HE. There may be staffing implications raised by the need to use your "best players". Less experienced staff tend to be used to teach large first-year classes, with more experienced staff preserved for the later stages of undergraduate study (Fung & Gordon, 2016), an observation made by Rebecca "the ethos has been to put the most junior people on the first year and more experienced higher up."

Across the sector, institutional demands for lecturers to be research active has taken experienced colleagues away from teaching (Fung & Gordon, 2016). Implementing curriculum changes that challenge this hierarchy may resurface tensions between teaching and research.

Compromising on content

In compressed time frames, there is less time for conceptual development, reflection, and the rehearsal of skills or techniques. Some cite this as undermining the value of immersive formats (Harvey et al., 2017); others note the need for module teams to identify key concepts achievable in a reduced time frame (Kops, 2014). Respondents echoed similar concerns' Claire felt "c*ertain things students can do in a short amount of time but for others it just takes time for them to assimilate the information, to get their heads around the terminology about [names concept], and that's what worries me."* However, this was not a sentiment shared by all; Kate indicated such attitudes were dependent on the teaching team's disposition *"it depends on what your signature pedagogy or the underlying principle of your curriculum design was to start with, as to how you were going to respond to immersive scheduling."*

A teaching and learning lead also discounted such arguments:

> *I think that every discipline would say "we can't learn X in a semester because we're special". You can do intensive language courses in a month, so I would disagree with that notion entirely and I think it's lazy complacency.* Judy

Potentially mediating such concerns was the structure of the first year; the immersive modules were taught at the beginning of each semester (Figure 1). Students then went on to study two "long, thin" modules, giving program teams the flexibility to decide where best to locate different aspects of the first-year curriculum. In most instances where compressed formats are used, such flexibility is not offered (e.g., Buck & Tyrrell, 2022; Goode et al., 2023; Harvey et al., 2017).

Workload and fatigue

Adopting immersive scheduling required additional energy; modules needed redesigning and sessions became longer and more demanding to deliver. Respondents felt this was not acknowledged, as Brain discussed when he reflected on the effort needed to design an immersive module "it was time-consuming; we had to explore new teaching methods, design new assessments, think about how it would come together, all at a time when departments are stretched resource-wise." Martin expressed similar sentiments when reflecting on his and a colleague's experiences:

> *The colleague teaching with me, we were both quite pressured for time in those first 4 or 5 weeks. You had less time to kind of do that prep that initially you'd wanted beforehand, and I think there's a knock-on effect on the other modules I was teaching to second and third years.* Martin

It was not just designing the immersive module which added to workload, Sarah noted the differing experience of teaching immersively "it was very intense, it was full on. I had to be organised, and it was clear when I wasn't because things, just like my referencing seminars, fell apart."

Running two module formats simultaneously had implications for marking and student support, which again respondents did not feel were taken into consideration, as John commented: "f*or people who are teaching on immersive and standard format modules, they may have little time to turn around marking. My concern was this hasn't really been built into the structures of how things are going to work."*

There is a risk this increased workload can undermine the success of the change initiatives (Andrade, 2020; Morshed, 2016). Fatigue was reported; concerns were expressed regarding the impact of poor-quality teaching spaces, as Cath discussed "a 2-hour block in a big lecture theatre is tough, particularly our lecture theatres, which have poor acoustics. Students get hot and smelly, I get hot and tired, it's not an appropriate learning space for active learning". Similar sentiments were expressed by Tamsin: energy required to run 2-hour sessions, as well as the:

> *Doing 2-hour sessions is tiring. Lecture theatres haven't even got a seat, you can't just sit down on a stool for 5 or 10 minutes; you're standing up all the time because nobody thinks of it from the staff point of view.* Tamsin

Staff also questioned whether students were prepared to engage in 2-hour active learning sessions. Students can have quite traditional expectations of *how* they will be taught at university (Owens et al., 2020), acting as a conservative force if not prepared and supported to engage actively (Nguyen et al., 2021). Davies (2006) noted that, without prior exposure to compressed formats, students preferred the traditional model; following exposure to compressed formats, this position changed. This need to prepare students to learn immersively was not anticipated:

> *I think the concept of them doing self-directed, group work, they just haven't got their heads around yet and they don't realise that if we send them off, we're not expecting them to go shopping: we're expecting them to go to the library and do some reading.* Sarah

Immersive scheduling was also seen to create vulnerabilities (e.g., for students with health issues or caring responsibilities), and respondents voiced concerns about the potential for students to fall behind because of illness or be excluded because of practical constraints such as visas, as discussed by Tamsin, *"or students, there isn't a contingency. If they get behind, that can be really demoralising. If you've missed a week, there's no catch up and you get out of sync really quickly."* Equally Martin noted:

> *I think that would be an issue if you wanted to take students away in those first 4 weeks, and they've not even arrived. How to make that happen if you have a Chinese student who would need a visa, I don't know.* Martin

Such vulnerabilities have been reported elsewhere (Dixon & O'Gorman, 2020), and given the demographic profile of the student body, immersive scheduling presented specific risks. Although acknowledged in the literature (Buck & Tyrrell, 2022; Kretovics et al., 2005), few solutions have been articulated. At the study institution it was hoped that strong peer bonds could mitigate effects of short absences. Given recent advances in online learning, there is potential for technological solutions to be found. Visa issues are potentially more challenging to rectify, and here resulted in international field trips being moved to later in the academic year to give students the time to obtain required paperwork.

Conclusions

In this paper, we drew on interview data collected from 17 academics working in one UK university to examine their responses to the introduction of immersive scheduling. Like many institutions adopting new delivery formats, changes in teaching and assessment practices were stimulated (Hyun et al., 2006; Lee & Horsfall, 2010). While being aware of the variables at play, developing a critical awareness of the challenges and opportunities created is necessary to identify ways of supporting staff transition to immersive scheduling. By focusing on academics, we built on previous work centred on compressed formats taking place outside traditional teaching periods (e.g., summer schools) and considered explicitly the experiences of staff required to integrate immersive delivery into the undergraduate offer (Hyun et al., 2006; Lee & Horsfall, 2010; Pritchard & MacKenzie, 2011). This contributes to research relating to student experiences and ensures HE practitioners, researchers, and policymakers have a comprehensive picture of the experiences of different groups following a change in delivery format.

We acknowledge this study was based in one UK university and reported a change in delivery format integrated into the first-year experience. In this study, we employ theoretical inference (Hammersley, 1998) to create more generalisable insights relevant to a wider population and of broader interest. We recognise the tentative nature of our claims, yet our study was comparable in scale to related work (e.g., Hyun et al., 2006; Pritchard & MacKenzie, 2011), and the wider evaluation has drawn on a diverse range of datasets that have framed the work presented here (see Turner et al., 2017, 2021, 2022). It is important to note that the study university was one in which both research and teaching were key agendas, and teaching innovation was both

widespread and well supported. It is plausible to suggest that resistance to the immersive approach in a research-intensive institution might be even stronger.

A unique feature of this initiative was that both immersive and traditional formats were part of the first-year curriculum. This may have supported acceptance and mitigated the severity of the challenges reported, which are documented in the literature (e.g., Harvey et al., 2017; Kops, 2014). For example, if staff felt the immersive format would not give students sufficient time to understand certain concepts, this content could be included in a traditional format module. Equally, the focus on active learning and inclusive assessment meant that student-centred practice was foregrounded and the requirement to accommodate additional support needs minimised (Hyun et al., 2006). Those not engaged in first-year teaching were not required to explicitly engage in curriculum change but could observe from the sidelines as the initiative progressed.

Recommendations

Here, we offer recommendations to support the adoption of immersive scheduling in HE. We acknowledge these are based on data collected over two successive academic years from 2014–15 and 2015–16. However, given the ongoing interest in compressed delivery formats, these recommendations remain current and can inform future practice. Running across the recommendation actions is the need for consultation, cooperation, and support for staff. Leaders of curriculum change activities should ensure that the following issues are addressed:

Anticipate and address cultural and structural barriers

Mediation is a topic discussed with reference to change management (e.g., Andrade, 2020; Roberts, 2015), and a process we observed as the vision for immersive scheduling played out. Mediating influences, including structural factors such as distributed leadership, lines of communication, and institutional organisation, can help or hinder change (Andrade, 2020; Kotter, 1996). Although some structural factors were anticipated and addressed through the introduction of guiding principles and support for staff, unanticipated factors emerged (e.g., timing of exam boards, unsuitable teaching spaces). However, structural factors exerted less impact than cultural factors. Cultural factors, such as aligning the vision with institutional or departmental values and norms, operated across multiple levels (Johnson et al., 2012; Roberts, 2015) and should be discussed and recognised to engender engagement (Adler & Lalonde, 2020). For example, respondents recognised the institution's diverse student demographic and accepted the need to ensure students drawn from underrepresented backgrounds received support to maximise their chances of success. Most realised immersive scheduling provided such support. Some academics also saw immersive scheduling as an opportunity to promote wider changes that were long overdue. Others were unaware of the potential benefits of immersive scheduling and saw only a divergence between current or preferred pedagogies and the new approach. Making the rationale and potential benefits of curriculum changes more visible can help reduce the implementation gap that arises from academic resistance (Adler & Lalonde, 2020; Kandiko Howson & Kingsbury, 2021). Kotter's (1996) change model highlights the need not only to develop a vision and strategy but also to communicate the vision powerfully and convincingly, to create and reward short-term targets, and celebrate successes. Including actions such as these when

immersive scheduling is proposed may help address persistent cultural barriers, as well as prompting staff to recognise the impact of the changes they have made on student learning.

Embed curriculum change into workload

The study university proposed an ambitious vision aimed at making a distinctive first-year experience, echoing the motivations reported for much curriculum change work (Andrade, 2020; Shay, 2015). Innovation was a theme implicit in the work undertaken by respondents, and though supported from the top, it was enacted in schools through bottom-up change (Blackmore & Kandiko, 2012; Kotter, 1996). New modules were developed in response to the guiding principles, which involved adopting novel pedagogies and inclusive practice, yet additional time for this work was rarely allocated. Repeated calls have been made to provide greater professional development in education (Roberts, 2015), as well as appropriate workload recognition and reward for those involved with curriculum development work (Fink, 2013). Our data indicate that the development work happened through necessity, and although positively received, was time-consuming for staff. This is a common occurrence, in that work takes place because it is required, regardless of the constraints academics face (Louvel, 2013). However, the lack of recognition can make academics reluctant to dedicate time for curriculum change work, as it is unrewarded and detracts from research (Fung & Gordon, 2016). We renew calls for workload recognition that reflects the value of ongoing curriculum development to mediate persistent structural barriers and signal real investment in teaching and learning.

Build a strong team

Planning and implementing immersive scheduling, like any other large-scale curriculum change project, is a time-consuming and highly skilled process (Fink, 2013; Shay, 2015). Teaching immersively was identified as reliant on a team effort. Attention needs to be paid as to *who* is involved in curriculum change work, what roles they take, and how they are supported. Traits our respondents highlighted, such as experience with interactive pedagogies, potential to engage learners, and ability to create a supportive environment, resonate with the characteristics Wood and Su (2017) describe as being indicative of excellent teachers. However, we must be mindful not to overload those recognised as good. It is important to build a strong team to deliver immersive modules and not become over-reliant on one key player risking a single point of failure (Fink, 2013). Investment in developing those who lack experience with student-centred practices through staff development and team teaching is essential (Andrade, 2020). Support for change can come from a range of sources; at the study institution, facilitators were brought to support the implementation of immersive scheduling, although, interestingly, they were not referred to by respondents in our study. It is not uncommon for the work of unofficial leaders to go unrecognised, yet local leaders play a crucial role in mediating barriers and engendering change (Johnson et al., 2012).

Support staff to manage uncertainty and risk

A key barrier to curriculum innovation is the conservativism of both individuals (staff and students) and institutions. Achieving the changes required to support immersive scheduling can be challenging, especially when not all colleagues are willing to change. Reports of academics wanting to stay with the familiar and retain the status quo are commonplace (Annala et al., 2022; Hasanefendic et al., 2017). This may illustrate the legacy of signature pedagogies, reflecting their close association with disciplinary practice (Abbas et al., 2016). However, we suggest that this

may also be indicative of the climate in which academic staff are working. Universities are increasingly accountable to the student body (Mangione & Norton, 2023) and judged against student feedback. The focus on satisfaction and outcomes has resulted in a culture of performativity where staff fear of reputational risk has stifled pedagogic enhancement (Wood & Su, 2017). Concerns have been raised about the emergence of a "results-led and target driven approach to teaching and learning that detracts from a focus on improving processes" (Wood & Su, 2017, p. 461). This has led to the practice of teaching safely rather than innovatively (Mangione & Norton, 2023). This is a pertinent point, given the observations made regarding students' expectations of university-level learning. Early advocates of block delivery reported students as wary of compressed formats, but then preferring them following successful engagement (Burton & Nesbit, 2008). Concerns about the extent of change introduced to the first-year curriculum may account for the reactions of some respondents who struggled with the vision for immersive scheduling. To counter this, we need to foster an environment where academics are not fearful of poor student performance or feedback as they innovate (Mangione & Norton 2023).

Acknowledgements

The data presented here were collected as part of a large-scale evaluation involving multiple academic schools and professional support services. We are grateful to those staff and students who contributed to the study. In addition to the research assistants who contributed to this paper, we would like to thank Dr Samantha Child, Dr Sebastian Stevens, and Dr Tricia Nash for their work on the study's earlier stages.

Conflict of Interest

The authors disclose that they have no actual or perceived conflicts of interest. The authors disclose that they have not received any funding for this manuscript beyond resourcing for academic time at their respective university. The authors have produced this manuscript without artificial intelligence support.

Author Contributions

Project Administration (RT), Pedagogic Innovation Design (PK, DC), Evaluation Design (RT, DC, PK), Data Collection and Analysis (ED, DM), Writing (RT, DC), Reviewing and Editing (RT, DC, ED, PK).

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