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# Editorial

We are delighted to welcome you to this first issue of the newly relaunched *Education in Practice*, an in-house journal developed and hosted by the University of Birmingham with the aim of sharing effective practice in learning, teaching and educational enhancement. *Education in Practice* has been designed for all University of Birmingham staff working in support of enhancing the student learning experience, be they academic members of staff or staff from professional or support services. Contributions are also welcomed from both undergraduate and postgraduate students detailing their perspectives on educational matters.

An often-asked question is: ‘Why should I write about my teaching?’. There are several reasons but an important one is that committing our thoughts and ideas to paper helps make us part of a much larger community. One where we can engage in scholarship to develop a wider identity, sense of belonging, and achieve external recognition for our work. But what is so important about belonging to a learning and teaching community?

A learning and teaching community allows individuals who hold similar values or goals to come together to share results, ideas, and most importantly learn from the collective wisdom and experience available. There are clear benefits. A collaborative approach allows progress to be made on key or challenging issues and, by working together, this can be more rapid and significant in terms of its scope and scale. But the benefits of being part of a community can be much more personal.

For those looking to become involved in the scholarship of learning and teaching, perhaps because they have an idea they wish to explore or share, this can be initially quite daunting. Engaging in ‘scholarship’ represents a transition from being ‘scholarly’. By being scholarly the purpose is to inform oneself, where any evidence or information gathered is verified and validated by us as individuals and therefore represents a growth in personal knowledge. ‘Scholarship’, on the other hand opens one’s work and ideas to a group who possess the same

context or vision, perhaps a module team or a collective interested in a particular area of institutional or disciplinary teaching and learning. Here it is verified, validated, and discussed by those same individuals and results in increased knowledge or understanding for the group. The next step beyond scholarship is research. Here, the purpose is to inform a much wider audience, perhaps beyond disciplinary boundaries, and with that same audience being responsible for the verification of the evidence that has been gathered and the learning that has taken place.

Being part of a learning and teaching community allows you to collaborate with others, and benefit from dialogue and peer review. But benefitting from belonging to a community can only be sustained by putting something back. This might be through supporting the development of others, sharing our own experiences in relation to a particular aspect of learning, teaching, assessment, and support, but it could also be by writing for publication. We are fortunate here in Birmingham to have our new Academic Career Framework that recognises all such activities where individuals can evidence them.

There exist a range of different routes for those wishing to write about, share ideas, and evidence their practice in teaching and learning. These extend from online blogs, to a case study or example of practice, up to peer reviewed research reports in international journals. For colleagues working within the University, *Education in Practice* has been designed as an accessible publication that 'bridges' the interface between newsletters and journals of educational research. It is an ideal first publication route for those new to publishing on teaching and learning, and an opportunity for those who are more experienced to share and test their ideas with other colleagues from across the University, develop collaborations and support others. Perhaps importantly it gives everyone within the University an equal opportunity to evidence their work and either develop, or further establish, a sense of identity and recognition within our growing teaching and learning community.

We warmly welcome contributions to *Education in Practice* from anyone working at the University of Birmingham. We would be delighted to hear from you.

**Michael Grove, Alison Davies, Jon Green, Marios Hadjianastasis, and Sarah Letters**

# Improving transition to higher education by developing students' academic self-concept

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## Abstract

The generation of learners affected by the COVID-19 pandemic and associated restrictions has experienced educational inequalities which have impacted upon students' preparedness for study and increased the risk of them not making a success of their time at university.

In this study, focusing on the experiences of foundation year students, I review the literature on transition and the emerging evidence of the impact of the COVID-19 pandemic on transition, as well as some of the specific issues affecting foundation year students.

The key findings of the review were:

- Students studying on a foundation year are more likely to be disadvantaged and are more likely than their peers to have a reduced academic self-concept, subsequently being more at risk of underperforming or not progressing.
- Transition activities should be student-centred and provide informal opportunities for relationship building.

An intervention based on the review was devised and implemented, providing structured informal opportunities for students to interact with one-another and with academic staff. A small-scale study indicated that carefully planned transition activities and the creation of opportunities for frequent informal contact with academic staff may help develop students' academic self-concept and mitigate against these increased risks by creating opportunities for peer-supported learning, the development of effective study habits and by helping students develop a sense of belonging.

**Transition to university**

Transition is a widely used term to describe the passage of students into university life. Promoting effective transition is an increasing focus of work done in relation to access and participation planning and improving equality, diversity and inclusion. However, it is not an idea that is particularly well defined (Gale and Parker, 2014) or well-researched, despite an increasing body of research describing issues relating to it. Gale and Parker (2014) argue that transition to university can be considered in three components: induction, development and becoming. The first broadly describes work done by a university to orient students to that institution's expectations. The second describes students learning to navigate the sociocultural norms of student life, and can be characterised as a shift of identity, akin to the shift from childhood into adolescence. Seeing transition through either of these first two lenses leads to structural attempts to address transition issues (e.g. welcome week talks, induction programmes etc.) that mould students to institutional values and norms. The third component is an attempt to reconceptualise transition as an acknowledgment of the fluidity of learners' lives and requires approaches that are less structuralist than the first two components; these would necessitate a more student-centred view of transition.

Before joining a university, students have difficulty visualising and predicting the experience, and require support both before and after arrival in developing a learner identity and independence (Briggs, Clark, and Hall, 2012). While many arrive without the cultural capital to navigate the challenges of transition, students do adapt by developing new social support structures (Scanlon, 2007) but those that struggle to do this are at increased risk of dropping out.

Transition to university has been shown to impact upon students, in terms of an increase in psychological disturbance and an increase in absent-mindedness (Fisher and Hood, 1987). There is little available evidence of the effect of time upon the dissipation of these effects, but it is assumed that most students navigate this period and that the effect on attainment is partly mitigated against by the lack of contribution to the final degree classification from first year work. In a foundation year, where a student's transition to a degree course

depends on successfully meeting assessed progression criteria, it is not unreasonable to expect that there is a greater risk posed by the impact of transition.

### **The impact of the COVID-19 pandemic on transition**

As identified by Cottle (2021), students progressing to university in the last two years have demonstrated great resilience in adapting to the rapidly changing educational conditions throughout the pandemic and most have worked hard to address any deficits from lost learning. While some have thrived on the opportunity for greater independence, teachers felt that some students were adversely affected by the absence of individual support throughout this period. Teachers identified several 'lacks', some subject-specific (e.g. missed curriculum content and practical skills), and others more general (such as group work, responding to feedback, preparing for assessments and differentiating between acceptable or routine anxieties and problematic anxiety).

Positively, dropout rates from university were seemingly unaffected in the 2020-21 academic year (Hillman, 2022) but students do report that the pandemic has negatively affected their lives. A negative impact on the knowledge they feel they need to succeed in their course was cited by 57% of students, with 73% citing a negative impact on their mental health (UPP Foundation, 2022). Further studies indicate a lower life satisfaction score among students than the rest of the population; this improved upon students' return to campus life in late 2021 but ongoing surveys report sustained high levels of loneliness and anxiety (Office for National Statistics, 2021).

Students' perceptions of the impact of the pandemic on their learning appear to be in line with other emerging evidence. The National Reference Test for English and Maths (Ofqual, 2021) is a sampling exercise done alongside the traditional GCSE period to provide an additional reference point for exam boards when setting grade boundaries. Although it could not be used in 2021 as no exams were sat, its results are still interesting as it indicated a significant drop in maths performance (interestingly, and counter-intuitively, this was not replicated in English). There is a chance that students' perceived subject-knowledge gaps from prior learning indicate real gaps in learning.

Students progressing to science-based degrees face additional challenges as they are unlikely to be as familiar with laboratory techniques and apparatus as might normally be expected. The cognitive load of university laboratories, which is always challenging to students coming from the 'recipe style' approach of school science (Smith, 2012) will be potentially greater, with a greater negative impact on students' confidence and self-esteem.

### **Educational inequalities and foundation years**

As noted by John Blake, the new Director for Fair Access and Participation, universities have worked hard to widen access to under-represented groups, but have they done enough to ensure worthwhile participation (Office for Students, 2022)? In other words, are all students offered the support they need to succeed once at university? Foundation years are often cited as pathways to university for students who do not meet the usual entry requirements and regularly provide a route into higher education for older students. A foundation year is a year 0 at university, delivering modules at level three which enable learners to demonstrate they meet an institution's undergraduate entry requirements. They provide opportunities for young people whose schooling (for whatever reason) did not provide them with either the opportunities to achieve the grades required or the access to post-16 courses usually required for higher study. Foundation years often act as a route into higher education for underrepresented groups.

School- and college-aged students with a positive view of their own academic aptitude and achievements, widely defined as academic self-concept (ASC), are more likely to continue to higher education (regardless of their actual academic ability) (Chevalier, *et al.*, 2009). Students from deprived backgrounds are more likely to have a lower academic self-concept. These perceptions, generally formed via their interaction with and interpretation of their environment (Marsh and O'Mara-Eves, 2008), are shown to have a consistent reciprocal relationship with achievement and educational outcomes.

In the 2017/18 academic year, almost a third of foundation year students came from the most disadvantaged backgrounds (Husbands, 2021). This data is based on the Index of

Multiple Deprivation; this is a reliable indicator as it encapsulates more factors than simply the local rate of higher education participation at age 18 or 19, the POLAR4 measure typically used by universities. Students on a foundation year are therefore more likely to be disadvantaged than their peers on a non-foundation route.

Schools in disadvantaged areas report more issues with poorly qualified staff than those in other regions; this includes issues around recruitment and retention of suitably qualified teachers (Civinini, 2020). Consequently, fewer students from these areas can study courses offering them access to good degrees. These effects are further compounded by a lack of science capital in young people in these areas, which has been used to explain differential patterns of aspiration and participation (Archer, Dawson, DeWitt, Seakins, and Wong, 2015). Archer *et al.* argue that Bourdieusian notions of capital should be extended beyond the Arts; parallels can be drawn with Gale and Parker's (2014) idea of a 'becoming' model of transition which is akin to the Bourdieusian concept of 'changing the field'. Science capital broadly refers to the aggregate of an individual's science-related knowledge, attitudes and experiences, largely related to social class, and how these impact on young people's aspirations and participation in science. Bathmaker (2015) argues that the concept of 'field' is an important lens through which to consider HE practices around transition. Pierre Bourdieu's field theory describes society as being constructed of overlapping fields, each being a setting where individuals occupy specific social positions. An individual's position in any given field depends on the specific rules of the field, and an individual's habitus (their ingrained skills, habits and dispositions which determine how they perceive and react to any field they currently occupy) and capital (social, economic and cultural). In the context of transition to university, a first-generation student from an area of low higher education participation is likely to experience a very different transition to university compared with a student who may have attended a high-performing school in a high-participation region.

The factors previously described combine to provide a compelling argument that students entering a foundation year are more likely than their peers to have a reduced academic self-concept and be more at risk of underperforming or not progressing. The impact of the stress of transition is exacerbated in a foundation year by the short nature of the course. There is a



strong case to be made for an enhanced level of support (changing the 'field' by adopting a more student-centred approach) to help students on foundation years transition to university, develop the skills needed to succeed, develop their own learner-identities and gain a sense of belonging to an institution. Evidence emerging from studies on the COVID-affected generation of learners indicate that their academic self-concept has been impacted upon negatively too. While foundation year programmes are often billed as a means to transition to university for underrepresented learners, unless a programme of support is put in place to support this transition there is a risk that they have a detrimental effect on a young person's likelihood to remain in university. It is important therefore to gain an understanding of strategies that can support a positive transition to university and begin to address some of the educational inequalities that affect this generation of learners. Lessons learned from supporting foundation year students could be applied more broadly to support all students transitioning to higher education.

### **Strategies to support successful transition**

Students value being able to develop relationships with teachers, and steps taken to foster collaborative learning through a phased induction process which includes informal contact with academics is shown to aid transition and help develop learner identity (Briggs, Clark, and Hall, 2012). Given that foundation year students are likely to be from a more diverse range of backgrounds than 'regular' first year students, it is important to adopt a 'becoming' mindset when devising strategies to aid their transition (Gale and Parker, 2014). This is reinforced by a study of twenty diverse institutions (Kuh *et al.*, 2010) that argued that successful integration of students depended upon offering opportunities to engage with academics and peers that were tailored to the specific needs of their students. It is therefore important to acknowledge and attempt to address some of the needs resulting from educational inequalities, both more generally and those caused by the pandemic.

A significant challenge to the development of informal relationships is identified by Skinner (2014). She argues that pre-university education affiliates students and teachers 'against' the exam board, allying to achieve goals. The obvious tension caused when tutors and lecturers are also responsible for assessment, and the contradiction of students valuing

individual feedback but being unwilling to engage with it, can be alleviated by supportive group tutorial relationships. Additionally, Skinner calls for university academics to develop a greater understanding of students' pre-university knowledge, skills and assessment expectations. These findings are reinforced by Rawlinson *et al.* (2014).

The beneficial impact of collaborative learning opportunities and engaging informally with academic staff on attainment, student satisfaction and retention are well documented in large-sample studies (Wasley, 2006), with a greater effect for students from underrepresented backgrounds. They are also identified as a key activity to address the 'lacks' resulting from COVID-related inequalities (Pownall, Harris, and Blundell-Birtill, 2021).

To support the introduction of the Engineering and Physical Sciences Futures programme (University of Birmingham, 2021), a fully-funded foundation year for those from the lowest-participation backgrounds, academic staff at the University of Birmingham introduced two new aspects to the existing foundation year. The first of these was a bespoke skills module (for EPS Futures students only) entitled 'Professional Skills for Engineering and Physical Sciences' that aimed to develop an understanding of professional skills, habits and competencies, and the ethical, environmental, social and cultural responsibilities of scientists through teaching, discussion and professional mentoring. The second was introduced as a 'Guided Study'; comprising of an informal Friday afternoon study group targeted at the EPS Futures students but open to all. There were always at least two academic staff present, and the goal was to create the opportunities described above to facilitate informal interaction between students and academics, and support students in developing peer relationships and their own academic self-concept.

The Guided Study session was timetabled immediately following a course studied by the whole cohort and held in a central glass-sided room in a literal attempt to increase its visibility. Attendance was suggested to students felt to be at risk of disengagement and promoted more generally by academic staff as a means to get more support with course content and work in a collaborative way. It was timetabled on a Friday afternoon and staff

and students came to see the session as a 'bookend' to the week. This choice of timetable slot was deliberately chosen to help foster a degree of informality.

### **Methods**

Students who attended Guided Study were invited to contribute to an informal focus group discussion to discuss the impact of the pandemic on their preparedness for university, and their confidence as learners. Four foundation year students attended and took part in a conversation lasting approximately one hour.

### **Findings**

All students in the sample reported that, while they had initially had anxieties around their preparedness for higher study, their academic self-concept had developed over the course of two semesters, and they no longer reported any significant concerns. They raised the following points that reinforce earlier findings:

- Schools and colleges seemed generally unprepared for the switch to online provision; this resulted in online learning that was difficult to engage with.
- No students were positive about their preparedness for group learning activities.
- Most students reported anxiety in approaching assessments which has passed with time and exposure but did affect the outcomes of their early assessments.

All four students identified the positive relationships they had developed with academics on the course as critical to their development as learners. Some positive points they raised were:

- Weekly induction sessions at the start of the course allowed a space for informal discussion and clarification of expectations. All students identified that the opportunity to get to know academic staff in a non-academic setting was beneficial and helped foster relationships that led to better active engagement in lectures leading to more interaction.

- Weekly Guided Study provided a very useful space to work with other students and receive support from academic staff. Students felt that the informal approach taken was a key factor in its success.
- While formal office-hours were still a common offer of support from some academics on their programme, most students were reluctant to use these. For context, every year around 10-15 students make good use of office hours and demonstrate the confidence to approach lecturers and module leads. This represents about 10% of the foundation year cohort. In its first year, Guided Study attracted at least twice this number regularly. In its second year, approximately 50% of the cohort made use of it at least once.

**Selected direct quotations from the focus group:**

“I know it’s a load of people there [Guided Study], but you can get that one-on-one help. Where it suits a lot of people is like when you might not need one on one help, but have an interest, that’s not specific to a module, they can ask an academic – it’s the perfect opportunity to ask a question on say, physics, outside of a lecture, that may not be directly related to the course. It offers the opportunity to find the lecturer you want to speak to about a certain thing they might know quite a lot about... to develop an interest you may have. It does help quite a bit.”

“The main reason is, I can’t study at home, so I do most of my studying at Uni... ..when I know everything about a topic, or think I know, I still want to be around a lecturer, because I’m not a graduate yet. The lecturers there will give us a different angle or make it simpler than we can. When someone else asks a question and I hear the explanations given, it might be different to the way I do it, it opens my mind to a new way of thinking about it – I’m learning something – and it’s nice. I like that it’s informal. We have a chat. I like Guided Study. I think it’s good... ..but I like the opportunity to have you guys around me.”

“I went a lot in S1. I think it’s important that, if you have a question, no matter how braindead stupid it might feel, you can ask the question without feeling stupid.”

“I think the Guided Study is one of the best things on the course. You can show up, and even if it’s busy you can help each other. It’s a nice environment to work in.”

“Guided Study is like, 100% the best thing that you have to offer. Hands down. I didn’t expect that. It is useful. If students are shy, it’s the perfect opportunity. Office hours sounds formal.”

“It does worry me that next year I won’t have that interaction and that Guided Study. I know that the level of contact I have now won’t be there next year. It worries me.”

### **Conclusions and next steps**

There is a compelling body of evidence to argue that foundation year students are more likely to need support to address educational inequalities to support their transition, attainment and retention, in terms of developing effective study habits, learner identities and a sense of belonging. Furthermore, the generational impact of the COVID-19 pandemic means more students will need more support, and that a project providing meaningful guided study coupled with an induction programme that focuses on study skills will address some of the issues to transition that the post-pandemic generation of students has encountered, and more widely address systemic inequalities in pre-university education.

There is strong evidence that transition is enhanced, learning enabled and a sense of belonging developed, by group activity that includes a phased induction, clear information sharing, personal contact with academic staff and formative feedback (Briggs, Clark, and Hall, 2012). Going forward it would be good to undertake a longitudinal study working with new students to ascertain their ideation of what university life will be like, assess their pre-university skills and learning habits and work with them to devise a transition process to best meet their needs.

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# Student mindset: emotional responses to the university learning journey

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## Abstract

Drawing upon a longitudinal data set collected between 2018 and 2022, this paper examines students' emotional responses at the start of their university learning journeys. From this data we suggest that students overall consistently report a positive, growth mindset. We show that this is a relatively stable attitude across disciplines and student backgrounds, even during the pandemic in 2020-2021. We also find that the beginning of students' journeys at the University is characterised by a relatively strong set of emotions. Based on these findings we recommend that, as staff, we need to develop teaching and support that enables students to maintain this positive mindset whilst taking into account the emotional charge of the first weeks of university life.

## Introduction

This paper draws upon primary research conducted between 2019 and 2022 examining students' mindsets as they enter the university, and builds on a more qualitative discussion of the respective perspectives of students and staff at the beginning of this learning journey (Whittle, 2022). Our aim was to understand how students' emotions affect their attitudes to learning, which in turn could help academic staff and tutors to prepare students more fully for their university learning journey, and to provide adequate support. The overarching aim is to enable students to understand their mindsets, and thus to develop or change their attitudes to learning, embrace opportunities to learn from 'productive failure' (Kapur, 2016), and become more resilient learners.



Drawing upon Dweck's model of growth vs fixed mindset (Dweck, 2017), the survey aimed to connect incoming students' feelings with data on attitudes to learning. Anyone who has taught undergraduates will have spoken to students where the reason for the conversation was not that the student did not understand a point or wanted to ask a question on the content. Rather the issues were framed by their emotional responses to study and feedback on their work (for an analysis of impact of emotions on learning see, for example, Pekrun (1992) and specifically for feedback, Shields (2015)). For example:

- "I have put so much work into this assessment, how can it be that I don't have a better grade?"
- "I experience ... at home and I am unable to complete the work by the deadline."
- "I have a very high mark in (e.g. Spanish), I am angry that I cannot understand my lecture in Spanish."

It is this emotional experience that our research aimed to capture, with data collected via an online survey examining students' feelings during Welcome Week. During the survey's iterations, and across an increasing number of cohorts at the University of Birmingham, we not only created a database of emotive responses, but also encompassed the rapid change and turmoil that higher education encountered during the pandemic. This is in part captured in our data, and we will speak of its impact as part of our analysis.

### **Methodology**

To create a base level of data, an online survey was circulated to first year undergraduates as they began their learning journey in Welcome Week. The survey was circulated between 2018 and 2021, gradually increasing the number of Schools that the survey was circulated to from 1 to 6 in its final iteration. This provided both a comparative data set between disciplines, and over time. In this study, we focus on the 2019, 2020, and 2021 intakes with 238, 128, and 205 respondents respectively, representing the largest and most recent data. As part of each of the start-of-the-term surveys, students were asked to give three words describing their feelings/emotions. The obtained data was cleaned and harmonised (to exclude variations of the same sentiment, e.g., "exciting" and "excited"). Several methods of analysis were then used: word clouds gave an initial description; words were given a red-green-blue characterisation depending on whether the word was categorised as describing

negative-positive-neutral emotions respectively (attributing valence, similarly to Rowe *et al.* (2014)); the order of words (positive first, negative first, etc.) was considered; the combination of positive & negative words (how many out of the three provided) was also taken into account. Counts of specific words and score averages, standard deviations, distributions etc. were compared across years and disciplines (represented by enrolment in different Departments/Schools).

We were surprised to find that the methods above arrived at the same conclusion: there was no substantial change between 2019, 2020, and 2021 intakes in the strength and type of emotion; indeed, the same words, “excited” and “nervous”, dominated all waves of surveys, with “nervous”, “anxious”, and “overwhelmed” in next prominent positions. This was particularly surprising as the survey included cohorts studying during and just after lockdowns. Similarly, there was little to no variation across different disciplines.

This data has to be analysed with some caution, and it is necessary to consider challenges in interpreting these types of surveys in regard to issues of representativity, reporting bias, eliciting responses that students think the researchers want to see etc. It is useful to note that while we have captured freshers’ emotions in the welcome/first week of the semester, we do not know how quickly these feelings, and especially, the strength of feelings dissipates over time (when being at university becomes a routine). Similarly, and particularly in contexts with large numbers of international students and broadly multicultural backgrounds, we cannot be sure that the terms we used in the survey, or the emotions students cited, were understood in the same way by all participants (as well as the researchers).

## Results

The first result presented above, specifically that there is little difference between the type of emotion students report to be experiencing, can be illustrated with three word clouds, including data across all disciplines (Fig 1).



Figure 1: Word clouds of three words students chose to represent their feelings over the Welcome week, in respectively 2019, 2020 and 2021

It is perhaps worth noting that the first word given in 2019 is usually a positive feeling, yet in 2020 the 1st word is usually a negative feeling, despite the proportion of each type of word staying the same; more broadly there were fewer 'positive' feelings overall in 2020, the year when students intake was most directly impacted by COVID-19 / lockdown uncertainties.

### Student mindset

To explore students' beliefs about their own intelligence and learning at university, in other words, their mindset, and how this differed between the three cohorts, we performed an exploratory factor analysis on the mindset survey data and examined differences in the patterns of responses across the years.

The purpose of an exploratory factor analysis is to provide insight into usual response patterns and these response patterns ('factors') can then be compared across groups of participants. The nature of a factor is determined by analysing the wording of the questionnaire items that cluster together and summarising what the grouped items have in common.

Performing an exploratory factor analysis on our three years of survey data, we extracted five factors, with relatively little overlap with each other. These are as follows:

**Factor 1: "Talent exists and is basically fixed"**

This factor pulled together items that suggested that you have to be "born with it" and that there is little room for change in this regard. Across all three years, there tended to be some agreement with factor 1. This was higher in the 2021 cohort, but the size of this difference was small. This suggests that many students broadly agreed that intelligence was a fixed entity which individuals brought with them to their studies. This factor explained most of the variance in the data, suggesting that these beliefs play an important role in students' conceptualisations of intelligence.

**Factor 2: "Bring on the challenge"**

This factor consisted of items that were about desire to learn new things, being prepared to carry on in the face of difficulty or mistakes and being appreciative of feedback. Most students agreed with this factor (the average 'agreement-score' falling between "somewhat agree" and "agree"). The 2020 intake agreed statistically significantly less than 2019 and 2021 intakes, but the effect size was small. This suggests that students coming to university in 2020 were a little less confident than their 2019 and 2021 peers in relation to challenges to be faced. However, it is worth noting that this factor is also probably most affected by participants feeling that they should agree with it.

**Factor 3: "I like to feel comfortable/safe while learning"**

The items loading onto this factor were about specifically new experiences feeling stressful, avoiding these, and about the need to work hard making participants feel not very smart. It

also included an item about intelligence being basically fixed. Across all years, participants tended to somewhat disagree with this factor, and there were no differences across the cohorts. This suggests that students appeared to recognise that learning can be a challenging and an uncomfortable process. This factor effectively represents an opposite pole to factor 2, and those students who agree with factor 2 would tend to disagree with factor 3. Notably, the small reduction in agreement with factor 2 in the 2020-cohort was not accompanied by a matching increase in agreement with factor 3.

**Factor 4: "I prefer it straightforward and error-free"**

This factor was about the desire to avoid making errors and the preference to do well without having to put in too much effort. The overall response pattern for this factor was to disagree somewhat, but there was a statistically significant difference in agreement with the 2019 cohort agreeing slightly more than 2020 and 2021 cohorts. Disagreement with this factor suggests that respondents accepted errors and the need for effort as a necessary part of the learning process. The pattern in responses is interesting, as it suggests that before the pandemic – which highlighted human fallibility and uncertainty in an all-encompassing way – students were a little less willing to tolerate making errors or having to put effort into their learning than their peers who started during a time of increased uncertainty or just after.

**Factor 5: "It is possible to develop as an individual"**

This factor encapsulates the idea that it is always possible to change substantially as a person. Participants generally didn't agree or disagree with this idea, but the 2021 cohort agreed statistically significantly more with it than the 2019 cohort. This may be another instance of the change of perspective on what is possible in the world that the pandemic demonstrated so dramatically.

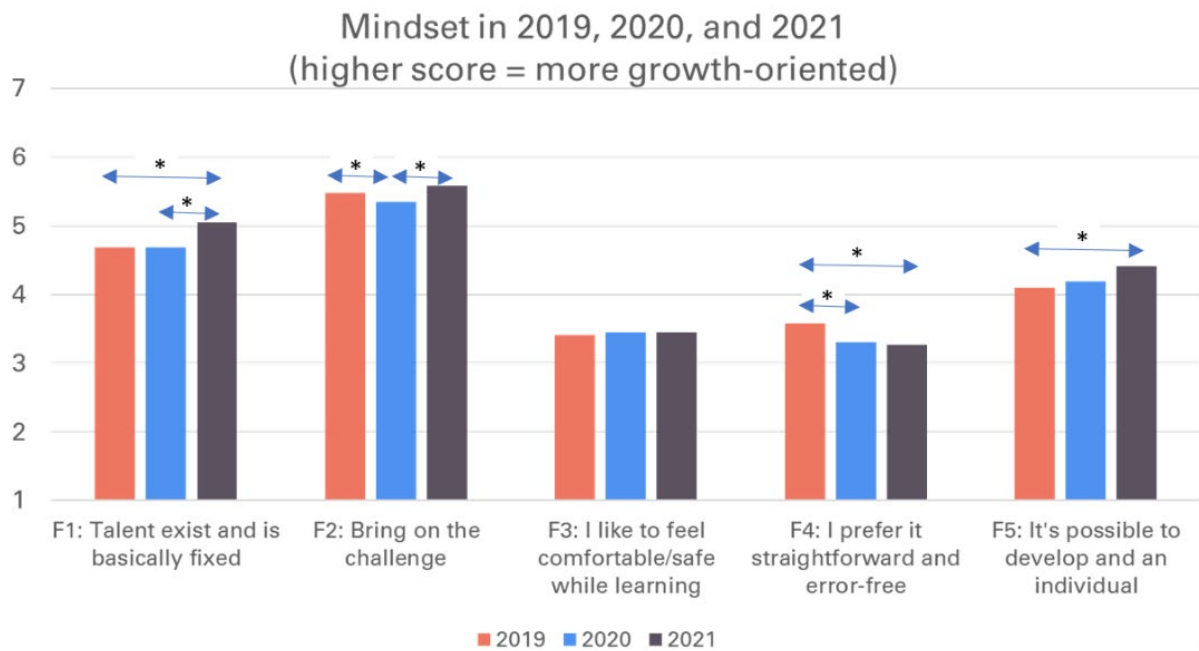


Figure 2: The factor scores across the three years. Point 4 on this axis corresponds to ‘neither agree nor disagree’. (Statistically significant differences are marked with asterisks \*)

Our data (see Figures 2 and 3) enabled us to investigate several possible correlations. No statistically significant correlations were found between the “type of person” (positive/negative/neutral) and gender, accommodation, or even “preparedness” and “doing well”; where both how prepared students felt for university and the how well they expected they would do were subjectively self-assessed by respondents. Similarly, the level of reported preparedness was not found to be correlated with gender, meaning that we are unable to comment on gender-based levels of confidence, or accommodation, which could be used as an indicator of socio-economic background. Given the absence of significant results on the expected relationships above, it’s even more interesting to observe the impact of different mindsets, including on the five factors explaining students’ attitude to learning.

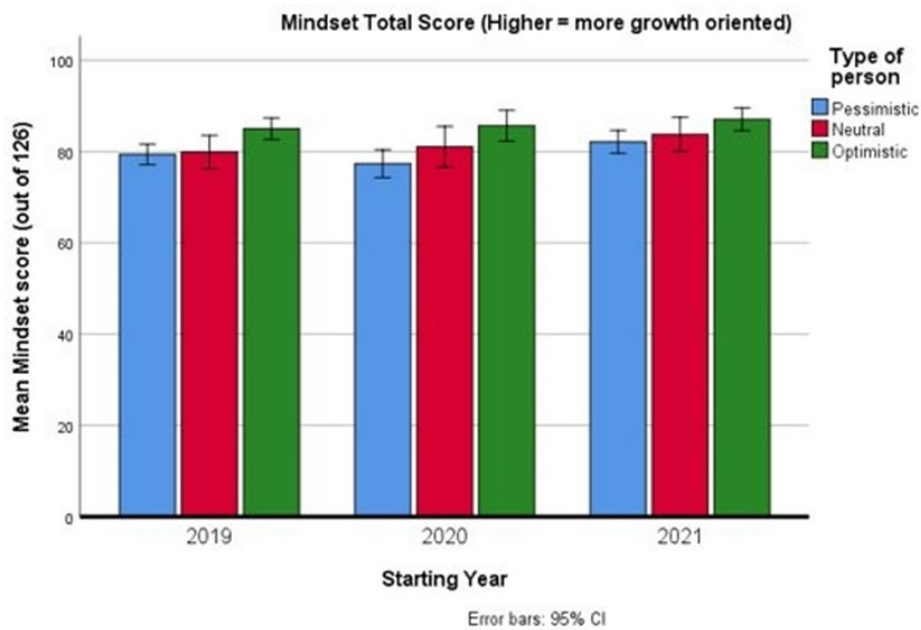


Figure 3: Type of person and the attitudes towards learning. Note: Higher score indicates greater agreement with the factor

The “type of person” (optimistic/pessimistic/neutral), which we understand exclusively as based on the emotional charges of the given words, without trying to generalise further, is related to mindset: there is a small, but consistent, correlation between optimism and growth mindset across all three years. It is interesting to note that the 2021 intake is more growth-oriented than the previous two years, perhaps illustrating the hopefulness after the lockdowns. Overall, this suggests that even a snapshot of the emotional state may be revealing of a more embedded opinion. This may mean in turn that the emotional state can or even has to be harnessed for developmental purposes, particularly at the start of the students’ learning process at university.

## Discussion

The COVID-19 pandemic was, and in many ways remains, a huge disruptor to many opinions and habits. It would be natural to expect that the emotional awareness students come with to university changed as well. While there is ample evidence that the mental health of young people has been affected by the pandemic and subsequent lockdowns (for adults in general see Chandola *et al.* (2022) and for young people specifically, Waite (2021)), it seems that the self-reported feelings of students concerning their start at the University have not

changed significantly between pre- and during pandemic cohorts. However, further research is needed to understand the long-term impact of the lockdowns and how this could be addressed meaningfully, both in terms of changes in emotional charge/valence at the start of the academic year, but also during the academic year itself.

One of the possible conclusions from these preliminary observations (acknowledging the data limitations) is that the emotional charge and the freshers' emotional background is: (i) consistent/stable and (ii) of significant strength. If (i) is correct, then the feelings of first year students can be predicted/anticipated – which makes those feelings more manageable. If (ii) is true, then these feelings could (or should) be considered, as emotional background has an impact on learning (Pekrun, 1992). A strong emotional charge can be used for some constructive purpose, but it also imposes limitations. The immediate practical implication, which has already been discussed across a number of Schools at the University of Birmingham, is the content and the intensity of the Welcome Week. Reaching out to large cohorts (300+ students on a programme) with important information in Welcome Week is a challenge; including key messages in pre-welcome communications and repetitions / re-inductions later in the semester / year are the options which are used in different Schools.

However, a wider awareness and recommendation is perhaps necessary. The results highlight the existence and the potential significance of emotions. Aside from their impact on learning, the wider context of challenges with mental health and emotional wellbeing of young people raises the question of emotion management, resilience, and education. In turn, this feeds into the considerations of how to foster social interactions and social intelligence, which is the foundation of group/teamwork, cohesion, integration, and community-building. The importance of these at university, in the workplace, and in society in general, cannot be overstated; thus, the question is whether we provide a good environment for development of soft / invisible (but vital) skills of emotion management to our students (Wei *et al.*, 2020 provide an interesting perspective). One of the crucial examples is the emotional response to feedback (whether during the studies or at work) which impacts significantly on how this feedback can be taken forward. The question is



then: should we start considering emotion processing with our students at the time when (mostly positive) emotions are running high, at the start of the year?

### Conclusion

Drawing upon the data collected, we can see that students at the University of Birmingham are 'open to the challenge' of studying at university. This is a relatively stable attitude across disciplines and student backgrounds. Even during the challenging circumstances of the pandemic in 2020-2021, students' mindsets remained relatively optimistic, correlating to a growth mindset. As staff, we need to facilitate ways for students to maintain this positive mindset amidst the emotional charge of the first weeks of their university learning journey. This is something that can be achieved through closer consideration of the role of personal and group tutorial activities during the first weeks of commencing an undergraduate degree.

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# Neurodiverse students within higher education – initial thoughts from a collaborative project

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## Abstract

The term 'neurodiversity' is increasingly used to reference groups of individuals with cognitive differences including, but not limited to, those diagnosed with autism.

Neurodiverse students make up an increasing proportion of students in higher education, and this is also true for doctoral studies, which has different expectations of the student, and through which the student engages differently with the academy. As part of a current HEFi-funded project which focuses on how neurodiverse doctoral students can best be prepared for their viva voce examination, we have interrogated the literature that looks at neurodiversity within higher education. We considered the diagnostic categories most commonly regarded as 'neurodiverse' within higher education, and what recommendations have been made for academic adjustments. We report here on our initial findings, their implications for our own project at the University of Birmingham, and for doctoral study within higher education more generally. Key considerations are the relatively high proportion of neurodiverse individuals who have co-occurring conditions and the issue of non-disclosure for students with unseen disabilities. We conclude that the principles of Universal Design for Learning (UDL) would potentially be of use to develop viva voce guidance which anticipates potential barriers, and we intend to explore this in the next stages of our project.

**Background**

In 2021/2022, approximately 14% of the 3080 Postgraduate Research (PGR) students registered at the University of Birmingham (UoB) disclosed a disability (Tableau data). Of these, 34% disclosed either social impairment (34) or learning disability (117). Although these categories are fairly blunt tools with which to identify specific conditions, we can safely assume that firstly, this figure is an under-estimate of actual numbers due to non-disclosure or lack of assessment evidence, and secondly, the majority of those conditions included could be considered to fall under the umbrella term of 'neurodiversity'. Therefore, neurodivergent students make up a significant proportion of our current disabled PGR population.

Common to most higher education institutions (HEIs), UoB does not currently record neurodiversity as a category of disability within application and disclosure documentation. However, there is a growing preference among students and staff for this term, which foregrounds cognitive diversity, rather than disability. Historically, neurodiversity has been used interchangeably with autism (Singer, 1999) but more recently, its use has broadened to encompass other conditions. To date, there is no one agreed definition.

We are a small team of neurodivergent and neurotypical academic staff from the Autism Centre for Education & Research (ACER) at UoB who have received funding from the Higher Education Futures institute (HEFI) to undertake a collaborative project, which aims to enhance understanding of neurodivergent students' experience of adjustments and needs for the PhD viva, and in doing so develop a tool that facilitates neurodivergent students and their supervisors to plan reasonable adjustments that reflect the student's need, not just their label.

In this article, we present key points arising from our scoping review, and use its findings to explore current understandings of neurodiversity as used within higher education, with the aim of concluding what it means to refer to a student as neurodivergent, the implications of co-occurring conditions and the ways in which these considerations inform the next stages of our project.

## Defining neurodiversity

The term neurodiversity was coined in the 1990s by sociologist Judy Singer, to frame autism as a variation of cognitive functioning that exists within the human species and move away from deficit interpretations. Figure 1 provides an illustration:

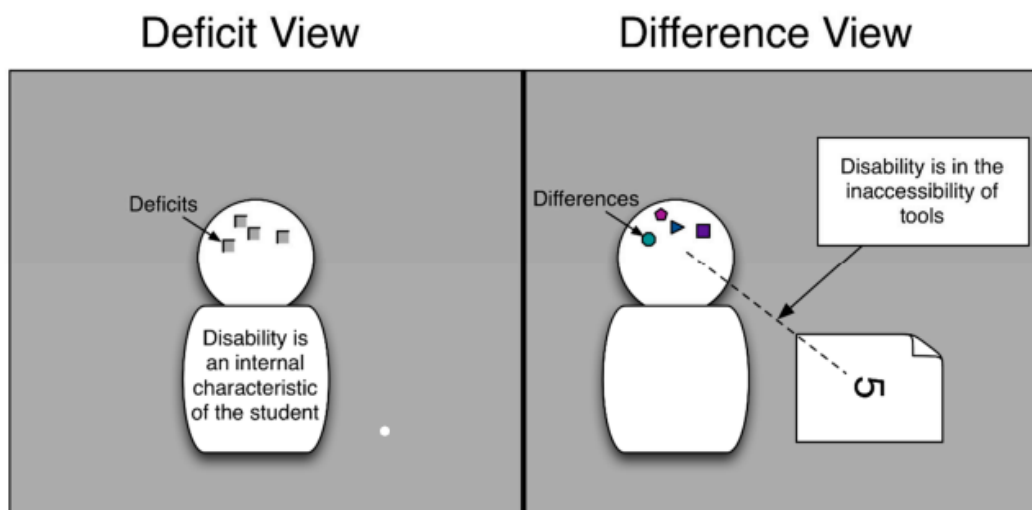


Figure 1: Lewis and Lynn (2018)

The neurodiversity movement has since been embraced by autistic communities, who sought to express their experiences of the world as different, not deficient. If taken in its original form, as used by Singer (1999), neurodiversity was the natural variation that could be seen across all human beings. Walker (2014) proposed the following definitions:

- Neurodiverse or Neurodiversity is a recognition of the naturally occurring diversity in human brain function.
- Neurodivergent (ND) as a term that refers to an individual who mind functions differently to the dominant societal norm.
- Predominant neurotype (PNT) refers to *“individuals whose brain functioning is more typical or dominant and distinct from the ND brain, and so more ‘average.’”*

A further exploration is provided in Figure 2:





Neurodiversity definitions....			
 Neurodiversity	 Neurodiverse	 Neurodivergence	 Neurodivergent
<p><b>Noun:</b> The diversity or variation of cognitive functioning in people. Everyone has a unique brain and therefore different skills, abilities and needs.</p>	<p><b>Adjective:</b> Describes the diversity and variation of cognitive functioning in people. Neurodiverse is typically used to describe neurodivergent people.</p>	<p><b>Noun:</b> Cognitive functioning which is not considered 'typical'. For example, autistic, dyslexic and dyspraxic people</p>	<p><b>Adjective:</b> Describes people who have a neurodivergence</p>

Figure 2: <https://exceptionalindividuals.com/neurodiversity/> (2022)

Neurodivergence therefore is the noun used to refer to a wide group of individuals whose cognitive functioning is perceived as different from the Predominant Neurotype (PNT). The limited literature exploring neurodivergence in higher education makes establishing an accurate definition to be used across the University challenging. From the literature explored here, the authors propose that, based on current understanding, the term neurodivergence should be used as a collective noun to describe individuals identifying with the following:

- Autism
- Attention Deficit Hyperactivity Disorder (ADHD)
- Dyslexia
- Dyspraxia/DCD
- Dyscalculia
- Tourette's Syndrome
- Developmental Language Disorder
- Speech differences e.g. stutter, apraxia.
- Auditory processing differences e.g., auditory processing disorder (APD)

## Methodology

For the first phase of our project we conducted a scoping review of research relating to neurodiverse students within HE, the processes of which are summarised in Figure 3:

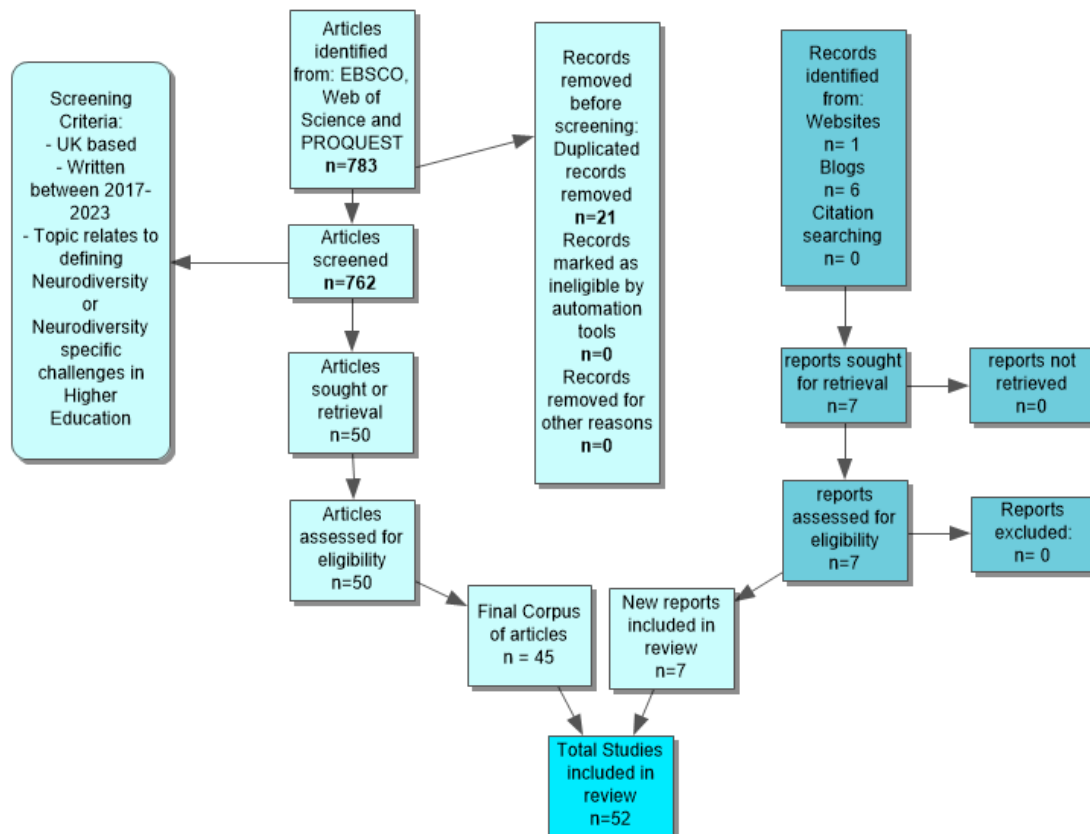


Figure 2: PRISMA (2020)

For each disability under the umbrella term of neurodivergence, the literature was read, and difficulties identified that could place the student at a “*substantial disadvantage in comparison to students without disabilities*” (Equality Act, 2010, p. 10).

An increased level of reliability was achieved in compiling a comprehensive list, by ensuring that a balance of academic research focusing on the diagnostic criteria and first-hand personal experiences were used. Furthermore, while most articles reflected on the focus of childhood presentations in the diagnostic criteria, the incorporation of adult experiences, ensures the recognition of the potential differences in the support needs of adults. It is

acknowledged that the majority of the literature focuses on undergraduate study and written exams, therefore we assessed whether the noted barriers to success could also apply in relation to the doctoral viva specifically, since this is a significant requirement of doctoral studies.

Through analysis of the available literature, it became evident that some barriers to learning were common to more than one neurodivergent condition. To explore this further, the key barriers identified were themed and cross-referenced (see Figures 4-10 in Appendix) across neurodiversity categories.

We do not have space here to comment in detail on these findings, except to highlight that they provide a useful starting point from which to explore the profiles of different conditions under the neurodiversity umbrella. They provide some illumination of what is common to all, and what is specific. Most importantly, they provide a potential framework through which we can consider the implications of co-occurring conditions. The impact of intersecting conditions has largely been neglected within the literature.

There is relatively little research that specifically references the challenges faced by neurodivergent postgraduate students. The difficulties outlined here are taken from the available literature and are therefore based predominantly on undergraduate studies. We recognise that this list may therefore be incomplete and consider that further research is needed, with a focus on neurodivergent students taking doctoral studies.

We also note that, in listing challenges faced by many neurodivergent students, we arguably focus on a deficit-based support system, which does not fit within the neurodiversity paradigm. The strengths associated with each neurodivergent condition are not listed here but they are equally important in ensuring student success. Incorporating this into future research would ensure a more balanced picture, and we intend to include this in our current project.

**Other considerations**

As previously stated, the aim of the neurodiversity movement was to move away from a deficit-based 'medical model' of disability. Therefore, when we use the language of neurodiversity, we must accept that this should also reflect a wider cultural shift in the way we view disabilities.

Nieminen and Pesonen (2022) argue that as the academic degree has become a necessity in 'modern knowledge societies', HEIs are welcoming a much more diverse student population. Yet despite this, and the increase in neurodiversity terminology, there remains an ethos within many HEIs that disabilities/neurodivergence are a deficit to the student's study that will likely hinder their achievement.

"A societal stigmatization of disabledness and neurodiversity overshadows higher education: abnormality and unproductivity are recognized and devalued in higher education" (Nieminen & Pesonen, 2022, p.3).

As research suggests, there is an increasing number of neurodivergent students entering higher education (Clouder *et al.*, 2020). It is therefore becoming increasingly important to address this gap in knowledge and understanding in HEIs.

We would like to introduce the concept of Universal Design for Learning (UDL) here and consider why it might be a particularly appropriate approach for doctoral students. The theoretical foundations of UDL lie in the belief that every human being is different, and therefore planning for this diversity is needed from the beginning of any design process (Sanger and Gleason, 2020). Its focus on human diversity therefore fits very naturally with the principles of neurodiversity. In employing a UDL approach, universities can demonstrate that a diverse student population is valued, rather than a minority that needs adjustments to enable participation (Waisman *et al.*, 2023; Cox *et al.*, 2021). In the next stages of our project, we intend to investigate, along with current neurodiverse doctoral students and the staff who support them, how we can employ the principles of UDL to render the viva voce more inclusive to neurodiverse candidates.



There are further benefits of a UDL approach, when we consider that disclosure and diagnosis are recognised as prerequisites for support in most HEIs. Research suggests that HEIs should encourage students to declare their disability prior to entry (Jacklin, 2011), however there is no compulsion for students to do this (Carey, 2012). While researchers have highlighted the benefits of disclosing (Cunnah, 2015), it is equally well documented that many students choose not to do so. For some this is due to fear of stigmatisation, and being treated differently (Jacobs *et al.*, 2022; Kendall, 2016; Hargreaves *et al.*, 2014). For others it may be that they do not identify as disabled (Shakespeare, 2006), or wish to re-invent themselves at university (Madriaga, 2007). Ryder and Norwich (2019) argue that some students are also 'put off' disclosing due to the subsequent requirement of proving a diagnosis through written evidence, alongside the need to justify that their difficulties are 'bad enough' to warrant support (Beck, 2022). We would argue that the issue of disclosure is of particular significance for doctoral students. Almost by definition, the majority of these students wish to pursue an academic career. Therefore, supervisors and other staff within their setting are not just a part of their studies but may be their future line managers and colleagues. Doctoral students often seek employment as tutors and research fellows whilst they are studying. They may therefore be especially sensitive to highlighting any perceived weakness or disclosing something that may put them at a disadvantage within the highly competitive environment of academia.

## **Conclusion**

We have undertaken this scoping review as part of our wider project, which will work in collaboration with neurodiverse doctoral students and their supervisors to explore how the viva voce can be rendered more inclusive and accessible and how academic staff can best be supported in their roles. The literature considered here has enabled us to present and investigate a definition of neurodiversity that seems to best reflect current usage. We also acknowledge that neurodiversity is an emerging 'movement' and therefore changes and challenges should be expected and welcomed. Identification of common and specific traits within different neurodivergent conditions is of particular significance and within our project we will explore the implications in relation to dual and multiple diagnoses, as they co-occur within individuals. We will also explore further the ways in which the principles of

Universal Design for Learning may be employed as a means of ensuring an inclusive viva voce experience is available to all neurodiverse PGR students, with or without formal disclosure.

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**Appendix: Cross-referencing of barriers to learning found in the literature, listed according to diagnostic condition**

		Dyslexia	Autism	ADHD	Tourette	DLD	Dyspraxia	Dyscalculia	Speech
executive functioning: Organisation	Difficulties with maintaining attention								
	Difficulties with organisation								
	Difficulties processing verbal information								
	Short term memory Difficulties								
	Difficulties with working memory								
	Difficulties retrieving long term memory								
	Requires more Processing time								
	Difficulties with Self-Determination (problem solving, decision making)								
	Difficulties with time management								
	Cognitive Inflexibility (predictability and routine)								
	Unspecified executive function								

Figure 3: Intersectionality of challenges in HE: Executive Functioning: Organisation

		Dyslexia	Autism	ADHD	Tourette	DLD	Dyspraxia	Dyscalculia	Speech
Verbal Language	Less elaborate vocabulary								
	Ability to convey knowledge through verbal language								
	need for unambiguous questions								
	Difficulties asking questions								
	possible fluency of speech differences								

Figure 4: Intersectionality of challenges in HE: Verbal Language

		Dyslexia	Autism	ADHD	Tourette	DLD	Dyspraxia	Dyscalculia	Speech
executive functioning: Regulation	Higher Anxiety								
	Lower Self-Esteem								
	Difficulties managing Unexpected Situations								
	Difficulties managing stressful situations								
	Perfectionism								
	Sensory Sensitivities								
	Difficulties managing emotions (expressed through behaviours)								
	Self-Stimulatory/soothing behaviour								
	difficulties with self-motivation								
	Impulsivity								
	Forgetfulness								

Figure 5: Intersectionality of challenges in HE: Executive Functioning: Regulation

		Dyslexia	Autism	ADHD	Tourette	DLD	Dyspraxia	Dyscalculia	Speech
Social Interaction	Difficulties understanding other people's thoughts/feelings								
	Difficulties understanding non-verbal communication								
	Difficulties with social communication								
	Higher social anxiety								

Figure 6: Intersectionality of challenges in HE: Social Interaction

		Dyslexia	Autism	ADHD	Tourette	DLD	Dyspraxia	Dyscalculia	Speech
Physical	Hyperactivity/Restlessness								
	Involuntary movements/tics								
	Higher levels of Fatigue								
	clumsiness								
	Requires consideration of staff positioning to avoid implications of powerful tic actions								

Figure 7: Intersectionality of challenges in HE: Physical

		Dyslexia	Autism	ADHD	Tourette	DLD	Dyspraxia	Dyscalculia	Speech
Literacy	difficulties with reading complex text	■			■	■			
	difficulties with essay organisation	■					■		
	difficulties with spelling and vocabulary choice in academic writing	■				■	■		
	difficulties with study strategies and metacognitive skills	■	■	■			■		
	difficulties with note taking	■	■	■	■	■	■		
	difficulties expressing oneself in written form	■				■			

Figure 8: Intersectionality of challenges in HE: Literacy

		Dyslexia	Autism	ADHD	Tourette	DLD	Dyspraxia	Dyscalculia	Speech
Numeracy	High levels of maths anxiety							■	
	Difficulties finding new locations						■	■	
	difficulties memorising number facts	■						■	
	Difficulties with concepts of Time		■				■	■	

Figure 9: Intersectionality of challenges in HE: Numeracy

# Decolonising the academic atmospheres of higher education

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## Abstract

When working on reflective essay assignments, students are challenged with performing sophisticated introspections, mastering theories and developing critical thinking skills. Furthermore, they can struggle with procrastination as they seek to express their own voice and nourish their creativity during the reflective process. This philosophical think-piece draws on our experience teaching marketing-related modules at both undergraduate and postgraduate levels. It illustrates how, by conceptualising the learning experience as an academic encounter within affective educational atmospheres, we, as educators, can offer students tangible and actionable tools to overcome some of the challenges of reflective learning. Affective atmospheres in educational settings can be understood as spaces (within and outside campus) in which peers and facilitators encounter each other in their learning journeys. We argue that pedagogical strategies often take our spaces of learning for granted, not recognising their significance on the learning experience. We propose that nurturing affective atmospheres requires recognition and cultivation. This paper illustrates how, within the context of the Business School, incorporating guided embodied experiences can impact students' capacities to work regularly, collectively, creatively, and reflectively.

## Current academic atmospheres and pedagogical challenges

COVID-19 has pushed us to rethink our most precious academic habits and environments (Bryson and Andres, 2020). It has necessitated the creation of virtual academic atmospheres at a time of anxiety, when many families have struggled to juggle work, childcare and home life during lockdown. Isolated study has significantly impacted on many students' social connections and mental health (Catling *et al.*, 2022). In addition to this global upheaval, social movements such as Black Lives Matter have fed into educational debate around white

privilege, free speech, and decolonisation, leading to questions such as "why is my curriculum white?" (Peters, 2015). These political moments have sparked significant controversy and prompted urgent action to build a more diverse, reflective, creative, and inclusive academic environment for all.

### **Affective atmospheres and embodied education**

Academic atmospheres can be understood as being continuously in formation, ephemeral, and dependent on the collective mood. They thus affect (and are in turn affected by) all those within them, including learners and teachers. In this sense,

“atmospheres are perpetually forming and deforming, appearing and disappearing, as bodies enter into relation with one another. They are never finished, static or at rest” (Anderson, 2009, p. 79).

This theory recognises that *“understanding is profoundly embodied, insofar as our conceptualization and reasoning recruit sensory, motor, and affective patterns and processes to structure our understanding of, and engagement with, our world”* (Johnson, 2015, p. 1). At the same time, this embodied understanding is political (Ahmed, 2014), meaning that certain bodies may hold privileges or feel welcome in certain atmospheres while others may not. While having ice breakers in teaching sessions is common practice, this paper highlights a deeper need to understand how learners (and educators) land in these academic atmospheres at a more existential level (Preece *et al.*, 2022).

In theorising academic atmospheres, we seek to challenge Western, Cartesian views of the world when supporting our students with their learning journeys and reflective assignments within the context of the Business School, and consider calls for decolonising the curriculum and authentic assessments. A separation between the ‘mind-intellect’ and ‘body-spirit’ still dominates within our academic practices and assessments (Ng, 2018), albeit with some disciplinary differences. While embodied pedagogy - the incorporation of multi-sensorial and imaginative learning techniques involving the body - in business schools has only recently started to emerge (Berti *et al.*, 2021), education of the body has been considered a

rich pedagogic practice in other disciplines such as the arts or sports (Albright, 2011). One way to help students understand and construct insightful knowledge is to support their process of connecting with theories, questions and learning from a more embodied perspective. Different embodied techniques can support this journey of becoming reflective practitioners in the process of knowledge creation, offering opportunities to explore various perspectives, handle complexity and uncertainty, increase their understanding of self, others, and community, and question received truths - all valuable skills in today's world.

Tadajewski (2022) highlights the importance of reflexivity in acknowledging the complexity of learners' personal biographies and experiences, the affordances of the environment, and the power relations between educators and learners, and learners themselves. Critical reflection entails an interconnection of self and world: looking outwards, locating theories and practices within their social, political, and cultural contexts, as well as looking inwards to challenge the processes by which one makes sense of the world (Door, 2014). Critical reflection involves questioning one's own experiences and orientations (Ahmed, 2014) and seeking alternative ways of seeing and doing, allowing for a potentially emancipatory shift in subjectivity. To create new understandings, this reflective process must, we argue, acknowledge the body of the learners and their orientations to academic atmospheres i.e., whether they feel they fit in or identify as misfits.

In bringing reflexivity into assessment as well as teaching, educators can create reflective spaces in which students can understand their subject positioning in the world. For instance, we know not all students sit equally within assignments, with some feeling more confident and reassured than others. Angu (2019) looks at the context of literacy in first-year students at a South African University, where analysing a 'personal literacy narrative assignment' demonstrates that assignments should not be seen as an objective evaluation of writing skills. Rather, assignments reveal vivid representations of "*the scholastic experiences of university students from a schooling system that marginalised and silenced the voices of those categorised by the same system as subalterns*" (Angu, 2019, p. 1160). This highlights how such reflexivity might lead to a contentious view of non-traditional assessment methods, as educators are in a position where they can judge the learner's innermost



thoughts (Schutz, 2013). However, we argue that assessment is always a judgement of the quality of students' learning and is inextricably caught up within power relations and hierarchies that exist in educational institutions.

Angu's research resonates with our own experience working with international students, who currently form a significant proportion of the UK student population. Through our academic journeys, we have seen students struggle to find their contribution to collective learning. One particular challenge consists of students' doubting whether their non-western references or theorists could support their understanding of a specific subject. In other cases, non-native speakers feel othered, even in cases of language fluency (Halic, Greenberg and Paulus, 2009). These challenges are based on the dominant presence, often unconscious, of the canonical theories and theoreticians to which we are habituated as knowledge creation keepers. In the UK, we have witnessed many non-native English speakers trying to fit in a model designed with English natives and Western students in mind (for instance, the essay-writing routine is harrowing). This situation creates additional challenges for those with the 'wrong bodies' and indeed those who have the 'wrong language'. For example, at the Business School, one of the challenges we face is understanding and supporting our BAME (Black, Asian, Minority, Ethnic) students who, independently of being home or international students, often perform less well than other students, a situation which is of course found across the sector (Mcduff *et al.*, 2018).

One of the pillars to better understand the challenges of improving our learning environment is to increase our understanding of how our students land in the affective atmospheres of our pedagogical routines (Preece *et al.*, 2022). The biographies and the subject positionings we occupy through our individual embodied experience in the world define our experience and emotions, making us feel adequate and at ease, or uncomfortable (Preece *et al.*, 2022). It is clear that for some students, this process can be uncomfortable. One of the limitations of traditional education is that it prioritises a disembodied understanding of topics via the passive attendance of a set of lectures. Theories of affect seek to understand how our bodies are directed through repetition into normalised routines which help determine us as specific affective subjects (Bajde and Rojas-

Gaviria, 2021). This affective subject creation sometimes reduces our potentialities and our capacities to create, be, and feel in diverse ways. In Sarah Ahmed's words:

"It is not, then, that bodies simply have a direction, or that they follow directions, in moving this way or that. Rather, in moving this way rather than that, and moving in this way again and again, the surfaces of bodies *in turn* acquire their shape. Bodies are 'directed' and they take the shape of this direction" (Ahmed, 2006, p. 15-16).

A pedagogical embodied perspective offers an invitation to investigate this discomfort and make it productive and exciting for our own learning and the learning of students (Ng, 2018).

### **Embodied pedagogy and disciplinary boundaries**

Mindful attention to embodied experiences in educational practice has demonstrated potential in allowing students to ideate and theorise in alternative ways, often moving away from hegemonic discourses (Orr, 2002). Ergas and Hadar's work demonstrates how mindfulness offers stress-reduction benefits to students and helps them to challenge normalised versions of what education should look like (Ergas and Hadar, 2021). Ng (2018) also reflects on how her presence in the classroom as an Asian woman provokes both contestation and admiration. She emphasises that "*it is indeed the encounter of bodies, not only of intellect, that gives dynamism to the process of teaching and learning*" (Ng, 2018, p. 36). Ng argues that her embodied approach recognises the learning each of us can generate when being in intimate communion with our own body. She sees, in this sense, "*embodied learning as a form of decolonising pedagogy*" (Ng, 2018, p. 50).

Albright (2011) also reflects on decades of experience in teaching choreography and dance through movement. Her reflections reveal how the communitarian programme she has designed, "Girls in Motion", has provided students with an embodied understanding of the transformational power of dance. Her students work with a group of middle school girls in an after-school activity. During this experience they discover as a collective that "*how we move in the world can make a difference*" (Albright, 2011, p. 10), and this activity results in

increased self-confidence and creativity. Ng and Albright's experiences demonstrate that embodied techniques can help students get involved in their learning at a more profound level, allowing them to discover their voice, the particularities of their lived experience and their subject positioning within the learning community.

One could argue that the business context is less compatible or less susceptible to enrichment by adopting an embodied perspective than the examples above. However, Gordon's (2014) contribution to the debate on decolonising education argues that we should be going beyond challenging the content within the curriculum to rethinking our disciplinary learning assumptions. His work invites bravery in thinking unconventionally when pushing the boundaries of our pedagogical practice if we are to genuinely decolonise the learning experience. Gordon's (2014) approach starts by identifying our tendency to work within a particular taxonomy of disciplines, each with their own specific methods of learning. He highlights that due to "disciplinary decadence", we become trapped in our disciplinary paradigms, which prevents exploring other ways of knowing and, therefore, any radical transformation.

### **Embodiment in the Business School: some examples**

In our own practice, conversations with students have highlighted that what they find helpful and inspirational resides in the power of physical and contemplative tasks that they can use to understand their embodied experiences better. For example, in the framework of a module on consumer behaviour, exploring different environmental conditions (such as different lighting or sound effects) can elucidate different narratives that come from the sensorial experiences of certain marketplaces and servicescapes. In experimentations of this technique by the first author, students successfully integrated narratives about sensorial elements of retail spaces and the consequences of those sensorial conditions on themselves as consumers. As different students evoked different experiences, pleasant or unpleasant, and acknowledged their assorted conditionings, the discussions around these topics reflected the diversity of the participants' backgrounds. This diversity allowed for a more empathic understanding of the design of sensorial elements in retail spaces and their impact on different users. As acknowledged by Anderson (2016), it is within the affective

encounters, the collective interactions, that we can, in the long run, re-shape the affective atmospheres in which we work.

Another example of an embodied activity is a combination of poetry with meditation. Poetic meditations prepare the body to appreciate a more metaphorical understanding of the phenomenon under investigation. These techniques are ideal in the context of preparing the students for data collection. In marketing research modules, this data collection can be from others via observing and interviewing or from themselves via self-observation / introspection:

"by using mindfulness practice as a means to relax and focus on sensations, ethnographers can prepare for a more truly embodied data collection where they become a 'sensorium', an instrument of research who is able to gather data from multiple environmental sources, including, but not limited to the visual and textual" (Rojas-Gaviria and Canniford, 2022, p. 8).

The poetic aspect complements this multisensorial openness by enriching the activity with a metaphorical purpose. Metaphors are known to operate as frames for academic work (O'Malley and Ryan, 2006), leveraging familiar, concrete reference points in order to develop nuanced understandings of novel and challenging constructs. This metaphorical understanding stimulates the students to engage in deeper levels of data analysis. Let us suppose, for instance, that we are preparing the terrain for students to conduct an inventory of their wardrobe or their fridge. This is an exercise that can be fruitful for understanding consumer behaviours. Through poetry, students can be transported into new understandings about their ordinary belongings, making the familiar unfamiliar, and allowing for an insight into how material objects gain meaning and value. An extract of a potentially useful poem for this case is, for instance, *Our House*, by Safia Khan:

“The fridge is full of disappointing surprises,  
like pilau rice in ice cream tubes, and  
hand grenades in cling film.  
[...]”

(Khan, 2021)

As illustrated by research and our experience with students, more careful attention to how we are affected and affect others through our embodied experience of learning and teaching can support our programme of decolonising the academic atmospheres in which we work. Students, for instance, participate with their own inventories of home artefacts or products, and their descriptions are enriched via a metaphorical vocabulary that can be learned from poetry coming from different cultural horizons. In conversations, a mosaic of perspectives is enacted, giving the students an embodied understanding of the diversity of consumers and consumption habits that are possible.

These practices denote a more malleable vision of pedagogical strategies. This malleable pedagogy is an open invitation to other disciplines beyond business to expand their horizons to consider unconventional pedagogical methods to enrich the learning experience and nourish spaces of innovation. These spaces celebrate an interdisciplinary dialogue and highlight the need for educators to come together for the creation of pedagogy across disciplinary boundaries. One example of this is the edited work by Tatiana Chemi and Alison Neilson (2022) in their collective exploration of using the arts for teaching in non-arts programmes. This European project offers alternative teaching practices through the arts and suggests concrete examples and methodologies that can be of use in any field.

While the spectrum of such techniques is very broad and may include experiences such as inspiration walks, collages, focus exercises, poetry reading, poetic meditations, podcasting, dancing, and prototyping, this article has focused on only a few examples for brevity. We ask for an opening of our academic atmospheres to allow for cross-pollination of what we often see as separate disciplinary islands in the world of academia. This also requires a

student-centric approach, acknowledging difference and how it is experienced and felt within educational spaces (both physical and virtual).

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# Meta-planning as a collaborative approach to creating a preessional summer teacher development programme

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## Abstract

This case study explores the implementation of a metaplanning approach in the collaborative creation of a professional development programme for preessional English for Academic Purposes (EAP) teachers. The Birmingham International Academy's preessional English programme is attended by over 1000 students across various course durations and is taught by over 90 EAP practitioners. In order to offer development opportunities for teaching colleagues, the summer continuing professional development (CPD) programme provides staff with time and space to explore new approaches in English language teaching such as pedagogy, inclusive practice, and innovations in technology. Before planning the final CPD programme, the metaplanning approach allowed teachers to express their initial concerns and aspirations related to teaching on the preessional programme, which were then grouped thematically through discussion and debate with other teachers. The final stage of prioritisation encouraged teachers to recognise their immediate professional development needs. The outcomes of the metaplanning approach were used to inform the creation of a teacher development programme based on the needs and aspirations of preessional teachers. Throughout our community of practice, teachers were then invited to come forward to facilitate workshops based on a particular theme. This innovative approach to collaborative CPD programme design may be adapted to support decision-making and collaborative project planning in other areas across the University.



**Introduction**

This case study will demonstrate the value of adopting a metaplanning approach to the collaborative creation of a professional development programme for preessional English for Academic Purposes (EAP) teachers. Metaplanning could be defined as the design of the planning process, generating ideas which are then grouped thematically before being prioritised (Wilensky, 1981). The end result is a visual image of the discussion; links between themes, similarities, contrasts are highlighted on the metaplan. Within the context of the Birmingham International Academy (BIA), this approach affords teachers the opportunity to put forward their initial concerns and possible aspirations/interests, which could be addressed through professional development activities which are then grouped thematically through discussion and debate with other teachers in the group. The final stage of prioritisation, whilst recognising that priorities can and do change, encourages teachers to recognise their immediate professional development needs. The outcomes of the metaplanning approach are then used to inform the creation of a programme of professional development activities based on the needs and aspirations of preessional teachers. This approach could potentially be of use to education leaders, such as heads of education or programme leads in other contexts.

**Background**

A key aim for the CPD co-ordination team at the BIA was to move away from a more transmissive 'training' approach to CPD by getting teaching colleagues more involved with professional development activities. Kennedy (2005) proposes a 'spectrum of CPD models' (Fig.1) which moves from transmission to transformative. The metaplanning approach falls between the community of practice and action research models proposed by Kennedy, both of which offer increasing capacity for professional autonomy, and could have more of a transformative impact on practice. The method affords participants to be part of the planning process by offering their thoughts and ideas as to what could be included within the summer CPD programme.

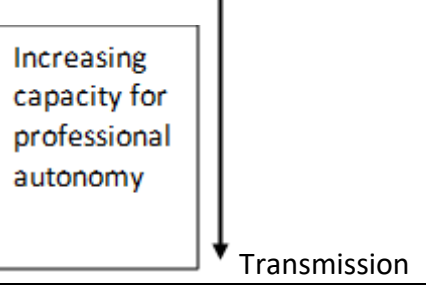
Model of CPD	Purpose of model
The training model The award-bearing model The deficit model The cascade model	
The standards-based model The coaching/mentoring model The community of practice model	Transitional
The action research model The transformative model	Transformative

Figure 1. Models of CPD and purpose (Kennedy, 2005, p. 248)

The agentic nature of this approach places the onus on teachers to reflect on their own professional development needs without co-ordinators imposing topics for CPD workshops and events in a top-down manner. This impactful and innovative approach to collaboration is easily modified and could be conducted online using synchronous platforms. Metaplanning could be straightforwardly implemented in other contexts where collaborative decision-making takes place.

**Case study: summer preessional English programme 2022**

The summer preessional English programme at the BIA welcomes over 1000 international students over the course of the summer on programmes of varying durations from 20 weeks to 4 weeks for unconditional offer holders. These programmes are taught by qualified EAP practitioners who bring different levels of experience and expertise to the team.

An integral part of the preessional is the professional development programme offered to teaching colleagues. During the teacher induction, a session is dedicated to teachers’ sharing of ideas and opinions on CPD and possible thoughts for workshops based on immediate needs and aspirations. In order to gather this information, an approach called ‘metaplanning’ was piloted during the summer of 2022 with 89 teachers. This method was innovative insofar that it had not been implemented before within the CPD programme

planning process and, after discussion with the Preessional Management Team, it was decided to trial the approach in order to ascertain the professional development needs of our teaching colleagues.

Metapanning is a collaborative approach to gathering qualitative data that goes beyond superficial identification and sharing of ideas (Wilensky, 1981). This method of data collection has its roots in business (Campagna, Ivanov and Massa, 2014) where it is used to support decision-making and problem-solving, however, it has applications in action research as a qualitative data collection method (Lawlor *et al.*, 2016). One key aspect of metapanning is stakeholder engagement. This involves bringing together different groups that have a stake in the outcome of the planning process. Ensuring that all stakeholders are represented and have a say in the planning process can help to build consensus and ensure that the final plan reflects the needs and interests of all parties involved (Schön, 1983; Wilensky, 1981).

### **The metapanning approach**

The focus of the activity is to gain a deeper understanding of colleagues' immediate needs and concerns regarding teaching on the preessional programme as well as aspirations and interests that could be addressed through CPD.

It is possible to conduct the activity using a traditional approach (flipchart paper and post-it notes) or digitally (using Padlet or Jamboard). This case study is based on the traditional approach. Two pieces of flipchart paper are required; one titled 'Needs/concerns' and the other 'Passions/aspirations'. Each participant is given six post-it notes on which they write three immediate needs and three aspirations linked to teaching EAP. These are then posted to respective flipchart pages.

Working collaboratively, participants then discuss the points with the aim of grouping them thematically. Once categorised, the group assign a suitable title for each cluster of post-it notes e.g., 'Student engagement', 'Corpus linguistics'. The action of discussing and justifying goes beyond the simple identification and presentation of ideas and gives participants

agency to put forward contributions based on their experience and professional development needs. It is also an inclusive method of involving all participants who may not usually contribute to such discussions.

The final stage of the metapanning process involves prioritising the themes based on individuals' wishes. This could be done using adhesive dots or felt pens with which participants indicate their preferences; three dots for highest priority, two dots for mid priority and one dot for low priority. It is important to acknowledge that priorities change over time, however, once data have been collected, they can be revisited year-on-year to add or adjust priorities accordingly.

### Example themes from metapanning

The data collected by the metapanning process are anonymous in nature and it is difficult to assign comments to particular participants which may encourage them to be open regarding their needs and aspirations. Table 1 provides a brief overview of the overarching themes proposed by teachers across the different programmes.

20-week	15-week	10-week	6-week
Hybrid teaching; Inclusive Practice. (Teachers n=2)	Teaching Methodology; Classroom Management; Student/Teacher Wellbeing; Personalisation; Motivation & Engagement; Challenging assumptions; Academic curiosity.  (Teachers n=5)	Motivation & Engagement; Time constraints/management; Inclusive Practice; Pedagogy; Cultural Awareness; Pronunciation; Technology.  (Teachers n=31)	Technology-related; Student/Teacher Wellbeing; Learner Engagement; English as a Lingua Franca; Classroom Management; Autonomy; Materials design; Teaching methodology; New technologies; Student Voice.  (Teachers n=51)

Table 1. Overarching themes collected by metapanning

Whilst some of these themes appear quite broad, this offers a wider scope for teachers who express a wish to facilitate a workshop. Guidance was available to teachers from CPD coordinators who may have required support with planning and focusing their workshop.

### **Links to the community of practice CPD model**

Wenger (1998) posits that a community of practice is a group of people who share a common profession or interest and who engage in ongoing learning and knowledge sharing in order to improve their skills and knowledge in that area. This is also alluded to by Boreham (2000, cited in Kennedy, 2005) who states that there is an added value in learning communities where collective knowledge could support the development of individuals. The goal of a community of practice is to facilitate ongoing learning and professional development, and to foster a sense of community and connection among its members.

The metaplanning approach provided colleagues with the opportunity to reflect on their professional practice and experience, articulate issues and aspirations that could be addressed through CPD activities and possibly put forward proposals for workshops that they would consider facilitating.

By bringing colleagues' immediate needs and aspirations to the fore, we were able to tailor our CPD provision to meet these needs whilst offering teachers the opportunity to share their knowledge and experience of a particular topic (Lave and Wenger, 1991). Although voluntary, there is generally a high uptake of teachers wishing to facilitate workshops throughout the summer as well as presenting at our internal, annual CPD conference event in August.

### **Conclusion**

In conclusion, metaplanning is a key aspect of effective project management, as it helps to ensure that the planning process itself is well-organised and efficient. Additionally, by keeping the big picture in mind and considering the long-term impact on learning and teaching, in this case, metaplanning could help departments to make more strategic and sustainable decisions in a collaborative and inclusive manner. Overall, the benefits of

metaplanning are numerous, and it is a valuable tool that gathers rich, insightful data to inform future decisions at a strategic level and could be used by heads of education and programme leads when evaluating programmes and planning for future iterations.

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# Small steps on the journey to ‘flipping the classroom’

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## Abstract

This reflective case study focuses on the implementation of a flipped classroom approach in the context of a large quantitative second year module. More specifically, I propose to share a very gradual and nuanced approach, which will be of interest to those who are already convinced of the benefits of the flipped classroom but are concerned about how to approach it. This intermediate solution or a ‘semi-flipped’ approach should be particularly relevant in the context of the post-pandemic teaching environment. The key idea is to select the relatively simpler parts of the course for bite-sized pre-recordings for students to engage with before the lecture, while the more challenging material, requiring more comment and interpretation, is discussed in a more traditional way. The main expected benefits are two-fold:

- students have the opportunity to familiarise themselves with the foundations and terminology of the subject at their own pace, enabling them to be better prepared for the more advanced material
- there is more time and space in the lecture room for discussion of this more advanced material.

## Introduction

The aim of this case study is to describe my experience of the flipped classroom approach to teaching with the hope of encouraging others to consider it in different contexts, which may be felt as a particularly daunting or challenging task when teaching large cohorts of students and in some technical or quantitative subjects. Using the example of a second-year undergraduate compulsory microeconomics module with over 400 registered students, I will illustrate that the flipped classroom approach can still be used, and that the teaching does not all need to be 'flipped'.

The flipped classroom approach has been implemented in a variety of contexts since the late 1990s (see, for some examples: Lage *et al.*, 2000; Mazur, 2009; Brame, 2013; Uzunboylu and Karagozlu, 2015, Schell and Mazur, 2015); its merits having been discussed and demonstrated multiple times across a variety of subjects and levels of study (Roehl, 2013; Little, 2015; Rowley and Green, 2015; Strelan *et al.*, 2020). While the debate may persist on the costs of implementation vs the relative benefits for learners for specific subjects/circumstances, I will neither discuss this nor provide any evidence to address this question. Instead, I will focus on the practicalities of the implementation, taken as given that the decision to take interest in the flipped approach is already made and bearing in mind some of the reservations colleagues may have (as, for example, discussed in Dumont (2014) or in the excellent reflective account by Towey (2015) of a failed flipped classroom design in the particular context of a computer science course).

## The starting point

The key idea of the proposed approach is simple and in line with the original proposal of Mazur (2009): the relatively easier content of the module is provided in bite-sized pre-recordings, while the more complex (and often more interesting to discuss) material is presented during an interactive session with the students. However, I would argue that we are currently in an advantageous position to attempt such an approach as a considerable number of courses *already have* all / most of the material pre-recorded due to the actions taken during the COVID-19 pandemic. This is not to say that those recordings can all be used



'as is'; but they do present a wealth of material as a starting point, or as a draft that can be edited (which is easier than to start from scratch).

**Implementation: small and simple does it**

The first nuance that I propose is to carefully select the relatively simpler elements of the most fundamental material (i.e., material that is less likely to change, especially for beginners and intermediate technical courses), and to edit it into 'bite-sized' sections, embedding, if possible, interactive elements (e.g. recorded videos allow for simple embedded quizzes). This selection will constitute the 'pre-recorded' part of the course. Noting that studies (e.g. Harrison, 2020) have argued in favour of bite-sized videos due to the attention span and psychology of feeling 'the progress' in learning, I do not propose to agree or argue with this view, which has been met, in my personal experience, with strong opposition from colleagues. Rather, I consider what the merits of bite-sized recordings are for me as a teacher as well as for the students: having small sections enables the teacher to assemble and re-assemble the course, editing a small fragment rather than a long recording of a video, thus providing more flexibility. This should also enable an increase in the potential mix of teaching materials, remembering that it is important to have some/sufficient interactive elements (embedded quizzes in the virtual learning environment (VLE) being the most straightforward to incorporate).

It is important to note that the selection of material should focus on the relatively simpler parts of the course, rather than exclusively on theory or descriptions. The division 'theory vs practice', if applied to the selection of the material, is likely to: (i) devalue the theory as something secondary that can be learned in one's own time and (ii) confuse learners where more complex theoretical concepts are presented, lessening the opportunities to ask questions and to ask for additional explanations. I do not have a theoretical underpinning for the above - it is only suggested by my own experience. The next practical question that may arise is how one is to know what is relatively simpler? To this, I have only one answer: experience and observation. The relatively simpler material is that which has in the past generated relatively fewer questions from students.

**Discussion: thinking before speaking**

The second nuance that I propose to discuss is the engagement with students during the flipped lecture. When I first attempted to flip the classroom, I believed that I had to interact with every (or nearly every) student - which is, of course, challenging for any course with more than 50 students. I now hold a different belief: it would be sufficient to: (i) give a good number of students the opportunity to interact (for example, to answer a question/problem set) and/or (ii) invite students to talk to each other for 5-10 minutes (ideally about the lecture; this is a peer learning approach). Let us look at both types of interaction in the context of a large quantitative lecture from the perspective of a student: answering (or even asking) a question in front of one's peers is intimidating, daunting, and generally not accessible to many types of learners (those who are shy of their knowledge, accent, background, etc.). While we always encourage our learners to participate by being both inviting and approachable, we are not, and cannot be, in control of their fears, prior experiences, etc., especially when there are 200+ peers (especially if the lecture is recorded, which may add to the potential stress of speaking up). Additionally, and no less importantly, it takes time to process the question or presented content, to think of an answer or a suitable question, to formulate it and to gather the courage to speak up.

To summarise the arguments above, I believe that for an interactive lecture, learners should be given time to think/process information before an interaction is expected. Giving 5-10 minutes of thinking alone, or when appropriate, talking to a neighbour, enables learners who are relatively shy to contribute; and gives time for everyone to formulate a question or an answer. Is this time wasted? Is this a break for the lecturer? I argue that thinking time is not time wasted, and that this is far from a break for the teacher. The second part of the argument is easy to defend: while students are talking, make your way round the room (especially to the back of the room) and engage with some students, perhaps giving some hints, etc. Thus, it is not a break; rather, it is a good opportunity to give students individual time with the teacher with less pressure.

The first part of the argument about the thinking time requires some stepping back. The most immediate counter-argument would be that students can, or even should, do the

thinking in their own time outside of the lecture room: that is what ‘University independent learning’ is all about. My point is that the in-session thinking time is not instead of, but rather *in addition* to, the individual thinking time: it also fosters the habit of critical thinking, questioning and discussion. In other words, for those students who are not accustomed to doing so (thinking *is* different from rote learning, which is much too common in some schools), it fosters a good habit; it enables more interactions (of different types) from a more diverse group of learners. This does not need to be to the detriment of the volume of content presented in any given course: the time in the interactive lecture is ‘freed up’ by the pre-recordings. Given that the material discussed is more complex, it is also only natural to give learners more processing time. Given that this material is also hopefully more interesting and more conducive to a debate, it is also more satisfying to deliver for a lecturer, particularly if the course is repeated multiple times. In a post-pandemic context (and where safe), increased interactions in the lecture room are also conducive to a more cohesive and collegiate/collegial environment.

While I hope that the arguments above are convincing in terms of large lecture rooms, little has yet been said specifically on relatively more quantitative subjects. I propose two additional points specific for such subjects: (i) the teacher needs to give suitable time for processing and asking/answering questions as this is likely to be slower than in more discursive subjects; (ii) the problem sets/questions put to learners in the room need to be of suitable difficulty and time requirement; if a complex problem needs to be processed, an intermediate result may be either asked for, or given, rather than the solution to the whole problem.

### **Suggestions and potential for evaluation**

The prospect of flipping your classroom can be daunting, but I suggest that the way to progress is by trial and error. In a very risk averse HE environment, I suggest a ‘small steps’ approach. I suggest that one does not need to fully commit to a flipped approach, whereby most, if not all, simple core material is pre-recorded, and only complex topics discussed in the session. On the contrary, it may be useful to choose *one sub-topic* per lecture, where *some* simple content is pre-recorded, and an interesting case study discussed in the lecture.

Such an approach presents the problem of lack of habit-formation for learners: however, offering a limited flipped approach in each or every other lecture may be sufficient, as long as students are warned in advance. The aim of such a 'small steps' approach is to gradually build confidence in both the lecturer delivering and the learners attending. Learners are likely to value (or at least not resent *en masse*) the approach and the lecturer will have the possibility of improvement in this technique from one year to the next.

Anecdotal evidence suggests that some students, notably those who appeared to be the most engaged, reported (via occasional email/conversation) that they valued the opportunity to have more interaction in the lecture as a result of some material being pre-recorded. Some international students also mentioned that they appreciated the opportunity to familiarise themselves with the terminology from the pre-recordings before attending the lecture. However, these evaluations have to be taken cautiously, as there was no direct comparison for the same course with a more traditional approach at the same level: all students were subject to the same treatment. As yet, no formal evaluation was asked from the cohort: a questionnaire and several focus groups with semi-structured interviews will be appropriate methods to evaluate the effectiveness of this approach (as illustrated by Nguyen, 2018). Another, and perhaps under-appreciated method of evaluation, would be to provide peer-instructor observations of several sessions to judge students' level of engagement and progress, but also to observe whether all learners feel included and comfortable with the approach.

### **Limitations and mitigations**

The first and main limitation of the flipped classroom approach (which has been pointed out by several colleagues in the Birmingham Business School Education conference in 2022) concerns learners who have failed to engage with pre-recorded material, due to time constraints, environmental/access constraints, lack of organisation, or 'recordings fatigue'. This is undoubtedly a very valid limitation of the proposed approach. It is, to some extent, mitigated by the fact that *some* content, and the most interesting part of it, is delivered during the interactive session, where the lecturer can show their passion for teaching their subject and fully engage their students. Thus, students who have not engaged previously

should acquire the motivation to engage with pre-recorded materials. However, this addresses only part of the issue; a careful selection of the material and formative/summative assessments as checkpoints should be used. Students who are falling behind are always a concern, just like those who are much more advanced than the rest of the group. One suggestion is to split the cohort according to the level of prior study and/or provide additional help or advanced/optional materials, although both of these solutions require additional and significant resources.

The second important limitation concerns resources. Delivering a flipped or semi-flipped lecture requires more time and energy (at least in the first few years of teaching a particular subject) than a traditional lecture (as highlighted by, among many others, Tu and Liu, 2016). Additional thought and preparation are required for in-session discussions; pre-recorded materials and any interactive elements need to be prepared and updated. Even more importantly, the delivery of the session and interactions require more energy and passion from the lecturer (and any assistants) during the session as more aspects could go wrong, more cohort-management is needed, and simply more walking about the room and interacting with students is expected. In a very resource and energy constrained HE environment, these are important considerations.

### **Conclusion**

Reflecting on my own experience on the choice of a flipped classroom approach, I recognise how much of it was driven by practical considerations of what can go wrong, which is particularly daunting in a large cohort setting. Some decisions were shaped by either a cost/resource minimisation attitude (e.g. use of existing pre-recordings) or by strong risk-aversion (e.g. flipping only the relatively simpler elements and flipping only part of the syllabus). However, while practical considerations are very important, these are also anchored in a sound pedagogical approach: from the decision to adopt all or part of the flipped classroom teaching to giving learners space to engage with their learning within the lecture room setting. These principles, combining practicalities with pedagogy, are both adaptable and scalable to other disciplines and levels of study, just like the flipped

classroom approach itself is versatile and beneficial for all levels of learning (Strelan *et al.*, 2020).

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