

3.12

One University’s Hybrid-Flexible ‘Studyflex’ Course Experience in Melbourne, Australia

Lessons Learned and Further Opportunities and Challenges in the Wake of COVID19

John Bevacqua, Meg Colasante, & Swapna Verma

I - Introduction

This Chapter sets out the experience in a university in Australia, where five subjects were designed in a flexible hybrid format. Here the students were encouraged to navigate and create their own unique hybrid learning pathway via online or on-campus mode and to alternate between various combinations of the two. In essence, the curriculum model, conceptualised and deployed using educational design research and originally titled “StudyFlex”, allowed students to self-determine their own bespoke hybrid journey, rather than the educator pre-determining a singular hybrid learning pathway through the subject. This central characteristic distinguished StudyFlex from most other hybrid or blended learning models deployed at that time in our local contexts.

The Chapter goes further, however, building upon the StudyFlex trial and the insights gained from participating educators, their students and online analytics derived from testing in contrasting contexts as part of that trial (Colasante, Bevacqua & Muir, 2020). Specifically, the discussion extends to identifying new and contemporary opportunities and challenges posed by “Hybrid-Flexible” (HyFlex) models like StudyFlex, including structural, socio-cultural, demographic and discipline-specific issues propelled to prominence by the COVID-19 pandemic and their impact upon student satisfaction and student performance. The work is timely given that many universities have provided students with various hybrid delivery options in order to accommodate pandemic public health restrictions. Early signs are that there will be significant post-pandemic demand for high quality hybrid delivery. The ultimate contention of the Chapter, therefore, is that there is a pressing need to continue to research, test and refine the implications of HyFlex initiatives like StudyFlex for students and their educators.

II - Why StudyFlex?

The genesis of the StudyFlex model was a series of discussions at La Trobe University in Melbourne, Australia in early 2018 on the feasibility of developing a single subject instance where students could self-select an on-campus or online mode of study from week to week or topic to topic, thus creating their own unique study blend or hybrid learning experience. Specifically, the aim was to design and administer a single offering which would allow enrolled online students the opportunity to

intermittently switch between face-to-face and online learning experiences at various bespoke intervals. In essence, the goal was to find a way to move beyond a predetermined hard line between online and on-campus study, re-imagining university study as a “no-line” experience (Bevacqua & Colasante, 2018; 2019). A key driver of this goal was the desire to maximise study flexibility for students without unnecessarily duplicating subject offerings to accommodate different study preferences - in particular, to accommodate the full spectrum of students, from those wishing to study fully online (and predominantly asynchronously) through to those wishing to engage predominantly on-campus. Traditional pre-determined “blended” offerings were incapable of accommodating this breadth of student flexibility whilst providing all students with an equivalent high-quality learning experience.

III - What is StudyFlex?

From the starting points outlined above, the StudyFlex pilot team settled upon a simple working definition:

In a StudyFlex offering, all students are enrolled in a single subject or course offering. Once enrolled, students will be able to choose from week to week or topic to topic how they wish to study. They can choose to complete either completely online, or supplement online activities with a degree of on-campus activity that suits them. Students can modify their choices on short notice. (Bevacqua & Colasante, 2018)

In essence, students determined their own form of “hybrid” learning experience, rather than the university offering a pre-determined blend or teacher-led hybrid for all students.

While the StudyFlex model sits within the HyFlex family of approaches, it is arguably not the most common approach. Well-documented HyFlex models offer multimodal options that often coalesce around on-campus events capable of catering for both face-to-face and synchronous online participation, and typically supplemented with asynchronous access to recordings to accommodate other learners (Beatty, 2019). These models allow students to construct their own customised learning experience by participating in different ways from event to event. However, StudyFlex was fundamentally designed to transfer increased control to the students to accommodate (and encourage) their own bespoke learning pathways where primacy was not afforded to any particular on-campus event, study modality or pathway. This approach leans more toward HyFlex variations that offer on-campus and equivalent asynchronous online options. As such, the primary asynchronous online alternative learning option for each week or topic in StudyFlex was a structured stand-alone alternative to attending an on-campus event.

The core guiding design principles for StudyFlex can be reduced to addressing two key matters - (1) facilitating equivalent learning experiences for all students irrespective of their chosen hybrid learning pathway; and (2) maximising student choice and accommodating the broadest possible range of student learning mode preferences and hybrid learning pathways.

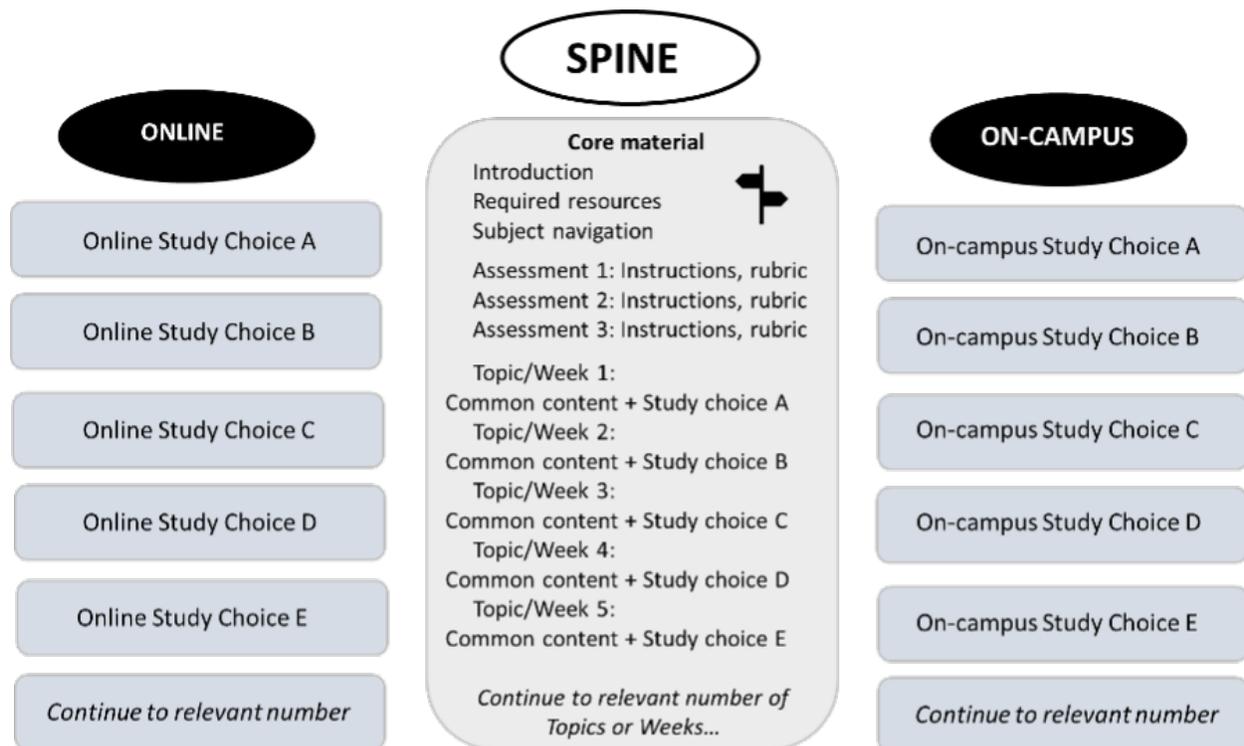
Equivalence for All Students: At its core, the StudyFlex pilot subjects comprised a “spine” or core online component that all students completed and used as their overall guidance across the semester, and a series of clear choice-points where students could create personalised learning pathways by choosing either an on-campus or online option of equivalent standard. That is, at each choice-point

across a 12-week semester subject, all corresponding learning and assessment activities were designed to be equivalent in terms of intended learning objectives, quality, and workload effort required.

Maximum Student Choice and Suitability: All StudyFlex offerings were designed to accommodate the study mode preferences of the broadest possible range of students and potential learning pathways. Hence StudyFlex offerings necessarily included both online and on-campus learning experiences, with students having the option to complete the subject completely online or via a personalised hybrid pathway of their choice combining online and on-campus learning activities. Consequently, the pilot StudyFlex offerings did not include any compulsory on-campus attendance requirements. Reciprocally, they all also included some on campus activities for those willing and able to participate in those activities.

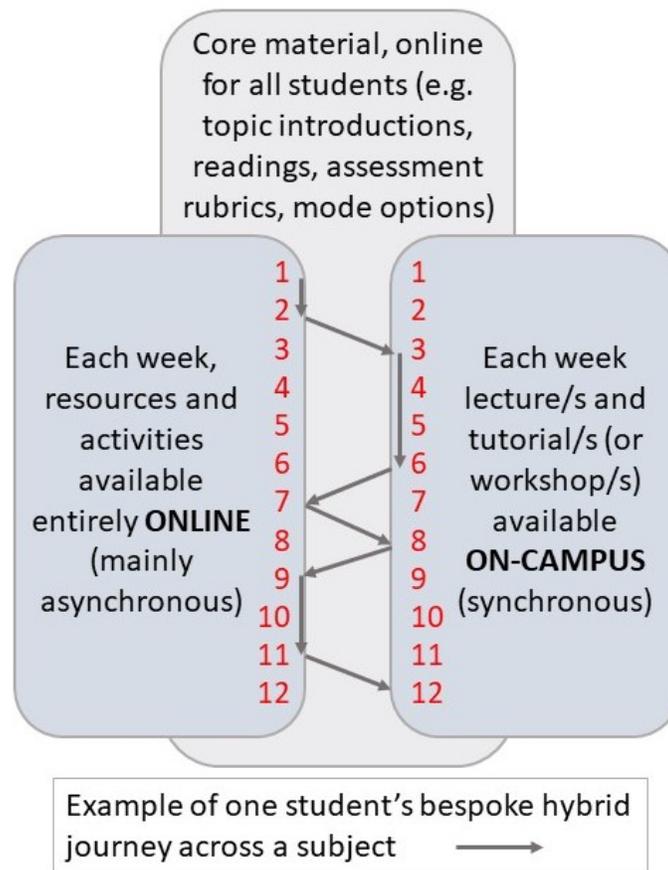
A key characteristic of the core design itself was a central online spine in the learning management system (LMS) as illustrated in the following diagram (Figure 1). This central spine or nucleus consisted of a singular online subject portal containing all the navigational supports and resources for all students. These supports included subject orientation materials, topic introductions, and directions to weekly instructions on navigating and choosing between on-campus and online experiences.

Figure 1. Core Design



The arrows in Figure 2 below show an example of one student's possible hybrid learning pathway (indicating periodic switches between online and on-campus activities throughout the semester) in their StudyFlex subject:

Figure 2. Sample Student Hybrid Learning Pathway



It is worth noting that the StudyFlex subjects align to the four Beatty (2010; 2019) values of HyFlex:

- “Learner Choice”: students choose the mode of engagement that works for them - week to week or topic to topic
- “Equivalency” and “Reusability”: there are no poor cousins between the modes, that is,
 - for Equivalency - despite mode chosen, they each provide students the opportunity for equivalent stand-alone learning outcomes (e.g. computer laboratory exercises offered as high fidelity online simulated exercises; collaborative development of strategic communications in group wiki format online or on-campus group poster development and each with structured intergroup peer review)
 - for Reusability - all content materials and resources can be accessed by all students irrespective of delivery mode (e.g. allowing students to compare or supplement their learning with equivalent activities; facilitating crossing of study mode boundaries in intergroup peer review activities).
- “Accessibility”: universal accessibility design principles embedded intentionally and by default, (e.g. transcripts added to all content videos).

IV - How - The StudyFlex Trial

The StudyFlex trial involved redeveloping five university subjects as a proof of concept, with a view to potentially rolling out the model more broadly. The first tranche of subjects involved three postgraduate masters level subjects, including two computer science subjects and a health research subject (see Table 1). To further test the proof of concept, a further two subjects were also involved in prototype design experiments in the trial; a postgraduate humanities subject and an undergraduate health science subject (see Table 2).

Table 1: Flexible hybrid format for designed and delivered/taught subjects

Code	Subject	Discipline	Flexible hybrid format
BCC	Blockchain and Cryptocurrencies	Computer Sciences (postgraduate)	12-week, 12-topic semester: a) Sole LMS site: all core material; guided navigation to study choice points. b) On-campus 2-hour lecture and 2-hour IT lab each week, each of which had: c) Online equivalent options (at own time and pace within the week). All students were also offered a 2-day residential intensive practical session toward the end of the semester.
PEN	Penetration Testing Principles	Computer Sciences (postgraduate)	As for BCC above. <i>Plus:</i> the online equivalent options for laboratories involved support for setting up a virtual machine for online completion of PEN lab exercises.
QMH	Qualitative Methods in Health Research	Public Health (postgraduate)	10-week, 9-topic Winter intensive: a) Sole LMS site: all common material; guided navigation to study choice points. b) On-campus 10x two-hour intensive seminars. c) Online topics of 10x learning cycles with activities of an equivalent nature to the on-campus seminars. d) Common online discussion forum for all students, which intentionally extended beyond the structured topic period into assessment preparation time.

Table 2: Prototype designs to test flexible hybrid model in other contexts (designed-only subjects)

Code	Subject	Discipline	Design work for flexible hybrid format
STC	Strategic Communications	Humanities (postgraduate)	Prototype created for a 6-topic, 12-week semester: a) Sole LMS site: all common materials, activities, and guided navigation to study choice points. b) On-campus fortnightly optional attendance to scheduled 3-hour seminars (team/shared teaching), each of which had: c) Online equivalent options including social constructivist activities in each topic.
IAI	Infection and Immunity	Health Sciences (undergraduate)	Prototype design for a 4-part, 12-week semester: Design focussed on <ul style="list-style-type: none"> · restructuring 12 topics into 4 related themes (of 2-4 topics each), and: · conceiving how to transform associated science laboratory experiences into equivalent on-campus and online exercises, and how to incorporate this equitably to students enrolled at various campuses.

Building upon the common structure set out in Figure 1 above, all of the trial subject designs comprised several core common features. These included regular study choice points, incorporated to facilitate student self-determination of their choice of hybrid study pathway across the semester. Allied to this were detailed navigation guides through the learning materials and student supports for each mode. The subjects were designed to ensure any mode-switching was intentional rather than inadvertent. This was achieved by including clear signposting (icons and text) at each choice point, which allowed students to easily bypass materials that were not relevant to their chosen pathway. However, if desired, students could access all materials regardless of chosen mode.

The specific subject designs were customised to fit each subject's disciplinary context (summarized in previous Table 1). Accordingly, the two computer science subjects (BCC and PEN) were structurally quite similar to each other (both having a laboratory focus), but quite different to the public health subject (QMH) with its seminar focus. For the IT experiences required for PEN, a bespoke virtual machine was created to enable off-campus simulation of a variety of penetration testing online environments.

The additional prototype designs enabled testing the initiative with teachers in other disciplines to draw out further efficacy issues and design principles (summarized in previous Table 2). Hence the health science subject (IAI) catered for the complexity of science laboratory-based learning spaces in the model, the humanities subject (STC) catered for social constructive experiences such as group

responses to a crisis scenario (on-campus poster or online wiki creation and peer review), and both subjects offered multi-week topic-based approaches rather than weekly structures.

V - Impact - StudyFlex Trial Data and Findings

The data collection approach from the StudyFlex trial have been set out in full elsewhere (Colasante et al., 2020) but the key features can be relatively concisely summarised. In terms of data collection, students from the three subjects taught in StudyFlex mode were invited to participate in an interview or complete an anonymous online survey. The survey asked students about their study choices in their subject, their preferences, suggestions, and whether they would recommend the model (n=19). The interviews offered deeper reflection opportunities on the same question themes, albeit had limited uptake (n=2). Almost all surveyed students (90%) and both interviewed students agreed the choice of study mode was (or was potentially) helpful for their learning. Each of the interviewed students and three quarters of the surveyed students recommended adopting this flexible approach in other subjects and/or extending this option to other students.

To supplement this data, analysis of anonymous student LMS access data was also undertaken. Each teacher involved in the trial also participated in an interview to discuss the design of their subject and to reflect on effectiveness, student attendance/participation, and suggested improvements (n=5). The teachers were all positive about the model, yet raised various challenges.

The data collected from the StudyFlex trial have had impact, both in terms of the insights into student and educator responses to the trial itself but also more broadly, in terms of implications and influence of those responses in shaping the continuing hybrid learning research agendas of the authors. Key among these implications and influences are: (1) the significance and relevance of disciplinary context to successful hybrid delivery; (2) the need to embed support for students and staff in any hybrid-flexible learning initiative; (3) the need to accommodate complex and multi-faceted cohort socio-cultural and demographic factors; and (4) the need to be cognisant of significant structural and administrative challenges potentially affecting the viability and success of learning initiatives like StudyFlex.

The authors are engaged in preliminary work (at subsequent universities) to collect interview and survey data from students and staff concerning each of these issues to inform the design and development of a further and more-refined “StudyFlex2.0” trial in 2023. As such, the balance of this part of the chapter centres on discussing the StudyFlex trial findings (Colasante et al., 2020) with respect to each of the four key findings and influences set out above, and its implications for StudyFlex2.0 and a broader ongoing research agenda in this context.

Disciplinary Context

The results of the StudyFlex pilot highlighted that despite adhering to core values such as equivalence, hybrid-flexible teaching and learning models should be customised to the particular disciplinary context. Further, student responses to the opportunities afforded by hybrid learning may vary depending on the disciplinary context. One way this became evident was in disciplinary-specific variations evident upon analysis of the LMS participation data. For example, average views of online content showed that the highly technical nature of PEN attracted the highest range of students views of online content (15-37 views per student per week), followed by fellow computer science subject BCC (3-16), with comparatively low views recorded by the public health subject (QMH) students (approximately 4). This reflects the content-heavy nature of the two computer science subjects,

especially PEN, compared to the process-oriented focus of the health research subject. This interesting insight suggests differences in student use of hybrid study choices depending on the disciplinary context.

As such, the authors are currently exploring avenues in StudyFlex2.0 to apply a new disciplinary-specific lens to test the viability and implications of applying hybrid-flexible learning models akin to StudyFlex. The chosen discipline is tax and business law. In part, this is due to the disciplinary teaching expertise and/or roles of members of the author team. However, this context also serendipitously allows for testing of the influence of a number of highly relevant disciplinary traits for potential impact on the successful design and implementation of hybrid learning. Key among these disciplinary traits are:

- learning volume and complexity (for which tax law in particular is infamous) – there is evidence to suggest that in online settings, in particular, excess volume can exacerbate perceptions of subject matter complexity more so than in face to face settings. It is unclear whether the same can be said of hybrid learning (the comparison of computer science versus public health data from the StudyFlex trial suggests this might not be the case);
- the accommodation of course or subject accreditation requirements which restrict the ability to modify subject content, delivery or assessment (for example, to remove the need for invigilated on-campus final examinations). These are common in legal and tax contexts in Australia and could significantly fetter the potential for hybrid models like StudyFlex which aim for maximum student-directed study-choices;
- fluidity and constantly-changing nature of the subject matter (another feature of tax and law in emerging or rapidly changing fields). This might have particular impact on the key hybrid design value of “reusability” and, consequently, the economics of applying hybrid delivery in such settings;
- applied versus theoretical applications – tax law teaching, for example, directly involves both (i.e. through the teaching of “black-letter” legal principles as well as tax calculation methodology). These features also have potential to raise challenges or opportunities in hybrid teaching settings. For example, it may be the case that hybrid learning options will be particularly more or less effective or desirable in one or other of these teaching applications.

It is not necessarily the case that one or more of these factors precludes the implementation of hybrid-flexible learning in this (or any other) disciplinary context. However, successful hybrid design may need to take these features into account – for example by limiting or directing more-or-less student-directed flexibility depending on the discipline-specific curriculum features and requirements. For example, the curriculum for taxation law could be apportioned so that the calculations component of topics and/or topics which are not as comparatively enriched with technical concepts (such as tax administration and tax accounting) could be taught better online in either synchronous or asynchronous mode and topics which require the complexity of conceptual analysis could be better taught synchronously only in either online or on-campus mode (such as income versus capital distinction in various contexts). The current work of the authors aims to test these propositions.

Support for Staff and Students

It is apparent from the findings of the StudyFlex trial that hybrid-flexible models implemented without adequate support for both students and staff are less likely to be well-received or to succeed

in meeting their full potential. In the case of students, hybrid offerings must be scaffolded with sufficient student support to enable them to navigate hybrid study choices and maximise benefits from hybrid learning. The StudyFlex teachers raised the need for support for students, including guiding them to understand how to navigate the new format. For example, one respondent lamented how some online students found difficulty navigating even basic LMS classes without the added “complexity of having to make these [study mode] choices”. It was also noted that, beyond the navigation, not all students may grasp the “responsibility for the choices that they make”, for example, how they best learn or how they can best take advantage of either or both modes; and that “there’s some work to be done right at the start when people are introduced to this way, to support them making those choices and developing that reflective practice”.

In the case of educators, hybrid models need to be designed with sufficient pedagogical support and reassurance in the form of professional development for those involved in flexible hybrid delivery to ensure they can do so effectively and efficiently. However further exploration is required to determine the form, nature and extent of the support required. Pertinently there is a further issue that warrants examination - to what extent the COVID-19 pandemic may have affected these matters (for reasons elaborated further in VI below).

Socio-Cultural and Cohort Demographic Factors

The success of any hybrid offering like StudyFlex hinges on an ability to cater for various socio-cultural influences on student study mode choice. For example, the StudyFlex trial revealed the significance of student work commitments, physical distance from campus, and life-load factors such as childcare commitments, illness and (changes in) lifestyle or personal circumstances affecting study plans.

During the trial, three general types of students emerged. Those whose decision-making was based on personal preference (e.g. prefer one mode or like the teacher); those who had some fundamentally inflexible reasons preventing on-campus participation (even if that formed their preference), such as location, work, or other responsibilities; and those students who unexpectedly used the flexible option as an online “back-up” when they otherwise preferred and intended to attend on-campus learning opportunities. Notwithstanding that some students labour under inflexible constructs that don’t allow them to make a choice other than to study online, when asked to compare their original intentions with their actual study patterns, over one-third of student responses overall reported variations from their expectations to actuality. That is, they either made use of more online or more on-campus opportunities than they had intended. This trend approximately aligns to what Beatty (2014) reported on participation expectations for small-sized HyFlex classes.

However, much more work is required to determine the suitability of hybrid delivery models like StudyFlex for various cohorts. Key aspects which the authors are currently examining in StudyFlex2.0 are:

- The suitability, desirability and design of hybrid learning for international students - both for those studying on-shore and those studying off-shore by distance learning;
- The suitability and design of hybrid learning depending on the level of tertiary study experience of the student cohort. For example, hybrid learning may be more attractive to students later in their degrees (or undertaking postgraduate or part-time studies) compared to fresh secondary school graduates. The intuitive logic is that the former are more likely to be facing inflexible life-load commitments such as work or family than younger students.

Conversely, school leavers are more likely to expect extra support which may or may not be able to be accommodated in a hybrid self-directed learning setting. While some of these issues have been examined in pure online learning settings, further study is required to determine whether these intuitively appealing conclusions apply with equal force (or at all) in hybrid learning settings.

Structural and Administrative Challenges

Whilst teachers involved in the StudyFlex trial were overwhelmingly positive about the model, they flagged various administrative difficulties in anticipating and sensibly managing on-campus attendance numbers. This included anticipated problems catering for unknown numbers of on-campus students, such as the science subjects requiring laboratory technicians to prepare equipment in advance. Even in a humanities context, the question was raised: “Is there a critical mass of students who need to say that they’re coming along to a session before it will run?” Related concerns extended to teaching workload in flexible hybrid subjects. For example, the health research teacher said he felt a doubling of effort on being attentive to students in both modes, saying “even though I’m only teaching it as one subject, it really is like I’m teaching it twice”.

These insights suggest a need for implementation of hybrid-flexible learning to be accompanied by contemporaneous data collection concerning student participation trends and preferences. Over time these trends can be refined to allow for better prediction of resourcing requirements to accommodate all students. The authors also aim to explore these propositions in greater detail in StudyFlex2.0 and other future work.

There are also potentially a range of more fundamental structural systemic issues which might hinder the full implementation or realisation of the potential benefits of hybrid learning in some contexts, for example where providing access to international students is concerned. Many of these structural and systemic limitations on student study mode flexibility have been recently tested as a result of the COVID-19 pandemic and are among a number of issues which will need to be addressed when implementing hybrid learning post-pandemic. Attention now turns to discussion of these issues.

VI - Beyond StudyFlex - Implementing Hybrid Learning in a post-COVID Era

Hybrid learning has increased in prominence due to the COVID-19 pandemic. The quarantining and other public health measures implemented worldwide to restrict physical contact and slow the transmission of the virus has compelled education providers to rapidly transition (albeit, temporarily) away from face-to-face delivery. In particular, at the height of the pandemic, teaching and learning required an unprecedented change to its pedagogy and required an immediate and significant transition to developing a digitised curriculum. In countries such as Australia, the response to this challenge by tertiary institutions has included adopting what has been loosely described as “hybrid” learning. One author has described the description of “hybrid learning” used during the pandemic as encompassing “...everything from parallel teaching (some learners online, some learners onsite), blended learning (use of digital or online resources in onsite teaching) to emergency remote teaching (teaching and learning during the pandemic)” (Nørgård, 2021, p.1711).

This rapid shift in teaching focus to “hybrid” learning has a number of potential effects on the implementation challenges highlighted by the StudyFlex trial. For example, insofar as support for students and staff for hybrid learning is concerned, there is a prospect that support needs may not be as significant post-pandemic. One reason is that many individuals have been compelled to equip

themselves to learn, work, or study effectively from home. For many people, transitioning to studying from home has required a significant investment in new technologies and equipment and changes in study practices. These investments and changes in practices will have been accompanied by improvements in digital literacy insofar as the use of learning technologies are concerned. The result is that many (including some of whom may previously have been hesitant) have now learnt how to effectively interact digitally in a range of educational settings. For these people, hybrid learning options may be increasingly accepted, preferred or even demanded. Indeed, there is growing recognition that forced distinctions between on-campus and online modes of learning ignore the realities of contemporary learning (Lamb et al, 2022).

The StudyFlex trial also highlighted a number of structural and administrative challenges associated with implementing hybrid learning models (some of which were noted previously in this Chapter). In addition, however, many of the discussions leading to the implementation of the trial concerned the ability of the University's systems and the University's regulatory rules and frameworks to offer sophisticated hybrid models to all students in any meaningful and enduring manner. The most obvious example of these concerns is the historical legal restriction on international student visa-holders, which in Australia restricts their ability to learn online and requires Australian universities to monitor on-campus class attendance of these student Visa holders. COVID-19 has provided both the opportunity and necessity for universities and regulators to challenge and relax these previously seemingly inflexible rules. For example, during the peak of the pandemic in Australia and in a number of other jurisdictions dependent on international students, face-to-face attendance student visa requirements were relaxed.

Although such regulatory restrictions may be intended to return when the pandemic ends, there will likely also be ongoing post-pandemic pressure on tertiary education providers to accommodate study mode flexibility "...to repair the damage caused by COVID-19's interruptions to learning trajectories" (Nørgård, 2021, p.1711). Many students have been compelled to defer or take leave of absence from their studies or particular study units due to COVID-19 restrictions and disruptions. Many will be impatient to resume and to make up for lost time. Others will have been forced to abandon their studies. They may choose to seek out alternative study options with greater inbuilt study mode flexibility to insulate against future risk of having to make the same decision in the event of future unanticipated calamities.

Others, who may not have previously contemplated or experienced online learning will now have had a taste of alternatives to traditional on-campus face-to-face delivery. Pearson's 2020 survey found that 84% of students globally agreed that "[s]tudents can still have a good university experience if some classes are held in person and some are held online" (Pearson, 2020, p.48). This suggests that in the wake of COVID-19 students will seek out high quality and flexible mixes of online and in-person learning experiences.

All of this provides a compelling case for universities and regulators to remove administrative hurdles in the way of innovative hybrid-flexible offerings like StudyFlex. It may also compel universities to consider the further issue highlighted by the StudyFlex trial - the need to capture contemporaneous and long-term data concerning both student preferences and student performance in hybrid learning settings. This will ensure informed long-term adjustments to resourcing, timetabling, and learning spaces which will be required to accommodate the likely widescale adoption of hybrid-flexible learning in one or more guises post-pandemic.

VII - Conclusion

The StudyFlex trial was the start of an ongoing journey. Whilst the nomenclature of StudyFlex has been repurposed at La Trobe University for other uses, and the model as originally conceived has not proceeded beyond the pilot stage at that university, the essence of the originally conceived model remains more relevant than ever. Specifically, the authors—having moved on to other universities—continue developing and building upon StudyFlex as part of a broader flexible-hybrid research agenda.

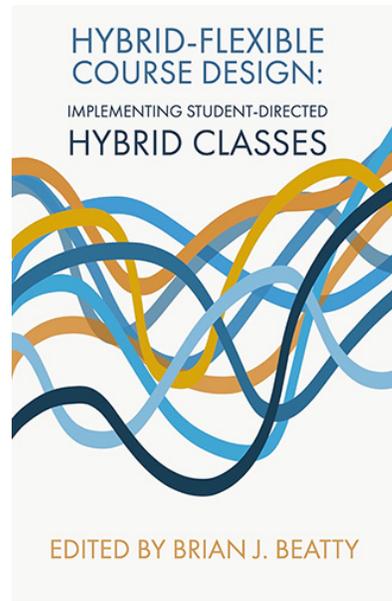
COVID-19 has accelerated the pace of this research and hastened the increasingly likely long-term transition to high-quality hybrid delivery in universities. The work required to ensure this transition continues apace and will require a large and committed international community of practice. The StudyFlex trial suggests a series of key starting priorities for this community of practice to address to ensure the benefits of flexible learning choice are fully realised. The continuing work of the authors stemming from the StudyFlex trial will aim to further build and refine the research agenda to allow educators to confidently assess whether and how to implement hybrid learning approaches in their particular classroom, disciplinary, administrative, and regulatory contexts.

Specifically, the StudyFlex trial and the values of HyFlex highlight uncertainties in our current understanding, acceptability, and impact of hybrid learning and illustrate that any existing knowledge must be qualified by the realisation that study attitudes and behaviours are not static, nor will they be the same in all disciplinary and cohort-specific contexts. Accordingly, future research needs to extend to include an array of highly contextualised studies involving the design and implementation of flexible hybrid learning models like StudyFlex, building to a critical mass of continually evolving and empirically backed body of research. The COVID-19 pandemic and anticipated realities of living in a post-pandemic world may provide the necessary momentum for the initiation and acceleration of this sorely needed body of research.

References

- Beatty, B. (2010). 'Four Fundamental Principles for HyFlex - The Pillars', *HyFlex World: Supporting learners with face to face and online options - all the time*. Retrieved 18-February-2022 from <https://edtechbooks.org/-fkxV>
- Beatty, B. (2014). Hybrid courses with flexible participation: The HyFlex course design. In L. KyeiBlankson & E. Ntuli (eds.), *Practical Applications and Experiences in K-20 Blended Learning Environments*, IGI Global, Hershey, PA, 153-177.
- Beatty, B. (2019). *Hybrid-Flexible Course Design: Implementing Student-Directed Hybrid Classes*. EdTech Books. <https://edtechbooks.org/-vGsU>
- Bevacqua, J. & Colasante, M. (2018). New shores: Preliminary observations from a proof-of-concept project, to define and design a student-centred approach to study mode selection. In M. Campbell et al (Eds.) *Proceedings ASCILITE2018: 35th International Conference on Innovation, Practice and Research in the Use of Educational Technologies in Tertiary Education*, Geelong, VIC, 309-313. <https://edtechbooks.org/-uBjA>
- Bevacqua, J. & Colasante, M. (2019). No Lines: Observations from a pilot project to re-imagine, design and implement a flexible student-centred approach to study mode selection. *Journal of*

- University Teaching and Learning Practice*, 16(1). <https://edtechbooks.org/-fZvk>
- Colasante, M., Bevacqua, J. & Muir, S. (2020). Flexible hybrid format in university curricula to offer students in-subject choice of study mode: An educational design research project. *Journal of University Teaching and Learning Practice*, 17(3). <https://edtechbooks.org/-dyJ>
- Lamb, J., Carvalho, L., Gallagher, M. & Knox, J. (2022). The postdigital learning spaces of higher education. *Postdigital Science and Education*, 4, pp:1-12
- Nørgård, R. (2021). Theorising Hybrid Lifelong Learning. *British Journal of Educational Technology*, 52, pp: 1709-1723.
- Pearson. (2020). *The Global Learner Survey August 2020*. Retrieved 11-March-2022 from <https://edtechbooks.org/-seES>



Bevacqua, J., Colasante, M., & Verma, S. (2022). One University's Hybrid-Flexible 'Studyflex' Course Experience in Melbourne, Australia: Lessons Learned and Further Opportunities and Challenges in the Wake of COVID19. In B. J. Beatty (Ed.), *Hybrid-Flexible Course Design*. EdTech Books.
https://edtechbooks.org/hyflex/one_universitys_hybr