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Evaluating hybrid teaching practices: a case study of staff and student experiences at City St George's, University of London

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ABSTRACT

This paper evaluates the hybrid teaching practices at City St. George's, University of London through a unique study of the experiences of staff and students in using these spaces for learning. The university was an early adopter of hybrid teaching in UK higher education and implemented it at scale and continues to use and develop this practice. Our evaluation focuses on practical insights gathered from two mixed-methods surveys, which included both qualitative and quantitative questions, conducted over the academic year 2021-2022. Additionally, staff focus groups were held to further explore survey findings. Responses highlighted the benefits of inclusivity in the hybrid teaching approach, though it also revealed mixed engagement levels among online students. The study also uncovered various challenges and technical issues faced by staff and students, providing valuable insights for improving future hybrid teaching practices. As this was an early implementation of this practice in a planned way, this snapshot analysis provides a useful baseline for understanding how hybrid teaching and experience will continue to develop. These findings will inform strategic decisions related to engagement, pedagogy, technology, space design, and staff development, as well as support a community of practice with other educational institutions.

Introduction

The COVID-19 pandemic significantly impacted higher education, with traditional, fully online, and hybrid teaching methods offering both advantages and disadvantages. Students have benefited from hybrid teaching, valuing the flexibility it provides and finding the hybrid combination more representative of the modern workplace than solely in-person learning. (Baty et al., 2022)

Although hybrid teaching is a relatively new pedagogic approach for live teaching to students both on campus and online, this approach has existed since 2007 in certain North American universities (Beatty, 2007). Many UK higher education institutions have subsequently created spaces using a variety of terms, such as hyflex, multimodal, blended synchronous, dual delivery and equitable models (Athens, 2023; Durham University, 2020; Sanchez-Pizani et al., 2022; Secker, 2021). The typical approach during the pandemic was either very simple, but unsustainable, or complex and rushed through, leading to poor student experiences and concerns about digital poverty, accessibility, and engagement (Knight et al., 2022; Pelletier et al., 2022; QAA, 2022).

This paper may be particularly beneficial for institutions that are either initiating hybrid delivery in a planned, non-emergency context or for those that had previously implemented hybrid delivery but have

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since reduced their efforts. The pandemic accelerated the adoption of digital resources, establishing classroom video technology as a vital component of higher education. However, this transition has since prompted a need to re-evaluate the pedagogical and practical implications of utilising hybrid teaching, for instance, discursive problem-based learning that does not work as well in a hybrid modality (Mineshima-Lowe et al., 2024).

In contrast, the approach undertaken at City St George's, University of London was to specially provision tens of rooms with built-in equipment for full hybrid teaching, which was rolled out across multiple areas of the university in the 2021-2022 academic year. The evaluation and analysis presented here examines the experience of this first implementation to highlight to other institutions who may be embarking on hybrid provision what the initial stages can be like and advising on lessons to be learned and implemented in further delivery.

City St George's, University of London is a public research university in central London, with around 22,500 students, of which about 60% are international. The university is unique in that approximately 70% of the student population can be identified as a commuter student, who travel to the Clerkenwell university campus for classes (Roy, 2020), which is significant given the choice to adopt hybrid teaching post-pandemic. The university emphasises entrepreneurship, industry partnerships, and practical learning to complement academic study. The Clerkenwell campus of the University has six specialist Schools (Faculties) with unique academic departments, facilities, and research centres. This context is important to understand the experiences of staff and students participating in hybrid learning and suggests both opportunities for how our findings may apply in other educational contexts, as well as limits.

In summer 2021, City, University of London, as it was known then, conducted a literature review on hybrid teaching alongside a sector wide benchmarking exercise during the COVID-19 pandemic, which resulted in institutional strategies, a technical design, developing online pedagogies and the creation of academic support for hybrid approaches (Abuhassna et al., 2023; Secker, 2021). Looking particularly at institutions operating in similar national and educational contexts to glean the most transferable recommendations, it was clear that smaller class sizes allow for more individualised learning experiences, improved group collaboration, and increased flexibility for students. However, for larger cohorts, lecturers were encouraged to look at chat exchanges and facilitating interactions while giving each student feedback and encouragement.

Over the next two years of restrictions on attending campus, twenty-five rooms were installed with hybrid technology to instruct students face to face and online simultaneously (Rutherford, 2021) under the project name of ISLA. At City St. George's, ISLA stands for Inclusive Synchronous Learning Activities, a methodology that offers a more personalised learning experience, allowing students to work more flexibly and access online resources while still participating remotely in live classes. This hybrid model is also seen to increase access to higher education by reaching students who may not be able to attend in-person modules due to accessibility, time, or financial constraints (Compton et al., 2023; QAA, 2022; Rutherford, 2023).

From Term 1 in 2021/2022, academic staff had the option to teach with some students physically in the same room and some students simultaneously online, thus a hybrid mode of teaching. Over seventy academics chose to try out this mode of teaching. Academics received technical and pedagogical training and were provided with written guidance and access to online support (City Digital Education, 2021; Digital Education, 2023). Over fifty student 'Co-Pilots' were also recruited to facilitate the delivery of ISLA (Inclusive Synchronous Learning Activities) teaching, and were given specific technical training (Bowdler & Crammond, 2023). The role of co-pilot included helping set up the technology at the start of a teaching session, for example to ensure that all cameras and microphones were set correctly for the lesson plan. Additionally, some co-pilots monitored the online chat during class to highlight to lecturers when students had used this method to raise questions, so that the lecturer could answer them live. However, due to delays and further pandemic restrictions, during the academic year of 2021-2022, there were teachers using ISLA who had actively signed up to try this method, as well as instructors who had chosen not to, but who then had to switch to accommodating hybrid participation by students at the last minute.

During summer 2022, research was undertaken to evaluate this experience of teaching and learning with ISLA and make recommendations for the future direction of hybrid teaching and learning at the

university. This study investigates what students and teachers reported of their involvement in ISLA spaces, including discussion of causes for these perspectives and implications for teaching quality and student experience. The paper then concludes with remarks on implications for next steps for the university and the sector.

Methods

The development of hybrid teaching guidance was grounded on a literature review undertaken by two of the project team, Dr. Jane Secker and Dr. Rebecca Wells. Working with the University's library, they devised specific criteria with which to search for academic literature on this topic. Their efforts highlighted several relevant papers, from which we derived information about good practice and challenges to avoid (Secker, 2021). These findings were then developed into staff-facing practical guidance, addressing both the pedagogical and technical aspects that staff undertaking this form of teaching would need to know (LEaD, 2023).

In February 2022, efforts were initiated to assess the student and staff experiences of hybrid teaching and learning following the conclusion of the academic year. The research team designed two mixed-methods surveys, one for students and one for staff, to investigate their experiences. Because the spaces were used for teaching where staff and students were interacting, this evaluation project emphasised the need to elicit feedback from both groups and designed the questionnaires to draw out comparisons and speak to similar themes. The entire research project received university ethical approval. The themes of the surveys were divided into the following categories: how respondents prepared for teaching/learning in a hybrid space logistically and pedagogically, how they experienced it both online and in-person, and how they assessed the practice for future teaching and learning. These questions were applicable both for staff teaching in these spaces for the first time, as well as for students learning in these spaces for the first time. As these questions sought to understand perceptions and the variety of experiences and preparations, the questions were focused on eliciting qualitative responses. The staff survey contained 26 questions, including 11 quantitative multiple-choice questions and 14 qualitative free-text questions, of which 7 were optional. A full questionnaire for each audience can be found in the appendices.

The surveys were quite similar for staff and students, with the main differences being around preparing to teach versus preparing/experiencing learning. Both surveys ensured anonymity for participants, as the provision of hybrid teaching was new and challenging, like many other efforts involving an element of online learning (Abuhassna et al., 2021), and therefore not universally welcomed. Further, as hybrid teaching was conducted in clusters around the university, the project team were concerned that asking questions that identified respondents beyond which school within the university they were part of would be seen as too easily identifiable. Both surveys were circulated via all-student and all-staff newsletters and were open for over a month.

Participants who completed the surveys were invited to join optional Zoom focus groups for further discussion, to deepen and further develop the qualitative insights solicited in the surveys. These focus groups were conducted by members of the research team acting as focus group facilitators in various combinations between the 15th of June 2022 and the 5th July 2022. There were 13 staff participants altogether in 5 separate focus groups. Of the 13 participants, the majority worked in the Law School (6), followed by Bayes Business School (4), the School of Health and Psychological Sciences (2) and the Sociology Department (1). The focus groups were recorded on MS Teams and transcripts were automatically generated from the recordings with participant consent to produce transcripts for analysis and to include quotations in any written analysis. During transcription, participants were anonymised and assigned a participant code, i.e. Focus Group 1 Participant 2 was coded as FG1P2. The questions asked in the focus groups were designed to get a deeper view into participants' methods of preparing for hybrid experiences and their emotions about the process and outcomes. These questions were chosen to get more detail about themes raised in the qualitative questions in the survey and answers were then analysed by the research team to develop themes.

This study's main gap is that participation in the survey and focus groups was optional, and only staff selected to participate in the focus groups. However, efforts were made to evenly advertise the survey

across the sections of the university, and the number of responses correlates helpfully with the information available about the overall number of people using the rooms with the relevant technology. While the sample may not be full, it is sufficiently representative to understand both student and staff experiences.

Results

This section presents our findings from the survey and focus group evaluations conducted with University staff and students around their experiences with hybrid teaching and learning. The student results are presented first, and as no students volunteered to participate in focus groups, these results are drawn from both the qualitative and quantitative questions in the student survey. The student results are grouped around the same sub-sections presented in the student survey. The staff results combine results from the staff survey and the staff focus groups. These findings are organised into themes based on the organisation of the survey questions in order to highlight the staff and student voice that was at the heart of this research project.

Student experiences

The student-focused survey was widely advertised to the student body, with the support of the University's Student Union, receiving 97 total responses, however, only 53 students fully completed the survey, with others responding to some but not all of the questions. Nevertheless, their responses have been analysed for the questions they responded to. Overall, the majority (48.61%) of student responses came from the Bayes Business School. This is in line with expectations as Bayes had the highest number of ISLA modules in academic year 2021-2022 and it was mandatory for several programmes across the school.

One of the key themes was that students appreciated the flexibility offered by hybrid learning and most would choose to use it again in future. As evidenced from this comment from a student response to a free-text survey question:

> Hybrid learning has been a great progression forward in the world of teaching at higher levels of study. Hybrid allows for accessibility and inclusivity and gives flexibility to students with health reasons, childcare, carer responsibilities, financial reasons, and personal home life balance.

But while students may have appreciated having the option, staff reported low take-up of online attendance and low engagement by online students. Still, the surveys and focus groups surfaced several ideas from staff about teaching adaptations that worked for them, which can be used for future training and guidance.

Attendance

There were notable differences between the schools within the university about the number of students who attended hybrid sessions online versus in-person, as seen in this table that illustrates students' responses to this question (Table 1).

Notably, students across the schools reported that these numbers did not vary significantly within a module, i.e. that if a module had 25-50% of students attend hybrid sessions online, this was quite consistent throughout the multiple sessions of the module. This could be because most schools required students to indicate at the start of the module which mode they would attend via, and then recommended that students stick to that choice. However, some respondents reported concerns with this method: the consensus was that students may have many legitimate reasons for needing the flexibility

Table 1. Percentage of students attending hybrid sessions online by school.

School	Percentage of students attending hybrid sessions online
Bayes Business School	Most reported 1-25% of students attended online
Health sciences & nursing	Most reported that 50-75% of students attended online
Law school	Either reported near zero online attendance, or near 100% online attendance

of hybrid attendance. Reasons included: disability, childcare, transportation, and work alongside their studies, as well as COVID specific reasons such as quarantine and border restrictions. However, the overall point was that hybrid enabled useful and supportive flexibility, but that methods of logistical and technical organisation needed improvement (and will be discussed below).

Engagement

The majority of students, regardless of school, reported that hybrid sessions had large interactive components. Despite that, the 50 students who responded to questions about the extent to which online students engaged in hybrid sessions reported that these students 'rarely/sometimes' engaged. This was slightly higher in the business school, with the law school reporting more engagement. Some students who clearly had been participating online detailed that being able to put questions in the chat was an improvement over posting afterwards in a forum, but also highlighted technical challenges in engaging with the flow of discussion (time lag, being unable to hear everyone). All students who responded to this question highlighted that the two things that helped student engagement were whether the lecturer actively included the online students and whether the online students were motivated to engage.

Impact on learning methods

47 students responded to the question about whether participating in hybrid learning has caused them to change their learning methods. The majority indicated that they have changed their learning methods, slightly more doing so ad hoc (31.91%) rather than in advance (27.66%).

In the qualitative section of this question, students reported that knowing the class was recorded enabled active engagement, rather than furious notetaking. Furthermore, the hybrid method enabled participation when travel time to university was not available (caring responsibilities, transport strike action, transport delays, etc.) Additionally, some students reported that being online removed in-class distractions.

25 students also offered suggestions about how to help future students succeed with hybrid learning, including both technical and pedagogical elements. On the technical front, they suggested providing laptops or subsidies for all students, making sure tech is working before sessions, including visuals, mics, breakout rooms, and installing auto-tracking cameras so lecturers can move. In terms of preparation and pedagogy, student responses included: providing user guides for remote and user guides for in-person students and giving students flexibility to decide mode of attendance.

Staff experiences

The staff-focused survey received 73 total responses, with the majority (63.01%) coming from Bayes Business School. This is in line with expectations as Bayes had the highest use of hybrid teaching and it was mandatory for several programmes across the school. Staff were the only survey respondents who volunteered to participate in focus groups, so this results section presents findings from both the survey and the focus groups. The following sub-sections are organised around the four main themes generated from the data.

Staff experience of and feelings about teaching via hybrid methods

Some staff felt that hybrid teaching was valuable as a back-up to ensure students do not miss out:

> It was offered an alternative to students who for genuine good reason couldn't possibly have it as the first learning environment. I'm [not] sure my students will necessarily want to do that. But where there's an absolutely genuine reason that they couldn't possibly attend for a certain week, at least it avoids them losing out on the learning (FG1P2).

However, fully online teaching as opposed to hybrid methods was still seen to offer more benefits in terms of flexibility. As described by one participant:

I did a lot of one-to-one tutorials with my students online, I still do actually. One of the transferable things I still [do] nowadays is a lot of one to one, if my students get hold of me in there, go "I'm really stuck on something" and (I can say) I'm going "well I'm working from home today so let's talk on Teams" and I just think that makes it so much better because everybody then gets the option to have a go at something they perhaps wouldn't normally be able to have a go at so, the more the more inclusive, you can be the more available. (FG3P1)

For some staff there was excitement about the possibilities of ISLA in teaching. As detailed by one respondent:

It's really made me reflect much more fully on what I am using classes and materials for. Because the old thing was that you, you had the lecture and you had Moodle and you had seminars and that was about it. But really now we're thinking about okay, well, what can we use, or you know how we're going to make best use of it. You can actually engage students in many different ways, because you can use chat as well as face to face, you can use hands up, you can share documents, students can write on a document together. And that kind of multitasking you can pick up and I'd rather not just lose it by going back to face to face as it was. (FG2P4).

Benefits were also noted for staff to develop transferable skills for example for presenting at online or hybrid conferences and in professional practice. One lecturer reported that:

I've, certainly in the last two years, built up a skill that I never thought I would end up having I think that's actually served me well on a couple boards that I sit on and some outside activities that I do I think it's made me more confident online, you know in those other activities (FG2P1)

Impact on staff teaching practice and planning

Nearly half (49%) of lecturers who responded to the survey questions about impact on their teaching methods reported making changes to their teaching because of the hybrid modality and did so in advance of teaching. A further 31% made changes on the fly, while only 18% of respondents reported they did not change their teaching style. Staff reported spending more time planning sessions, for example to accommodate group work and make sure they knew who would be in person and who online, to communicate with students regarding devices such as headphones 'I think it's doing those things beforehand to prime students to say have your devices and have enough power plugs in the room'. (FG5P1).

Changes made by staff, as reported via the survey and focus groups, included:

- Increased time allocated to activities, more handouts and instructions, different feedback methods.
- Tried to make less use of whiteboards and other mediums that were difficult for online students to see. But this was to the detriment of those in class.
- Added quizzes and polls.
- Provided clear guidance to online students; materials posted in advance on Moodle to ensure access during sessions.
- Created opportunities to ask questions via Zoom chat, and anonymously via a Jamboard. (a digital interactive whiteboard developed by Google) Got students to work into a Google doc in advance of and during seminars.

Staff also used different techniques to engage students from making turning cameras on for online students mandatory unless exempt, to arranging for each online student to be paired with an in person student. For example, one lecturer reported:

Anybody who is online I made sure that they had a buddy who was in the classroom so when we have the hybrid session and therefore it's that person's responsibility, especially to be making sure that the other person is engaged. (FG2P1)

Staff fostered inclusivity by trying to make an equitable experience between online and in person students, using collaborative documents that were written by all students in real time, turning on subtitles, and encouraging an online presence for all students. One respondent said:

I encouraged all students to have Zoom open on their browsers in the room, or online, which meant that in the chat we can all put questions (FG5P1). Another reported that

I was a bit conscious about having a little bit more accessibility and not overloading the PowerPoints … that I needed to slow down speaking … which was kind of good practice, I think, anyway (FG5P2).

Staff perceptions of student experiences

Staff reported that students appreciated global peer interaction, for example:

They got a real buzz from having people globally, be able to interact with them synchronously so people experiencing from our master's Course, for instance, hopefully policy experiencing and bringing global perspectives to that was a really, really big positive. (FG5P1)

I think we're actually causing our students to get exactly that same greater comfort with the technology that they will be forced to use through their careers and through the rest of their lives (FG2P1)

Some staff recognised that students valued the hybrid approach despite some drawbacks:

They [students] may actually be incredibly appreciative of the fact that you're offering something even if it's not perfect, but it's not necessarily going to be perfect emulation of what you would like to offer (FG2P2)

Staff felt conflicted about offering a compromised student experience due to issues with technology and delivery, for instance:

On the one hand it is wonderful because it gives me access to people they wouldn't otherwise get here, on the other hand, it's a pretty lousy student experience compared to that for people are actually in the past, so I guess, how to square some of those conflicts and paradoxes (FG2P2)

I think it was an overwhelmingly positive experience and good for the students, but at the same point there are issues with both staff and the onsite facilities that needs to be solved to roll it out for that, but it is good that it is happening. (FG5P1).

Staff thoughts on the technology

Some lecturers felt that the technology worked well: 'the hybrid-based room lectures were seamless, from my perspective, all the technology work(ed) so students who tuned in were able to hear everything and the recordings work' (FG5P3). There were some positive comments about the room set ups, for example that microphones were more sophisticated and sensitive and cameras were better.

More commonly there were significant technical issues:

It was just beyond the joke, it would get so embarrassing, and you know I don't very often get worked up about these things, because you know you can usually roll with the punches, but when you've got students who are wholly online, you can you know. And I must admit I did I did get really quite worked up … I felt my professionalism in front of the students was really beginning to get compromised. (FG5P2)

Experiences with technical support including IT and AV teams, were overall not positive:

Tech support has not been overwhelmingly positive in terms of the speed at which they were responding to queries or issues, and it took say five weeks for us to determine which handheld microphone we were allowed to get for it and what they recommend it. (FG5P1)

There was a concern about workload when using the hybrid approach. Academic staff described the number of things to keep track of:

I found made it really difficult to do things that I would do in person like do breakout groups. (FG5P3)

Discussion

Our research into hybrid teaching at City St. George's, University of London, aligns with the literature in recognising the potential and challenges of hybrid teaching to enhance flexibility and student engagement. Primarily, our results consistently show that students appreciate the accessibility and inclusivity

that offering hybrid options can provide, even if there is relatively low take up by students, confirming the arguments made especially around Universal Design for Learning (Ctl, 2021; Frumos, 2020; Raes et al., 2020).

Our academics shared some positive experiences with the technology: 'the hybrid-based room lectures were seamless' and the online students were able to hear and see everything in class. There were specific remarks about the new microphones and cameras that were more advanced and sensitive in broadcasting the discussions to and from the learning space. This conforms with the literature that finds for a hybrid teaching space to be effective, the location of cameras, microphones, and screens is important (Bryant, 2021) to ensure that all learners have a high-quality learning experience (Columbia CTL, 2023).

The literature also suggests that the delivery of content should be in a way that considers when, how, and why it is being taught within a hybrid modality (Raes et al., 2020). In fact, staff respondents talked about the benefits of adopting a flexible online methodology, as opposed to just a hybrid approach, to achieve greater inclusivity and opportunities. Educators can therefore design, manage and assess their teaching methodologies to accommodate the different learning styles, communication requirements and varying needs of their students, regardless of their location (Abuhassna et al., 2022; Bøjer & Brøns, 2022). Staff commented on newly tried methods to increase student engagement, such as asking online students to turn on their cameras, unless exempt, and pairing that student with an in-person student. This 'buddy' technique aimed to enhance the learning experience and promote active participation among students.

However, some staff at the University felt conflicted about offering a compromised student experience due to issues with technology and module delivery. Staff respondents mentioned difficulties managing breakout groups or sharing documents online. This was compounded when support teams were under-resourced or unable to fix problems on the spot due to timetable restrictions. This confirms the literature's consistent finding that technology for hybrid teaching must be led by academic objectives including appropriate timetabling and the support and professional development in equipment use (Beatty, 2007; Manciaracina, 2020; Rapanta et al., 2021). In fact, staff recognised the advantages of developing transferable skills, such as presenting at online or hybrid conferences and in professional practice. Institutions would benefit by encouraging collaboration and interaction amongst academic staff, to share challenges, ideas and best practices for teaching in a hybrid environment (Mihai, 2021). This could include peer-to-peer mentoring and communities of practice. The University has set up such a group for academic staff and educational developers engaged in hybrid teaching.

Almost half of staff surveyed reported spending more time planning sessions, with many commenting on the extra workload. Senior academic managers would do well to recognise the many challenges that come with teaching in a hybrid environment and offer flexibility and support for their academic staff. This includes workload adjustments, in-class support from colleagues or graduate teaching assistants and providing opportunities for feedback and reflection (Li et al., 2023). There is a further need to explore how teachers can use their pedagogical skills and knowledge to plan and design hybrid classes at scale and as part of a course, or programme over time (Pelletier et al., 2022; Walker & Voce, 2023).

Conclusion

The research team discovered early on that there is very little in the literature, as noted by other institutions, in terms of the 'performance of the space' and the relationship of the technology to the effectiveness of hybrid teaching (Bryant, 2021; Sanchez-Pizani et al., 2022) and on student engagement (Wagner et al., 2023). The research at City St. George's, University of London, was carried out at an early stage in the adoption of hybrid teaching, therefore assessing the experience of students and staff at this moment provides a useful baseline for further evaluation and understanding as hybrid technologies and practices develop (UCL, 2021). Although this evaluation has limitations due to the number of students and staff who engaged with the project, and especially the lack of student engagement with optional focus groups, the coverage across the university of responses as well as detailed qualitative insights enabled key findings to be realised to develop hybrid practices at the University.

If a hybrid approach is to realise the full potential that it brings to learning and teaching, it is important to design and develop learning spaces that can easily be adapted to accommodate changing educational needs, to be flexible and fit for the future. Our findings from surveying staff and student experiences of hybrid teaching and learning has outlined significant potential in making education more available to students. However, it also highlighted the importance of specific technological decisions and the impact of coordinated support and training to ensure teaching staff can realise the possibilities of this mode.

As a result of this evaluation at City, St. George's, University of London, we have put into practice key measures to support and reinforce hybrid teaching. In fact, one immediate lesson was the value of this kind of evaluation, and so the largest postgraduate programme currently teaching via hybrid methods has review and evaluation embedded at multiple points within its operating cycle. The university concurrently developed and is implementing new learning and teaching principles, and we have been able to embed the pedagogy and importance of technical standards into those policies. There has been a major appreciation of our student Co-Pilots who work in support of all our hybrid taught modules, with the goal of continuing to see this role as an area for professional development for students.

Based on this evaluation at the University, our recommendations for universities considering the development of hybrid teaching, would firstly be to assess whether the institution has the necessary physical and digital infrastructure: early emergency responses may no longer be valid nor sustainable. This should involve reviewing the pedagogical reasons for preferring face-to-face teaching over hybrid delivery. This is key because as there can be something of a dichotomy between balancing students' preference to be on campus and the flexibility that students value in the hybrid offer. And finally, as our results clearly demonstrate, the success of hybrid teaching can simply be down to the quality and effectiveness of planning, training and the commitment of academics alongside the dedication of student co-pilots in their valuable support role (Mineshima-Lowe et al., 2024; Rutherford, 2023).

This study at City St. George's, University of London shows that hybrid teaching has the power to change the way we think about and approach education. Although it might not be appropriate for every topic or setting, it is undoubtedly an effective option for many, both today and into the future.

Acknowledgments

Disclosure statement

About the authors

Dr. Miranda Melcher is an educational technologist in Learning Enhancement and Development (LEaD) at City St George's, University of London. Her work focuses on learning design and inclusive pedagogy especially for neurodiverse students. She earned her MA and PhD from King's College London and her BA from Yale University. She was made a Fellow of the Higher Education Academy in 2020.

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Professor Rachael-Anne Knight is a Professor of Phonetics, and Divisional Lead for Speech and Language Therapy in the School of Health Sciences. She was at City, University of London (now City, St George's, University of London) from 2005-2023. Professor Knight completed a BA at the University of Roehampton and a PhD in phonetics at the University of Cambridge. Her main areas of phonetics research involve intonation, rhythm, rhotics, clinical phonetics and accent perception as well as education and pedagogy. She has been a Principal Fellow of the Higher Education Academy since 2015, and a National Teaching Fellow since 2016.

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