Hybrid-flexible (HyFlex) subject delivery and implications for teaching workload

A 'small data' analysis of one academic's first-hand experience in 2021 and 2022

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The COVID-19 pandemic has had broad ranging impacts on the delivery of education at universities. In this context, hybrid-flexible teaching, or HyFlex (HF), has been offered at my university as a mode of delivery ostensibly suitable to what is ultimately a disrupted teaching environment. HF involves the delivery of a subject simultaneously in three modes: synchronous face-to-face, synchronous online and asynchronous. In this article I adopt a 'small data' research approach and examine my personal memos documenting my own implementation of a HF version of one undergraduate subject in two consecutive iterations. Existing research on HF is clear that students appreciate the convenience afforded, and while there is some general mention of the impact of HF on teacher workload, I set out to develop detailed insights by documenting and reflecting on my own experiences. Conclusions I reach are that attendance becomes complex and problematic in HF subjects, impacting curriculum design, teacher confidence and workload. Also, it is not practically possible to adapt existing synchronous subjects to HF without significant redesign, and this is to develop timely feedback interventions and create a sense of belonging for students. Hybrid-flexible learning is predicted to continue and expand in higher education, making the detailed account outlined here a valuable example.

Keywords: Alternative modes, blended learning, online learning, hybrid learning, HyFlex, flipped learning

Introduction

The COVID-19 pandemic has had broad ranging impacts on the delivery of education at university. In this context, hybrid-flexible teaching, called HyFlex (HF), has been offered at my university as a mode of delivery ostensibly suitable to what is ultimately a disrupted teaching environment. In this article I adopt a 'small data' research approach: I examine my implementation of a HF version of a flipped and blended undergraduate subject in 2021 and 2022 in terms of its impact on teacher workload.

What is HF delivery? Why did I implement it and how? A comprehensive guide to HF is Beatty's (2019) 250-page e-book, Hybrid-flexible course design: Implementing studentdirected hybrid classes. HF is defined as 'multi-modal courses which combine online and onground (classroom based) students' (p. 6). Beatty acknowledges HF is not new - in fact, it been discussed in educational literature dating back to 2006 (see Beatty, 2006). Many studies define HF as 'hybrid-flexibility' also noting the range of delivery modes involved: face-to-face synchronous, online synchronous and asynchronous (Kohnke & Moorhouse, 2021); and faceto-face synchronous and online synchronous - with no asynchronous mode (Malczyk, 2019). 'The HyFlex (hybridflexible) model was developed by Beatty [...] and is described as a combination of hybrid, i.e., combining both online and face-to-face modalities, and flexible, as students may choose whether to attend face-to-face sessions' (Raes, 2021, p. 140). In some studies, face-to-face synchronous students and online synchronous students all interact via the online platform - that is, all students, regardless of location, use the online platform for the duration of the class (Kohnke & Moorhouse, 2021). Other studies locate the teacher in the face-to-face mode but with an assistant operating the online teaching technology (Raes et al., 2020).

At my university, HF was initially offered to volunteer subject coordinators at the end of 2020 as an experimental mode of delivery. Volunteers were asked to consider implementing HF in autumn 2021 and encouraged to submit ethics applications to record and analyse their teaching experiments. I volunteered, despite not having a specific teaching problem I was attempting to resolve with my implementation of HF. It was offered to me, and other volunteers, as a mode of delivery the University had already decided was valuable, and my role was – generally – to explore this so-called 'value.' I do not recall the specific objectives being concretely explained to me by the University. Looking at my reflective memos, the first workshop I attended focussed on the most apparently novel aspect of HF delivery, which is managing synchronous face-to-face students and synchronous online students, using the new hybrid teaching spaces on campus. The overall rationale for HF was presupposed; my sense at the time (and this was also because the University was coming out of multiple lockdowns in Sydney, meaning there were many weeks of online-only teaching), was that HF was thought to allow for a more engaging experience for online students, and this was because they would be sharing an actual classroom space with actual face-to-face students. Other suggestions (anecdotal) at the time were that HF would ease the burden of subjects having to suddenly move online again in the future due to further potential lockdowns. Moreover, given Beatty was also suggested by the University as a key HF resource, it would seem that the University's rationale was aligned with Beatty's findings: namely, that HF would better serve fully online students without abandoning face-to-face students.

In 2020 I was interested in the impact of HF on curriculum design and delivery, and in turn, workload. This focus was less out of selfishness than it was a response to what already seemed taken for granted - and noted in HF research: that students generally like HF because of the convenience it afforded them regarding their attendance. In addition, however, I noted an early stumbling block in my implementation of HF that also contributed to my focus on workload. I expect I am like many colleagues in my institution who teach a two-semester calendar year in so far as I begin preparation for autumn teaching (first semester, which commences in March), and in January: after the end of year shut-down period when the University is closed for business. For me it is challenging in a practical sense to start preparing much before January; my time is consumed at the end of second semester with marking and results preparation and meeting the University's deadlines for results processing and tying up loose ends in my research at the end of the calendar year. In terms of the 'stumbling block' I mentioned, I recall a conversation with an educational advisor in my school when I was asking for advice about my imminent HF experiment, particularly regarding developing curriculum that suited synchronous students (face-to-face and online) and asynchronous students. Juggling face-to-face students and online students at the same time in a physical classroom did not concern me, even without an assistant operating the technology; what perplexed me, somewhat, was how to accommodate these different modes of attendance in my curriculum. The educational advisor's advice was to follow Beatty's suggestion: one should design HF courses as if they were fully asynchronous, 'asynchronous first,' as this is the most useful basis for accommodating any other mode of attendance (Alexander, 2020). I took this advice as valuable, given it was a product of a HyFlex expert's experience. Yet at the time I was less than two months away from the beginning of semester, so I conceded that I could only adapt my existing subject to HF delivery. In terms of my approach, it followed that I began wondering about the impact of a hybrid-flexible approach on existing curriculum in a subject and in terms of teacher workload.

The subject I used as the basis of this experiment was a level two undergraduate subject in the humanities discipline. The subject is an elective, meaning that students can take it voluntarily - in other words, it is not a required subject that is part of the core. In addition, the subject is available to any student at the University, and the only pre-requisite is they have completed the required amount of credit points in level one subjects. It is a creative industries subject, meaning students are required to complete a creative practical task that also demonstrates their understanding of key theoretical issues. The subject was first launched in 2019, and since then approximately 40 students enrol each autumn. Also, it is a flipped subject, meaning students are provided each week with online rich-media lecture content (not recorded lectures), readings and digital activities, and they are expected to engage with these materials before attending a 90-minute tutorial. In 2019, this subject was only offered on-campus to faceto-face students. With the pandemic in 2020, it was moved fully online. And in 2021, it was offered as HyFlex in three modes: synchronous face-to-face, synchronous online and asynchronous. The University has been clear that students are to be informed they can switch mode whenever desired. The research in this article pertains to the 2021 implementation of this subject and considers its 2022 iteration in response to findings from 2021.

In this article my research question is: What is the impact of HF on my curriculum design and delivery, and in turn, my workload? I explore this question based on my recorded observations in reflective memos. A memo is defined as any writing used to reflect on and understand the research (Maxwell, 2022). Ravitch and Riggan (2012, p. 153) explain that a 'reflexive memo can be an early-stage approach to research design that helps you to identify and engage with aspects of your relationship to your research, but it can also extend well into the research process as it unfolds over time' (quoted in Maxwell, 2022). The purpose of memos is also to detail setting and context (Phillippi & Lauderdale, 2018). Memos are not intended to be comprehensive or archived separately, and following Corbin and Strauss (2012), they are not intended to be shared - they are contextual, personal reflections of the primary researcher. I completed these memos twice: in 2021, and again in 2022, when I reflected on the impact of the second iteration of the HF subject based on my findings from 2021. Existing literature contains little concrete guidance on the content of memos and field notes (Phillippi & Lauderdale, 2018, p. 382), so I adopted a simple process. From Corbin and Strauss (2012, p. 3), I used memos to identify and develop the dimensions of the study, my concerns and key questions. This is also described in secondary research as developing a storyline. I recorded memos weekly, according to the following structure: (1) what specific activities were completed in relation to the preparation and delivery of HF content; (2) observations in relation to the above; and (3) what new activities need to be completed in the following weeks?

My analysis of my reflective memos is what boyd and Crawford (2012, p. 670) would call a small data approach to my research question, following also the example of Veinot (cited in boyd & Crawford, 2012). This approach, that may involve (as it does here) focusing on a single individual, is noted as a method more suitable in some research contexts than Big Data analysis. In my case, I follow boyd and Crawford's recommendations and analyse a data set that fits the research question being asked. Most significant in the context of my research question are the intricacies of my decision-making process in response to my curriculum development as it unfolded over the course of my experience. I could not have told this story by 'farming millions of Facebook or Twitter accounts' - or analysing the experiences of tens or even hundreds of HF instructors in HE.

In what follows I develop insights from my experience, over the past two years, designing and implementing a HF version of the undergraduate subject I coordinate. First, I outline findings from a literature review, focused specifically on my research question of workload. Next, I will draw on my memos to analyse my specific experience in 2021 and 2022. Finally, I will offer some conclusions designed to be practically relevant for colleagues experimenting in future with the implementation of HF at their institutions.

Literature review

What does current research have to say about the impact of HF on teacher workload? Does HF curriculum require initiatives specific to this mode of delivery, which therefore result in an increase in typical teaching workload?

Many studies identify a range of key benefits of HF for students including flexibility, equivalency, student choice, reusability and accessibility (Beatty, 2014). Other positives include the ability to accommodate a wider range of student learning preferences and the advantage of empowering and encouraging students to take control of their own learning (Beatty, 2014). A recent study, Kohnke and Moorhouse (2021), describes how students choose their mode of attendance each week based on how safe they felt attending class in person, in terms of COVID-19. Related is how students choose their mode of attendance based on their personal needs such as family and/or work commitments (Malczyk, 2019).

Beatty's (2019) e-book notes an unavoidable cost for faculties/schools of designing subjects that support multiple modes of student participation, and this is because of the additional workload required. It also seems that his suggestion that teachers more regularly 'check in' with students to provide assessment opportunities is new/novel and unique to HF. On this theme of additional time required to engage students in HF modes, Beatty also notes the need in subject planning to 'explicitly support an active and engaging learning community shared by all students regardless of participation mode' (p. 49). And Beatty's own literature review notes some general claims from researchers regarding the heavy workload involved with HF curriculum design and implementation.

Few articles from the period of Beatty's e-book until today discuss hybrid-flexible delivery in terms of workload. Dinu et al. (2021) explore the impact of the pandemic on academics, and their findings show an increase in time spent preparing and delivering fully online courses - but this is primarily in terms of the additional time required to transition face-toface materials to fully online. Finn et al. (2022) analyse the impact of COVID-19 on the research activity and working experience of clinical academics. The authors acknowledge the additional time required to rapidly produce teaching and assessment materials for online delivery. Zorkić et al. (2021) make some general comments about the increased workload for teachers during a transition to online learning and they note the negative impact of hybrid modes of learning on the certainty and clarity of teachers' roles. There is some discussion about teachers' anxiety due to their perceived lack of technical skill when teaching online. These studies are primarily concerned with the increased workload stemming from the event of the transition from face-to-face to online teaching in response to COVID-19 lockdowns. They make the valuable point that adapting face-to-face curriculum to online is time consuming because the latter requires a different and specific approach.

I also consulted a systematic literature review provided by Advance HE, called Flexible learning: A literature review 2016-2021 (Loon, 2021). Advance HE is a member-led charity that works with universities with an aim to improve higher education. My institution, like many, encourages its academic and professional staff to apply to become a fellow with Advance HE, and the literature review is a HF resource provided by the University. It aims to 'identify and summarise flexible learning trends, issues and impacts from 2016 to the end of 2021' (p. 6). It adopts an integrated systematic review and 'draws on the work of Littell, Corcoran, and Pillai (2008), Loon et al. (2019, 2020, 2021), and Torraco (2016)' (p. 6). Eighty-four papers were included, and most of the articles reviewed were from the UK (p. 7). When I searched the document for the keyword 'workload,' no results were returned. After consulting the data set accompanying the literature review, I performed a keyword analysis of abstracts that appeared relevant to workload issues and identified two articles.

Kauppi et al. (2020) analysed the construction of hybrid learning spaces for university students today. The authors suggest design principles that should be considered when developing courses, such as reported structured cycles combining individual and group tasks, as well as tasks that concern process and content (p. 1113). Relevant is the authors' claim, not until the very last sentences of the article, that 'as higher education is changing towards online education, it is of great importance to emphasise that "teachers are designers" [...]. Hybrid learning spaces can indeed foster in-depth learning and even sustainable development, but leveraging the hybridity requires careful designing' (p. 1114). This is a point similar to one I have made myself in previous research, namely that teachers are more than teachers today: they are designers and content strategists, copywriters and user-experience experts - among other things (Dawkins, 2016).

Another article which focuses specifically on the impact of COVID-19 on teachers in terms specifically of the shift from classroom to online/flexible (FL) learning in a Philippine state university is by Tarrayo et al. (2021). Amongst the problems, advantages and disadvantages, and points for improvement in FL, the authors note the desire of participants in the study for school administration to be sympathetic, non-judgemental and realistic in executing plans for FL. 'The administration should take care of faculty members' well-being, for they play a great role in the implementation of FL' (p. 11). Suggested here, in my reading, is an extraordinary burden on teaching staff and their desire for additional support.

In summary, existing research discusses the impact on teachers of a sudden shift online. As would be expected, research also identifies the common opinion that online is convenient for students. Some research talks about how the role of teachers has changed and is changing, and this is often in terms of technological expertise. Suggested is that universities are responding to a disrupted context with technological innovation, and they are responding fast - as are teachers on the educational frontline. What is missing from research, however, is a detailed account of exactly what teachers are doing that is taking more time and changing their roles. There is some anecdotal mention of this in relation to online, but a complete absence of detailed discussion when it comes to hybrid-flexible delivery (HyFlex). Let me attempt to shed further light on these questions with my own, small data, account of my delivery of HF in 2021 and 2022.

Delivering HyFlex: 2021

For the HF subject I delivered, the following structure of classes was suggested by the University and timetabled accordingly: one synchronous HF class at 11 am (face-toface and online), and a second synchronous class (face-to-face only) at 12:30 pm.

My early memos note my acknowledgement, and attempt to address, the challenges designing subject content that accounts for the three modes of delivery and attendance. I make a note of my intention to adapt my original subject, which was a flipped, blended and synchronous subject (faceto-face and online), to HF mode (simultaneous synchronous face-to-face and online, and asynchronous). Based on the workshop mentioned above, I reasoned that the inclusion of asynchronous activities for students attending in asynchronous mode would enhance student presence (Stavredes, 2011). I set out, then, to maintain the skeleton of the subject as it had been originally designed, as a flipped and blended subject with synchronous face-to-face and online tutorials, but with the addition of weekly asynchronous activities specifically for students who wished to study in asynchronous mode. My rationale was that I did not have the time, nor ability to gain approval for wholesale assessment changes and take Beatty's advice and redesign this subject as 'asynchronous first.' Also noted is my attempt with these asynchronous activities to create meaningful opportunities for feedback for students.

From Carless and Boud (2018), effective feedback involves a shift from learners being passive recipients of feedback to those with the ability to integrate feedback into their learning process. Moreover, I reasoned that this would be best achieved through activities that followed a reflective model.

Regarding the initial weeks of the subject's thirteenweek schedule, my memos document several observations. The biggest issue was the complexity of keeping track of attendance. It became clear that far more was required than simply recording a roll of attendance. In this subject - and the majority of others in this discipline - attendance is not compulsory, and in the iteration of the subject being discussed there was no grade awarded for participation in class (historically this has been a vexed issue at the University). I decided in the very first class to ask students to use on online form, every week, to nominate their mode of attendance for that week. Noted in my memos, however, is that many students would fail to follow these instructions. Naturally, this made it hard for me to distinguish between absences or asynchronous participation.

In addition, in the first weeks of the subject the asynchronous tasks for those choosing this mode of attendance in a given week (and who these students were, I did not know), were not being completed. I did not keep a record of the completion rate since attendance was vague for the reasons noted earlier, but I do recall there were only a few. Anecdotally too, I noted some confusion for students about whether they were required to complete asynchronous activities if they swapped modes, for example from asynchronous to synchronous. And I also noted the ease with which students could get out of sync in this regard, and as a result unsure of what was required of them and when. Reflecting now on this issue, the flexibility of attendance in a HF subject is not as practically applicable as it seems on paper, and was understandably confusing for all involved.

My memos note my decision to change tack in the third week of the subject. I decided to follow the suggestion from the school educational designer and mandate a weekly asynchronous activity for all students that was due to be completed before class. I initiated what I have called foundation activities, which are tasks students would use to demonstrate achievement of a given week's learning objectives. Furthermore, since for some students the activities were to be a substitute for synchronous check-ins, I reasoned that these tasks were also an opportunity for me to provide valuable feedforward feedback (Hattie & Timperley, 2007), and engage in a dialogue with students, while also facilitating a dialogue between students each time they were asked in these tasks to reflect on other students' work. I was seeking opportunities to foster students' sense of belonging via the development of their connectedness to other students (Kahu & Nelson, 2018). All students, regardless of their mode of attendance, were to complete the foundation activities, and these would be discussed and extended in class. Any further commentary from class would be uploaded to the Learning Management System (LMS) at the conclusion of each class - either by students themselves or me. By week 6, I note my dissatisfaction with the students' engagement with the foundation activities.

A final issue noted in my memos from 2021 is again related to attendance. Recall that the following classes were timetabled: one synchronous HF class at 11 am (face-to-face and online), and a second synchronous class (face-to-face only) at 12:30 pm. The face-to-face classes were scheduled for students who nominated that mode as their preferred way of studying, and the online class was scheduled primarily for interstate students and overseas students. This messaging was communicated to students prior to week one via the University's online enrolment system. I was aware of the University's desire for students to have flexible attendance, and thus for students to have the opportunity to opt into the online class at their own discretion, and I communicated this objective to students by emphasising illness and similar extraneous factors as reasons for opting out of face-to-face and into online. As was to be expected, attendance in this subject declined in all modes after approximately week 4. A novel problem for HF, however, was the disruption caused by an imbalance in declining attendance across the modes. In my memos I note occasions when there were more students online than in the face-to-face classes, and one occasion when only one student attended the second face-to-face class. This was because of a perfect storm of absence generally and other students in the cohort deciding to attend the earlier class online. It is accepted that small class cohorts can lead to enhanced student engagement, but miniscule cohorts of two, or three, and sometimes only one, do not foster dynamic learning environments. I did not anticipate students in one face-to-face class would decide to attend online at a different time (I assumed students timetabled classes around other commitments), but I noted this as an organisational oversight (mine) that left the subject with very low to miniscule face-toface attendance in some weeks.

Delivering HyFlex: 2022

In 2022, I resolved to offer the same timetable of classes as 2021: one synchronous HF class at 11 am (face-to-face and online), and a second synchronous class (face-to-face only) at 12:30 pm. The total size of the cohort was similar, at approximately 40 students. Regarding the timetabling of the synchronous classes in 2022, I documented my inability to solve the imbalance, noted in 2021, of attendance across modes. I did not have a solution about how to prevent miniscule attendance in the second face-to-face class and

maintain the desired flexibility of HF; that is, if students decided to flock online or not attend at all. My memos note my approach was to intensify the requirement that students notify me in advance of class of their attendance pattern for a given week. My plan was to consistently notify students weekly via emails from the LMS and include a link in every weekly module to an online roll. I hoped that if attendance patterns were beyond my control, at least I could be better prepared and adjust my lesson plans to suit.

I set out in 2022 to increase the number of concrete instances of student engagement with curriculum, regardless of students' attendance modality. Involved was accepting with the HF model - and generally in terms of trends of student attendance in any mode of subject delivery - that many students would choose not to attend synchronous classes, even if nominated as their preferred mode of attendance. Returning to approaches from asynchronous teaching pedagogy, my primary approach in the 2022 iteration of the subject involved strengthening the asynchronous activities; in other words, designing them in such a way that students would be more likely to do them, also, therefore, supporting those who choose to attend asynchronously. This involved following the original advice I received and re-designing the subject as 'asynchronous first.'

I was certain this was the approach I would take since the conclusion of the 2021 iteration of the subject, and so I began preparation earlier. When I say earlier, I mean submitting a subject variation request prior to semester commencing and, although I did not have more time to prepare, my subject development was more focused and economical due to the concrete goals in my sights. My first step was to make the asynchronous activities assessable, and this involved the subject variation I mentioned a moment ago. This meant reducing the value of one assessment so that I could include another. The consequence of this approach was that, given I did not want to dramatically adjust existing assessments, I was limited by how big the new assessment would be. I settled on a total of 10 marks for this assessment, broken down into five one-mark tasks and one five-mark task. I maintained the reflective model from 2021, for the reasons noted above.

My memos note my plan to strategically place the asynchronous assessment activities in the subject's schedule. They were 'strategically placed' in so far as they were designed to scaffold assessments due in the same week by providing feedforward feedback. The activities were due before 9 am the day of class, and I envisioned they would be complemented by in-class exercises that would develop the activities further. I planned for all in-class activities to be uploaded to the discussion area of the LMS at the conclusion of class. This was an optional requirement, and I decided to advise students that if they wished to have feedback on the in-class exercises they were to email me.

In terms of the foundation activities, the majority of students completed these consistently each week (recall that no assessments are mandatory in this subject). I did note on several occasions, due to my provision of feedback for these assessments, an increase in my workload. Since feedforward feedback needs to be timely (Brooks et al., 2019), foundation activities had to be marked within a day or two of their submission. The University's assessment policy states that feedback is typically to be given within three weeks of the submission of assignments. Given each of the foundation activities was a critical reflection assessment, where students needed to reflect on the curriculum and, on occasion, their peers' online work, I was spending an estimated ten minutes per student per activity writing feedback. I accepted that, while time spent marking was disproportionate to the weighting of the assessment task, it was absolutely necessary in terms of my objective to engage students in all modes and provide meaningful feedback.

Regarding attendance in 2022, I also noted several issues. Despite my repeated communication and my placement of the online roll in the weekly online modules in the LMS, directly in a user's so-called reading path, students did not consistently notify me of their intended attendance pattern. Similar to 2021, I experienced weeks of miniscule attendance in the second face-to-face class. Rather than rely on knowing with certainty (via the roll) that attendance would be low, I prepared instead each week for minimal attendance. But this was especially challenging if only one student attended. I also recall my communication with my supervisor at the time and how, feeling a sense of defeat regarding attendance, I requested permission from students on two occasions in the last weeks of the subject to combine the second class of faceto-face students into the first HF class.

Discussion

It is evident that HyFlex, in terms of the flexibility of attendance enabled for students, is more complex to manage than it would seem at first. Managing the technology required to teach synchronous students at the same time in a physical classroom as students online was, in my opinion, perceived by the University as the most challenging part of this process. For me, however, it was the least. Difficulties with new technology can be anticipated and rehearsed, but effectively managing a student cohort of varying attendance patterns - and, therefore, fluctuating levels of engagement - was something I was not prepared for and certainly perplexed by.

It seems attendance can be considered a redundant concept in HF subjects. That is, attendance for any mode, not just the asynchronous students. I realise now it is illogical and somewhat contradictory to provide the flexibility enabled by HF, a flexibility that responds to changing student attendance patterns (based on their health, their work - and in some cases the weather), yet expect them to decide, in advance, when they plan to attend (via a roll). This complexity of attendance changes the approach to teaching.

When students do not attend class, or do, or change their minds from one week to the next, an intervention is needed for the teacher to maintain a connection with students, and for students to maintain a connection with each other. In my example I implemented 'asynchronous first' tasks, or what I call weekly foundation activities. My objective was to create a tenable connection with all students, and especially asynchronous students. All students needed to complete these activities at regular and strategic intervals if there is to

be the flexibility for them to swap attendance modes. Such activities were my attempt to stay connected with students, develop students' feedback literacy and foster a sense of belonging. Finally, the requirement that all students attempt these activities (due to flexible attendance) means that it is not possible to adapt an

existing subject to HF delivery; in other words, subjects need to be redesigned as asynchronous first.

As my examples show, the distribution of attendance in hybrid classrooms can easily and frequently become imbalanced, and the teacher needs to be flexible enough themselves to design curriculum for the frontline of classroom teaching that is adaptable, on the spot, to multiple potential combinations of student cohort - in some cases, one or two face-to-face students and two or three times as many online (often with cameras off); or even a lone student in class by themselves. Workload considerations evident here involve ongoing attendance management, adjusting lesson plans and having multiple lesson plans. These are extraordinary considerations, beyond the bounds of 'typical' synchronous teaching pre-COVID-19.

Additionally, given the necessity of asynchronous activities and the need to make these assessable to increase their completion rate, it is clear from my example that more time is needed, in compressed timeframes, for teachers to provide necessary feedback. If these 'asynchronous first' tasks are to scaffold assessments and enable formative feedback, they need to be marked in a timely manner; and, despite such assessments possibly having a small weighting (since they are weekly reflections), teacher feedback needs to be constructive and detailed - especially so in this context of HF and asynchronous attendance. Detailed feedback takes time, and the marking can feel relentless, and while Beatty (2019) notes this already, my own analysis offers more detail. Perhaps

one option to address additional workload here is automated asynchronous assessment tasks, such as quizzes created using interactive HTML5 and embedded in learning management systems. Further research might analyse these and other options in light of questions about workload (in terms, also, of the time taken to develop sophisticated enough quizzes), and their impact on student engagement and belonging.

Significant too and important to mention from my experience, is the added stress I was experiencing when attendance in class and online was low. I felt somewhat embarrassed, as if it was somehow my fault that students did not come to class, and this was especially acute when I was attempting to run a class with two, or one, student only.

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Conclusions

Academic research speaks generally of an increase in workload required for online teaching and HF alike, but where is this workload spent? My narrative my own example of this experience is valuable. Time

is spent attempting to manage students across multiple attendance streams; attempting to develop and adapt lesson plans to shifting cohorts - and sometimes diminished cohorts; providing timely feedback on tasks that attempt to compensate for student absence in asynchronous mode; and time is spent on the mental energy required to do all this, to juggle these dynamics and put on a brave face when classrooms are practically empty. Innovation is important in today's (and tomorrow's) disrupted learning environments, and so too is a detailed account - a small data analysis - of one's person's first-hand account.

The objectives of this article are not to determine what teaching and curriculum design approaches, methods or strategies 'work' and what did not, in the context of this discussion - which is the implementation of a HF subject in the wake of the COVID-19 pandemic. The objective of this article is to document the workload involved, for one teaching academic, trailblazing this mode of teaching at their university. As such, it shines a light on the micro-decisions made at the level of curriculum design and classroom teaching, and on the problems encountered and the approaches taken in response. This article wants to engage teaching academics in a conversation about what we are doing at the present time in the classrooms of our disrupted teaching environment, and about the changing nature of a teaching academic's work in higher education today - and also, about the nature of innovation at university, in terms of where, when and why this happens. The present account is especially important since hybrid learning is here to stay; according to Ignacio Cobisa, senior research analyst at International Data Corporation (IDC), 'By 2024, 40 per cent of education institutions will adopt a hybrid-first approach to operations and service delivery, driven by a high demand for flexible learning options among students and lifelong learners' (Times Higher Education, 2022).

Teaching staff about to embark on HF subject design need to be familiar, in specific detail, with the additional work potentially required. Teaching staff are advised to ensure their school and supervisor are aware of their efforts in this space, and are supportive, perhaps in terms of additional workload too. For me, regarding the next iteration of the subject discussed here, I plan to maintain the asynchronous foundation activities for the reasons noted above. I also plan to timetable one synchronous face-to-face and online class only (to reduce the imbalance noted above), and despite being contradictory to the flexible attendance enabled by HF delivery, I will likely maintain my attempts to require students to nominate, in advance, their weekly attendance pattern. (I realise I am not yet ready to be completely unaware of attendance in a given week - but maybe I will have to.) My focus in this article has been documenting my approach to managing HF delivery, and future research might consider other ways of engaging students while also attempting to analyse the students' own perspective on these approaches.

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References

Alexander, B. (2020, June 26). What is HyFlex teaching? [Video]. YouTube. https://www.youtube.com/watch?v=jNHnJnzwXuA

Beatty, B. (2006, October). Designing the HyFlex world – hybrid, flexible classes for all students [Paper presentation]. *Association for Educational Communication and Technology International Conference*, Dallas TX

Beatty, B. J. (2014). Hybrid courses with flexible participation – The HyFlex course design. In L. Kyei-Blankson and E. Ntuli (Eds.) *Practical Applications and Experiences in K-20 Blended Learning Environments* (pp. 153 – 177). IGI Global.

Beatty, B. J. (2019). Hybrid-flexible course design: Implementing student-directed hybrid classes. EdTech Books. Retrieved from https://edtechbooks.org/hyflex/

boyd, d. & Crawford, K. (2012). Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon. *Information, Communication & Society, 15*(5), 662–679. https://doi.org/10.1080/1369118X.2012.678878

Brooks, C., Carroll, A., Gillies, R. M., & Hattie, J. (2019). A matrix of feedback for learning. *Australian Journal of Teacher Education*, 44(4). http://dx.doi.org/10.14221/ajte.2018v44n4.2 Carless, D., & Boud, D. (2018). The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, 43(8), 1315–1325. https://doi.org/10.1080/02602938.2018.1463354

Corbin, J. & Strauss, A. (2012). Basics of qualitative research: Techniques and procedures for developing grounded theory (3rd ed.). Sage.

Dawkins, R. (2016). Content strategy: A lesson from the industry for university learning analytics. Show Me The Learning: Ascilite 2016: Conference Proceedings: 33rd International Conference on Innovation, Practice and Research in the Use of Educational Technologies in Tertiary Education, University Of South Australia, Adelaide, Australia, 27-30 November 2016, 172-181.

Dinu, L. M., Dommett, E. J., Baycova, A., Mehta, K. J., Everett, S., Foster, J. L. H., Byrom, N. C. (2021). A case study investigating mental wellbeing of university academics during the COVID-19 Pandemic. *Educ. Sci., 11*(702). https://doi.org/10.3390/educsci11110702

Finn, G. M., Crampton, P., Buchanan, J. A. G., Balogun, A. O., Tiffin, P. A., Morgan, J. E., Taylor, E., Soto, C. (2022). The impact of the COVID-19 pandemic on the research activity and working experience of clinical academics, with a focus on gender and ethnicity: A qualitative study in the UK. *BMJ Open. 12*(6), e057655–e057655. https://doi.org/10.1136/bmjopen-2021-057655

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112. https://doi.org/10.3102/003465430298487

Kahu, E. R. & Nelson, K. (2018). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research & Development*, 37(1), 58 – 71. https://doi.org/10.1080/07294360.2017.1344197

Kauppi, S., Muukkonen, H., Suorsa, T., & Takala, M. (2020). I still miss human contact, but this is more flexible – Paradoxes in virtual learning interaction and multidisciplinary collaboration. *British Journal of Educational Technology*, 51(4), 1101 – 1116. https://doi.org/10.1111/bjet.12929

Kohnke, L., & Moorhouse, B. L. (2021). Adopting HF in higher education in response to COVID-19: Students' perspectives. *Open Learning: The Journal of Open, Distance and e-Learning*, 1 – 14. https://doi.org/10.1080/02680513.2021.1906641

Loon, M. (2021). Flexible learning: A literature review 2016 – 2021. *Advance HE*. https://www.advance-he.ac.uk/news-and-views/flexible-learning-literature-review-2016-2021

Malczyk, B. R. (2019). Introducing social work to HF blended learning: A student-centred approach. *Journal of Teaching in Social Work*, 39(4-5), 414 – 428. https://doi.org/10.1080/08841233.2019.1652226

Maxwell, J. A., (2022). Qualitative research design. In P. Atkinson, S. Delamont, A. Cernat, J. W. Sakshaug, & R. A. Williams (Eds.), *SAGE Research Methods Foundations*. https://dx.doi.org/10.4135/9781526421036788354

Phillippi, J. & Lauderdale, J. (2018). A guide to field notes for qualitative research: Context and conversation. Qualitative Health Research, 28(3), 381 – 388. https://doi. org/10.1177/1049732317697102

Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2020). A systematic literature review on synchronous hybrid learning: Gaps identified. *Learning Environments Research*, 23(3), 269 – 290. https://doi.org/10.1007/s10984-019-09303-z

Raes, A. (2021). Exploring student and teacher experiences in hybrid

learning environments: Does presence matter? Postdigital Science and education, (4), 138 - 159. https://doi.org/10.1007/s42438-021-

Ravitch, S. M., & Riggan, M. (2012). Reason and rigor: How conceptual frameworks guide research. Sage.

Stavredes, T. (2011). Effective online teaching: Foundations and strategies for student success (1st ed.). Jossey-Bass.

Tarrayo, V. N., Paz, R. M. O., & Gepila, E. C. Jr. (2021). The shift to flexible learning amidst the pandemic: The case of English language teachers in a Philippine state university. Innovation in Language Learning and Teaching. https://doi.org/10.1080/17501229.2021.194 4163

Times Higher Education. What is driving innovation in the higher education sector? (2022, June 1). Retrieved from https://www. timeshighereducation.com/campus/what-driving-innovation-highereducation-sector

Zorkić, J., Mićić, K., & Kovacs Cerović, T. (2021). Lost trust? The experiences of teachers and students during schooling disrupted by the COVID-19 pandemic. CEPS Journal, 11(Sp.Issue), 1–24. https://doi. org/10.26529/cepsj.1150