University of Reading

InForm

Issue 24 March 2025

A journal for International Foundation Programme professionals

Foundation students as co-creators? A reflection on co-creating lectures on the Global Politics and Liberal Arts modules at King's Foundations

Navigating AI in International Foundation Programmes: A Framework for Developing AI Literacy, Redesigning Assessments and Empowering GenAI Students

Teaching Sustainable Development through Project-based Learning in a Multidisciplinary Foundation Year

Troubled waters: the future of internationalisation and international pathways

This issue:

Engagement

InForm Conference 2025

University of Reading

Enhancing Quality and Equity

We are pleased to announce that the InForm 2025 Conference will be held at King's Foundations, King's College London.

The aim of this conference is to bring together a collection of research and ideas related to the international foundation and pathway programmes (IFP) as well as providing an opportunity for interacting and sharing practice with colleagues from the wider IFP community.

Saturday 21 June 2025

Venue: **King's Foundations, King's College London**

Conference fee: £60 in person, Conference fee: £30 online

We welcome presentations and proposals related to the themes.

- **Inclusive pedagogy and curriculum design.** *(e.g. collaboration, differentiation, classroom practice)*
- **Measuring and enhancing quality in IFP settings.** *(e.g. policies and procedures, sector standards, external examining, defining and measuring 'quality', implications for programme planning)*
- **Culturally responsive assessment and feedback practices.** *(e.g. inclusive assessment, effective feedback, student perspectives)*
- **Responding to critiques and advocating for the value of IFPs.** *(e.g. public engagement and profile raising, debates around public-/private-sector provision, IFP financial models and institutional roles)*
- **Supporting diverse student needs and promoting belonging.** *(e.g. personal tutoring, student experience, representation, extracurricular activities)*
- **Impacts of technology on quality and/or equity.** *(e.g. technology in the classroom, hybrid and online learning, AI, data collection and use)*
- **Ensuring equitable access, opportunities, and outcomes.** *(e.g. widening participation, meeting stakeholder needs, undergraduate progression)*
- **The role of scholarship in promoting quality and equity on IFPs.** *(e.g. need for research-led approaches, critiques of practice, conceptualising quality/equity and their relationship)*

To submit a proposal, please use the **call for proposal form**. If you have any queries about the call for papers please contact the KCL InForm organisers at:

InformConferenceEnquiries@kcl.ac.uk

Proposal deadline:
12pm Monday 31st March 2025

InForm
Issue 24 | March 2025

Editor Dr Veundjua Muruko-Jaezuruka

InForm is published by the International Study and Language Institute, University of Reading.

For further information concerning any of the articles in this issue, please email **inform@reading.ac.uk**

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WELCOME

Dr Veundjua Muruko-Jaezuruka

Chair of the InForm Editorial Board

From the editorial board...

Issue 24 of ***InForm*** builds on the 2024 ***InForm Conference, Engagement,*** held at the University of Leeds on June 8. Tom Lowe (University of Westminster) led the plenary session, on 'Are the rules of engagement changing? The challenges to student engagement in 2024. Several articles originate from the conference, reinforcing ***InForm*** as a key publication platform. Discussions pertaining to student engagement featured heavily at the conference and are further explored throughout this issue, providing opportunities to contemplate ways to enhance and cultivate student engagement within teaching practices and in a diverse educational context. Furthermore, it explores collaboration in curriculum design, AI in learning, innovative pedagogy, transferable skills, academic literacies, inclusive course design, and decolonizing curricula.

The first paper, written by **Philip Henderson**, explores Graphic Organisers as powerful tools to boost student performance and engagement on a Project Module at Northumbria University. **Dr. Barney Samson-Ledger** discusses an iterative process of designing a new tool for evaluating student engagement in the international foundation contexts. This notion of measuring student engagement is also explored by **Amy Stickels** through shadowing students, offering a different evaluation approach. **Dr Martina Klett-Davies and Dr Eleonora Pinto de Moura** compare engagement and academic performance across modules, analysing the correlation between engagement time and final exam grades.

The focus then shifts to Generative Artificial Intelligence, with **Dr. Veundjua Muruko-Jaezuruka and Rubina Birks** introducing a framework for developing AI literacy among International Foundation Programme (IFP) students, along with an exploration of redesigning assessments to address AI's challenges. **Cassie Ngo and David Hastie** integrate prompt engineering into an English for Academic Purposes (EAP) module, enhancing AI literacy. Next, **James Ackroyd** examines student attitudes towards the use of Generative AI in essay writing at King's International Foundation Programme. **Lee Viciano** evaluates the effectiveness of Pencil Code's, a hybrid block-based and text-based programming environment, impact on computational thinking among foundation-level students.

Collaborations between students and staff for active learning and engagement are highlighted by **Dr. Margherita de Candia and Dr. Giuseppe Zevolli**'s reflections on co-creating lectures. Similarly, **Faith Dillon-Lee and Jill Haldane** discuss collaborating with Student Alumni to redesign curricula and assessments on the IFP. **Dr Claudia Prieto Piastro and Dr Laurie Benson** explore decolonizing curricula in international foundation classrooms.

The main section concludes with pedagogical approaches and assessments. **Elizabeth Mulder** explores the use of local events and smaller galleries, implementing a scaffolded approach to enhance primary research methods for visual arts pathway students. **Alex Murruni** evaluates mind mapping's effectiveness in foundation-level classrooms. **Jody Bradford and Charles Lam** highlight how linguistic approaches can be integrated within English language modules across disciplines. **Salomy Sumithra and Chee Kean Lam** reflect on peer and self-evaluations' impact on group work assessments. **Susanne Andersen and Bethan Hawley** focus on two-stage exam format as a formative assessment to enhance students learning and feedback. **Dorcas Lam** concludes with a discussion on project-based learning in a multidisciplinary foundation year.

The ***InForm Exchange*** section presents brief articles on ongoing IFP practices and debates. We continue with **Jared Valenzuela'**s reflection on the use of leaderboards—a gamification tool to boost interaction. Finally, **Professor Nina-Anne Lawrence** explores the political context of quality standards and entry criteria for international pathway programs.

We hope you will enjoy reading the selection of articles in this issue and we thank the authors for contributing and sharing their work with InForm.

This year's ***InForm Conference*** will be hosted by Kings College London University on the 21st June 2025. The theme of the conference is on "Quality and Equity on IFPs" We invite you to register either as a presenter or participant; see details on page ii.

To submit an article for the next InForm issue, please email **inform@reading.ac.uk**.

Graphic organisers:
Enhancing learning with simple visual frameworks

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Graphic organisers, widely used in schools, remain surprisingly rare in higher education. Could these simple yet powerful tools boost student performance and engagement at university? This study explores their impact within a Project Module at Northumbria University, comparing two groups: one using traditional handouts, the other benefiting from graphic organisers. The results showed that students who used graphic organisers not only completed tasks with greater efficiency but also retained knowledge better and found the materials significantly more helpful. However, the research also highlights the importance of thoughtful design, as organisers that lack clarity can sometimes lead to confusion.

Introduction

Pre-made graphic organisers like Venn diagrams, flowcharts, and mind maps are widely used in primary and secondary education to structure information, simplify tasks, and clarify relationships. They promote active engagement through clearer understanding and interaction.

Despite their proven efficacy, graphic organisers are underutilised in higher education, limiting their potential to enhance learning and engagement. In higher education, visual tools like graphic organisers are seen as supplementary, due to a focus on textual over visual content. (Matusiak et al., 2019). Furthermore, while graphic organisers are widely adopted in schools (An & Kim, 2024), their role in higher education is constrained, with limited implementation across disciplines (Green & Dillard, 2021).

This study investigates the impact of graphic organisers on student performance and engagement within a Project Module at Northumbria University. Using a sample of students (n = 16), the research compares the effectiveness of traditional handouts versus materials enhanced with graphic organisers. By exploring their application in higher education, the study seeks to determine whether the cognitive benefits observed in school settings can be replicated at the university level.

Background and barriers

A separate survey of mixed-specialism International Foundation Programme teachers (n = 12) highlighted several barriers to the use of graphic organisers in higher education. Nearly half of the respondents agreed or strongly agreed that "handouts are always left in class, so they feel of little value." Time constraints were another concern, with five participants agreeing or remaining neutral about lacking time to create such materials. Additionally, over a quarter believed students could draw their own organisers during lessons, despite research by Stull and Mayer (2007) demonstrating that teacher-created organisers yield better outcomes than learner-generated ones.

Despite these reservations, Cognitive Load Theory (Sweller, 1988), Dual Coding Theory (Paivio, 1990), and Schema Theory (Bartlett, 1932) highlight graphic organisers' ability to enhance cognitive efficiency and engagement by simplifying tasks and fostering interaction. These theories also emphasise the reduction of extraneous cognitive load and the integration of visual and verbal (dual coding) elements to improve learning outcomes. Recent studies such as van Merriënboer & Sweller's (2005) study reaffirm that graphic organisers support schema development (the process of organising information into cognitive structures that represent knowledge) and enhance student engagement, particularly when designed to minimise unnecessary cognitive demands.

Methodology

This action research study was conducted within a Project Module of Northumbria University's International Foundation Programme. The students (n = 16) that participated in the study, divided into two groups (n = 8). Both groups demonstrated comparable academic abilities, evidenced by similar IELTS scores, minimising differences in performance and engagement.

The groups were randomly assigned to receive either traditional text-based handouts (control group) or handouts incorporating graphic organisers (experimental group). Both groups received identical content and verbal instructions on data generation, survey methods, and presenting data using graphs or charts. The lesson involved students generating general ideas on a topic, creating Likert scale questions, surveying their classmates, recording the data, and then presenting it in bar or pie charts. In the experimental group, graphic organisers such as blank pie charts, mind mapping graphics and tables for questions and answer were used to structure this information (see Figure 1 and 2), following Cognitive Load Theory (Sweller, 1988) and Dual Coding Theory (Paivio, 1990).

Performance was measured through task completion, verbal explanations, and the quality of work assessed using a rubric. Engagement in the form of active participation, interaction with materials, and perceived value was evaluated through classroom observations and self-reported questionnaires, methodologies that are well-established in educational research for assessing student engagement and learning experiences (Jonsson & Svingby, 2007). These metrics were chosen to capture both cognitive (performance) and affective (engagement) outcomes, aligning with studies suggesting that graphic organisers improve critical thinking and participation (Robinson & Kiewra, 1995).

This research was limited as the small sample size limits generalisability, and the specific module context may not apply to other higher education settings. Additionally, some of the self-reported engagement data is subjective, and the researcher's dual role as teacher-observer may introduce some element of bias.

Results and discussion

The findings from this action research revealed notable differences between the two groups, particularly in terms of engagement, perceived value, and knowledge retention.

Student feedback from the post-lesson survey highlighted the perceived benefits of graphic organisers particularly in enhancing engagement, as students reported feeling more involved in the learning process and better supported by the structured materials. In the group using graphic organisers, there was a 15% increase in students who felt the handouts helped them "completely" understand how to present their data effectively. Furthermore, 75% of students in this group rated the handouts as "extremely valuable" in helping them complete the lesson activities (see Figure 3), 35% more than the control group, suggesting an enhanced level of support compared to traditional handouts.

The knowledge retention quiz also showed 10% more correct answers from the group with graphic organisers, reinforcing the idea that these tools help students better retain and recall information. While not all measures were formalised through scientific methodology, observations indicated that the graphic organiser group was more effective in verbally explaining their work and completed tasks more thoroughly. However, these impressions require further study to be validated and should be treated cautiously.

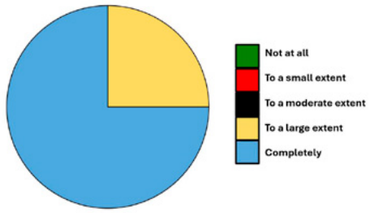

Figure 3: *A visual representation of some of the data gathered from the experimental group on the value they placed on handouts featuring graphic organiser templates.*

While many organisers proved effective, a table for recording survey results caused confusion in the experimental group. Several factors may explain this outcome:

1. **Lack of Clear Instructions:** Students may not have fully understood how to use the table due to insufficient guidance.
2. **Flawed Design:** The table's layout may not have been intuitive, making it difficult for students to record their data naturally.
3. **Inflexibility:** For this task, a rigid table format might have removed the flexibility needed for students to tailor their data recording process.

This suggests that, while graphic organisers can be helpful, their design and application must be carefully considered to ensure they align with the learning objectives. This outcome aligns with findings by Howard and Major (2004), who highlight that poorly designed instructional materials can hinder effective learning.

Q1.					
Options	a)	b)	c)	d)	e)
Q2.					
Options	a)	b)	c)	d)	e)
Q3.					
Options	a)	b)	c)	d)	e)

Figure 1: *First example of graphic organiser for experimental group, used for structuring multiple choice/likert scale questions.*

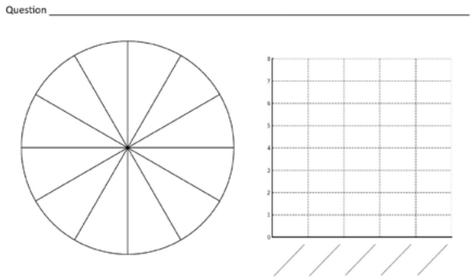

Figure 2: *Second example of graphic template for experimental group, used for structuring, shading and labelling a chart.*

These findings echo existing research demonstrating the benefits of graphic organisers for engagement, critical thinking, and retention (Robinson & Kiewra, 1995; Mayer & Moreno, 2003). The observed improvements in task completion and knowledge recall further support the idea that visual tools can reduce cognitive load and help students process information more efficiently.

Conclusion

The benefits of graphic organiser templates in enhancing student engagement, task completion, and knowledge retention appear clear and, most notably, student engagement by promoting active involvement and reducing barriers to understanding appear clear. The results suggest that, when chosen wisely, graphic organisers offer a valuable return on the investment of time and effort for teachers. However, a "one-size-fits-all" approach is inadequate; educators must evaluate the suitability of each organiser for specific tasks. It should also be highlighted that they are not universally effective; their design must align with learning objectives to maximise their impact. While these findings are promising, further research is needed to explore the broader implications and address the limitations of this study.

Future research directions

To build on this study and address its limitations, several avenues for future research are recommended:

- **Broader Sample Sizes:** Expanding the study across multiple institutions and disciplines would provide a more comprehensive understanding of graphic organisers' impact.
- **Longitudinal Studies:** Investigating the long-term effects of graphic organisers on knowledge retention, critical thinking, and skill development could offer deeper insights into their sustained benefits.
- **Mitigating Researcher Bias:** Future studies should use impartial observers to minimise biases from the researcher's dual role as instructor.
- **Refining Engagement Metrics:** Future research should incorporate objective engagement measures, such as participation tracking or physiological indicators, to complement self-reported data.

Recommendations for teachers and material designers

- Design graphic organisers that align with the course's subject matter and learning objectives, while incorporating diverse types (e.g., concept maps, flowcharts, timelines) to address different learning styles and task requirements, in line with Sweller's (1988) recommendations on aligning instructional materials with cognitive load theory.
- Allow students the freedom to modify or create their own graphic organisers to enhance ownership and engagement with the material.
- Provide explicit guidance on how to use graphic organisers effectively, including examples and templates to help students understand their purpose.
- Explore digital tools and platforms that facilitate the creation and sharing of graphic organisers, allowing for interactive and collaborative learning experiences.

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Walking with students:
A day in their shoes to understand engagement

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Measuring student engagement is not straightforward as engagement is a result of a wide variety of interrelated factors which is often difficult to grasp through methods like questionnaires and focus groups. This article looks at the implementation of a different approach to understanding student engagement – through shadowing students. The method was used over three years and is reflected on in terms of what learning can be gained. "Walking with" students enables the observer to gain a "real time" insight into the student experience which can result in learning that is not apparent via other methods.

Opening our eyes to new understanding

It is often held that you never fully understand another until you have spent a day walking in their shoes. Being a student for a day offers insights into the student experience which is not as apparent through more traditional methods of understanding engagement e.g. a questionnaire. Through triangulating information from students via a student workload diary, focus group discussion and student shadowing, a number of themes emerged. Firstly, students are creatures of habit - they tend to sit with the same people (and sometimes in the same configuration around a desk) in each class and often with others speaking a shared language. This has implications for students' social engagement as well as their ability to learn from others' experiences and cultures, potentially limiting their academic engagement. Secondly, the scheduling of classes hampers engagement in class – as an observer, having many classes in one day was tiring and observers struggled to maintain focus when classes started at 9am and finished around 5pm. This may be magnified for students where the majority are studying in their non-dominant language. Finally, students working habits are barriers to engagement. Many International Foundation Programme (IFP) students come from cultures with intensive schooling schedules where homework was completed in the evenings. The students we walked with did not work between classes, instead completing work during longer periods of concentration e.g. sports afternoons or evenings. This leaves work for times when they could be participating in wider engagement activities.

Tying our laces: Preparing to walk with students

Student engagement is "invisible and elusive to grasp" (Bryson, 2014, p.21). It refers to both a process whereby the student becomes engaged with university through transition and involvement in learning as well as an outcome (Kuh, 2001; Bryson, 2014). It results from the interaction of various factors – including experiential, emotional, cognitive, and behavioural. Astin (1993) introduced a holistic model of student engagement, linking successful outputs to the interaction of what the student brings with them from prior educational experiences with the new environment. It is thought that "students who are engaged with their studies are more likely to be successful" (Kahu and Nelson, 2017 p.59) as it is through their engagement that they learn and gain the skills needed for academic success (Kahu, 2013). Furthermore, a student's sense of belonging, motivation and enjoyment increases their academic achievement and reduces their likelihood of non-completion (Pedler et al., 2021). Thus, understanding student engagement is vital.

Student engagement is more than what happens in the classroom. It links to the whole student experience, including extra-curricular activities, social time and learning to be away from home. Lowe and Wright (2024) argue for a greater holistic overview of all activities in order to ensure a smooth experience and support student success. This led them to develop a mapping framework to audit student engagement activities. However, this is only part of the picture.

To understand this complex web of experiences contributing to student engagement, and provide a more objective basis since "staff views on student engagement are often based on anecdote or belief rather than good evidence" (Bryson, 2014, pp xix), a different approach is required. This led to the development, over three years, of an observational method of 'walking with' students, accompanying them through everyday activities that make up their academic life (Deuchar, 2022).

Walk the walk: Student shadowing

In the shadowing method, an observer gains a snapshot of a "day in the life" of a student on the IFP by trailing a student (or group of students) across a period of time to observe the students' experience of the curriculum and being a student. This involved attending lessons alongside observing breaks between classes. The method was not staff focusing and was not a teaching observation– instead it was a way to experience learning from the student perspective to gain an understanding of student behaviours in and outside of class.

Students observed were mostly unknown to the observer in order to reduce the power dynamic of having two teachers in the classroom. Students were informed that the observer was attending classes and of the purpose of their presence. Teaching staff were also sent, in advance, the information guidance regarding the shadowing method (what it is/ is not) as well as the schedule and student information.

To support this, an observation form was devised. The form captures the amount of time (as an approximation of minutes) that students were engaged in different types of activities including listening, having the opportunity to take part in Q&A, engaging in written tasks, group tasks and discussion. This enabled us to break down the proportion of time students spent in "engagement" activities in the classroom. Space on the paper-based form was available to make other observations of student behaviour in and out of class alongside notes of informal discussions between the observer and the student.

Mapping the walk: Developing the method

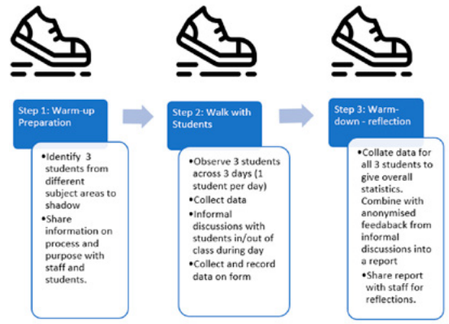

Figure 1: *Process for Year 1 (Shoe image: flaticon.com)*

In the first year of using this method (see figure 1), the shadowing took place over three days, involving three different groups of students. It was supplemented by informal clarification discussions with students between classes. This was beneficial in getting a more immediate insight but was reserved only for those in that specific class and so limited the number of student voices feeding into our understanding of the student experience.

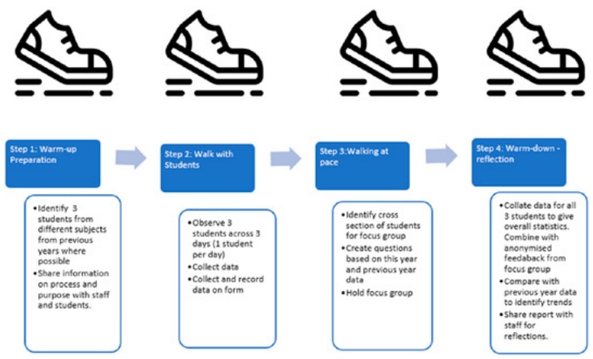

Figure 2: *Process for Year 2 (Shoe image: flaticon.com)*

In the second year (see figure 2), the observations were undertaken with students from other courses not observed in the previous year. We undertook them in a different term to draw comparisons and see if the observations, and conclusions drawn, were time dependent. They were supported by a more formal focus group. Whilst this had the benefit of involving more students from other groups, this meant that the informal feeling of experiencing "with" students became lost as did the timely insights.

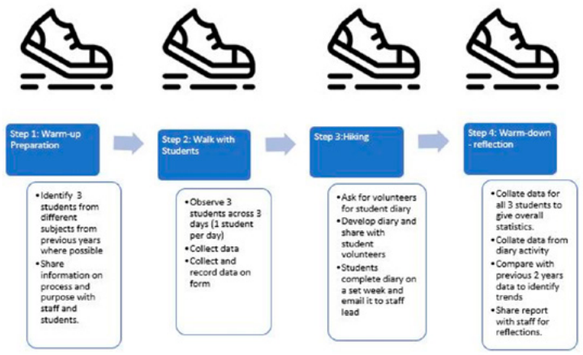

Figure 3: *Process for Year 3 (Shoe image: flaticon.com)*

In the third year (see figure 3) the observations were undertaken during a different term again to build reflections, and comparisons, across the academic year. In order to get a greater insight into the student workload, paid volunteer students kept a workload diary of an identified week in the academic year. In the diary the students coded how they spent their time (they noted down time spent on academic work and class, as well as "everyday" denoting cooking/ clearing/ eating/ laundry and "other" referring to social activities, relaxing). Students were not asked to give details nor justify how they spent their time. This gave useful insights into student workload and the wider demands on students' time which impact on their ability to fully engage.

Warm-down: Reflections and limitations

Walking with students brings some limitations but also benefits.

1. **The Snapshot View:** it is one day in the life of a small number of students so to what extent is it representative of the whole? Having said this, it did offer first-hand observation of interactions in real-time rather than focusing on memories / perceptions of participants in questionnaires. As we undertook this over a number of years, we were able to build on, and compare, the knowledge we were gaining to give a more holistic view.
2. **Observation Bias:** there is potential for subjectivity due to observer bias and staff decisions over what constitutes an "engagement" behaviour being observed. Furthermore, biases of students in completing the student diary, with desire to create a positive impression of themselves, may impact the accuracy of the diary data. However, a triangulated approach with other methods helps to mitigate these biases.
3. **Complexity of engagement:** the "walking with" method observes outward signs of typical engagement behaviours which misses other psychological elements of engagement. The triangulation of data with focus groups enables observers to look further to understand this.
4. **Reduction of Judgement:** the presentation of observational data of 'students spent x minutes doing y' to staff offers a less judgemental form of feedback to staff who can reflect on what this means for student engagement and draw their own conclusions.

Recommendations

Recommendations for future use of this approach include:

- Establishing this as a "co-inquiry" with students to develop the observation form and diary to focus on elements that students identify as engagement, rather than based on potential staff misunderstandings of what constitutes engagement.
- Focus groups run by students rather than staff may yield more honest insights.
- Engaging staff across the department, rather than it being one single observer, to undertake the shadowing process reduces the time/ resources burden. It also enables a greater range of staff to appreciate the issues through their own experience, rather than reading about it.
- Shadowing over a number of cycles – gives more holistic understanding and not just "snap shot" view.

Conclusion

As Deuchar (2022) argued, researchers should use a wider set of methods to better understand the experiences of international students. Spending a day walking in the students' shoes, supplemented with traditional (feedback) methods, offers real-time, holistic insights into student engagement. This then allows us to better organise our programmes and teach our modules by understanding what occurs beyond the classroom.

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Flaticon.com. Figures 1-3 have been designed using resources from Flaticon.com

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Evaluating student engagement in the international foundation context

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This article details the iterative process of designing a new tool for evaluating student engagement in the international foundation context, taking into account multidimensional models of engagement (Fredricks 2014; Trowler et al 2022). The author outlines efforts to evaluate the impact on student engagement of activities which invite Liberal Arts students to co-create their curriculum for an 'Introduction to Film Studies' topic. The article examines the challenges in evaluating engagement, presents a tool that addresses these challenges, and proposes further research into assessing socio-cultural engagement in the international foundation context.

Introduction

What is the impact on engagement when Liberal Arts students on an International Foundation Programme (IFP) co-create their curriculum by choosing films that are familiar and meaningful to them? A year ago, I was planning activities for an 'Introduction to Film Studies' topic. Following Fredricks' observation that "engagement tends to be lower in contexts where students (…) find the subject boring and unrelated to their lives" (2014, p.19), I intended to promote engagement by inviting students to analyse films they knew. Before the seminar, I asked students to post on a Padlet a film that was important, memorable or interesting to them, to identify the protagonist and to explain their reasoning. This built on conceptual scaffolding from my lecture, and prepared students for their seminars. In the present paper, I discuss my efforts to measure the impact of this intervention, the challenges I have met, and my proposed next steps.

Premises and definitions

This paper takes as a starting point two premises. Firstly, that engagement is multidimensional; a student demonstrating behavioural engagement (e.g. participation) is not necessarily "deeply invested in learning" (Fredricks 2014, p.16). As such, students' behavioural engagement must be considered alongside emotional engagement (e.g. feelings of belonging) and cognitive engagement (psychological investment and cognitive strategies) (Fredricks 2014, p.15; Trowler et al (2022) posit three further dimensions of engagement in HE: critical, political and sociocultural). Secondly, that engagement is reciprocal; teachers must engage students rather than expecting students to simply 'be engaged' (see Trowler et al 2022). As such, I adopt Trowler's definition of engagement as "the interaction between the time, effort and other relevant resources invested by both students and their institutions" (Trowler 2010, p.3). With my students, I paraphrase this by comparing student engagement to a romantic 'engagement.' When two people become engaged, they commit to investing their time, effort and resources in their relationship. I commit to investing my energies towards my students' learning, and ask them to do the same. My intention in designing my 'Introduction to Film Studies' learning activities was to encourage students to invest time, effort and resources into choosing a film to analyse, which in turn would promote their investment in understanding the concept of the protagonist.

Assessing engagement

I intended to assess my students' engagement across Fredricks's dimensions of behavioural, cognitive and emotional engagement (2014). Behavioural engagement is relatively easy to observe; we can see how many students post on a Padlet or participate in a discussion. Emotional and cognitive engagement are not directly observable so are harder to assess (Fredricks 2014, 22). As such, I decided to use self-reporting measures. After students had attended my lecture, completed asynchronous activities and participated in the seminar, I asked them to answer a survey on their perceptions of their engagement. For each of Fredricks's three dimensions of engagement I asked students to rate on a Likert scale their agreement with five statements adapted from Fredricks (Fig. 1).

Behavioural engagement

In class, I pay attention

I work hard to do my best in class

When I am in class, I listen very carefully

I prepare and do asynchronous tasks on time

I keep trying until I understand.

Emotional engagement

I feel happy to be part of Liberal Arts

I enjoy learning new things

In class, I feel encouraged

I enjoy being in Liberals Arts seminars

Sometimes I don't want a class to end

Cognitive engagement

When I read, I ask questions to make sure I understand

I check my work for mistakes

Before I study, I think about what I need to learn

I make notes about things I have not understood

I make notes in lectures and seminars

Fig 1: *Engagement survey (adapted from Fredricks 2014)*

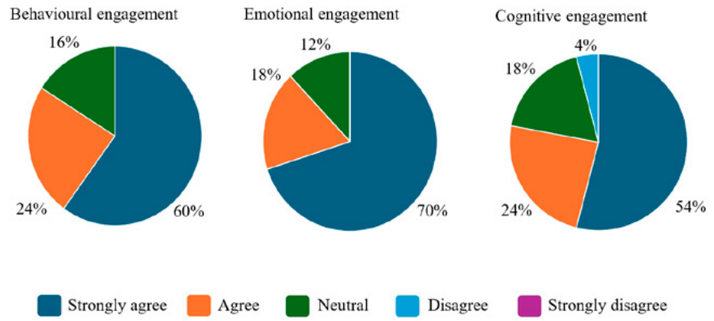

Figure 2: *Initial Results*

10 students responded, giving a total of 150 responses, with 50 responses for each dimension of engagement (behavioural, emotional and cognitive; see Fig. 2). Across all dimensions, 83% of student responses agreed or strongly agreed with statements indicating positive engagement. Notwithstanding the potential for non-response bias (where a particular population is more likely to participate in the study, e.g. those with high engagement) and social desirability bias (where respondents give answers perceived to be appealing to the researcher), this was encouraging. The strongest dimension of engagement was emotional engagement, with 88% of responses agreeing or strongly agreeing with related statements. Cognitive engagement had the lowest level of agreement, with 78% of responses agreeing or strongly agreeing with statements. Inasmuch as can be inferred from these results, it appears that asking students to analyse films that they chose had a more positive impact on emotional engagement than on behavioural or cognitive engagement. That is to say that the intervention may have had a stronger positive impact on how students feel about their learning than on how they behave in class or on the learning strategies they use.

Challenges (and solutions?)

My initial data had several limitations. Firstly, my survey *assessed* rather than *evaluated* student engagement, measuring the extent to which students are engaged but not how or why. I will repeat this survey, asking students to also comment qualitatively on their own perceptions of their engagement. Secondly, while self-reporting is well suited to measuring emotional and cognitive engagement, it may be counterproductive when considering behavioural engagement. When I repeat the data collection, I will use teacher observation measures to assess behavioural engagement in the asynchronous activities and the seminar. This will also allow me to triangulate students' observed (behavioural) engagement against their self-reported (emotional and cognitive) engagement. Thirdly, the results lack a point of comparison that would indicate how students' engagement was impacted by my intervention. When I repeat the survey, I will ask students to answer two sets of questions, one set focused on the Padlet and one on the seminar. Comparing these two sets of responses will allow me to measure whether engagement with the Padlet task impacted on engagement with the seminar tasks, and therefore to draw more robust conclusions about the impact of the intervention. (I will also address non-response bias by asking students to answer the survey questions in the classroom.)

Finally, my original data relates to Fredricks's three dimensions of engagement but not Trowler et al's expanded dimensions. My adapted survey will include questions on students' critical, political and socio-cultural engagement, which may indicate whether these HE-focused dimensions are meaningful for IFP students and how these dimensions are impacted by co-creation of curricula. Critical engagement relates to "the student's orientation to authority," political engagement to "the student's agency" and socio-cultural engagement to students' induction into (as opposed to familiarity with) the culture and thought system (Trowler et al, 2022). My adapted survey will illuminate the extent to which students feel critically, politically and socio-culturally engaged, according to these definitions. However, future research must consider whether it is appropriate in the IFP context to use induction into the culture and thought system as the measure of socio-cultural engagement. Is it our goal as IFP educators to induct students to think as we do? Trowler et al observe that "non-traditional" HE students may "find the values embodied in HE 'foreign' because of habitus mismatch" (2022, citing Reay et al., 2009). IFP students may find the values embodied in IFP teaching and learning 'foreign' for the same reason; I would suggest successful socio-cultural engagement should involve embracing our students' diversity of thought rather than inducting students into 'our' culture and thought system.

Conclusions and future research

My initial research suggested that asking students to analyse films they knew (rather than films that I chose) facilitated a high level of positive student engagement with their learning. The intervention appeared to have the greatest positive impact on students' emotional engagement, and the least significant positive impact on cognitive engagement. My adapted data collection tools, developed to strengthen the robustness of future findings, can serve as a model for further investigation into students' multidimensional engagement in various educational contexts including Foundation and HE programmes. Further investigation is needed into whether IFP student engagement is best framed according to Fredricks's (2014) three-dimensional model of engagement from the compulsory education sector, Trowler et al's (2022) six-dimensional model of engagement for the HE sector, or a third model combining aspects of both. As such, future research should investigate in more detail the particularities of evaluating engagement in IFP programmes and further develop tools that respond to the specific challenges and opportunities of teaching in the IFP context.

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Analysis of VLE engagement and academic performance in Maths for Social Science and Social Science modules

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After the Covid-19 pandemic, the role of Virtual Learning Environments (VLEs) expanded significantly with the implementation of a variety of online resources and interactive activities. This case study focuses on the blended and flipped classroom approach adopted by King's Foundation, and uses data from the 2022-2023 academic year to investigate the correlation between VLE usage and final exam grades. Our results highlight the association between VLE engagement and academic success.The study offers a valuable example for other international foundation programmes on how VLE data can enhance teaching and learning practices.

Introduction

Before the Covid-19 pandemic, virtual learning environments (VLEs) were primarily used as repositories for reading materials. However, in 2020, their role expanded to include a variety of online activities facilitated by educational tools such as Kaltura, Echo360, Padlet and H5P. Although face-to-face teaching has largely resumed post-pandemic, several positive aspects of online learning have been integrated into traditional teaching methods (Cicero, 2020).

This case study examines the model adopted by King's Foundation, which continues to implement a blended and flipped classroom approach (Gilboy et al., 2015), requiring students' engagement with the VLE to prepare for weekly seminars, and promoting a move towards 'decolonialising pedagogy' (Klett-Davies, 2023). It provides a valuable example for other international foundation programmes to reflect on these practices and consider how readily available VLE data can be leveraged in their own contexts.

In this paper, we analyse and compare the usefulness of the VLE for students enrolled in the Maths for Social Science (M4SS) and Introduction to Social Science (ISS) modules at King's Foundation. Using data from the 2022/23 academic year, we investigate the correlation between VLE usage and final exam grades. Finally, we consider how student characteristics such as gender, region of origin, pathway, and English proficiency scores in listening, reading, speaking, and writing may influence students' self-regulated learning and task-avoidance (Hypponen et al., 2019).

Background

King's Foundations is a large foundation programme, with both modules constituting full units, each accounting for 300 hours of learning including weekly lectures, seminars, and independent self-study. In the 2022/23 academic year, the ISS cohort was approximately one-third larger than the M4SS cohort, with 282 students enrolled in ISS and 195 in M4SS. Both modules received very high student satisfaction ratings (91% for ISS and 93% for M4SS), with even higher satisfaction levels regarding their respective VLE pages (94% for ISS and 95% for M4SS).

For this analysis, we merged and processed three datasets: VLE engagement data, student database, and student performance data. The VLE engagement data recorded the total hours spent online by individual students on their module's VLE pages, engaging with embedded online materials such as pre-seminar resources. The VLE tracking mechanism updates regularly, pausing its timer if no activity, clicks, or interaction occur for several minutes.

Results

VLE engagement and final grades

Our data analysis showed that students engage with their module's VLE in both M4SS and ISS modules, with slightly higher engagement observed in M4SS. On average, M4SS students spend approximately 50 hours on the VLE over the academic year. This is equivalent to around 2 hours per week across the 25-week module, which is consistent with the expected level of engagement. For ISS, the average engagement time is 42 hours, or 1.7 hours per week, which falls below expectations.

Figure 1 indicates that the distributions of VLE engagement for both modules exhibit similar shapes and spreads with a few very high values. M4SS students show a wider range of engagement times, while ISS students have a more concentrated pattern of engagement. Both modules have a similar percentage of students with lower engagement levels, with approximately 9% of M4SS students and 10% of ISS students engaging with the VLE for fewer than 20 hours.

The stacked percentage bar graphs (Figures 2 and 3 below) illustrate how students are grouped based on their VLE engagement hours across different grades in the M4SS and ISS modules.Each bar represents a specific range of engagement hours, with segments indicating the percentage of students in each grade category within that range.

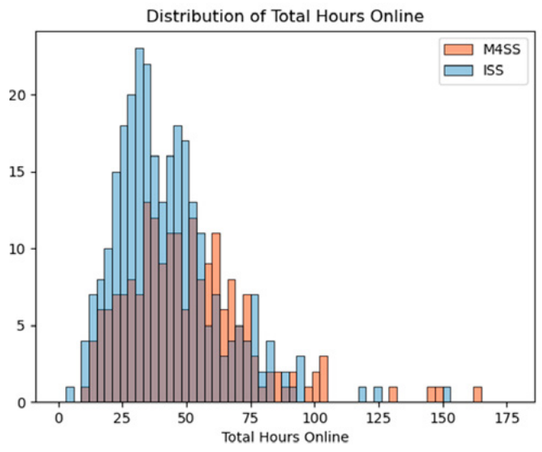

Figure 1: *Distribution of Total Online Hours for both modules.*

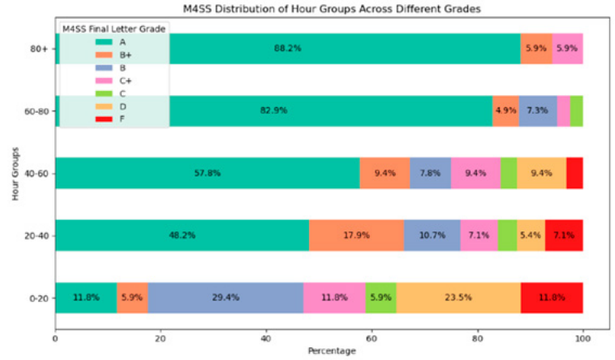

Figure 2: *Distribution of hour groups across different M4SS grades.*

In the M4SS module, only 18% of the students who engaged with the VLE for less than 20 hours scored A or B+. In contrast, in the ISS module, over half (56%) of these low engagers achieved an A or B+.

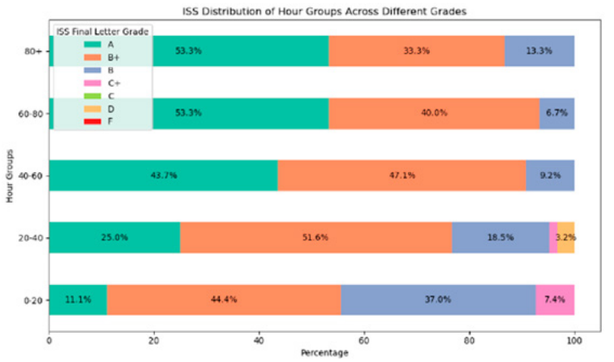

Figure 3: *Distribution of hour groups across different ISS grades.*

In both modules, there is a clear pattern where the percentage of higher grades increases with more VLE engagement. This suggests an association between VLE engagement and student performance, with a stronger relationship observed among M4SS students compared to ISS students. One possible explanation for this difference is the final grade distribution. The M4SS module exhibits a negatively skewed distribution, while the ISS module shows a more symmetric distribution concentrated around the mean.

Student characteristics and final grade

The analysis of the correlation between student characteristics and final grades in the M4SS dataset indicates that students from the East Asia and Pacific region (r=0.27), those with stronger reading skills (r=0.26), and those who spend more time online (r=0.36) tend to achieve higher final grades. Other English language skills, such as listening, speaking and writing, as well as gender and pathway, do not show a significant relationship with final grades in the M4SS module.

In the ISS module, students with stronger listening (r=0.29), reading (r=0.34), speaking (r=0.23), and writing skills (r=0.26), and those who spend more time online (r=0.32), tend to achieve higher final grades. In addition, being female is positively correlated with the ISS final grade, while being male is negatively correlated. Neither region nor pathways show a significant relationship with the ISS final grade.

We also explored different student profiles to identify factors influencing academic performance. By categorising students based on gender, region of origin, pathway, English proficiency, and total hours online, we determined the percentage of students in each category who did not achieve A or B+ grades. Across both modules, we found that combinations of factors characterised by low engagement (less than 20 hours spent online) were consistently associated with significantly high percentages of students failing to achieve A or B+ grades.

Student characteristics and VLE engagement

Since increased VLE engagement is correlated to better outcomes, this information can be used to identify students who may need support, without assuming causation. In the M4SS module, gender influences VLE engagement, with 11% of males categorised as low engagers compared to 7% of females. Similarly, in ISS, 12% of males and 8% of females are classified as low engagers. Pathways show minimal distinction in M4SS low engagement. However, in ISS, students in the Business Management and Social Science pathway are twice as likely to be low engagers (14%) compared to those in the Liberal Arts and Social Science or Global Politics and Social Science pathways (both 7%).

Regarding language proficiency, M4SS students in the lower English stream are slightly more likely to be low engagers than those in the higher stream (9% versus 7%). In ISS, this disparity is more pronounced, with students in the lower stream being twice as likely to be low engagers (12% versus 6%). Certain student characteristics intersect among low engagers, but this analysis is beyond the scope of this paper.

Conclusion

In summary, both M4SS and ISS students actively engage with their VLEs, with M4SS students spending more time on the platform than ISS students (50 hours versus 42 hours over the 25-week period). A high proportion of students who engaged with the VLE for 60-80 hours achieved an A or B+ in both M4SS and ISS (88% and 93% respectively). However, this percentage decreases significantly for those engaging between 20-40 hours, with a stronger relationship observed among M4SS students (66%) compared to ISS students (77%). Future research will compare these findings with data from the 2023/24 cohort, where the main assessment shifted from online to in-person exams, to examine potential changes in the relationship between VLE engagement and academic achievement.

Our analysis also shows a moderate correlation between VLE engagement and final grades, as well as associations with English proficiency, where stronger reading skills were linked to success in M4SS, and more comprehensive English skills were key in ISS. Additional demographic factors were observed, including positive correlations between being female and higher grades in ISS, and between VLE engagement and academic performance among East Asia and Pacific students in M4SS.

These findings highlight VLE engagement data as a useful tool for identifying students who may require additional support and emphasise the importance of explicitly communicating its connection to academic success. They underscore the need to encourage future cohorts to actively engage with the VLE, alongside implementing pedagogic strategies tailored to students with lower English proficiency, weaker self-regulation skills and higher task avoidance tendencies. Effective strategies, successfully implemented within the modules, include providing feed-forward feedback to engage students, offering clear guidance and scaffolding for VLE activities, sending reminders to disengaged students, and standardising seminar teaching to set clear expectations across groups. In conclusion, this study demonstrates the value of VLE engagement data and its relationship with academic performance, informing educational decision-making and intervention strategies to support students in achieving their full academic potential within international foundation programmes.

Acknowledgements

We would like to thank Cecilia Lo and the TEL team for their invaluable discussions and for the input provided, which significantly enriched the quality of our work.

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Navigating AI in international foundation programmes:

A framework for developing AI literacy, redesigning assessments and empowering GenAI students

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Artificial Intelligence (AI) has transformed how information is accessed, ushering academia into a new era of teaching and learning. While students increasingly embrace AI as a study aid, its impact on education warrants scrutiny to safeguard the integrity of institutions, teaching and assessment methods. This article presents a framework for discussing the challenges and opportunities posed by the use of AI for students on International Foundation Programme (IFP), with a focus on its impact on academic integrity. It emphasizes the importance of cultivating AI literacy to empower and protect students, alongside redesigning assessments to mitigate the pitfalls of AI.

Introduction

AI is defined as the ability of machines and systems to acquire and apply knowledge and perform tasks typically requiring human intelligence (OECD, 2016; UNCTAD, 2017). While reliance on machines is not new, the accessibility of AI-generated answers has introduced new challenges and opportunities.

The rapid evolution of AI has profoundly impacted education in Higher Education (HE), particularly within International Foundation Programmes (IFPs). IFPs, which help international students transition to undergraduate studies, now face the dual challenge of leveraging AI tools while addressing their implications for academic development and integrity.

AI misuse, such as reliance on generative tools for essays or problem-solving, raises concerns about plagiarism, superficial learning, and reduced critical thinking. This is particularly problematic for IFP students building foundational academic skills, as over-dependence on AI risks undermining their readiness for undergraduate studies, thereby distorting the educational goals of these programmes.

Conversely, AI offers significant benefits for IFP students, many of whom face linguistic, cultural, and academic adjustments. AI tools like language translation, personalized learning platforms, and content generators can bridge gaps in comprehension, promote independent learning, and enhance the educational experience. By improving accessibility and adaptability, AI can support students in meeting HE demands.

However, tools like ChatGPT, though impressive, present reliability concerns (Sartaj & Pearson, 2024), highlighting the need for caution. While AI can enrich learning, addressing ethical and dependability issues is crucial. This duality highlights the need for a balanced approach, combining AI integration with AI literacy training. Additionally, traditional assessments must be redesigned to evaluate deeper understanding and mitigate AI misuse.

The following sections outline a framework for teaching AI literacy in IFPs. It offers strategies for integrating AI literacy into teaching and rethinking assessments to address AI-related challenges, ensuring students are equipped for academic and professional success.

Developing AI Literacy for students on IFP modules

Having considered the benefits and challenges of AI in a learning and teaching context, it has become apparent for academics to develop students AI literacy to enhance the ability of students to think critically and make balanced judgements about any information they find and use from AI. The rationale for this intervention is to safeguard students from over-reliance on AI, misinformation it may generate, and threats to academic integrity, while recognizing that students' use of AI chatbots is inevitable.

Therefore, teaching AI literacy to IFP students equips them with the skills and confidence to excel in UK universities, bridge cultural and academic gaps, and thrive in an AI-driven world. This involves empowering students with the knowledge to engage with AI effectively, critically, and ethically. It includes understanding AI fundamentals, assessing its outputs, and identifying its limitations and biases. By integrating AI literacy into the curriculum, IFP educators not only prepare students for academic success but also ensure they are workforce-ready with the skills to leverage AI responsibly.

Framework for developing AI literacy

Based on research, teaching AI literacy involves a combination of practical training, critical thinking exercises, and ethical discussions. However, for IFP educators, we suggest the following approaches;

- **Introduce AI Basics:** Teach foundational concepts about how AI works, its capabilities, limitations, and real-world applications.
- **Hands-On Experience:** Provide opportunities to use AI tools (e.g., ChatGPT, Grammarly, or data analysis software) for academic tasks, encouraging exploration and familiarity.
- **Critical Evaluation Skills:** Train students to analyse AI outputs for accuracy, bias, and reliability, fostering informed decision-making.
- **Ethical and Responsible Use:** Educate students on ethical considerations, including academic integrity, data privacy, and the boundaries of appropriate AI use.
- **Incorporate AI into Learning Tasks:** Design formative assignments where students collaborate with AI, such as analysing its outputs, improving them, or reflecting on their ethical implications.
- Prepare for AI in Careers: Link AI literacy to employability by showcasing its applications in various industries and emphasizing future-proof skills like creativity, adaptability, and problem-solving.

On the IFP at the University of Reading (UoR), we designed an "AI Literacy for Students on Foundation Microeconomics" module following the proposed framework. The content was designed with a focus on using AI for learning economic concepts by showing examples of AI in action such as AI prompt to solving basic economic calculations including spotting errors in the outputs. Best practices for using AI on Foundation Economics, including tips for getting the most out of AI Chatbots, were also taught.

During the AI Literacy session, a practice question taken from the module's formative assessment, was used to illustrate an example of an incorrect calculation output generated by ChatGPT. The prompt requested ChatGPT to calculate the initial demand (see practice question insert in Figure 1) based on the informationprovided. However, the resulting value was found to be incorrect. In contrast, Figure 2 shows that ChatGPT produced an answer of 164,897.90, whereas the correct manually computed value is 630,769.23.This is an important discrepancy which demonstrates an example of the limitations of AI with regards to economic calculations and importantly, it emphasises the need for students to analyse outputs using their subject-knowledge.

Furthermore, at UoR, AI literacy is an important content in Academic Skills modules on the IFP.This content is included in Week 4, Semester 1, for both home and international students,with a focus on using AI responsibly and addressing the University's policy on AI. Moreover, UoR incorporated AI literacy into the Academic Skills modules on the IFP early in the Semester, for home and international students; demonstrating the vital importance for students to gain early exposure to the University's AI policy and develop a foundation for ethical and effective AI use

Additionally, Figure 3, shows recent feedback from 25 students in November 2024, on the Foundation Microeconomics AI Literacy session underscoring the importance of AI literacy, with students affirming its value on the module and in their education. The students' feedback is important in understanding whether the AI literacy has achieved its purpose and by the responses we received, it seems that it is overwhelmingly beneficial to run these sessions.

Start with solving for Initial Quantity Demanded:

- $5 × Initial Quantity Demanded - $5 × 82,000 = $3 × Initial Quantity Demanded + 0.45 * ($3 × Initial Quantity Demanded)
- $5 × Initial Quantity Demanded - $3 × Initial Quantity Demanded = $5 × 82,000 - 0.45 * ($3 × Initial Quantity Demanded)
- $2 × Initial Quantity Demanded = $5 × 82,000 - 0.45 * ($3 × Initial Quantity Demanded)
- $2 × Initial Quantity Demanded + 0.45 * ($3 × Initial Quantity Demanded) = $5 × 82,000

Now, combine like terms:

- $2.45 × Initial Quantity Demanded = $5 × 82,000

Now, isolate Initial Quantity Demanded:

- Initial Quantity Demanded = ($5 × 82,000) / ($2.45)
- **Initial Quantity Demanded ≈ 164,897.96**

So, the initial quantity demanded was approximately 164,898 vehicles.

The Golden Gate Bridge at San Fransico Bay in the United States is a toll bridge. In September 2002, the toll was increased from $3 to $5 (£1.80-£3.00). As a result, demand fell by 82,000 over the next three months but revenue rose by 45%. What was the inital demand (quantity)?

Figure 1: *ChatGBT output - error in calculation, source: ChatGBT, 2023.*

Given that revenue is $\text{Price} \times \text{Quantity}$, and revenue rose by 45% after the increase, we can set up the equation:

$$1.45 \times 3Q = 5 \times (Q - 82,000)$$

Let's solve this equation to find Q:

$$4.35Q = 5Q - 410,000$$

Subtract $4.35Q$ from both sides:

$$0.65Q - 410,000$$

Divide both sides by 0.65:

$$Q = \frac{410,000}{0.65}$$

$$Q = 630,769$$

Therefore, the initial demand (quantity) before the toll increase was approximately $\boxed{630,769}$.

Figure 2: *Correction Solution. Source: Author, 2024.*

Rethinking and redesigning assessments on the IFP in the age of AI

With AI tools capable of generating essays or solving complex problems, traditional assessments are at risk of being undermined. To address this, educators in HE must redesign assessments that prioritize originality, creativity, and critical thinking, making it harder for AI to substitute students' efforts. This presents an opportunity to innovate assessment formats that are resistant to the influence of AI, whilst making them more reflective of the students' skills. Therefore, assessments should be designed in a way that students demonstrate their critical thinking skills, problem-solving, collaboration, ethical AI usage, and inclusivity, fostering a culture of designing assessments to withstand AI-related challenges.

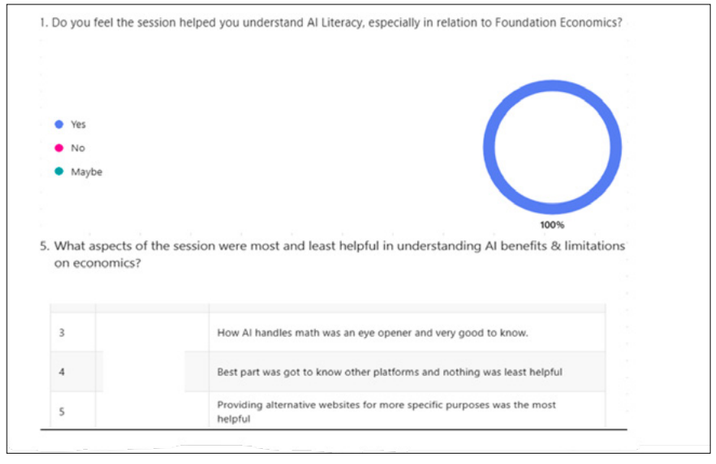

Figure 3: *Student feedback: AI Literacy on Foundation Economics, numbers in figure represent each anonymous response*

Assessment types most vulnerable to AI include written assignments, essays, short-answer questions, completion tasks, and dissertations (Lim et al., 2023; Rudolph et al., 2023; Gardner et al., 2021). Conversely, formats such as multiple-choice questions, observations, performance records, oral presentations, peer/self-assessments, and portfolios are less affected by AI. Strategies like closed-book exams, where students rely solely on pen and paper, or tasks requiring personal reflection, unique perspectives, or real-world applications, can mitigate AI misuse. For instance, students might review academic journal articles or deliver oral presentations to demonstrate understanding without AI reliance.

Interactive activities, such as group discussions, can also minimize overdependence on AI, fostering critical thinking and independent learning. Rudolph et al. (2023) note AI's limitations in answering semantic, factual, and ethical questions, allowing educators to design assignments that challenge students to justify their answers. Open-ended questions, where students must develop and defend arguments independently (Cotton et al., 2023), or analysing images, videos, or lengthy texts beyond AI input limits, can further encourage authentic student work.

To maintain academic integrity and uphold the quality of IFPs, curricula must evolve to include redesigned assessments that foster learning and promote ethical AI use. These strategies not only preserve the value of IFPs but also provide students with meaningful opportunities to engage responsibly with AI while developing essential skills for future academic and professional success.

Conclusion

Universities and students must demonstrate readiness to use AI responsibly, as AI knowledge positions them at the forefront of technological innovation and academic integrity. For students, this means developing confidence and adaptability, fostering ethical and effective practices to lead in an AI-driven world rather than merely adapting to it. For educators, it reflects a shift toward a hybrid teaching model where AI complements, rather than competes with, traditional methods.

While familiarizing students with AI tools is crucial, they must also understand the ethical implications of their use. Providing clear guidelines for academic purposes and redesigning assessments to emphasize intrinsic skills over AI reliance is essential. Combining AI with human capabilities – such as creativity, critical thinking, and social-emotional skills – can yield the best outcomes. Scholars can explore innovative pedagogical approaches to maximize AI's benefits, address its limitations, and study its impact on various disciplines, student assessments, and higher education productivity.

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Enhancing AI literacy:
Integrating prompt engineering into an EAP module for international foundation students

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Effective prompt engineering is an important subskill for students to leverage Generative AI tools effectively. For international students who may be less familiar with these tools, effective prompt engineering is even more important, enabling students to use GenAI for language support and additional tuition. Incorporating the teaching of this skill within IFP is thus a consideration for educators. This article examines this integration within an EAP module and the pedagogical considerations that surround it, utilising a mixed-methods study to gauge the effectiveness of this intervention. The study affirms the usefulness of explicit teaching of prompt engineering in IFP.

Introduction

The rapid rise of generative AI (GenAI) is transforming sectors like education by reshaping how we engage with information and solve problems. Central to this shift is prompt engineering, a skill for effectively communicating with GenAI to produce meaningful outputs. Despite its growing importance, research on integrating prompt engineering into educational curricula, especially in International Foundation Programmes (IFPs), remains limited. This is critical since international students often benefit greatly from GenAI's capabilities (Farrelly & Baker, 2023) but may have less familiarity with these tools than domestic peers (Kelly et al., 2023). This article addresses this gap by examining how prompt engineering can be integrated into an English for Academic Purposes (EAP) module for IFP students, detailing the rationale, pedagogical methods, and outcomes based on student feedback and performance.

Prompt engineering and pedagogical approach

Prompt engineering involves crafting inputs for AI tools to generate content, with better prompts producing higher-quality outputs (Knoth et al., 2024). Walter (2024) argues that it also fosters critical thinking, as designing effective prompts requires criticality. However, students often rely on simplistic prompts, leading to generic and less helpful outputs (Walter, 2024). To address this, explicit instruction in prompt engineering is essential for helping students effectively use these tools in their studies (Ding et al., 2023; Walter, 2024).

Prompt engineering is a key component of our 10-week EAP module, where AI literacy is taught alongside academic skills and language (see Ngo and Hastie (2025) for the module's design). It is introduced in the first two weeks to enable students to use GenAI for more advanced tasks later, such as obtaining personalised feedback on their writing.

We begin the module by eliciting examples of the scale and impact of AI around us, before discussing recent developments in the field that have led to the emergence of generative AI.Students are then directed in pairs to input two prompts of similar purpose in ChatGPT or another similiar LLM : *1. Tell me about AI; 2. Provide a 200-word concise summary of AI, its applications and limitations* - and compare

the results of each. This enables students to recognise how inputs affects AI outputs. Subsequently, we introduce the CREATE prompt engineering framework (Birss, 2023) due to its mnemonic simplicity and coverage of essential elements such as specificity, detail, relevance, and iteration (Mollick, 2023). CREATE stands for:

- **Character:** Assign a role for AI
- **Request:** Explain the task
- **Examples:** Provide examples
- **Adjustment:** Refine the outputs through iteration
- **Type of output:** Specify output format
- **Extras:** Use helpful phrases such as 'ask clarifying questions before answering'

We present an example prompt, ask students to analyse its alignment with CREATE, and assign a prompting exercise using scenarios relevant to IFP students (e.g., revising for a test on an unclear topic in the IFP). Students create prompts in pairs, compare outputs in small groups, and finally present their findings to the class, discussing their prompting strategies. This structured approach ensures students understand the principles of effective prompting and gain hands-on experience in applying them to their academic contexts.

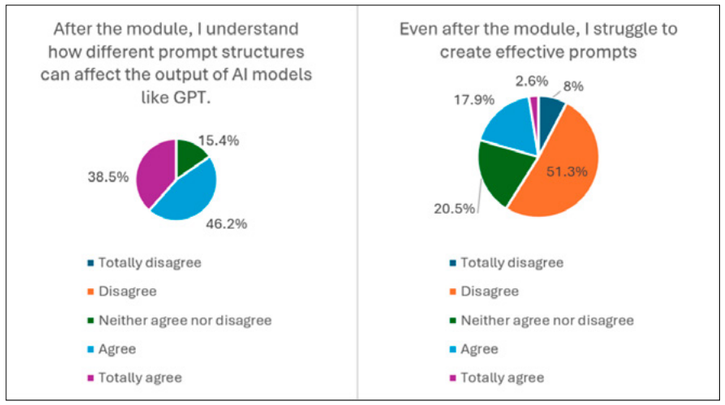
In subsequent lessons, students continue practising prompting, compare and evaluate output of different AI tools and have discussions on ethical use of AI, while studying academic language and skills. They also look at authentic examples of AI-overreliance in academic contexts and are directed to identify the semantic and structural features of AI over-reliant work and recognise both the benefits and limitations of utilising GenAI (see Ngo and Hastie (2025) for further details).

Methodology

This mixed-methods study began with collecting students' feedback at the end of the course with five-point Likert scale questions about different aspects of the module including prompt engineering instructions. Open-ended questions were also included, asking students what they found the most important and interesting about the module. 39 IFY students from over 20 countries and several pathways responded to this survey.

Semi-structured interviews were done in English with eight students, focusing on the effectiveness of the module. Thematic analysis was conducted and prompt engineering emerged as a key theme.

Results



Figures 1 & 2: *Students' perceptions of the efficacy of prompt engineering instructions.*

According to survey data, 84.7% of students reported that after the module, they understood how different prompt structures can affect AI output (Figure 1). Only 20.5% of students reported continuing struggles with prompting after the module (Figure 2). In addition, for open-ended questions, 16% of respondents regarded prompt engineering as the most important topic in the module.

The efficacy of teaching prompt engineering was further explained in interviews. In particular, a participant said that: *(The thing I found particularly useful about the module is) creating prompts so that you can get the good answers, CREATE (prompting framework) (…) it's really easy to use.* Another interviewee, who had used AI prior to the module, felt more confident in crafting prompts, saying *"I probably could write more complex prompts to get even more specific things"*. Similarly, another student said *"Rather than giving short sentence is to ChatGPT to help answer my questions or help me, I've now know how to make a prompt to make it more useful"* and gave an example of her prompt for obtaining feedback from AI: *"I would type in 'act as a university English professor, critique my essay'. Then I would put in the module guidelines on how it's going to be marked."*

Discussion

Both quantitative and qualitative data provide evidence for the effectiveness of the module's prompt engineering instructions. The high percentage (84.7%) of students reporting an improved understanding of how prompt structures affect AI output and the relatively low percentage (20.5%) of students who still struggled with prompting after the module demonstrate the success of teaching prompt engineering, though there remains a small group that may need additional support or practice. Interview data support these findings and the example of asking AI to 'act as a university English professor' and incorporating module guidelines for tailored feedback shows that the module has increased students' confidence and sophistication in applying prompt engineering techniques in their studies. These data highlight the influence of teaching prompt engineering, addressing the call for this kind of instruction in existing research (Ding et al., 2023; Walter, 2024).

Conclusion

This study underscores the value of teaching prompt engineering in an AI-integrated EAP module for IFP students, showing that this kind of instruction can enable students to use GenAI effectively. Survey and interview data revealed increased confidence and improved prompt-crafting skills, with students applying these techniques to academic tasks such as obtaining personalised feedback and revising content. While the results are promising, further research is needed to explore the impact of prompt engineering instruction. We aim to triangulate the survey and interview data with the prompts students stated in the Declaration of AI use, which was a mandatory part of their written assessments in this module, to gain deeper insights into the purposes of their prompts, the level of their prompt-crafting abilities, and the impact of prompt engineering on the quality and originality of their written work.

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Student attitudes towards the use of Generative AI in essay writing and the impact of in-class interventions

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This study investigates student attitudes towards Generative AI in essay writing and the impact of in-class interventions. Students' initial scepticism towards Generative AI's capabilities in academic writing decreased over the academic year, likely due to increased exposure and integration into existing skills lessons. However, it raises concerns about students' belief in AI's essay writing ability and highlights the need for consistent reinforcement of ethical considerations and a focus on the process of essay writing. It then gives suggestions for how EAP courses can be adapted to address these findings and the evolving landscape of AI in education.

Introduction

Generative AI has only been widely know about for 2-years. In that time, it has had a major impact on Foundation Year Studies. The initial reaction of teachers was often one of concern, especially around assessment (Pirrone, 2023), and this sentiment is still quite prevalent. However, in July of 2023, the Russel Group published its *New Principles on Use of AI in Education*, calling for the integration of generative AI into higher education teaching and this view has gradually gained wider acceptance as educators have thought about the potential benefits of introducing it into the classroom (Waring and Evans, 2024).

It is within this context that this research took place. The research's aim was to place students at the heart of the discussion around how generative AI can be integrated into the classroom, using an approach which embedded AI into the curriculum and encouraged students to experiment with it. The students' attitudes towards the use of generative AI were then collected to assess their ideas around it and the impact of the in-class interventions.

Context

This research was undertaken with students on the King's International Foundation Programme studying the English for Academic Purposes (EAP) module. Last year there were 341 students, with the largest student nationalities being Chinese, Saudi and Turkish and entry IELTS scores of between 5.5 and 6.5 (Intermediate to Upper Intermediate). Shortly after the Russel Group Principles were published, King's endorsed them (KCL, 2024) and a decision was made within the Foundation Programme that the main responsibility for enacting these principles would be given to the English modules. The approach taken was that the use of generative AI for academic work was to be viewed as a set of EAP skills for students to develop, and therefore we had a responsibility to support students in developing them.

Within the EAP module, the curriculum was adapted to include the use and critique of generative AI within existing skills-based lessons. In Term 1, there was work on the use of generative AI in Weeks 2, 3, 4, 7, 8 and 10 embedded into existing skills input. This research is therefore partially an attempt to assess the efficacy of this approach within this context.

The Research

The research consisted of 3 surveys administered online to students at the beginning of Term 1 and the beginning and end of Term 2. All students studying on the EAP module had the opportunity to participate. There was a high participation rate in Survey 1 (n192), although this declined in Survey 2 and 3 (n119 and n70 respectively). The aim of organising the surveys in this way was to investigate how student attitudes towards generative AI changed over the year after having regular input on its use in their EAP classes. Along with the decline in participation rates, one other possible limitation of this research is social desirability bias. Although this could be an issue, the overall trends shown by the survey are still valid as they develop from survey to survey with a reasonably high number of participants.

One obvious change was in the percentage of students saying that they regularly used generative AI. In Survey 1, almost 75% of students said that they never or rarely used it, but by Survey 3 this had gone down to about 20% with over 25% saying they used it most days for activities such as ideas generation which was specifically looked at in the course. There was also a significant shift in students' perceived ability in using generative AI with the percentage of students thinking that they knew how to use it for academic work increasing by over 50% over the academic year.

However, when students were asked what they thought generative AI was capable of, the results from the survey were more mixed (see figures 1 and 2).

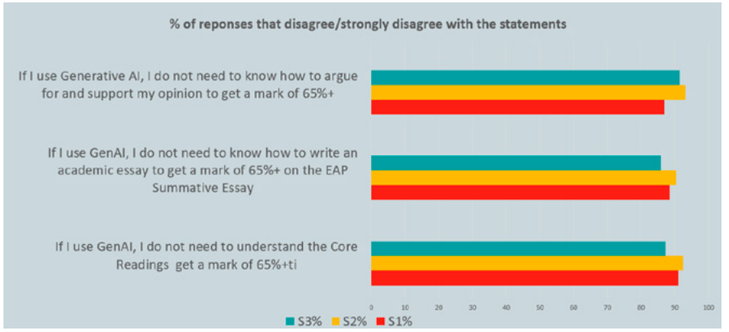

Figure 1: *What students think it can do – the higher the percentage the less faith students have in Generative AI's ability*

Figure 1 shows that there is scepticism amongst students about generative AI's ability to perform individual tasks that are necessary to write a reasonable academic essay with around 90% of students saying they did not think it was capable of performing these parts of the essay writing process. These areas and the critique of generative AI's ability to do these was a theme of lessons throughout Term 1. The greatest level of scepticism is in Survey 2, after the students have had input that specifically looked at the skills mentioned in the survey. However, the shift in attitude is small and there is a slight decline in students' scepticism of generative AI over term 2, when they were not getting input on its use in the essay writing process.

Figure 2 focuses on student ideas around generative AI's ability to write "good" academic essays "with minimal input from students". When students were asked to think about the essay as an end product, the levels of scepticism they showed towards its ability was noticeably lower. In Survey 1 and 2 around 75% of students think it is not capable of producing good essays, much lower than the 90% of students who thought it was not capable of producing a researched argument or understanding core readings. This percentage then goes down further to just over 60% by Survey 3. This is a very worrying trend as by the end of Survey 3, students are submitting summative assessments and in some cases will have already received feedback and grades for them.

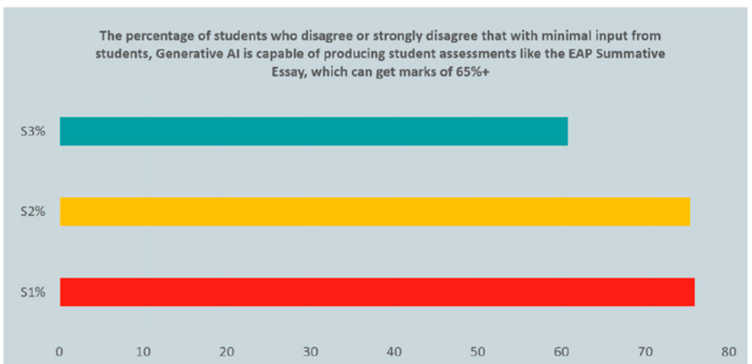

Figure 2: *Students' perception of Generative AI's ability to write an essay - the higher the percentage the less faith students have in Generative AI's ability.*

Conclusions

One of the aims of this research was to assess the efficacy of embedding generative AI into existing skills lessons. The results here were mixed. Students clearly used it more frequently as the course went on and saw themselves as more confident users of it. The EAP course was the main vehicle for input in its use, so by discussing it in class, the course was probably a contributing factor in these positive changes. However, the data from figures 1 and 2 shows only a small correlation between course content and the changes in student attitudes. There are however a number of ideas arising from the data about how generative AI can be better integrated into EAP courses.

The first of these is to do with consistency. As mentioned in Term 2, when there was less input on AI, there was a negative shift in student attitudes. Therefore, it is important to keep on reinforcing the ideas around academically acceptable AI use throughout the year.

Secondly, the approach took very much focussed on the use of AI as a skill, and although this was important, it needed to be supported by a greater focus on the ethics of Generative AI use.

Thirdly, the data clearly shows a difference in how students view the abilities of generative AI when essay writing is viewed as a process or as a product. Therefore, these results which emphasise the process element in essay writing support the suggestions put forward by Compton, Gordon et al. (2024), that the approach to essays in the age of generative AI needs to become much more process driven.

Next steps

The findings from this research are being used to help plan the 2024-25 EAP course. Based on this research the following changes have been introduced:

A Formative Writing Portfolio that students work on throughout term 1, which feeds directly into their summative essay submitted at the start of Term 2. This portfolio aims to emphasise process writing. It has also given teachers greater access to student writing leading to valuable discussion in classes around the use of generative AI that has emerged organically from the portfolio process.

More generative AI input embedded into lessons planned for Term 2, to keep the ideas fresh in students' minds and to reinforce the message about appropriate and ethical use of AI. The assessment focus in Term 2 is on a presentation, and this provides opportunities for this. For example, integrating generative AI use into lessons on presentation structure and research.

Last year's survey will be administered again to see what changes there are year on year. From initial analysis of the 2024-25 Survey 1, there appears to have been a significant increase in students' prior knowledge and use of generative AI. The differences in their views on its ability to produce written work have however so far been replicated. This reinforces the idea that this is a very fast moving area, it is expected the data from this year's surveys will lead to more changes in the course for 2025-26. Although this is a challenge, it is one worth taking on and I hope this paper has been a worthwhile contribution to this developing field.

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Enhancing student confidence, engagement, and curiosity in programming with Pencil Code

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"Programming is a useful yet extremely complicated skill to master" (Jenkins, 2002). This complexity is evident when examining the high failure rates observed in many introductory programming courses (Bennedsen & Caspersen, 2007). This suggests that although many students recognise the benefits of taking programming modules, they often do not perform as well as they had hoped. Prominent scholars such as Mason and Beaubouef (2005), have investigated the potential reasons for this. They have explored factors such as students' limited problem-solving skills, the ineffective use of laboratories for homework assignments, and the tendency to introduce students to intermediate programming tasks without first reinforcing the design phase that is essential for developing Computational Thinking (CT).

Introduction

Computational Thinking (CT) is a critical skill in Computer Science, and its absence is a major barrier preventing foundation or first-year university students from excelling in introductory programming courses. Computational thinking is defined as a systematic problem-solving method that involves breaking down complex problem into smaller more manageable parts. The concept of CT can be traced back to the foundational work of Seymour Papert (1980) and was formally defined by Wing in 2006, whoargued that CT involves "solving problems, designing systems, and understanding human behavior by drawing on concepts fundamental to Computer Science" (p. 33). This paper focuses on the "design" aspect of this definition, as it has a significant impact on education, particularly in foundation programs within university.

In my role as an educator in the Foundation program within the Mathematics and Computer Science department at City, University of London, I have encountered similar challenges as those described in the literature. The module I teach, titled *Introduction to Programming with Python*, has consistently received feedback indicating a lack of reinforcement of computational thinking within the curriculum. Note that this module is attended by both international and home students of foundation levels. Students have expressed concerns such as, "I do not know where to start coding, so I cannot engage with the programming activities," and "There are so many rules to remember in programming that it becomes less enjoyable." Additionally, mathematics students who take this module often question its relevance, with comments like, "As math students, we do not understand why we have to take a programming module."

Reflecting on this feedback, I identified that the insufficient emphasis on computational thinking within the module contributed to a lack of purpose, which, in turn, diminished student engagement and curiosity. To address this issue, I decided to focus on the design aspect of CT and emphasise it within the module. In the following academic year, I introduced a visualisation tool called Pencil Code to enhance students' engagement and curiosity in learning programming.

Pencil Code: Bridging visual learning and programming comprehension

Recent literature indicates that different types of programming environments can positively influence students' interest in and comprehension of programming (Weintrop, 2015). Pencil Code (Bau, 2013) is one such hybrid programming environment that combines both block-based and text-based coding, allowing students to focus on the visualisation of coding concepts and the nature of computation before delving into the syntax

Figure 1: *Comparison of Pencil Code and text-based code readability.*

and idioms of a programming language. This approach enables learners, especially those who have never encountered programming, to test their assumptions, refine their ideas, and develop their understanding of the complex norms of coding. The primary advantage of Pencil Code is its seamless transition between block-based and text-based coding. The block-based approach offers a drag-and-drop interaction with a more natural language. In contrast, the text-based programming aspect emphasises functionality and practicality, allowing learners to apply algorithms in a real coding environment. Pencil Code aims to build confidence in early-stage programmers, preparing them to write code independently without the tool.

Pencil Code serves as a learning aid, enabling students to complete simple programming tasks while gradually familiarising themselves with programming syntax (Bau et al., 2015). Typically, the simplest programming tasks assume that the programmer understands the language's syntax and idioms. However, many beginners are unaware that code executes in a linear, top-to-bottom fashion. Introducing loops can further complicate this understanding, as they involve repeating certain lines of code. To comprehend this, text-based programming relies on indentation to define loop structures, requiring students to maintain a consistent one-tab indentation from the left margin. In Pencil Code, the visualisation of this process makes it much clearer (refer to Figure 1).

As demonstrated, the indentation under the 'for' loop is far more apparent in the Pencil Code version compared to the text-based version. This feature alleviates students' concerns about making indentation errors, making the initial stages of learning programming more accessible. This is just one of many examples of how Pencil Code can simplify the learning process for students.

Class design	Teaching content	Student learning objective	Example of activities
Week 1	Concept of program design and algorithm.	Understand the concept of computer operations and algorithm.Answer question such as "How does computer read codes?"	Drawing using pencil codes.
Week 2	Concept of input and output.	Understand how computers can implement our input into the desired output through algorithm.	Peer programming activities to test out input and output program.

Figure 2: *Implementing Pencil Code in the first 2 weeks of Introduction to Programming*

Implementing pencil code within the first two weeks of teaching:

Before introducing Python installation and other mundane tasks, I encouraged my students to visit ***https://pencilcode.net/*** and experiment with its features. I provided them with a concise guidebook that I authored (interested readers can request this guidebook). We began by focusing on visualisation tasks before moving to more functional tasks, using the block-based programming approach.

Below is the planning table for the first two weeks of my module:

During the first week, I ensured that students had the freedom to explore all the features of Pencil Code, ranging from drawing to using operators. In the second week, I, along with a teaching assistant, facilitated a peer programming session. This peer programming initiative aimed to pair mathematics students with computer science students to collaboratively build a simple input-output program. Another reason is that both Maths and CS students tend to be curious as to why they have to study each other's topic. and this approach helps to fill that gap. The screenshot below is an example taken from my guidebook, demonstrating the level of support that the students get to complete this task.

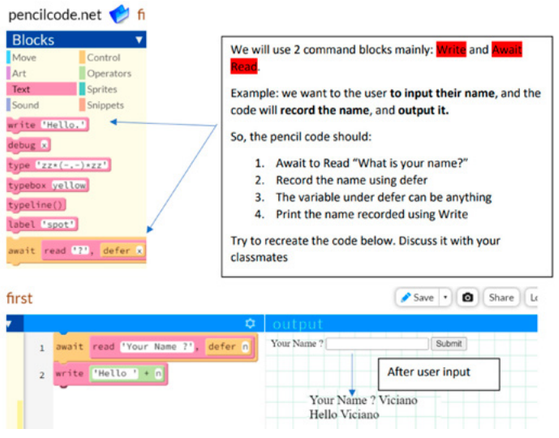

Figure 3: *Instructions for input-output activity in pencil code*

Observation

The first in-class quiz took place in week 4, and I observed a noticeable improvement in students' performance and engagement when using Pencil Code compared to the previous year (2023 cohort compared to the 2022 cohort). The quiz consisted of 20 questions, which students completed in class via a university-wide platform called Moodle. For the 2023 cohort, 93% of students passed the quiz with an impressive average score of 72/100, a significant improvement over the 52% pass rate observed in the 2022 cohort. This represents a marked increase not only in performance but also in the students' grasp of the programming concepts introduced in the module.

More importantly, the level of engagement during the quiz was notably higher among the 2023 students. Unlike in previous years, students did not feel the need to frequently check online resources or resort to guessing answers. This suggests that Pencil Code's approach to introducing computational thinking and programming concepts helped build students' confidence and understanding, enabling them to tackle the quiz more effectively.

To gain further insights, the teaching team conducted an optional survey in week 5, right before the reading week, to gather feedback on students' experiences. Figure 4 presents the summary.

Beyond the survey data, I also received verbal feedback from students at the end of the term, which provided qualitative insights into their experience with Pencil Code. Many students, particularly those without a computer science background (i.e., those who did not take Computer Science at the A-Level), expressed that they found programming to be more approachable because the module introduced computational thinking in an accessible manner.

One student shared the following feedback through the Module Evaluation Questionnaire (MEQ) for the 2023/2024 academic year:

"I feel that the module really provides a good transition from sixth form (high school) study into university-style learning. The Pencil Code is really enjoyable, and I wish that the material could be extended into the later weeks. I really feel like a programmer now."

This feedback suggests that Pencil Code played a crucial role in helping students bridge the gap

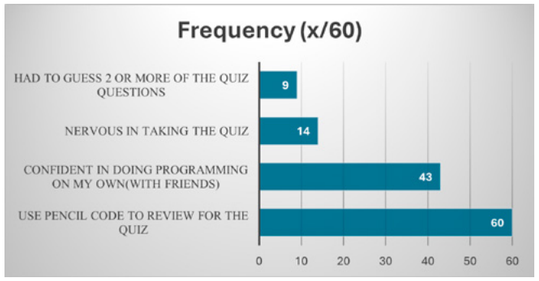

Figure 4: *The benefit of pencil code on students' engagement with programming*

between pre-university education and university-level programming. The student's comment about feeling like a "programmer" highlights the success of this approach in not only teaching programming skills but also fostering a sense of identity and confidence in learners.

Discussion

This article demonstrates that Pencil Code is an effective tool for developing computational thinking and has had a positive impact on students' attitudes, engagement, and curiosity toward programming. The observations in this study primarily focused on foundation-level students, both with and without a background in computer science. The significant improvement in quiz performance and student feedback suggests that Pencil Code can serve as an excellent introductory platform, particularly for beginners who might otherwise find programming intimidating. Although, it is useful to highlight that there could be other factors which contributed to this improvement and has not been captured by this study. As an example, visual and kinesthetic learners may find pencil code to be more helpful compared to verbal and auditory learners. This has yet to be studied extensively.

A key advantage of Pencil Code is its user-friendly, cross-platform design, which helps students transition from visual comprehension to understanding programming syntax. This seamless shift builds confidence and encourages persistence, as many students continued using Pencil Code for quiz preparation and refining their coding skills, demonstrating its value for both initial learning and ongoing practice.

However, while the results are promising, there are some areas where further research is needed. Future studies should explore whether Pencil Code's positive effects are equally prevalent in other educational contexts, such as among non-STEM students or those at different educational levels, such as high school or undergraduate courses. Understanding whether this tool can be effective across diverse settings will help determine its broader applicability in teaching computational thinking.

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Foundation students as co-creators? A reflection on co-creating lectures on the Global Politics and Liberal Arts modules at King's Foundations

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Research into co-creation in higher education has received considerable attention in recent years, with collaborations between students and academic staff being positively framed as opportunities for active learning and increased student engagement. However, the literature remains scarce regarding the viability and effectiveness of co-creating at Level 3 (foundation). This piece discusses the design, implementation, and student reception of two small-scale projects at King's College London where students on the GP and LAmodules were invited to co-create and co-deliver lectures.

Exploring co-creation at Foundation level

Co-creation, broadly defined as a "meaningful collaboration between students and staff, with students becoming more active participants in the learning process, constructing understanding and resources with academic staff" (Bovill et al., 2016, p. 197), has emerged as a central concept in higher education research (Ryan and Tilbury, 2013, p. 15; Iversen and Stavnskær Pedersen, 2017, p. 22; Bovill, 2020, p. 3), with collaborations between students and academics positively framed as opportunities for active learning and student engagement. Scholars discussing their experiences with co-creation frequently position their work within critical pedagogy, framing students as creators of knowledge and learning as the product of negotiation.

Although, in principle, co-creation can be implemented across different study levels, the literature remains scarce regarding the viability, effectiveness, and contextual risks of co-creating at Foundation level and in relation to lectures. Typically associated with didactic and monologic knowledge transmission (Clark, 2018, p. 986), the lecture has been at the centre of debates on its pedagogical suitability and benefits in higher education. A space for learning through active listening and knowledge creation (Webster, 2015), the lecture in its traditional format can be rethought to reflect less hierarchical relationships between students and lecturers.

Viewing co-creation as a fruitful opportunity to let go of some of our power as lecturers (Seal and Smith, 2021, pp. 58-59), we sought to implement lecture co-creation in the Foundation modules we lead. Our aim was twofold: first, to challenge the traditional lecture format by 'sharing the stage' with students; second, to challenge the knowledge being transmitted by negotiating content with learners.

In what follows, we describe our initiatives, discuss student feedback, and reflect on the pedagogical feasibility of lecture co-creation at Level 3 and, more generally, on the tensions that may arise when lecturing is coupled with co-creation.

Fostering inclusiveness and engagement through lecture co-creation

In the context of Global Politics (GP) and Liberal Arts (LA) - two 30-credit modules designed to prepare Foundation students for a variety of undergraduate degrees – lecture co-creation was seen as an opportunity for students to contribute to knowledge creation, shape study materials and potentially destabilise the Western-centric bias of our curricula. In GP, following the introduction of new regions in a unit delving into democracy, students were invited to co-create segments of three lectures with a focus on democracy in the MENA region, India and Latin America. Eight students volunteered to participate; except for the student presenting on India, all co-creators presented on regions aligned with their personal background. In LA, students were invited to contribute to a session exploring questions of gender inequality in the art world. Considering that most artworks included in the lecture over the years had been selected from Western artistic contexts, the integration of an element of co-creation was intended to broaden the range of perspectives included.

Two approaches to lecture co-creation

In GP, a one-step approach to co-creation was adopted: a call for participants asked for volunteers to present at the three lectures, granting students a high degree of freedom in selecting content and developing their arguments on democracy in the three regions. After an initial meeting with the volunteers to brainstorm ideas, students were asked to send their slides by a set deadline and were invited to meet with the lecturer to discuss their work. Except for one student, who asked for additional guidance, GP students were left with substantial room for initiative over the final 'script' of their lecture. This approach allowed students to exercise a higher level of ownership over their work, alongside a higher questioning of established power relationships concerning what knowledge is created at lectures. Indeed, three students questioned established definitions of democracy and existing measurements, with one student specifically contesting the classification of a specific country as non-democratic. However, this approach required more ex-post intervention by the lecturer to ensure co-created materials aligned with the module assessment.

Taking stock of the challenges encountered in GP, LA adopted a two-step approach, wherein the lecturer maintained greater control throughout the process. Initially, students were invited to contribute to a Padlet with analyses of a self-portrait by a woman from any context and tradition. This was envisioned as an intermediary step allowing in principle all students to participate (the top three peer-voted posts would feature in the co-created lecture, while the others would be discussed in seminars). The second step involved a process of negotiation between the lecturer and the three contributors: the lecturer shared some notes with the three students ahead of a first meeting. The notes included some reflections on their chosen paintings substantiated by relevant academic literature. In a second meeting, students rehearsed their presentations and received guidance on their delivery.

Compared to GP, the LA approach arguably diminished the level of student ownership over their work. However, by exercising greater control and incorporating more scaffolding throughout the process, the emphasis was placed on the negotiation phase of co-creation. This ensured that the co-created materials were fully aligned with the module objectives.

Student feedback

To understand how the initiative was received by all students, we collected feedback from the co-creators and the rest of the cohort.

The feedback from the eleven 'co-lecturers' was very positive, with many describing the experience as "unforgettable" and "meaningful". A common theme in several responses was the notion of "opportunity": an opportunity to practice presentation skills; but also, a 'relational' opportunity. Notably three LA students appreciated the chance to engage more closely with the lecturer, with one emphasising the feeling of being part of a "community of co-creators" that encouraged collaboration and mutual support.

As for the rest of the cohort, feedback reflected a mix of positive reactions (the majority in both modules), constructive reservations, and a few concerns. Figure 2 below shows that 83 percent of LA respondents found the experience positive, a proportion noticeably higher than in the other module (56 percent, see Figure 1). The difference could be attributed to some 'co-creation fatigue' experienced by the GP students, who engaged with three co-created lectures, while LA students only had one.

The qualitative responses accompanying the surveys offered additional insights into student perceptions. Starting with the positive comments, students remarked that "this was an amazing idea" and "a great form of having lectures". Noting that the initiative was "very good and exciting", one student wished "there were more (co-creation) opportunities". Others appreciated the fresh perspectives, with one noting, "I think this initiative was good because it allowed us to see other perspectives rather than just that of our tutors." Another stressed the benefit of peer input, saying, "it was great to listen to my peers' opinions and ideas."

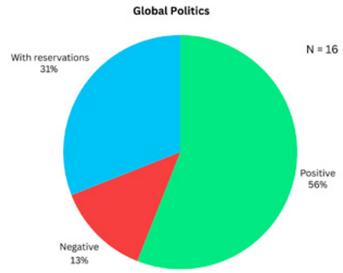

Figure 1: *Student feedback on lecture co-creation in GP*

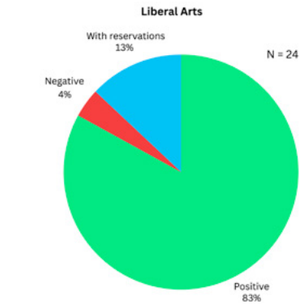

Figure 2: *Student feedback on lecture co-creation in LA*

As expected, some students had reservations. They appreciated the innovative character of the initiative but highlighted potential issues on two fronts. Firstly, with respect to lecture execution, some remarked on the perceived lack of lecturing skills of fellow students. Secondly, and on a deeper level, others observed that their peers were not as qualified as the tutors to deliver the material. Their comments conveyed the idea that lectures should be centred on the knowledge authority of teaching staff, who are put in a hierarchical relationship with respect to students when it comes to the transmission of knowledge. As one student put it, "it would be better to hear from the lecturers", which echoed the points from another student who said, "professors should make sure they (students) understand the knowledge fully." Remarkably, one student went so far as to argue that they "did not learn that much from students". Interestingly, some resistance was expressed also by one of the GP co-creators, who remarked, "talking about those regions ONLY through the voice of students is a mistake. The teacher should provide a more detailed overview of the region than what was done."

Conclusions

Two main conclusions emerge from our reflection on the initiative.

The first relates to the pedagogical feasibility of co-creating lectures with Foundation students, who are just approaching their subjects at an academic level. Based on our experience, more scaffolding may be recommended to guide students through the process and ensure alignment of materials with learning outcomes. However, as the comparison between the two modules reveals, this approach might reduce students' sense of ownership over their work and their freedom to challenge knowledge creation.

More generally, this initiative has allowed us to critically reflect on the innate tensions between lecturing – a primarily monologic and hierarchical activity - and co-creating with students. These tensions emerged in some student comments, which questioned the knowledge authority of their classmates; but were also experienced firsthand by us, who found the sharing of the lecture 'stage' and the negotiation of lecture material with students disorienting. Nevertheless, we considered this a positive initiative. It confirmed that co-creation can indeed help foster student engagement (incidentally, the co-created lectures were highly participated) and promote the inclusiveness of our syllabi.

Our next step is to explore methods for implementing whole-class approaches to co-creation, such as collaboratively developing syllabi and reading lists, to maximise engagement in the process of knowledge creation prior to lecture delivery.

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Teamwork makes the dream work:

Working with student Alumni on syllabus co-construction for the University of Edinburgh's IFP for the College of Arts, Humanities, and Social Sciences

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The University of Edinburgh encourages student and staff engagement. IFP alumni and staff are working on a Student-Led Project that promotes independent study skills in a supportive environment. This paper will explore how this project aligns programme development with student-led practices and enhances staff and students' learning experience.

Introduction

English Language Education (ELE) is part of the University of Edinburgh (UoE), and oversees the English Language courses for the International Foundation Programme. The IFP is currently being redeveloped, and as part of this process, we engaged with IFP students to co-construct the new English Language course to reflect their learning needs as they progress to their degree programmes. This was possible due to the Student Partnership Agreement (SPA), designed to generate student-staff engagement opportunities and measure the enhancement of the student experience (Student Partnership Agreement, 2024-2025). The value gained by involving IFP students in the redesigned CAHSS IFP is clear; as stated by Leslie and Gorman, "Student engagement is vital in enhancing the student experience and encouraging deeper learning" (2016, p. 1). This focus on engaging students' perceptions is essential to curriculum design, bringing together diverse views and voices around a common purpose of enhancing future student experiences. Therefore, this paper focuses on the review and redesign of the College of Arts, Humanities, and Social Sciences (CAHSS) IFP.

Our positionality

Before engaging students in the redesign project, we reflected on our positionality. Four key areas were identified:

Student workload

- Assessment frequency was a particular focus, but also what is assessed and how in accordance with UoE's Assessment and Feedback Principles and Priorities (2022)

Reflection and self-development

- Here, we were focused on helping learners better understand their strengths and weaknesses, what skills they need to develop, and how they interact with the academic world (Bertram Gallant & Drinan, 2006).

Familiarity

- One of the key goals of the CAHSS IFP is to prepare students for undergraduate study and provide opportunities to develop transferable skills at multiple points (Kuh, 2009).

Risk tolerance

- Learning in new environments also asks students to become comfortable with ambiguity and taking risks. Joining a new community of practice can be nerve-wracking and face-threatening (Lea & Street, 1998), and yet risk is an inherent part of doing anything. Thus, we recognise the risks that IFP students are asked to take as part of their journey towards UK undergraduate study.

Co-construction: Engaging Alumni students

The key aspect of the SPA agreement is that students and staff work together. We decided, therefore, that the SPA funding would be used to remunerate volunteer students for their time. Before applying, a focus group was set up with graduate IFP students. All CAHSS IFP graduate students from 2018-2023 were invited to join the focus group. Seven students accepted the invitation, a mixture of 2nd, 3rd, and 4th years, with one student who had graduated that summer also joining. There was a mixture of nationalities, though Chinese was predominant, which mirrors the common make-up of the CAHSS IFP cohort. While the focus groups provided insight into a variety of vital areas, key for this paper were the responses related to course design and the possibility of offering a Student-Led Project. As one student responded, "There's so many things happening at the same time and tutors there they would expect sometimes that students are already equipped with some, with knowledge, with life skills" (focus group 1, 2023). This highlighted for us the importance of the areas of positionality we had identified earlier in our process.

Co-construction: Framing the syllabus around a student-led project

Based on focus group feedback from alumni IFP students, we identified the need for a Student-Led Project for the final teaching block of the CAHSS IFP, guided by Murray who states that "(t)he pedagogic rights to enhancement and inclusion can be realised through autonomous learning practices such as student-led learning" (2024, p. 135). The Student-Led Project also reflects the principles of Students as Change Agents (SACHA) to develop students' confidence in teamwork, design thinking, and data management (Donnelly & Taylor, 2024), all areas identified in the focus group as being necessary for students' degree progression. The Student-Led project, therefore, would provide learners with academic language and literacies practice (including the four skills required by UKVI), offer engagement with a topic relevant to their future studies, develop their independence, provides space for reflection and reflexivity, foster teamwork, and introduce risk-tolerance and familiarity in a teacher-supported environment.

Co-construction: Partnership in practice

A priority to partnerships in practice is building a community approach to working with our alumni where their prior learning experiences are respected and valued, and they are nurtured in partnered work.With this in mind, we elicited the alumni's views on the marking scheme, specifically any missing key skills, abilities, or competencies specific to their programmes. The students reporting several key areas, including evidencing research, wording, and layout of the rubric.We value the power to transform when transitioning from pathway learning to undergraduate study, and we designed this early task to empower the students in their role as co-creators of curriculum and assessment practices.

The next task was engaging the alumni on the proposed Student-Led Project. To prioritise the power to transform curriculum through collaborative staff-student working, we asked them for their blue-sky thinking on a possible syllabus. To direct their focus, we scaffolded broad themes such as the use of AI, group work (including dynamic management), teacher facilitation, workshops, and assessment types. We used Miro, a collaborative platform that is AI-powered and provides a visual workspace, to generate creativity when drawing on undergraduate project work and IFP group work practices. This aspect of partnered work prioritises the value of students' personal trajectories of learning and teaching.

The final stage was an in-person meeting to gain a deeper understanding of how the Student-Led Project could link to the experiences of the undergraduate students in CAHSS. Students' interests coalesced around academic socialisation, specifically concerns about students' interpersonal skills when working in a group dynamic, and equity of grading group assessment(s). They positively evaluated peer exchange of feedback, the importance and benefits of literacy skills assessment, and they innovated with assessment ideas such as podcasts, debates, and academic discussion, including portfolios as formative assessment. On AI, students were less engaged about the current university guidance; yet there was consensus that a Student-Led Project should build in AI literacy to facilitate a multi-modal project with a strong sense of teacher guidance.

Feedback and reflections

Both students and staff reported that the collaboration on course design was rewarding on multiple levels. Staff commented that they had learned from their students and that this shaped their approach to course design. Students reported that they felt valued in engaging in the project, fostering the development of key graduate skills, such as critical thinking.

However, we underestimated to administrative technicalities related to paying our alumni (such as tax and oncosts, Right to Work, and paygrades), which delayed the start of the project. Equally, the alumni also noted that they had hoped to get more direct work experience from the project. We now realise we should have surveyed the alumni at the beginning of the project to find out what their expectations were, rather than focusing on what we hoped to learn from them.While overall our alumni did report gaining a lot of satisfaction from the project, we are nevertheless disappointed that we were remis in discovering what the alumni themselves sought to gain, as this contrasts with our goal as set out at the beginning of the project for being equal partners. We clearly gained more from the project in this sense, which underscore an imbalance that we regret.

Conclusion

Having a keen awareness of positionality and values is key to outlining the project clearly to student partners who have other commitments beyond your project. We advise flexible understanding to these commitments so that student partners feel fully comfortable and able to participate in the co-construction of the project. We also advise early consultation with stakeholders to avoid delays. Finally, for student partners' satisfaction, it is essential to set up the parameters of the partnership to ensure that it is of equal value and interest to all parties. This is paramount for truly dialogical practice. A method to do this would be to provide a mechanism pre-, mid- and post-partnership working to elicit students' voice. Encouraging meaningful student engagement would have helped the students know they were recognised as equal partners as well as co-facilitators in the project.

These take-aways show that the lead-in to such a project is as crucial as managing the project itself. Nevertheless, the SPA project has produced exciting and authentic results for syllabus design. While this is perhaps not a new discovery, the positive results of this method of working help to bolster previous research in this area (e.g., Murray, 2024; Patterson, 2019; Stevens, 2022). While there are certainly aspects we would revisit when planning to work with student alumni again, these do not discourage us. The IFP project will require ongoing review and thus there is potential to consolidate these experiences with further SPA funded alumni co-construction, especially regarding assessment. Indeed, we have learnt a lot and hope that this paper will encourage others to engage in similar projects with their students.

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Same difference?

Towards a decolonial classroom in international foundation teaching

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This article explores the imperative and complexities in decolonising within international foundation classrooms, particularly in higher education. It specifically examines the unique difficulties faced by educators and students in these culturally diverse settings, focusing on pedagogical strategies and curriculum development. The discussion is framed around the experiences of international foundation students in the UK, highlighting the dual challenges they face in integrating into university life. The article aims to be a starting point to offer practical strategies for educators to foster an inclusive and supportive learning environment.

Introduction

'Turns' arguably form part of Higher Education (Rai and Campion, 2022). The 'decolonial turn'- tied to both the historical legacies of colonialism and recent anti-racist campus activism including Rhodes Must Fall (2015-)- has on the one hand (re)-raised urgent calls for educators to challenge the 'coloniality' of pedagogy and 'the hegemony, legacy, and limitations of European epistemologies' (Hayes, Luckett, Misiaszek 2021; Mignolo 2011). On the other hand, concerns have been raised about a 'decolonial bandwagon' which potentially serves only certain interests within an increasingly neoliberal UK university setting (Rai and Campion, 2022).In these debates, the experiences of students and staff in international foundation programmes have received less attention. This article aims to explore the complexities associated with decolonising the international foundation classroom, a unique space within higher education settings. It explores how decolonial pedagogical strategies can potentially enhance the learning experiences and academic performance of international students, whilst acknowledging ongoing limitations. Specifically, we seek to ask:

1. 1. What does decolonising mean relative to foundation student educational aims and Level 3 curriculum design?
2. 2. What insights can be gained from feedback loops, including staff workshops, towards decolonising the classroom?

This article is framed by our experiences teaching at the Centre for International Education and Languages (CIEL) at King's College London where we both teach 'Introduction to Social Sciences' (ISS) Level 3 course as part of CIEL's Foundation Programme (KIF). The module aims to equip students with concepts, knowledge, and research methods to explore social worlds, and their inequalities.

The urgency to decolonise the curriculum and classroom

In our module we have aimed to challenge Eurocentric 'origin stories' of the Social Sciences (Bhambra et al. 2018). These erasures- routinely 'hidden in plain sight'- have potentially fostered feelings of isolation or misrepresentation amongst students (Rutazibwa, 2020). However, alongside challenges to not simply 'add in' non-Western scholarship, a question from a student in a seminar stuck with us as an example to better consider the different positionalities of foundation students: 'Isn't it colonising to try and decolonise me?'. Had we, as educators, been complicit in the 'decolonial bandwagon' within a Eurocentric educational context that has often ignored or erased differing ethnic, national, political, or religious identities as well as educational aspirations? In short, in our desire to 'decolonise' had we not fully given space to the needs of our students, educationally and pastorally?

In our classroom and support settings, EDI strategies acknowledge that international students may not share the same 'starting points' as their British peers, including the relevance of decolonising education. This disparity necessitates the implementation of 'differentiated support systems' (Tavares, 2021). International students face unique challenges, including language barriers, finding a sense of belonging, and engaging in the classroom; they are not fully integrated into a higher education community that has temporarily accepted them towards a 'traditional' UK university experience but may exclude them later in their academic careers (Li, 2024).

Daily microaggression and constant stereotyping rooted in Orientalist attitudes (Said, 1978), are frequently reported by students. and often imperceptible to the broader higher education community (Leonardo, 2016). These regrettable encounters are arguably compounded by staff potentially lacking an understanding of nuances in students' societies and even small, seemingly innocuous remarks- from name pronunciation to the phrasing of holiday periods. At the same time, stereotyping works not only vertically, but between students, often tied to language skills, nationality, social networks, and educational backgrounds. Creating the potential for a decolonial classroom requires educators to acknowledge violences with a compassionate approach, supporting equity of voices, recognising the embodied knowledge and lived experiences of students, and modelling empathic behaviour with them.

Pedagogical strategies for a decolonial classroom

In our lectures we aim to integrate diverse perspectives and relevant themes, such as religious and national identity, to try to resonate with students' experiences (Swartz et al., 2020; Walsh, 2007; Heleta, 2018; Maalouf, 1996). We have embedded a lecture and seminar on the topic of decolonising identities, building on 'Connected Sociologies' which seeks 'the reconstruction of curricula in the light of newly understood histories' (Bhambra, 2014; Bhambra et. al 2020). The aim is to (re)introduce students to key concepts including 'eurocentrism' to allow independent reflect not only on their course materials but, for example, why and how key theorists or concepts are chosen, enabling wider links to power and representation.

This lecture and following seminar also addressed King's College London's own colonial legacies, including slavery reparations and the removal of the Cecil Rhodes Professorship in an attempt to have students critically reflect on the environment in which they are studying (Drayton, 2022). This was followed up by students creating presentations on the debate 'should controversial statues be removed?'. Nonetheless, some questioned why these issues mattered for their studies with one eye on undergraduate acceptance. One key takeaway we continue to debate, is when and in what form, to offer critiques of dominant social theory- is it too much to offer early in term one, or something for students to be aware of and to signpost as a useful toolkit?

Secondly, our teaching approach acknowledges the importance of incorporating diverse learning styles and backgrounds (Barraket, 2005; Welikala, 2008; Gibbs, 1992). In our seminars, we use 'class contracts' where students collectively set ground rules for collaboration, revisited throughout the term. This approach is based on Kolb's experiential learning principles, as "the process whereby knowledge is created through the transformation of experience" (Kolb 1984, p. 38), and incorporates psychodynamic and Gestalt techniques. This collaborative process helps create an effective learning environment and aids conflict resolution. Students appreciate the clear, safe spaces these contracts provide.

Additionally, the class contract fosters a democratic, decolonial learning environment and teaches academic debate norms.

Furthermore, we structure seminars to recognise that students are the experts of their own social reality. During seminars and lectures, students explore theory in real-world contexts, fostering deep connections to the material (Suarez-Ortega, 2013). We utilise a selected reading guide (case study), chosen not only for its topical relevance but also for its relatability to students' experiences and we emphasise the connection between the theory presented and their own reality. Each guide provides students not only with questions on the content of the articles, but with context questions and creative tasks.

While our work with students continues, in early 2024, we conducted a staff-facing Continuing Professional Development (CPD) workshop in collaboration with colleagues from King's Foundation, entitled 'Learning from EDI Innovation Initiatives in the Classroom'. During this workshop, we outlined our methods detailed above, then provided a platform for staff to share their experiences. Prompting questions for discussion included, 'what does decolonising mean to you, your teaching, and students?', and 'how do you address difficult topic areas?'. This was contextualised from us, and a fellow colleague in Global Politics, by sharing experiences of addressing difficult situations in the classroom. One such 'EDI fail' from our Global Politics colleague, shown as a video testimonial, was how students reacted differently to their contextualisation of democratic developments in the Middle East in relation to British imperialism. Indeed, some student only felt they could express their ideas after the class. This was picked up on by a range of staff who agreed with the reflection that more space to think how student bring an 'understanding of topics differently' fits into staff responses or class management.

What came out of the workshop feedback - both in plenary and later survey - was threefold. Firstly, staff were glad to have a space to discuss how to address 'difficult' topics, including conflicts such as Ukraine and Gaza, as a 'much needed forum'.

Interestingly, one survey comment stated that, 'even amongst established members of staff, there were conflicting ideas about what is acceptable topics of discussion in the classroom'. Secondly, we felt it was valuable that dialogue was opened between optional module tutors and English-language tutors on issues of decolonising as too-often curriculum development is siloed. Thirdly, staff fed back that student voices needed to be better heard as 'we do not know what may be happening to students outside of the classroom'.

Turning to future directions

Going forward, we aim to conduct empirical research to understand how and in what ways decolonising the curriculum can enhance international students' engagement and overall academic performance in the UK. This research will involve workshops and lectures, reflecting on both student and staff engagement and feedback. As this article has outlined, the initial phase of this research has already begun, with preliminary work conducted in the form of workshops and lectures.

Decolonising the curriculum in the international classrooms is not only relevant but urgent. It requires a concerted effort from educators to create an inclusive and supportive learning environment that acknowledges and values the diverse experiences and perspectives of all students. By adopting pedagogical strategies and curriculum developments, educators can help international students navigate the challenges they face and foster a sense of belonging and engagement in the classroom.

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Exploring the careers landscape:
Integrating transferable skills training for students at foundation levels

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In challenging economic times, students at all levels of study should develop transferable skills required in the workplace.The author's surveys of international students reveal that while they expect career support from universities, they do not engage with career-development opportunities. Findings and recommendations from this data-collection outline changes that could be made.However, it is perhaps early intervention at foundation levels to support career development that is needed, where it is often too late to embark on such development on the completion of study.

Introduction

Many UK and international students leaving higher education face stiff competition in the search for employment.While good jobs are hard to find,UK employers and job websites are reporting the skills lacking in graduates and the need for more (or better) career training (Institute of Student Employers, 2022) (Targetjobs, 2023) (Fig 1.).Many websites offer advice about the skills which are needed and how to acquire them (Training Express, 2023) and employers are perhaps looking to universities to fill these skills gaps.At the same time, many HE institutions are competing to recruit more students.While there has been a modest increase in UK home student fees (Universities UK, 2024), universities will continue to be heavily dependent on international student fee income.It is in this context that universities are putting renewed emphasis on career training to provide better student job prospects but also to promote institutional profiles via indicators such as Graduate Outcomes (HESA, 2024). This complex cycle of interdependence is challenging the objectives of education in an as yet undetermined relationship with academic provision.

Although universities are seeking to provide better on-campus career-training support, there is evidence that support for international students falls behind the levels of support offered to home students (Fakunle & Pirrie, 2020). This is an area where universities should focus their efforts to promote and sustain international recruitment, as part of wider initiatives to develop a thread of careers training as compulsory and standard.

In this context, this article seeks to understand the engagement levels of international foundation (and other) students in on-campus careers training, to provide insights into their career plans and reveal their expectations about careers support. It also attempts to understand teachers' views about their own role in career training.

I believe that it is only by offering sustained employment training – beginning at foundation levels – that we will instil a student mindset set on pursuing professional self-development to promote employment success that many may argue is the end point of education.

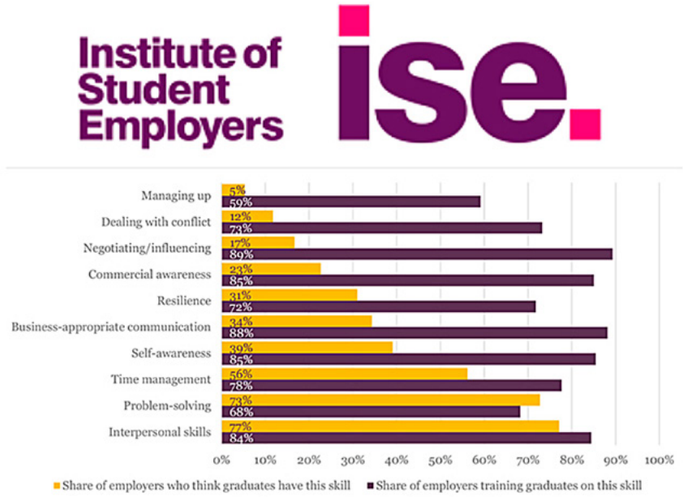

Figure 1: *A description of skills which employers and job websites state are lacking or required in new graduates (Institute of Student Employers (2022); Targetjobs (2023)).*

Data collection and findings

As programme lead for the Pre-Masters Graduate Diploma at Queen Mary University of London, I surveyed 6 Pre-Masters teachers to understand their views about careers training of students.While they believed students needed to promote their career profiles, views were ambivalent about which departments were responsible for providing that training (Fig 2):

I also wanted to find out whether my foundation students had started their own career planning and had engaged with Careers & Enterprise support on campus. An online survey provided responses from 31 international Pre-Masters students, with 39% from China:71% had started career planning, 71% thought it important/essential to enhance their professional profile while studying and 100% believed that Queen Mary was responsible for careers training. However, while 74% of students were aware of Careers & Enterprise services, only 6% had contacted them.

This apparent contradiction led me to seek a deeper understanding of the motivations and behaviours of larger groups of international students.In collaboration with colleagues from Careers & Enterprise services, funding was obtained for two student-lead projects to obtain answers to the following:

1. How can we better understand the factors that contribute to the low participation rates of international students in career-training activities?
2. How can we effectively increase the motivation of unengaged international students in the various activities offered by Careers & Enterprise?

In one project, the opinions of 104 international students were collected by survey and interview, and stratified into non-Chinese and Chinese groups; 3% (3) were foundation students, 30% (31) were undergraduates, 67% (70) were postgraduate/doctoral students. Careers & Enterprise services were particularly interested in Chinese cohorts who had been largely silent in terms of career planning (Hanna, 2024).

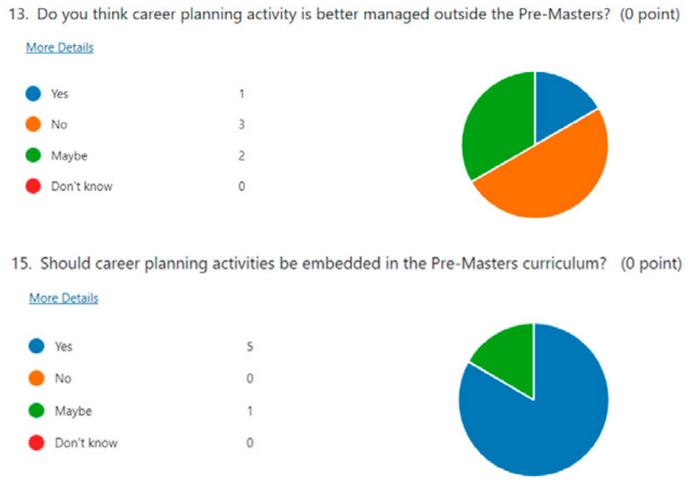

Figure 2: *Pre-Masters teachers' views about the responsibility for career training of students studying on a Pre-Masters Graduate Diploma programme (2022-23).*

In the other project, two student groups were briefed to answer the research questions set out above via their own data collection methods and to write up findings and make recommendations (Al-Fadzli et al, 2024).

Collating the findings from the two projects, the main reasons given why international students did not engage with Careers & Enterprise services were as follows:

1. Lack of awareness about what is on offer
2. No time due to study
3. Services not needed
4. Events clash with lesson timetable
5. Lack of confidence to join sessions
6. Do not think the service is helpful
7. Services are not country-specific

A surprising finding was the aspiration of many international students to work post-study in the UK (Fig 3.). This echoed the findings of the Pre-Masters survey and has significant implications for the institutional support of large groups of international students.

A detailed report of findings and recommendations from the two projects can be viewed on request.

Discussion

While recommendations for the improvement of careers training were made in the surveys, I do not believe that excellent career training provision will, on its own, promote the engagement ofstudents. The surveys revealed low levels of interaction with careers support despite the self-declared need for it and it being readily available via on-campus services.

This lack of engagement is, I believe, due to the absence of such vital educational training over the course of students' academic careers.For many students, career planning is an activity which only occurs at the end of academic study.A precious window of time is wasted which is so profoundly developmental for young people and which may help to better shape their career choices and chances of success.It is too late for students to embark on careers training at the end, say, ofpost-graduate study.This sentiment was echoed by Queen Mary alumni at a student careers fair in February 2024 when explaining their first-hand experience of intense workplace competition. It was neatly summarised by one Pre-Masters student, in response to the need for early career training:

"It's not too soon. Because there aren't actually lots of time in each semester to prepare for the job market, and if students try to find job after graduation, it's usually too late to get into the company in the same year."

Figure 3: *Stated aims of non-Chinese and Chinese international students (respectively) to seek employment in the UK post-study*

The solution lies in early intervention in students' careers, i.e. at foundation levels, so that they develop a mindset which self-motivates them to sustain career-training during their studies.Students can then exploit the luxury of time to study, socialise, develop and build knowledge and experience which will support them in future career choices.In the case of foundation students, these activities could be fun and engaging such as aptitude training, educational outings to companies, and awareness-raising about the world of work.

A distinction should perhaps be drawn between pre-job research skills, and the hard and soft knowledge and skills learned in the classroom.The former would include job market analytical skills, interview practice and building a CV which evidences commercial and voluntary experience.How should the development of this type of expertise sit with respect to the curriculum?It is possible that many activities could (and should) fall outside formal study time.Alternatively, could more careers training be explicitly embedded as an assessed curricula component? Could some hybrid arrangement be formulated which requires the collaboration of both academic and professional services departments?

Some may argue against my seemingly commercialised approach. But careers training is, in my view, a *constituent* part of progressive education.Academic and professional knowledge and skills are complementary and deeply entwinned to provide life and workplace success. Including a sustained element of careers training over time as a compulsory but flexible part of students' lives, would promote a mindset conducive to full engagement where it would support their development into adults, primed and equipped to enter the world of work.

It is clear that a close alliance between professional services, academic departments, students' unions, IT and other departments will be key to the successful rollout of meaningful and longitudinal careers training.Lecturers may require the support of professional services in understanding current requirements in the workplace so as to integrate them into curriculums. Professional services need to perhaps better understand academic requirements, constraints and objectives. Some institutions provide centralised schemes to allow students to accrue points towards 'employability' awards.My experience of such schemes is that, unfortunately, student uptake is low.While survey results made some recommendations to promote engagement, the key to combating this issue is to develop a change in the mind-set of students *over time* so that they are motivated to engage in sustained and structured career preparation.

If we do not intervene early we will not be supporting our students to make their best preparation for a successful life and career. In a political and economic post-Brexit climate where there will be greater reliance on international student fee income, and where students have so much to gain in terms of personal development, exposure to the workplace and guidance in career planning, it is more than ever incumbent on educators to play a leading role.

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The need to include career guidance and employability skills within international foundation programmes

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International Foundation Programmes (IFPs) are pivotal in fostering international students' academic and career success by enhancing their engagement with transition processes. This study investigates IFP alumni perceptions, uncovering a lack of career guidance and employability support as barriers to effective engagement. Alumni reported feeling less prepared than their home peers, highlighting the need for tailored, culturally competent career resources. Recommendations include embedding further career development into IFP curricula, promoting mentorship and peer networks, and facilitating early engagement with employability initiatives. By addressing these gaps where applicable, IFPs can empower students to actively participate in their educational journeys and prepare for professional success.

Introduction

Whilst employability is often the main incentive for international students studying abroad (Soares & Mosquera, 2020), employability skill policies in the UK remain focused on home students (Fakunle, 2021). The exclusion of international students hinders their development of academic and social capital (Bourdieu, 1988), reinforcing their status as "others" within higher education. This contributes to students experiencing a sense of not belonging and risks disengagement from academic and social communities (Thomas, 2012).

In the UK, high-quality careers guidance is deemed essential for supporting students to reach their full potential; with statutory guidance implemented in 2023 to ensure that all home students receive comprehensive careers advice before entering higher education (Department for Education, 2023). However, international students enter higher education from diverse backgrounds, with varying levels of guidance and support shaped by the educational systems and resources available in their home countries.

Once students enter higher education, they all have access to careers advice and opportunities to develop employment skills. However, international students often face unique barriers in engaging with these resources, which can include cultural and linguistic differences, unfamiliarity with UK employment practices, and navigating visa restrictions. Yet, despite their willingness, international students frequently encounter challenges in accessing opportunities for paid and unpaid work experience. These challenges are largely unexperienced by their home student peers, who benefit from enhanced cultural capital and a deeper understanding of career expectations in a UK context.

Research

A recent in-depth study was conducted, utilising listening rooms (Parkin and Heron, 2023) and walking intraviews to collect rich, detailed qualitative data on their experiences. It involved six IFP alumni, who had completed their foundation year in 2022/3 or 2021/22, and were purposefully selected to reflect diversity in terms of their home countries, ages, and progression degree programmes, offering a

range of perspectives. While the small sample size limits generalisability, the diversity of the participants provides valuable insights into the nuanced experiences of international foundation students.

The research aimed to gain a deeper understanding of students' perceptions of their foundation year, focusing on what they valued most and what had had the most impact on them. This was intended to inform programme improvements and support smoother transitions for future foundation students into undergraduate studies. Although the alumni were not specifically asked about career or employability skills, reflexive thematic analysis (Braun and Clarke, 2022) revealed that all participants highlighted this as a missing aspect of their foundation year. They perceived that the limited availability of integrated employability knowledge and skills had negatively impacted them, leaving them feeling less prepared and inferior to their home peers. This finding highlights the importance of fostering greater engagement with career-related skills to enhance international students' confidence and readiness for the demands of higher education.

Generic careers guidance

When reflecting on what was missing from their foundation year, some alumni expressed that they felt unprepared for undergraduate studies and the world of work:

"I would have liked the opportunity to focus on careers, (…) just more information available and what career paths that we'll go into…"

Alumni perceived pressure to have a career plan once they began their undergraduate programme and wanted more time during their foundation year to consider their career options. In a discussion about what would make an ideal foundation year, students suggested more information on career paths, internships, and other career-related opportunities. They wanted not just career advice but also guidance on employability skills, such as understanding the role of internships and how to explore these opportunities.

The alumni considered this lack of knowledge hindered their ability to compete with their home peers, leaving them feeling overwhelmed, unprepared, and less likely to engage with career opportunities or apply for positions. The IFP could play a pivotal role in addressing this by providing students with the tools and guidance needed to explore potential career options, thereby supporting them in realigning their capital portfolio (Lin, 2014). This approach could help to increase their confidence to make informed decisions, actively engage with career planning, and better navigate both their career paths and the job market.

Specific careers guidance and skills development

Alumni also expressed a desire for more specific career guidance and skill development during their foundation year, such as how to write a CV and covering letter, and how to develop a Linkedin profile. They stated there was a significant focus on careers once they were an undergraduate and perceived home students were notably more prepared, engaged and at an advantage, compared to international foundation students. One student recounted during their undergraduate welcome week:

"I didn't have a CV. (…) and so many things are happening, (…) you're applying for memberships to societies and certain positions like freshers' reps, and they're asking you for your CV and this is the second week!"

This alumna had wanted to apply for a position in a society but did not have a CV. They felt unable to apply for any roles, hence missed out on opportunities to engage and gain valuable skills and experience. Another alumna discussed the pressure and competitiveness they felt when trying to secure an internship, early in their undergraduate journey:

"You have to start thinking what kind of career you're looking into and because if you don't, you'll start seeing your friends getting offers into big firms and you're like: Where are my offers? Where am I going?"

These reflections highlight the need for early access to career development resources that enhance students' academic and cultural capital, such as CV writing, interview practice, awareness of internships and networking opportunities. These resources are crucial for enabling international students to understand industry expectations and develop and align their skills with market demands, and actively engage with career development opportunities. By fostering this engagement, students are better equipped to build the confidence and knowledge necessary to navigate potential career paths and integrate more effectively into professional networks.

Comparison with home peers

A recurrent theme from all of the alumni was the perception that they were at a disadvantage compared with their home peers, citing a lack of preparedness and limited access to relevant resources. They reported feeling stressed by the competitive nature of undergraduate studies. These findings highlight the need for foundation programmes to better equip students with the skills and knowledge required to compete on an equal footing with home students, whilst fostering a more inclusive environment that values diverse forms of capital. For IFP students, the independent and autonomous approach often expected in UK higher education may act as a barrier to accessing career support services. This highlights the importance of integrating career-related resources into foundation programmes in a scaffolded and culturally competent way, acknowledging that students are not a homogenous group and require tailored approaches. By addressing these gaps, IFPs can help students build the confidence and self-efficacy needed to navigate the unfamiliar challenges of their future studies and careers.

Conclusion and recommendations

The findings highlight the importance of IFPs providing comprehensive support and resources to help students navigate the transition from foundation to undergraduate studies. By enhancing their confidence and reducing the perceived challenges of adapting to new academic and social expectations, IFPs can foster more inclusive and engaging environments. The following integrated and practical steps are recommended to achieve this, leveraging existing services and promoting collaboration within higher education institutions to ensure students can actively engage with opportunities beyond the programme.

Career development and support can be delivered through various mechanisms, such as embedding employability-focused content into core or skills-based modules, offering standalone workshops facilitated by careers teams, and signposting students to university services. Building partnerships between and with career consultants, international advisors, and external organisations can provide tailored support for IFP students. Additionally, involving alumni as mentors for current IFP students offers a valuable peer-to-peer support model. Alumni can share their experiences, enhancing career preparedness for current students while further developing their own skills. Similarly, engaging home undergraduate students as mentors can foster meaningful connections, enhance social integration, and positively influence students' academic performance (Arthur, 2017) and sense of belonging (Hughes and Smail, 2014).

With the above in mind, IFPs should work to ensure they:

1. **Integrate Career Development into the Programme**
   Career and employability skills should be embedded into the curriculum through workshops, alumni panels, and guest speakers to prepare students for the job market.
2. **Enhance Access to Career Resources and Support**
   Dedicated pathway career advisors and tailored workshops addressing visa regulations and employability strategies can help students navigate career paths effectively.
3. **Facilitate Early Career Exploration**
   Early exposure to career fairs, reflective goal-setting, and partnerships with local organisations can provide students with real-world insights and experience.
4. **Provide Mentorship and Peer Support**
   Mentorship programmes connecting IFP students with alumni or home undergraduates can foster collaboration, career insights, and social integration.
5. **Foster a Supportive and Inclusive Environment**
   Empowering students through feedback mechanisms, student-led initiatives, and inclusive practices enhances belonging and career preparedness.
6. **Address Inequities and Barriers**
   Tailored guidance on visa regulations and equitable access to career resources ensures all students are equipped for success.

By adopting these strategies, IFPs can create a supportive and equitable environment where international students thrive academically and professionally, preparing them for global careers while fostering inclusion and equality throughout their educational journey.

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Engaging international visual arts foundation students in primary research to develop their understanding and motivation:

A case study

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This paper describes a study which uses smaller galleries and employs a scaffolded approach to help international foundation students on a visual arts pathway understand and develop primary research methods such as observation and interviews, enhancing academic integrity. It outlines stages of the study along with findings, challenges and benefits. Though limited in scope it shows positive results in enhancing primary research skills and further independent study which ultimately also increases motivation and course engagement: building a sense of belonging and integration into the student and wider community.

Introduction

Supporting international visual arts students in methodological research is crucial for fostering academic integrity which is defined by the European Network for Academic Integrity as 'compliance with ethical and professional principles, standards, practices and consistent system of values, that serves as guidance for making decisions and taking actions in education, research and scholarship' (Tauginiene et al., 2018). For foundation students, a scaffolded learning approach is essential, helping them acquire the necessary concepts, knowledge, and skills incrementally.

This study aims to show that utilising smaller galleries and venues provides situations where students can gain more confidence in primary research skills, which in turn increases course engagement and motivation.

Smaller venues offer distinct advantages over larger galleries. Larger galleries can feel impersonal and crowded, making it difficult for students to focus, identify relevant pieces, and spend time studying or sketching. In contrast, smaller venues provide a more intimate experience with personalized talks, behind-the-scenes access, or exclusive use on closure days. This less-intimidating setting, shared with peers, encourages confidence in asking questions and communicating. Students also benefit from having ample time and space to sketch and take notes.

Literature review

Research in the arts is highly specific and requires a distinctive approach more likely using art itself for inspiration. Resources for teaching research skills in visual arts at foundation level are limited. For instance, Gray and Malins' *Visualising Research* (2004) and Biggs and Karlsson's *Routledge Companion to Research in the Arts* (2012) offer valuable insights but are more suited to postgraduate levels. Bell (2022) highlights a gap in methodology for EAP where traditional EAP resources focus primarily on secondary research and referencing, perhaps with primary research such as surveys and data analysis, which may not align with the specific needs of arts research. Gray and Malins (2004) argue individuality and personal development are key objectives in student-centred teaching in art and design.

Watson (2003, cited in Bell, 2022) stresses the importance of promoting learner autonomy and using authentic tasks to reflect real-world academic challenges. Von Lier (2004) introduced the concept of 'affordances' - learning opportunities that encourage active student participation. Perkins and Solomon (1994) introduce a methodology termed 'hugging' where 'learning in one context' can impact performance in another, a principle supported by James (2023) who notes the importance of connecting EAP input with subject-specific skills. In fact, Jeon (cited in James, 2023) states that a disconnect between EAP and subject courses can limit skill transfer and student motivation. Thus EAP lecturers should provide real-world opportunities for this transfer to take place.

International art students coming from diverse educational backgrounds may face several challenges. For example, some students may have had limited exposure to technology for research purposes or perhaps had limited access to galleries. Additionally, inadequate guidance on conducting primary research can hinder engagement: gallery visits often result in students simply taking photos without delving into deeper research or sketching due to time or venue constraints, resulting in mixed feedback on trip value. These issues underscore the importance of targeted instruction on research, particularly primary, and referencing conventions tailored to the visual arts.

Case study

The case study (Mulders, 2024) involved a multi-national Foundation cohort of 35 students, including from Nigeria, China, and Iran enrolled for a range of art specialisms such as film, illustration and game design: thus multi-disciplinary. The unit was an EAP academic skills one where the summative assessment was an essay evaluating their own primary and secondary research sources for a project. The venue was the Craft Study Centre, a gallery associated with the University for the Creative Arts. The exhibition was textile-based with some pieces focusing on sustainability. (*Making*: 50, 2024)

Methodology

Determined by gallery capacity, students were divided into groups of 8 each arriving 20 minutes apart. They were allowed to remain in the gallery as long as they wished.Students were instructed to circulate and identify either a work related to their specialism or directly to the project, or a line that resonated in the artist statement which could be cited. Roughly half the students spent extended time in the gallery, sketching, taking notes and photos and interacting with each other in discussion. Students who did not find a connection to the works were encouraged to consider display methods, lighting and labelling which would be helpful for their final major project exhibition. Students who remained in/returned to class worked on secondary research and their project.

Pre-visit preparation included input on a sustainability project, which tasked students with incorporating waste or recycled materials into their work highlighting single-use product awareness. Prior sessions covered academic integrity, identifying reliable sources, and Harvard Referencing, while an exhibition overview was provided using the Craft Study Centre website.

While visiting, task prompts encouraged close analysis of a piece through observation and sketching from different angles or focusing on a specific section. Students considered how the piece could integrate into their work by identifying resonant aspects, why these stood out, and potential changes to suit their own style or intent. They also reflected on questions to ask the artist, exploring their choices, techniques, or inspirations. A more comprehensive list of task prompts is included (Appendix 1).

Post visit, students worked individually or in groups to research their chosen artist online, analysing recurring themes and comparing these to their observations. They searched for contact details and, with peer and tutor support, created and refined questions. To streamline communication, they pooled questions with others who chose the same artist, avoiding the sending of multiple messages.

During the follow-up week, students presented artist replies individually (or in groups if questions had been pooled). Academic integrity and Harvard Referencing skills were consolidated through image captioning, citing and referencing artist replies, and adding appendices. Finally, students also completed a survey providing feedback on the sessions' value.

Results

The questionnaire, which included a mix of multiple-choice, 5-point Likert scale, and open-ended questions (Appendix 2), revealed several insights. Seventy-seven percent of students found the activities very or extremely useful for understanding primary research (Fig. 1), while 65% reported that the out-of-class activity was more motivating than in-class work, aligning with a key aim of the study (Fig. 2). Fourteen out of 35 students contacted an artist, and 8 received a response, representing 40% of the group—a higher-than-expected outcome and a positive result. The low score for artist contact could be attributed to the lack of relatability for students from disciplines like film and animation and the fact that 6 students had not received replies by the time of the survey.Activity evaluation showed that students found the gallery visit more enjoyable than useful, while the discussion and question-forming activities, though less enjoyable, were perceived as beneficial (Fig. 3). Strong engagement with the survey provided extended answers to open-ended questions, offering valuable feedback.

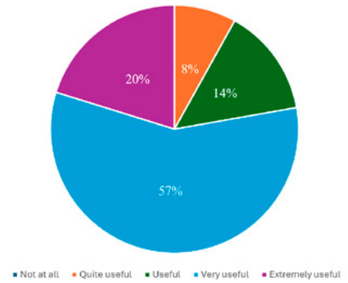

Figure 1: *Q: Was the day's input useful in understanding primary research?*

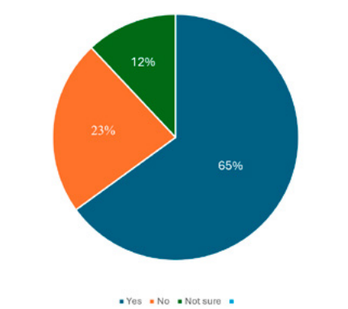

Figure 2: *Q: Is out-of-class work more motivating than in-class work?*

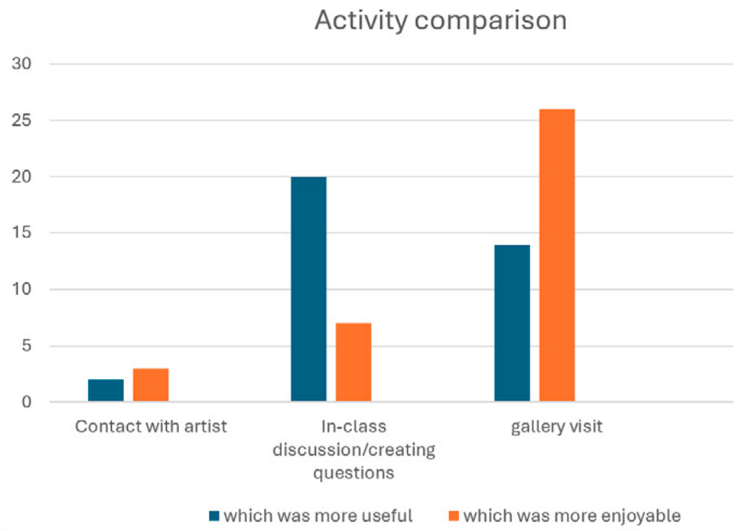

Figure 3: *Activity comparison*

Implications

Advantages for teachers include the opportunity to build relationships with event organisers and galleries, simplifying future collaboration for educational visits. Supporting small galleries also contributes to their sustainability and survival, as they rely on community engagement. Additionally, increased interaction with students fosters stronger relationships and provides valuable insights to inform future teaching. Teachers can also gain specialist knowledge from students and subject colleagues, enhancing the quality and relevance of course content.

Challenges using this methodology include creating tailored materials for each event or gallery, which might be streamlined with adaptable templates. Identifying specific, relevant events is time-consuming, while liaising with galleries and preparing the trip adds another labour-intensive component. Additionally, managing large groups, especially for distant venues, requires adequate staffing and resources for smooth coordination.

Despite the complexity of planning and execution, these sessions offer clear benefits for students. They provide a practical, authentic experience of primary research and a context-based approach to Harvard referencing which is more engaging than using random examples from course books. Immersive learning enhances understanding of academic integrity and analysis skills, leading to deeper learning. Students build confidence in research and communication with peers and professionals. The sessions create memorable experiences often referenced later, while varied activities sustain interest and engagement. Reflection through surveys fosters valuable feedback for both students and lecturers. Finally, these sessions strengthen the link between English for Academic Purposes (EAP) and subject specialisms.

Conclusion

The study, though limited in scope, shows positive outcomes in enhancing visual arts students' understanding of primary research and engagement with EAP skills, as evidenced by their research files and sketchbooks. Future research should examine ways to tailor sessions for multidisciplinary groups, potentially through smaller, discipline-specific visits. However, staffing, costs, and scheduling constraints pose challenges. Institutions can still prioritise practical EAP experiences and incremental interventions to maintain student motivation. Encouraging cross-disciplinary thinking, even when activities may not seem equally relevant to all, could also foster critical thinking skills. This approach may guide other institutions in balancing discipline-specific needs with broader pedagogical goals.

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Appendix 1

Outline/ task suggestions for a gallery visit to support primary research

Today's objectives:

- **To explore the work of xxx**
- **To select works relevant to your subject specialism and/or project**

Practical exercise: Explore, create, respond: In your sketchbooks record/show how selected art elements or principles were used with annotation. Consider elements such as materials, composition, colour, theme, texture, repetition...

These should be related to your own specialism. Analysis of technical and stylistic features of specific artworks related to your subject area with your own observations and interpretation of ideas is important for primary research and inform your own creative outputs

Analysis exercise: Try to give your own unique perspective on the artwork that you see and write the answers to the questions below. This work will be completed at the gallery and for homework and this sheet can be added to your reflective journals.

(Note: selection of questions per event/ visit)

1. What are some repeated motifs in xxxx's works?
2. What do you think xxx is trying to communicate? Do you think he/she is trying to communicate?
3. How have ideas been communicated through the formal elements in the work?
4. Why do you think xxx has used yyy as a media?
5. How does xxx's work differ from other artists in this genre?
6. Do you see a common theme in xxx's works?
7. What is the historical/geographical/ cultural context of the work?
8. What ideas is the work trying to explore?
9. How might his/her sketches and drawings influence your own style or process?
10. How does the work engage the audience?
11. Does xxx's exhibition/work make you feel anything? What?
12. Explain how the image/work reflects both playful and serious elements.
13. How do you think xxx sees his/her role in society? What does the work do?
14. Do you like or dislike the exhibition? Or not feel anything? Why?
15. How important is the placement and lighting of the work?
16. Does the work inspire you? What specific aspect inspires you?
17. Reflect on the specific work you chose to sketch: why did you feel a connection to it? Was there an issue it was addressing that resonated with you? What was it?
18. Which elements would you like to use in your own art works? How would you adapt them?
19. How has the research changed the way you think about your ideas and own work?
20. How would you reference the work to use it in any oral or written paper?

Appendix 2

Student Questionnaire IIF – CSC primary research: 20/02/2024

(Where applicable please circle the emoji that applies from: 😫 = not at all to 😀 = very)

1. How enjoyable was the gallery session?
   😫 ☹️ 😐 🙂 😀
2. What was the most interesting aspect/ information?
3. Was the day's input useful for understanding primary research?
   😫 ☹️ 😐 🙂 😀
4. Did you get any information you could apply to your own work? What?
5. Did you make contact with an artist?
   Y / N
6. Did you get an answer?
   Y / N
7. How useful was the answer to your own work/specialism/way of working?
   😫 ☹️ 😐 🙂 😀
8. Is out-of-class work more motivating than in-class work?
   Y / N
9. Out of the 3 sections for this input, which did you enjoy most?
   a. Gallery visit
   b. In-class discussion/creating questions
   c. Contact with the artist
10. Out of the 3 sections for this input, which do you think is most useful for your studies?
    a. a.Gallery visit
    b. b.In-class discussion/creating questions
    c. c.Contact with the artist
11. Thinking about the different skills we covered, which do you think you now feel confident about – tick all that apply:
    - Understanding and doing primary research
    - Working collaboratively
    - Thinking analytically when viewing a piece of art
    - Creating relevant material (questions for artist)
    - Harvard Referencing skills
    - Speaking: communicating your ideas
    - Connecting research to your own output
12. Thinking about the skills you did not tick, why do you think you are not confident about them? – list all that apply. (What do you need to know to become confident?
13. What was the biggest challenge in this lesson?
14. If you were a teacher, what would you change for a future, similar lesson?

Transforming learning:
Using mind mapping in the foundation-level teaching

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This article explores the effectiveness of mind mapping as a pedagogical tool in a Foundation classroom.The author shares some practical experiences with one cohort of students from our International Foundation Programme during the academic year 2023-24. Data collected from student feedback suggests a strong positive response to mind mapping, with most students indicating a desire to further develop their skills in this area. The article concludes that despite some limitations in data collection, mind mapping offers significant advantages for students across learning styles and abilities, promoting deeper understanding and fostering critical thinking skills.

Introduction

With the evolution and adaptation of technological advances, numerous tools and applications have emerged to create and share mind maps collaboratively and in real time. Scientific research continues to explore the cognitive benefits of mind maps and their potential of enhancing student's engagement, improving information retention, and personalising learning experiences. This article will introduce the principles of mind mapping, discussing its application within the educational setting and highlighting the practical benefits and challenges observed through its implementation. By examining the experiences of students from the International Foundation Programme, we aim to demonstrate how mind mapping can serve as an effective tool to enhance learning outcomes.

Buzan conception of mind maps

Mind mapping was introduced by Tony Buzan in the early 1970s, as an effective method for visualising and organising thoughts, it is an invaluable tool for enhancing student engagement. With the years, mind mapping has been found as a culturally relevant pedagogical approach that aims to improve the experience of teaching and learning (Buzan 2008).

Buzan (2008) advocates for mind mapping as a powerful way to capture and map human thoughts. The appearance of a mind map (Fig. 1) may seem intimidating for some students because it doesn't display much information, and some concepts appear too abstract. For example, the first branch above 'Natural Architecture' is divided into four sections. The section 'Great Thinkers' recalls some notable philosophers such as Leonardo DaVinci and Einstein who advocated using mind maps to tackle difficult concepts. Buzan (1996) refers to the most common linear method of notetaking as 'Our Mistakes', arguing that this method contradicts the natural way our brain works. He emphasises the idea of 'Radiant Thinking', where an idea or impression begins and then our brain develops it, moving in various directions with a variety of thoughts.These ideas and thoughts are better represented through a mind map, considering mind mapping lies in its use of colours, lines, and images, which create a playful and engaging learning atmosphere.

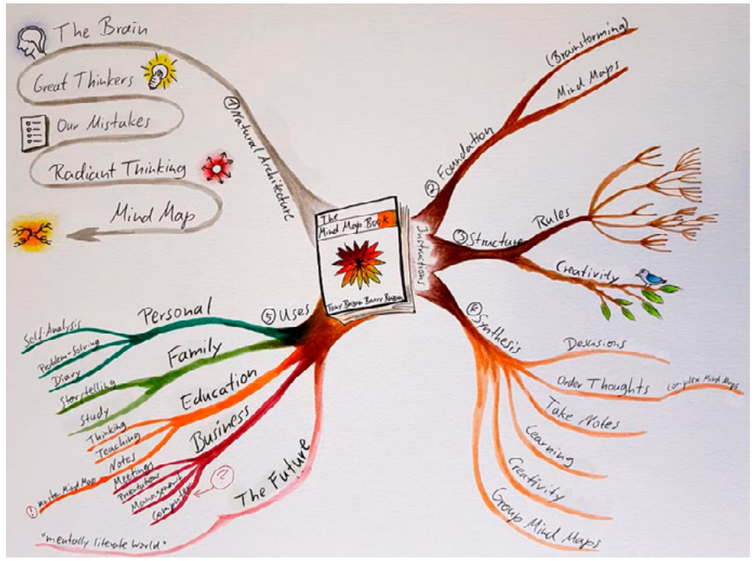

Figure 1: *Mind Map example from Tony Buzan Book (1996).*

The cognitive benefits of mind mapping in education

Key studies and expert opinions, such as those by Edward (2009), provide valuable inside into how mind mapping enhances learning and memory retention. Edward (2009) states that mind mapping is one of the most effective and efficient ways to input, store, and retrieve data from the brain. He also empathises with how mind mapping works with natural work of the brains, optimising overall potential and capacity and making learning more accessible and enjoyable for students.Studies such as Parikh (2016) revealed that mind mapping techniques are more effective than traditional methods. While traditional methods may involve linear note-taking and rote memorisation, which can be less engaging and less effective for some learners; mind maps offer a more dynamic and visual approach with higher engagement level (Shi et al., 2023).The visual and interactive approach might encourage Foundation students to develop personal connections, experiences, and creativity, capturing their thoughts and enhancing their understanding of complex concepts.

In international educational settings, mind maps can serve as an effective tool for summarising class materials, preparing for exams, planning research projects, and fostering creativity when exploring new topics. Taking my foundation level international students as an example, mind map can help them to memorise English words or enlarge the English vocabulary and synonyms, while for a science student it might help to grasp scientific principles. Business students benefit from mind maps by using them to facilitate and communicate strategic planning and problem-solving. This method encourages the exploration of various associations and connections between ideas, promoting the development of critical thinking and problem-solving abilities, which are crucial for foundational learning.

Mind mapping and personal experiences

The use of mind mapping in teaching and learning is supported by its ability to integrate visual and cognitive processes, accommodate individual learning styles, and promote active engagement and collaboration. The example in Figure 2 illustrates how mind mapping facilitates the note taking experience and retention process. The non-linear approach may help students to develop rapid connections and associations between ideas and fostering a deeper understanding of the "big picture" and the relationships among its branch parts (Shi et al., 2023).The "big picture" is also accentuated on having all figure and content in one paper, conceptualising what normally would take several pages of notes to express the same concept. This view enhances memory and information recall, fosters creativity and critical thinking vital skills for success with our students. The above example highlights both our students and educators can use mind maps to personalise their learning and teaching experiences and suit their different learning styles and

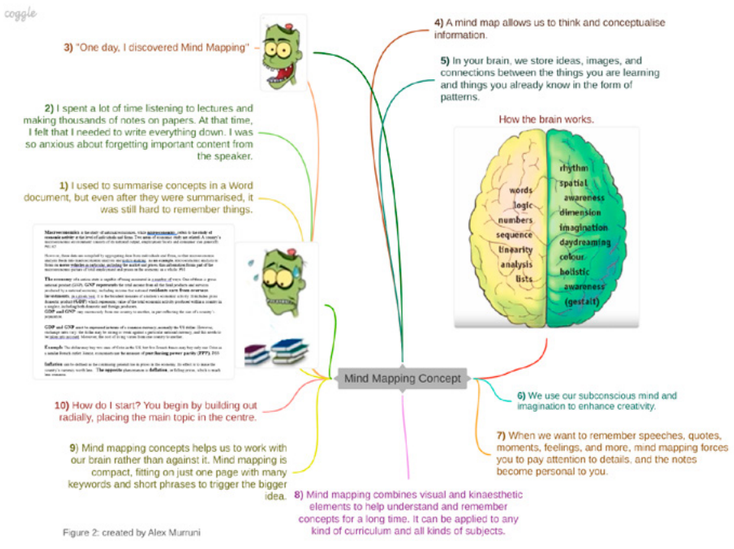

Figure 2: *Benefits from creating mind maps, self-created by Alex Murruni*

preferences, making education less aversive and more interesting. Despite engaging students with a linear note-taking technique can be a bit of a challenge, but with some creativity and strategic methods, educators can make it more interactive and effective. Here are some strategies: encourage students to actively participate in notetaking by asking them to write down key points, questions, and summaries during the lesson. This keeps them engaged and thinking critically about the material. Finally, the tutor might use the white board to map and summarise all the points or ideas students bring forward during discussions, this process helps consolidate their understanding and provides a concise reference for future study. These benefits make mind mapping a valuable tool for educators aiming to enhance the learning experience and outcomes for their students.

Understanding student reactions: Observational findings

Teaching international students and promoting mind mapping for students' active learning and collaboration give some advantages. I noticed that during the task activities students formed more inclusive learning groups, compared to the same task but doing individually and then sharing ideas. Low attainment students who benefit more from higher performing students during task activities may focus less on the individual results but more on making connections and developing their own understanding while the visual map is evolving.

This method suggests that mind mapping does not limit what students can do; rather, by identifying the main concepts of a topic and new insights together with the connections within the subject matter, it enhances students learning experience, creativity and critical thinking comparing to the traditional methods.

I conducted this qualitative research by observing my 17 international students during their 1st foundation year in 2023-24. I incorporated different learning activities by using mind maps during the academic year, from group collaborative activities with their research projects to individual tasks for planning presentations or action plans for revising or learning new concepts. The table below demonstrates the questions asked and summary of their collective answers.

Questions	Summary
How does mind mapping help you understand the main concepts of the topic?	• Key finding 1 Majority of the students benefited from using mapping in terms of having the key points always visible in one page and breaking down topics into manageable chunks, helping students to collaborate more effectively.
What criteria did you use to organise the information on your mind map?	• Key finding 2 The dissimilarity existed in organising information for most of the students. The importance of specific content varies from student to student. This can be explained by the limited number of words used to define/explain a concept.
What challenges did you encounter while creating the mind map?	• Key finding 3 For students who acknowledged challenges, they found it difficult to understand how to work with branches and to develop their mind maps further.
During the academic year, informally asked on one-to-one basis whether they were using mind mapping for any activities.	• Key finding 4a Some students randomly used mind maps to take notes, but most continued to use traditional methods. • Key finding 4b The main reason for not relying on mind maps is that it is difficult for students to adapt to a new method and discard other linear methods used for a long time
At the end of our 10 teaching weeks, during the exam/ assessment period, I randomly asked if they had used mind mapping to help with their revision.	Key finding 5 Some students started using mind mapping for their exam revision. Around 10% of the student's mind mapped their assessments. 15% of the students mapped the key points to assess their understanding. The remaining 75% didn't use it at all.
During their final period of studying with us, I investigated whether they wanted to continue practicing the mind mapping technique in their future studies.	• Key finding 6 The majority of the students showed their positive attitude to mind mapping. They want to experiment it more while they progress into university.

Table 1: *Summary of the key findings*

Key takeaways from the findings

Despite my strong intention to promote mind mapping among students, and although it may not be universally applied by students and academia during lessons and activities. There is a strong support from different literature (Buzan 1996- 2008, Edward 2009, Parikh 2016, Shi et al., 2023) that emphasise how mind mapping resonates more with how human brain works and retains information rather than those traditional methods, such as linear note-taking and rote memorisation, which can be less engaging for many learners. The results with this cohort of foundation students are quite encouraging. From the data collected, mind mapping offers significant benefits in group activities for both lower attainment students and high-performing students, as it actively fosters creative thinking and brainstorming while promoting active engagement with material. Students benefited from identifying new insights and relationships that are more difficult to discover with conventional methods. Mind mapping encourages students to process information more deeply and use colours and picture to make connections with the key concepts, so therefore, they can develop their own understanding of the material.

The results show that some students embrace the initial ideas of mind mapping, but they do not persevere and make mind mapping as a habit for every subject they learn.This is especially true for those who struggle with the structure and technique of mind mapping, particularly how to branch the ideas and decide what relevant information can be included. From this perspective can be concluded that any teaching and learning method can face reluctance from some students, clear guidance and practice at the initial stage are crucial for students at any level to effectively continue to utilising this technique as they advance in their academic journey.

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Promoting linguistic empowerment in international foundation year:

Challenging texts; inclusive pedagogies

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International Foundation Year (IFY) programmes serve a diverse student body, including many navigating the complexities of academic English. This study highlights how linguistic approaches can be integrated within English language modules for A&S (Arts & Social Sciences) and STEM (Science, Technology, Engineering, Mathematics) disciplines, fostering holistic development while engaging students.

Introduction

This article outlines a pedagogical approach based on academic literacy to engage with students and subject experts meaningfully in International Foundation Year (IFY) programmes, rather than from what could be considered a deficit English language support approach.

Integrating linguistic approaches into IFY is crucial for fostering meaningful academic experiences that facilitate learning. To achieve this, we focus on academic communication, disciplinary identity, language, and the role of English for Academic Purposes (EAP) practitioners. Understanding the distinct disciplinary communities of practice is critical for making EAP modules relevant and accessible to students.Collaboration with subject experts makes academic communication transparent and equips students with the tools they need to navigate their academic disciplines effectively (Bruce, 2015).

Fostering students' sense of scholarly identity is a key objective of IFY programmes. By incorporating opportunities for students to engage with texts and practices specific to their disciplines, we enable them to see themselves as active members of their respective disciplinary communities. Such identity building increases confidence and engages students with their discipline. By using challenging disciplinary texts, students develop their linguistic skills to contribute to academic discourse, ultimately preparing for successful undergraduate careers.

This article presents our work at three levels. At the macro level, regardless of discipline, we raise questions about the 'preparedness' of our students as they work in new study environments and how related issues are addressed through academic literacy. The meso level highlights the importance of disciplinary genres across modules by integrating texts on topics that align with students' interests and disciplinary orientations. At the micro level, we foreground the engagement with challenging academic texts and propose several approaches to enable students to deconstruct academic language and communication. The two authors teach specifically to Arts and Social Science (A&SS) and STEM (Science, Technology, Engineering and Mathematics) at the IFY level. While they are tailored to students' specific needs, we observe shared underlying threads. Across strands, our implementation empowers students to become effective language users, thereby fostering strong engagement as successful future undergraduates.

Macro-level: Navigating the university through academic literacy

Drawing on the theoretical framework of Academic Literacies for academic writing pedagogies (Lea and Street, 1998), we can articulate insights which feed into teaching. These promote an understanding of university variations and demands on students' communicative repertoires and make 'a student's negotiation of conflicting literacy practices' more transparent (Lea and Street, 1998 p.157). For students in A&SS, collaboration with subject leads has been crucial on the compulsory forty credit module, which works bi-directionally: with the EAP practitioner's approach emphasising language as situated and social rather than as a purely technical skill. The obvious starting point is through analysis of genres used across modules, but this has been enriched by conversations with subject leads to ensure a more ethnographic development in the EAP module takes place over time.

In STEM, understanding disciplinary genres is equally important for academic literacy. A key feature in scientific communication is the distinction of findings from their interpretation, a convention fundamental to how scientific knowledge is presented, understood, and critiqued. This is often manifested in separating 'Results' and 'Discussion' sections in scientific genres.There is also growing emphasis on communicating science to the general public, particularly on global issues such as climate change and sustainability. This requires students to not only master disciplinary genres but also make scientific concepts accessible. For example, students were asked to each identify and discuss an article from the *MIT Technology Review*, a popular science magazine, in relation to how innovations in sustainability were introduced and communicated in relation to their respective disciplines. By understanding both the internal conventions of scientific writing and the broader need for public communication, STEM students are better equipped to navigate the demands of their academic and professional futures.

Meso-level: Supporting disciplinary communications

With the nine A&SS pathways being necessarily broad in subject scope, there has been a focus on changing the EAP module syllabus to align with their topics and typical genres. A closer look at the reading lists of concurrent modules reveals a variety of genres, including those that are more 'classic' (articles; review articles; foundational textbooks) as well as hybrid, multimodal and complementary genres such as blogs, videos, and 'living galleries.' Bruce (2008) refers to 'social genres' - entire texts with specific social purposes. With knowledge of social genres, we work towards complementing the subject modules, bringing EAP expertise to these modules. It is also an opportunity to draw on the students' experience as they live and work in our context. For example, as part of 'Identity in Society' in Semester 1, we include research and a guest lecture on International Students' Experiences.

For STEM, the EAP module focuses on building core scientific knowledge and developing the skills necessary for effective disciplinary communication. Unlike A&SS, where identity plays a prominent role, STEM subjects often have less emphasis on their disciplinary identity or the broader scientific community in students' early studies. The EAP module addresses this gap by focusing on language to help students better understand their assignments and feedback to enhance their engagement. The module encourages students to develop confidence in communicating within their disciplines by building knowledge and skills in STEM-specific genres, such as technical reports, lab reports, and software evaluation. Students also engage with original research articles and learn to report various metrics and statistics. In practice, this can be done in EAP modules through guided text analysis to build students' ability to understand disciplinary conventions. Given the nature of scientific knowledge, which is often considered part of the 'public domain,' there is typically less emphasis on theory or individual scholars in STEM disciplines. Consequently, citation practices differ, with less focus on individual contributions and more emphasis on widely accepted facts and data. This approach therefore equips STEM students with necessary tools to navigate the disciplinary conventions effectively.

Micro-level: Engagement through challenging texts

At class level, our students are challenged through several difficult academic texts across their A&SS modules – often focussing on seminal theories in each subject area. To enable students to approach these with more confidence, systematic academic language development classes have been introduced in the last two years for the EAP module in A&SS. The language workshops drew on Systemic Functional Linguistics as an appliable theory (Martin, 1992; Martin and Rose, 2007).Rather than being 'bolt-on,' these workshops work with the genres we already read in the EAP module all along the semester. This enables students to build up a familiarity with areas of language choice within these genres and to start questioning their own at interpersonal, ideational and textual levels of student writing genres, too. For example, in workshop one, we incorporate analysis by using the tool 'theme and new' to evaluate coherence in example text excerpts. In workshop three, we analyse interpersonal language use between an academic book chapter and an academic article introduction. We compare use of personal pronouns, passive voice and inanimate subject plus verb. Students are often surprised to see that personal pronoun use is common within the book chapter (the author is well-established in his field, with frequent self-reference), while the article is much more likely to foreground 'the study' (inanimate subject followed by verb, e.g. 'this study reveals that.'). We also discuss discourse expectations from different pieces of writing the students are doing. Reflection is a common written genre for the Arts and Humanities students, while the essay continues to be the main contender in the Social Sciences modules.

In STEM, the EAP module addresses the challenges of engaging with scientific texts by emphasising comprehension, application, and reflection. Students are taught to view scientific texts in context, fostering critical thinking about the relevance of the science being studied. Level-appropriate articles are selected from prominent sources like *Nature* and *Science* to provide authentic texts illustrative of the academic style in science writing. Drawing on Bjork and Bjork's (2014) notion 'desirable difficulties,' the selected

texts need to be relevant to the topics at hand and show novelty in the technology to keep students interested. Additionally, reflective practice is incorporated to develop students' sense of progression and ownership of learning. Reflective writing is becoming more standard in practical disciplines, such as engineering and biomedicine, as educators see its benefit for continuous improvement. The EAP module provides step-by-step instructions to guide students through the writing process of reflective writing, equipping them to critically engage with the science community.

Conclusion

Looking forward, exploring collaborative opportunities between subject experts and EAP practitioners will enhance the holistic development of students across disciplines. By collaborating with subject experts, EAP practitioners can continue to design inclusive pedagogies addressing the diverse student needs, ensuring they are equipped to navigate the communication demands throughout their academic career. We encourage fellow EAP practitioners to actively seek collaboration with academic departments, thereby enriching learning experience and creating effective support systems as students transition to their undergraduate studies. Together, we can foster an environment where language empowers students to become engaged, confident members of their academic communities.

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Fairness in group assessment through peer and self-evaluation

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Despite their perceived advantages, group assessment is frequently associated with problems arising from unequal contribution, free-riding, clique forming and even feelings of inferiority, particularly because of poor language ability, often leading to dissatisfaction among students. To mitigate this, peer and self-evaluations (PE and SE) have been introduced in higher education institutions as a means to create a greater sense of fairness in the assessment process, whilst enhancing students' responsibility and reflection. This study reports on foundation students' perception on the role of PE and SE in group assessment and on whether they contribute to fairer grades.

Background

The value of group work as a form of assessment has long been recognised and justified among educators. Nevertheless, group work is frequently associated with unequal contribution stemming from free-riding, for instance (Davies, 2009). In addition, group assessment may conceal students' heterogenous contribution. To mitigate this, studies have demonstrated that active learning activities through various methods of peer evaluation (PE) and self-evaluation (SE) contribute to a greater sense of fairness in the assessment process, besides enhancing student responsibility, autonomy and reflection (Ion et al., 2023). As such, instead of addressing the challenges of group assessment, this paper is premised on methods for increasing student perception of fairness in group assessment through thoughtfully designed peer and self-evaluation.

The foundation programmes at the University of Nottingham Malaysia (UNM) enrol an ethnically diverse student population each academic year. Bringing people of diverse backgrounds together and requiring them to collaborate on group assessments naturally elicits some challenges. Varying attitudes, study patterns, and time management styles, besides language proficiency (or lack of) are factors that considerably affect group dynamics and ways of working. While group assessment provides opportunity for knowledge sharing, individual knowledge structures and conflicting perspectives are not so easily received by peers (Wang and Zong, 2019).

Oftentimes, foundation teaching staff receive complaints from students experiencing unresolved conflicts during their group work, accompanied by requests for fairer allocation of marks to reflect the unequal contribution of certain member(s) of their team. Resolving such issues is not only time consuming for lecturers but can also be tricky to handle without sufficient evidence to corroborate students' claims. Although this is a common and longstanding issue, due to tight marking deadlines, lecturers may expect students to 'bite the bullet' and resolve conflicts on their own whether or not they have acquired conflict resolution skills as part of any formal curriculum.

To minimise issues faced in collaborative work, some foundation teaching staff at UNM have redesigned assessments to include PE and SE components. However, discussions with these lecturers indicate that there are different practices in the use of PE across the four foundation programmes. Naturally, this varies depending on the type of assessments. Some group assessments include a compulsory PE component, some optional upon request by groups facing unresolvable conflicts, and yet others without any form of PE or SE (in other words, evaluating only the final product). PE is also more commonly used compared to SE.

It has been reported that assessment of group work usually results in the same grade for all students (Barfield, 2003). Yet, PE provides an opportunity for both the process and the product to be assessed more fairly and accurately because students can evaluate the contribution of each group member (Cheng

and Warren, 2000). This should enhance students' perception of fairness, rendering PE as a viable means for increasing the quality of assessment of group work (Forsell et al., 2020).

Recognising the use of different practices among the foundation teaching staff, it was opportune to investigate students' experience of, and hence, their preferences for the different methods of PE and SE. The authors hoped that this endeavour would have a positive impact on the way foundation students approach collaborative work at university.

Thus, this study aims to:

1. Examine foundation students' perception of group assessment and the likelihood of fairer grades through PE and SE; and
2. Propose (more) effective PE and/or SE practices/methods to increase foundation students' perception of fairness and overall satisfaction in their experience with group assessments.

Method

An online survey was distributed to students in four foundation programmes at UNM namely Arts and Education, Business and Management, Science, and Engineering. Following a number of demographic questions, respondents were asked to provide feedback on various aspects of their experience with group assessment, as well as their preferences, opinions and suggestions on the use of PE and SE methods. A total of 166 responses were gathered from the online survey carried out through the Qualtrics software. The data were analysed using both Qualtrics and IBM Statistical Package for the Social Sciences (SPSS v.28).

Findings

Issues encountered by students in group assessment

Out of the 161 respondents who reported having participated in group work during their foundation studies, 83% acknowledged having encountered various issues. Some of the main issues disclosed were lack of communication (57%), free riding (50%), lack of cooperation (41%), conflicts (40%), lack of participation (40%), sucker effect (25%) and personality clashes (25%). Concurrently, it was encouraging to find that 68% of the respondents reported being able to resolve the issues faced, indicating that they may have successfully utilised some conflict resolution skills.

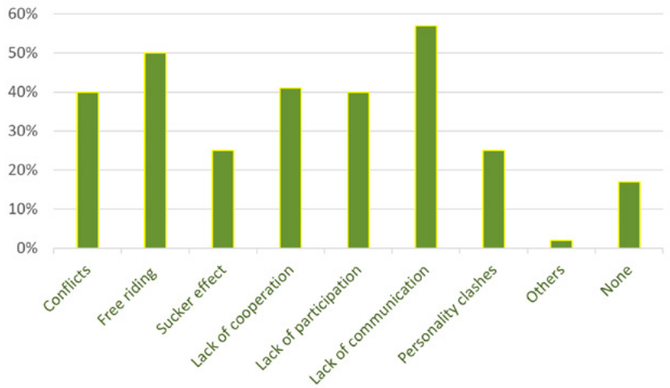

Figure 1: *Issues encountered by students when doing group work*

Student preferences of PE and SE methods

The study found that while 77% of the respondents had previously experienced formal PE, only 37% had done SE. Among the former, 70% believed PE contributed to fairer grades; and of the latter, 71% believed SE contributed to fairer grades. This suggests that PE was indeed more frequently carried out than SE, yet both have contributed to a perception of resulting in fairer grades.

The study survey used a 5-point Likert scale to gauge respondents' opinions on some specificities of PE and SE methods, as illustrated in table 1 below, in the order of highest mean.

Not surprisingly, the results indicated that respondents felt strongly that free riders must be penalised. They also opined that PE forms should be made accessible to all students; that PE should be carried out anonymously using a consistent method across a programme; and that those who contributed more to group work should obtain higher grades.

Results also indicated a higher preference for compulsory PE over compulsory SE. In addition, respondents indicated that they would contribute more to a group assessment with PE and SE components than without. Respondents also felt that although SE might be less effective in resolving issues in group work, it may help individuals understand their strengths and weaknesses better.

The survey also asked respondents to propose the types of evaluation to be included in group work. In this regard, 58% indicated a preference for both PE and SE; 36% preferred only PE; a mere 2% chose only SE; whereas 4% were not in favour of either evaluation method.

Preferred evaluation criteria

Respondents were asked to rate the importance of 15 criteria for evaluating themselves and other members' contribution to group work; the distribution of importance placed is displayed in Figure 2. More than 50% viewed meeting deadlines, sharing the responsibilities for group work, submitting quality work and being respectful of other

	Mean	SD
Free riders should get zero or lower marks than the rest in the group.	4.14	1.005
The peer evaluation form should be made available to all students.	4.13	0.918
Peer evaluation should be made anonymous.	4.11	1.101
A consistent peer evaluation method should be used across the programme.	4.01	0.860
Group members who contributed more to the group work should get higher marks.	3.87	1.004
Self-evaluation may help me understand my strengths and weaknesses better.	3.73	0.904
I will contribute more to a group work assessment with a peer evaluation component.	3.61	0.906
Peer evaluation should be made compulsory.	3.61	1.138
I will contribute more to a group work assessment with a self-evaluation component.	3.28	0.905
Self-evaluation should be made compulsory.	3.26	0.914

Table 1: *Student responses to PE & SE statements*

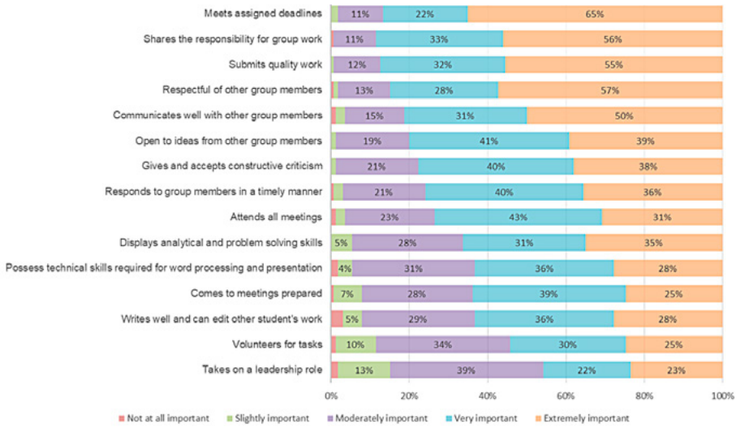

Figure 2: *Preferred evaluation criteria*

group members as extremely important criteria for inclusion in PE and SE. Around 80% considered communicating well with other group members, being open to ideas from other group members, giving and accepting constructive criticism and responding promptly to group members as very important or extremely important. Surprisingly, attendance at and preparedness for meetings, analytical skills, problem solving skills, technical skills, writing skills and editing skills, as well as volunteerism, were regarded as less important. Willingness to take on a leadership role was treated as the least important criteria. This finding seems to suggest that attitudinal and behavioural related criteria were preferred to those associated with higher skills and capabilities.

Conclusions

There are a number of conclusions arising for reflection. Firstly, the overall student perception is that the inclusion of PE and SE components does contribute to a greater sense of fairness in group assessment. Moreover, respondents indicate that they would potentially contribute more towards group work that include PE and SE components. Secondly, the inclusion of an SE component may also encourage students to become reflective learners who carefully consider their own strengths and weaknesses. Thirdly, respondents also seem to favour evaluation criteria that promote team ethos over higher skills and competencies. In sum, the overall sense of fairness is dependent on how PE and SE are both designed and administered in group assessment.

Recommendations

This study therefore recommends the adoption of transparent evaluation approaches to mitigate issues in group assessment, which could improve the ways of working of both the teaching (and assessing) staff as well as their students.

Some practical takeaways can be proposed from the findings of this study. Firstly, group work would benefit from a combined PE and SE criteria that is compulsory and consistent across a particular programme of study. Secondly, PE feedback from students indicating the need to grant a lower mark for less / non-contributing group members should be acknowledged, and this is crucial towards creating a sense of fairness. In fact, this directly implies that an assessor's inaction in the face of evidence creates dissatisfaction amongst those who contributed fairly and responsibly. Next, PE should be done anonymously because students may feel unable to honestly evaluate other members during an open session. And lastly, some of the highly rated evaluation criteria should be included in the design of PE and SE in group assessments.

On a more general note, wider adoption of PE and SE methods could benefit students by enhancing soft skills and stimulating positive behaviours in collaborative work, whilst cultivating workplace readiness. Besides addressing commonly occurring conflicts, PE and SE infused group work that provide the opportunity for foundation students to acquire and develop the skills and confidence to evaluate peers' work and reflect on one's own strengths and weaknesses could help to create greater autonomy and a sense of empowerment.

Notably, teaching staff could also benefit from approaches that promise a smoother assessment process without the additional, time-consuming effort of dealing with dissatisfied students seeking external intervention for conflict resolution. Subsequently, this enhanced teaching and learning approach should align directly with any institution's education strategy that places greater emphasis on the wellbeing and development of both its teaching staff and its students.

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Two-stage exam format used as formative assessment for learning and feedback

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For STEM students on the International Foundation Programme taking Foundations of Biomedical Sciences 2023-2024, the two-stage exam was adapted as a formative assessment to develop students' subject knowledge and assessment literacy through discussion and instant peer feedback. This unit included students aged 17–24, from 25 nationalities, and with CEFR levels B2–C2. Variations of the two-stage exam were tested to evaluate their effects on engagement, discussion and feedback. Findings indicated strong student engagement, with the preferred variation involving individual short answer questions (SAQs) followed by rephrased collaborative SAQs which developed understanding while fostering meaningful discussion through peer-driven insights.

Introduction

Collaborative testing has been used as summative assessment in many contexts with the purpose of improving student learning and performance (Rao et al. 2002, Gilley and Clarkston, 2014). A common format for this is two-stage exams where students first complete and submit an individual answer, and then following in smaller groups, complete a collaborative answer. There are different variations of the format in respect of the questions in the individual and collaborative stage. E.g., both the individual stage and the collaborative stage can consist of the same type of questions such as multiple choice questions (MCQs) or short answer questions (SAQs), the questions in the collaborative stage can be a subsection only of the individual stage, or can be MCQs even if the individual stage was SAQs (Murphy et al. 2023, Khong and Tanner, 2021). In some cases, the collaborative stage can again be submitted as an individual answer following the group discussion (Efu, 2019).

The purpose of the collaborative stage of the assessment is to provide instant and focused feedback to the students, improving their learning (Nicol and Selvaretnam, 2022). Research has not consistently shown that collaborative assessment has a positive effect on students' performance and retention of specific course content. Suggested reasons for this include differences in difficulty of content, knowledge recall versus more complex processes and concepts, and novice vs veteran students (Rao et al. 2002, Leight et al. 2012). Nonetheless, many studies report students find the process positive, with the discussion helping their learning as well as the development of skills such as critical thinking, problem solving, the ability to present an argument, collaborative skills, and in some instances a reduction in exam anxiety (Rao et al. 2002, Efu, 2019).

Two-stage formative assessment format and feedback to students

Previously, students taking the Foundations of Biomedical Sciences unit have taken part in regular formative assessments, answering exam-style SAQs under timed conditions during classes. Students received written individual feedback comments on their answers, and general feedback to address common errors was provided during class. Through the feedback, students developed their understanding of the expectations for summative assessments on the IFP Foundations of Biomedical Science unit. Students said it helped them understand better what the questions were asking and the level of detail needed in answer. Additionally, routine formative assessment provided students and tutors with ongoing feedback on students' overall progress. Students said that it helped them check their knowledge and showed them what they needed to study more.

Formative assessment variations

Traditional	Two-stage exam format		
	Variation 1	Variation 2	Variation 3
Individual SAQs	*Individual stage SAQs* *Group stage MCQs*	*Individual stage SAQs* *Group SAQs identical to the individual stage*	*Individual stage SAQs* *Group SAQs different to the individual stage*

With the aim to improve students' subject language skills and promote learning through social constructivism (Vygotskiĭ & Cole, 1978), the formative assessment was adapted to the two-stage exam format. This allowed students to receive instant peer feedback, it promoted deep learning, and the collaborative group stage also supported development of students' collaboration and academic communication skills. During the initial trial of the two-stage assessment, students were presented with an individual stage consisting of SAQs, followed by a collaborative stage consisting of MCQs. The MCQ format was chosen initially as the mid unit exam for the unit consists partially of MCQs (variation 1). Students engaged in constructive discussions during the collaborative stage, and the move to a two-stage format was well received by the students. However, student feedback indicated a preference for the formative assessment to focus solely on SAQs.

This gave rise to a second format of the two-stage assessment, where students were presented with identical SAQs to answer during both the individual and collaborative stages (variation 2). In addition to promoting group discussion, this modification to the two-stage assessment format encouraged critical reflection upon individual answers and allowed for immediate peer feedback. Despite these positives, it was observed that in some collaborative groups, students with more subject knowledge dominated the group, reproducing their individual answers without group discussion.

To overcome this, a third format of the two-stage assessment, where both the individual and collaborative stages were presented to students as SAQs, was developed. However, whilst the collaborative SAQs assessed same subject knowledge as the individual SAQs, the questions were phrased differently and used different command words (variation 3). This format reduced the likelihood of reproduced answers and highlighted to students that subject knowledge could be assessed in different ways, thereby improving exam literacy.

For the collaborative stage student groups were either assigned at random, or pre-determined by the tutor to ensure an equal mix of subject and language ability per group. For all variations of the two-stage exam format, students were allowed 10-minutes to complete each of the individual and collaborative stages.

The collaborative stage of the two-stage exam format provided additional opportunities for students to generate internal feedback and thereby enhance their learning. The feedback provided by the tutor for both the individual and collaborative stage was a Red, Amber and Green (RAG) rating rather than a grade. This encouraged continued dialog between both the students within the collaborative groups, as well as with the tutor, about how the students applied their learning in the assessment and how they could improve their study strategies (Vanttinen-Newton and Andersen, 2021).

Student feedback on the two-stage exam format

Students responded very well to the two-stage exam format of the formative assessments. Figures 1 and 2 show 91.5% found it useful to do the formative assessments, and 75.6% found that the feedback from the formative assessments influenced the way they studied.

(82 out of 106 students responded – 77% response rate)

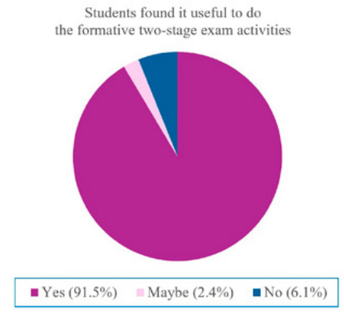

Figure 1.

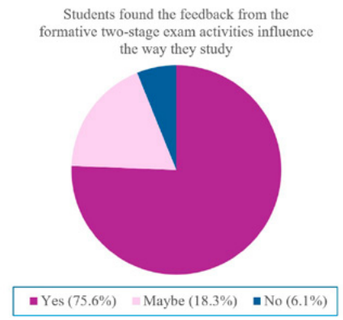

Figure 2.

Students found the collaborative stage of the two-stage exam format beneficial, improving their confidence and learning through discussion, and that it worked well in respect of participation within the group. Figures 3, 4 and 5 show 86.1% of the students strongly agree or agree that 'The group discussions made me feel more confident about the answers', 'Every group member contributed to the learning process' and 'Discussing the questions with my group changed my answers'.

(72 out of 106 students responded – 68%), (questions adapted from Giuliodori et al., 2008)

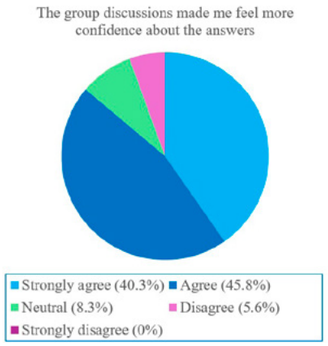

Figure 3.

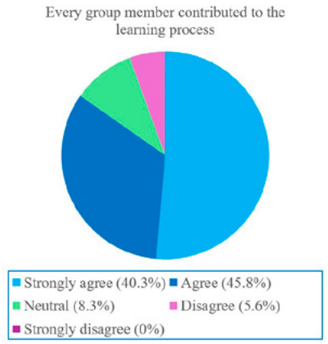

Figure 4.

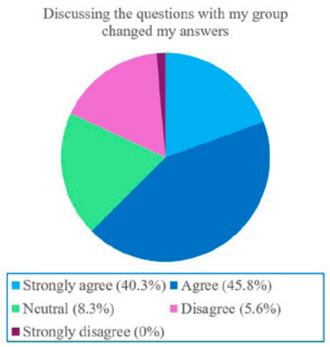

Figure 5.

Students were very positive about the two-stage exam format as a formative assessment and enjoyed the process. They found the discussion in the collaborative stage, as well as the formative assessment in general, helped develop their learning and assessment literacy.

Student comments about collaborative stage:

- Helped improve my understanding of questions
- Helped me check my knowledge
- Helped me learn how to give better answers
- Helped me feel more prepared and confident for the summative assessment
- The feedback improved my understanding
- The other students helped me learn

Many students expressed reservations about the two-stage exam format being used as a summative assessment, particularly how the groups would be organised. In the formative assessments different ways of organising the groups were trialled, such as students choosing their own groups and tutors setting the groups for them to have a balanced variety of ability in respect of knowledge and language in the groups.

Student comments about the grouping during collaborative stage:

- Worried about having passive students in the group
- Want teacher to decide who are in the group so they are even and fair
- Worried about being in group with students who do not prepare well
- Would like students to choose who is in their group

Conclusion

The adaptation of the two-stage exam format as a formative assessment in the IFP Foundations of Biomedical Sciences unit enhanced student engagement, deepened subject understanding, and improved assessment literacy. The variation featuring rephrased collaborative SAQs, was most effective, fostering critical reflection and knowledge sharing practice based on instant peer feedback. Students valued the collaborative stage for improving confidence and exam readiness, though concerns about group fairness and potential use in summative assessment were noted.

To address grouping concerns, tutors adopting the two-stage assessment model should balance groups by subject knowledge and language ability while offering students some input in group selection. Expanding the use of the two-stage exam format as formative assessment across STEM subjects could further promote instant feedback, improving learning outcomes and boosting programme wide exam literacy.

The two-stage format shows strong potential for fostering active learning, collaboration, and reflective thinking, offering a valuable tool for enhancing formative assessment.

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Facilitating student engagement through project-based learning in a multidisciplinary foundation year

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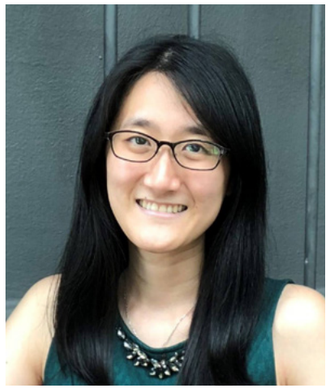

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Contributing to the small body of literature on project-based learning (PjBL) in higher education, this article documents the adoption of PjBL within a multidisciplinary foundation year. The project aims to cultivate the sociological perspective in students while allowing them to embark on a self-directed learning in sustainable development. Multiple quantitative and qualitative measures of student learning reported in this article highlight the cognitive, affective, and behavioural outcomes resulting from the adoption of the project approach. The article discusses these findings through the lenses of learner autonomy and student engagement while reflecting on the challenges of implementing PjBL at foundation level.

Introduction

With the growing call for educators to "teach less" in the classroom, greater focus has been placed on student-driven learning experiences. In the past quarter of a century, project-based learning (PjBL) has been widely assessed in the literature as a pedagogical approach and adopted in classrooms to encourage students to take charge of their own learning. Founded on principles of constructivism, project-based learning is often defined by the following features:

1. The project is problem-oriented, guided by a central driving question.
2. The project requires interdisciplinary or multimodal investigation.
3. The problem presented for investigation is situated in a real-life context.
4. The learning process is driven by students with multiple opportunities for formative feedback built into the process.
5. The project culminates in a concrete artefact—a tangible end-product. (This is a distinctive feature that differentiates PjBL from similar approaches like problem-based learning and experiential learning.) (Adderley, 1975; Helle et al., 2006; Kokotsaki et al., 2016)

Nevertheless, the bulk of the existing literature documents the implementation of PjBL in K-12 contexts, and relatively little has been done to investigate its implementation and efficacy in higher education settings. Reviewing studies on PjBL conducted in higher education settings, both Guo et al. (2020) and Helle et al. (2006) highlighted the lack of empirical evidence produced to objectively measure the impact of PjBL on student learning. While the present work does not immediately bridge this gap, it documents the design and implementation of a PjBL assessment in the unique context of a multidisciplinary foundation year and reports on multiple quantitative and qualitative measures of student learning, highlighting the value of PjBL on student engagement at foundation level.

Context

With the growing call for sustainability education, the social science module of our multidisciplinary foundation year incorporated a project designed around the United Nations' Sustainable Development Goals (SDGs). Over the course of eight weeks, students were asked to investigate a real-life problem or phenomenon within the university community and frame their investigation with one or more of the UN SDGs. The project culminates in an 8- to 10-minute mini-documentary (the artefact) that captures their investigation. The main learning objective is for students to develop and apply the sociological perspective through their investigations while learning about the impact of sustainable development on their immediate community. The 220 foundation students enrolled in the module were a mix of those pursuing the business pathway and those pursuing the arts and education pathway in the foundation year, and students were asked to form interdisciplinary groups.

To scaffold students' learning, groups were asked to submit a proposal with a driving question for the project in the second week for formal formative feedback. Students were also invited to discuss their project with the instructor at any point prior to the final submission with some time allocated during class for such discussions.

Student learning was assessed through the following:

1. Assessment of the final artefact based on content criticality and depth, application of the sociological perspective, and presentation of the video
2. A comparison of pre- and post-project surveys about students' knowledge of SDGs and attitude towards sustainability
3. Individual post-project reflection

Sample Artefacts

The artefacts submitted were of different levels of criticality and depth, and featured a wide array of topics. Nevertheless, descriptions of two sample artefacts below offer a snippet of the self-directed learning that students undertook.

Artefact #1: Women in Engineering

Driving question: "How can we examine gender equality through the experience of male and female lecturers in Foundation in Engineering to address preconceived gendered notions in (the university)?"

SDG: #5 Gender Equality

The documentary opened with statistics of the gender ratio in STEM, among the university teaching staff, and more specifically within the Foundation in Engineering (Figure 1). The rest of the documentary featured interviews with a few teaching staff in the Foundation in Engineering. The female academics talked about their professional journey in STEM and in higher education, their experience working in a male-dominated environment (including their classrooms), and challenges they faced along the way (Figure 2). An interview with the ex-head of department discussed efforts by the department to pursue gender equality among staff and students (Figure 3). The video ended with recommendations to create greater gender equality in STEM. Through this project, students explored the lived experiences of their immediate community within the global issue of gender equality. They also developed the sociological perspective by exploring how gender shaped the professional experiences of the individuals they interviewed.

Figure 1: Gender ratio among teaching staff

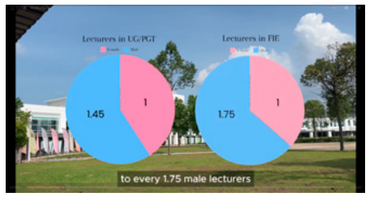


Figure 2: Interview with female teaching staff

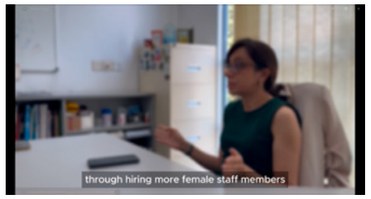
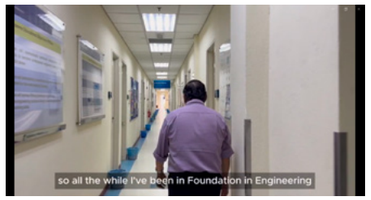


Figure 3: Interview with ex-Head of



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Artefact #2: Food Waste Segregation

Driving question: "How can we promote responsible waste management practices among university students to ensure proper utilisation of food waste bins and minimise contamination with non-food waste?"

SDGs: #11 Sustainable cities and communities; #12 Responsible consumption and production

The documentary opened with statistics on the amount of food waste generated globally, and their environmental and social impacts. The group then conducted their own investigations on awareness and practices of food waste separation among students (Figure 4). The documentary also captured the waste separation process and preparation of food waste for composting (Figure 5) while interviewing with the waste management worker about challenges he faced when food and non-food waste were not properly separated (Figure 6). Through this self-directed learning, the students went behind the scenes and "got their hands dirty" to understand how individual actions yielded greater social and environmental effects.

Figure 4: Surveying students on food waste disposal

Figure 5: Preparing waste for composting

Figure 6: Interview with waste management worker

Measuring student learning

The pre- and post-project surveys provide a quantitative measure of student learning. The SDGs were introduced using one of the UN's videos and further resources were made available on Moodle. A comparison of the pre-project survey (n=209) and post-project survey (n=213) shows that students' cognitive understanding of SDGs and attitude towards sustainable development improved after the project.

Figure 7: Comparison of students' knowledge of SDGs pre- and post-project

The individual reflections also indicated that the project yielded behavioural and affective outcomes. Table 2 shows the skills and traits students self-reported after completing the project:

LABEL	DESCRIPTION	NO. OF STUDENTS
Collaboration	Working with others to achieve a common goal	184
Communication	Conveying information and ideas clearly	181
Critical thinking	Developing questioning, analytical, and problem-solving skills; being able to evaluate relevant strengths and weaknesses, put forth informed arguments, and reflect on your own beliefs and choices	129
Subject awareness	Understanding how your chosen topic has greater social impact	112
Emotional intelligence	Having empathy, care, and concern for yourself, others, and the environment	99
Resilience	Overcoming difficulties and challenges to press on towards the goal	95
Confidence	Knowing that what you do can make a difference	92
Continuous learning	Having a commitment to lifelong learning and development	82
Sustainability action	Taking action in a way that facilitates environmental social wellbeing	54
Agency	Understanding how to and feeling able to influence and achieve change	44
Interdisciplinarity	Being able to see how different disciplines intersect to produce a joint effect	37

Table 2: Skills and traits developed through the project

ITEMS	Pre-Project Reflection		Post-Project Reflection		DIFFERENCE
	MEAN	SD	MEAN	SD	
I know what sustainable development is.	3.11	0.70	3.61	0.64	+0.49
I believe that sustainable development is important.	3.63	0.67	3.81	0.57	+0.18
I believe I have a personal responsibility towards sustainable development.	3.19	0.70	3.48	0.68	+0.29
I believe I can contribute towards sustainable development.	3.08	0.75	3.35	0.67	+0.27
I believe that sustainable development has a real impact in my community.	3.38	0.76	3.70	0.61	+0.32
I believe that sustainable development has a real impact on my personal life.	3.16	0.78	3.48	0.68	+0.32

Table 1: Comparison of students' attitude towards sustainable development pre- and post-project

Students' written reflections are more nuanced and offered a glimpse of their personal engagement with the learning. Four key themes emerged from their written responses, and sample quotes are provided below for illustration:

Practical behavioural change

- "I used less plastic bags and straws"
- "This project made me use more public transport than own car."
- "I have become more proactive in advocating for sustainable practices within my community."

Realisation of personal agency

- "I understand that while my recycling practices may only contribute a small part, *collectively, they can lead to substantial positive change*."
- "A significant change in my outlook is the new feeling of *personal accountability* that I now have towards sustainable practices... this project has highlighted *the crucial role that individuals and communities play* in promoting sustainable efforts."

Personal affective impact

- "Witnessing the challenges students face firsthand has made this a *more personal issue* for me"
- "I am more aware of my actions and the consequences now as *I empathised with the workers* when filming them segregating the food waste and plastic under suffocating working conditions"
- "It was *very surprising* for me to see how much plastic is actually wasted"

Understanding of social connectedness

- "I have come to appreciate *the interconnectedness of social justice and SDG*. It's shown me how addressing systemic inequalities, such as racism, is crucial for achieving sustainable and inclusive development globally."
- "Recycling practices show how *interconnected* environmental, social, and economic dimensions are within sustainability efforts."

Conclusion

Introducing PjBL at the foundation year offers exciting opportunities to enhance student engagement, which often encompasses the cognitive (how students think), affective (how students feel), and behavioural (how students act) dimensions (Fredricks et al., 2004). The multiple measures of student learning presented above have pointed to positive cognitive, affective, and behavioural outcomes, indicating holistic engagement in the learning process.

Guided by Deci and Ryan's self-determination theory (2015), Pigou's study (2022) concluded that student engagement also increases with greater learner autonomy. The student-led nature of the PjBL approach empowered students to chart their own learning as they had to decide on a topic for investigation, design the investigation, and create a final artefact—all within the real and tangible environment in which they live. With this increase in autonomy and personal connection to the project, students are compelled to engage more intimately with their learning process.

Nevertheless, the implementation of PjBL at the foundation level required significantly more resources, including significant pre-planning from the instructor and more scaffolding support for students that take place outside of class time. For larger class sizes, logistical coordination may pose a challenge too. However, since PjBL presents opportunities for interdisciplinary teaching and learning, designing a single project as an assessment for multiple modules could address some of the aforementioned challenges. Therefore, effective implementation of PjBL within a foundation year requires intentional design and incorporation at programme level.

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InForm Exchange

The role of 'leaderboards' in enhancing engagement

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The issue of boredom in EAP courses is a challenge for many educators when cultural factors or teaching styles influence it. In response to student feedback about an EAP module being uninteresting, a leaderboard approach was implemented. This involves the use of leaderboards, an element of gamification. Gamification is the incorporation of gaming features into non-game contexts. Grounded on the theory of goal-setting, leaderboards can serve as an engagement tool that may help alleviate student boredom. The feedback from students indicates a high level of engagement and interactivity, which in turn fosters a supportive and positive learning environment.

Introduction

Student engagement in English for Academic Purposes (EAP) courses is essential to academic achievement as it facilitates positive language learning. However, many tutors face challenges in addressing teacher-induced and activity-induced boredom (Kruk et al., 2022), which affects interpersonal dynamics and learning outcomes. Upon reviewing students' evaluations of an EAP module, the report shows several statements implying dissatisfaction, often concerned with a lack of interaction and engagement. In response to this challenge, a gamification feature, notably leaderboards, was used with EAP students to enhance their engagement. Leaderboards are a gamification tool that ranks students based on performance and provides performance feedback by using spreadsheet software to track and manage the leaderboards. The leaderboard approach aligns with goal-setting theory (Locke,1968); in real-time score progress, students are motivated to achieve goals where they strive to reduce the discrepancy between the target goal and actual performance. This thereby increases the likelihood of student engagement.

How leaderboards work in our EAP context

Culture influences patterns of behaviour (Phillipson & Lam, 2011), and it can be argued that one prevalent behaviour usually in a classroom is the tendency of students to be reticent. It might be that the logic behind this overt behaviour is that for some students who originate in Asian countries such as China, Korea and Japan, reticence and humility are valued, possibly leading to an environment where most students feel discouraged from expressing themselves orally. This cultural conditioning may lead students to exhibit *alexithymia*, where they cannot identify and communicate their emotions, increasing proneness to boredom (Way et al., 2010). This could pose a challenge among teachers when students remain passive.

In response to this, a decision was made to gamify the class to increase student engagement. The semester typically begins by forming ad-hoc groups, allowing students to collaborate more flexibly and dynamically. They can create groups (usually three members) with the people around them or by grouping via a shared characteristic e.g., birth month. Members will vote for their 'captain,' 'presenter,' and 'notetaker.' Each group will be encouraged to complete the *'system habits'* weekly, consisting of 'Active Speaking' – 50% and 'Task Success' – 50%. A simple spreadsheet, accessible by students and instructor, can be used to track and manage the groups and their respective roles, making it easier to organize and review their work. Also, displaying it allows efficient tracking of each group's score helping with accountability. Points will be awarded in 'Active Speaking' if students answer questions. Sometimes, half a point can be awarded to a group even though the answers are wrong. This is because the *'system habits'* strive to foster a culture of open and positive student expression.

'Task Success' involves any collaborative activity during class time. Points will be awarded if a group completes a task during a jigsaw activity, creates graphic organizers, or does a simple think-pair-share activity. Extra points will be awarded for above standard output. For example, in a jigsaw activity, students would not only contribute relevant ideas from their sections but also ensure that their explanations connect with the ideas shared by others, helping the group synthesize the material into a cohesive whole. To make students aware of this measure, setting clear expectations at the outset and outlining what 'above standard' means for the activity is essential. Furthermore, for evidence of learning, students are usually asked to post their work on a Microsoft TEAMS Channel. Total points will be computed automatically by formulas in the spreadsheet at the end of a week from the accumulated points of their 'system habits' and 'task success'. A weekly summary of their progress as a group will be presented and emailed.

Benefits of leaderboards

Leaderboards have multiple benefits in a class. Firstly, it creates a strong desire to improve. Sailer et al. (2017) have shown that participants display higher levels of competence and need satisfaction, which refers to individuals' intrinsic desire to feel effective in their activities, contributing to their overall motivation. As a result of this competition, one student has transformed from being timid to becoming expressive. Additionally, student progress has been monitored throughout the semester through a visual representation of performance in a spreadsheet, which offers a diagnostic tool to assess levels of engagement. This ensures that future teaching and learning decisions can be made with greater insight by the instructor. For students, it can be a point of inspiration when they see they are making significant learning strides. Thirdly, the 'system habits' nurture a culture of engagement in a positive environment where the emphasis is on 'efforts' rather than innate 'talents.' This is especially beneficial for cultivating a growth mindset as it encourages students to improve through hard work rather than solely relying on innate abilities. Finally, students take ownership of their group roles. It allows them to be autonomous and thus exercises their leadership skills, which may result in a more active class engagement. In simple terms, students appreciate when they feel their roles are appreciated. At the end of each semester, groups that have performed well are typically awarded a small token such as a certificate of recognition to acknowledge their significant contributions to their learning.

Challenges of leaderboards

Establishing rapport among students is crucial when introducing gamification elements like leaderboards; otherwise, some students may view it as immature, especially when transitioning between secondary education and higher education. Emphasizing 'growth mindset' principles such as *learning with practical optimism and focusing on progress, not perfection* (Wilson & Conyers, 2020) and maintaining a supportive culture are vital, as students benefit when clear expectations for improvement are set. Consistency in reporting weekly group performance can also be challenging, particularly during marking periods. It is recommended to implement a weekly Friday routine to check system habits, ensuring results are emailed by Monday. When providing feedback, it is important to highlight students' strengths and motivate other groups to improve, explaining that weekly scores reset to zero, thus allowing opportunities for progress.

Reflection

"Leaderboards' encouraged students to compare themselves upward (Balci et al., 2022). As students become accustomed to the 'system habits', freely expressing their ideas without cultural restrictions, the class becomes more engaged. As students become more comfortable speaking, their thoughts become clearer, which might not be obvious when they are hesitant.

It is also helpful to adapt your teaching style when incorporating 'leaderboards,' making it more personalized in your context. Gamifying your class, making it more fun and achievable, may appeal to students already overwhelmed with life burdens and academic responsibilities. Not only as a tool for motivation and engagement, 'leaderboards' stand as effective feedback on learning concepts that may contribute to students' overall well-being and academic performance.

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Troubled waters:
The future of internationalisation and international pathways

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The first half of 2024 was a challenging year for the international pathways sector and for higher education in the UK overall. The Times published an article questioning the quality and entry criteria for international pathway programmes which triggered a debate around whether international students were taking the places of home students. This article explores the political context which forms the backdrop to this and goes on to discuss implications and suggest steps going forward.

Introduction

The first half of 2024 was a challenging year for the international pathways sector and in fact for higher education in the UK overall.

The Times (2024) published an article questioning the quality and entry criteria for international pathway programmes which triggered a debate around whether international students were taking the places of home students; a theme which comes up every few years but in the context of the wider political and funding issues, took a stronger grip.

The political context was a commitment from the then government to reduce immigration figures; a commitment they were struggling to deliver on. Targeting international students offered easy wins. This was evidenced in the withdrawal of the dependent visa for students, which affected mostly postgraduate students and specifically women. There was then the MAC (Migration Advisory Committee) review (UUK, 2024) which looked at the poststudy work visa which had specifically been brought in to make the UK a more attractive study destination. This process produced significant angst in the sector given the huge contribution international students make to the regional and national economy. All of this worked to negatively impact the image of UK university education, making us seem unwelcoming as a destination. To add fuel to the fire, the then prime minister was personally talking down certain academic disciplines, branding the programmes as 'mickey mouse degrees' (Quinn, 2023).

What was the fundamental issue underlying all of this? Much of it can be rooted back to the funding of HE. Home fees in England have not been increased since 2012 with the result that their value today is significantly less than their value back then. The current real time value is calculated to be around the equivalent of £6000+, a £3000 reduction. Whereas international student fees used to subsidise research, as the home tuition fee has devalued and humanities and arts degrees no longer produce the surplus which subsidised science degrees, international student fees are now needed to subsidise teaching. So far from taking home places, viewed from a certain perspective, international fees are subsiding home student places.

There is possibly another issue going on here which is less visible. This issue is the fact that international pathways are a lesser known and less understood type of programme and are therefore often misunderstood by academic colleagues within the institution as well as beyond.

Whenthe issues discussed above arose in early 2024, UUK was quick to respond by commissioning the QAA to carry out an independent review (QAA, 2024). This was a helpful response given that objective evidence was needed. The fact that objective evidence was needed, speaks volumes about the sub-sector.It relates to programmes which are not degree programmes, that are delivered by a range of parties and that are less standardised.

These programmes are delivered by private pathway providers, universities themselves and a combination of these (see table 1 for the models currently operating). When delivered in-house, there is a lack of consistency of model: some are centrally located and others are located in a faculty; some are academic departments and others are situated within a central administrative department. In other words, are these programmes academic programmes or are they recruitment tools; is this a part of the recruitment strategy or the academic strategy of the institution?

In terms of the programmes themselves, despite some similarities, for example, academic study skills, English development and subject orientation, there is some variety with regard to how much subject content they contain. For some institutions, and for many private pathway providers, the programmes are seen as upgrading content knowledge to A'Level (level 4) although delivery is aligned to university style delivery and assessment. For others, the English and academic skills development are at the fore and the subject is there as a vehicle for these. This difference is probably little understood also.

Where to from here?

We in international pathways need to work proactively to promote the enormous benefits of the work we do and the high standards we work to. All university-run programmes come under the institution's own QAA processes, just as degree programmes do, and the majority of pathway providers have voluntarily signed up to the OfS to demonstrate their focus on quality.

There is a body which represents institutions who run their own international pathway programmes; the University Pathway Alliance (UPA). The UPA is currently working on an IFP level descriptor. Level descriptors exist for each level of a degree, but there is no equivalent descriptor for level 3 delivery of an international foundation programme. This will provide an objective descriptor which will offer standardisation to the UPA members and hopefully, beyond. The UPA is also establishing a Special Interest Group on assessment to investigate and address some of the recommendations from the QAA report.

There is also work to be done to showcase within and beyond the sector the purpose and benefits of international pathway programmes and the significant work carried out to ensure a quality student experience and the outcomes for both students and institutions.

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Model 1	The international pathway programmes are owned and run directly by the university
Model 2	A private education provider is recruiting and preparing students via an on campus international college e.g. Kaplan, Study Group, INTO, Navitas, CEG, Oxford International
Model 3	The university has its own provision in addition to working with a private education provider as follows: i) Own IFY plus receiving students from an external centre run by a private education provider in partnership with another HEI within the city as a city based centre rather than institution based ii) Own plus London College e.g. many HEIs partner with Kaplan to receive students from their London Centre iii) Own or private education provider plus NCUK: NCUK largely offer off shore foundation programmes
Model 4	The university runs its own pathway programme alongside a partnership with a private education provider who recruits the students onto the university's own programme(s)
Model 5	Partnership/hybrid version: The university provides the academic content and staff to deliver the academic teaching; the private provider recruits students and provides student support
Model 6	A university offers IFY/IFP as Year 0 of a joint degree overseas (4 year degree)
Model 7	Private education provider delivers the international pathway programmes and the university's own English Language Centre delivers the English language separate from the academic study skills.

Table 1: *Source: Lawrence, N-A, (2024). Angst over the quality of International Pathway Programmes: Is it justified? WonkHE*

This is a call for papers for Issue 25 of *InForm*

The submission of papers is now invited for Issue 25 of InForm from members of the academic community associated with International Foundation Programmes. Issue 25 will be published in Spring 2026. We are interested in articles related to the variety of academic disciplines commonly found across international foundation programmes and remind contributors that InForm is not predominantly an English language teaching journal. As well as article submissions, we welcome letters in response to articles in the current issue (max 200 words). Submissions should be sent to **inform@reading.ac.uk** by 5pm on Friday 10th October 2025.

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B33532 03.25