

## Issue 21 April 2022 Official Services of the services of the

A journal for International Foundation Programme professionals

Pedagogies of Purpose: Education for a fairer, fitter future The Brick Lane field study: Facilitating a legitimate sense of place through remote learning Decolonising an IFP: The experience so far Improving students' experience in learning mathematics through modelling real-world problems

### This issue:

Student Support and experience: In and outside the classroom







### *InForm*

## 2022

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### **Enhancing Inclusivity in the IFP**

We are pleased to announce that the InForm 2022 Conference will be held at the University of Reading.

The aim of this conference is to bring together a collection of research and ideas as well as an opportunity for interaction and sharing of practice with colleagues from the IFP community.

### Saturday 30th July 2022

Whiteknights Campus, University of Reading

Conference fee: £70 in person

Conference fee: £35 online

We welcome presentations and posters related to the theme.

To submit a proposal and/or register please email inform@reading.ac.uk

Proposal deadline: Monday 16th May 2022



### InForm Issue 21 | April 2022

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## WELCOME



Noor Mat Nayan
Chair of the InForm

Editorial Board

Welcome to the 21st issue of InForm. This year there have been some changes in the InForm editorial board. Mark Peace has stepped down as the chair of the editorial board and I am now taking over his role. We would like to thank him for his hard work and dedication to InForm.

### From the Editorial Board...

2021 continued to be a challenging year for us all on the IFP with the everchanging rules and regulations due to the pandemic. Supporting our students in such unprecedented times in and outside the classroom was a priority. Despite the circumstances we found innovative, ingenious, and alternative approaches to ensure that our IFP students still had the support and experience to bring them through the transition into their undergraduate programmes. Taking the above into consideration, the theme of this issue is "Student Support and Experience: In and Outside the Classroom" which was also the theme of last year's conference.

The papers that have been chosen in this issue describe various aspects of student support and experience encompassing both contexts - in and outside the classroom. In the last issue we introduced a new section called InForm Exchange which proved to be a success and, as a result we have continued to keep this section.

Our first paper is by Cathy d'Abreu entitled 'Pedagogies of Purpose' and discusses how Education for Sustainable Development (ESD) was embedded in IFP modules using the Pedagogies of Purpose (POP) toolkit. Some examples are described to show how the POP toolkit can be used to support students in their learning as well as module design and assessment. The next paper by Sebastian Kozbial investigates the use of exploratory practice as a student-centred learning approach to support Chinese undergraduates and examines the challenges this poses for students who are used to more corrective feedback. Mark Holloway and Jill Fenton then describe a creative approach to support students doing field studies by recreating a sense of place and bringing the outside experience into the online environment. The following two articles discuss supporting students' learning experience in the sciences. Paul Mackay describes the H5P software which can be used to create asynchronous and synchronous materials to support Hyflex learning in maths and physics and Viciano Lee proposes a 7-step process of mathematical modelling to improve student experiences via modelling real-word problems. Finally for this section, Jinying Ma, Kathryn Paterson, Stuart Donaldson, Stephen Blowers and Junyi Li examine an area that can sometimes be overlooked, i.e., post exams support by providing individualised learning plans to repeating students.

The InForm Exchange section brings together a collection of shorter articles which describe ongoing practice, reflections and opinions of IFP practitioners. We start with Victoria Wilson-Crane and Samuel Kwan's article on how students are supported from the very beginning of their Pathway journey. They discuss a Pathway preview which comprises pre-arrival learning resources. Then, Jon White describes how to use website assignments to develop transferable skills which can motivate students to be creative and diverse, hence widening vocational skills and employability. Victoria Sala Arslan's article highlights the amount of vocabulary that IFP students encounter in HE and proposes that an Institution Word List is crucial in supporting students to learn and reach their potential. The last article by Amy Stickels, Allyson Edwards and Samantha Grierson describes the global movements that have shaped student experiences outside the IFP such as Rhodes Must Fall and 'Why is my curriculum white?' and how they have started their journey to decolonise the IFP curriculum.

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.

Additionally, we are happy to announce that this year's InForm Conference will be hosted by the University of Reading on 30th July 2022. The theme of the conference is "Enhancing inclusivity in the IFP". The conference will be hybrid allowing face-to-face sessions as well as online participation for those who cannot attend in person. We invite you to register either as a presenter or participant. For more information, please see the enclosed advert on page 4.

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

## Pedagogies of Purpose:

### Education for a fairer, fitter future

This paper introduces the role of Education for Sustainable Development (ESD) outlining why we are embedding it on the Foundation Programme at Oxford Brookes. The 'Pedagogies of Purpose' toolkit distils core insights from Transformative Learning Theory (Mezirow, 2000) and the UNESCO ESD competencies (2017) to present a simplified, visual aid to invite educators to orientate teaching and learning for a fairer, fitter future. It suggests a shift from 'what' we teach, to focusing on 'how' we engage students with learning for sustainability, offering a few examples of activities, assessments and course design to stimulate socially, environmentally and culturally critical thinking.

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### Introduction:

The concept of pedagogies of purpose builds on Paolo Freire's (1972) premise of the emancipatory potential of education. It harnesses established knowledge in the literature on pedagogy and hopes to support educators, from any disciplinary background or entry level, to engage and empower their learners "to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity" (UNESCO, 2017).

Quite a tall ask perhaps for already overburdened Foundation practitioners, multitasked with supporting students' transition into tertiary education, developing their study skills, linguistic literacies and academic competencies, while also juggling the challenges of teaching and learning in a pandemic. Yet, Nelson Mandela's often quoted "education is the most powerful weapon which you can use to change the world", coupled with the urgency of

present global challenges demands an upgrade for teaching and learning showing that both people and planet matter.

### What is Education for Sustainable Development (ESD)?

The terms 'sustainable', 'development' and 'education' are all contested, slippery and nebulous terms, on that, widespread consensus exists, but this paper argues that it is critically important for all students and all educators from all disciplines to embrace ESD and its purposeful pedagogy. The latest Advance HE and QAA Education for Sustainable Development Goals (2021) provides a clear definition and compelling rationale for educating for sustainability:

"ESD is part of an educational change agenda allowing us to look critically at how the world is and to envision how it might be, supporting learners to create and pursue visions of a better world" (Advance HE QAA ESD Guidance, 2021;). ESD champions dismantling unsustainable dominant narratives that support exponential growth on a finite planet, biodiversity annihilation (Dasgupta, 2021), environmental degradation (Stockholm Resilience Centre, 2020) and rising inequality. It urges educators to respond to current global realities by developing the knowledge, skills and attitudes students need to navigate complex, challenging and uncertain futures. Foundation practitioners have a unique potential to sketch out the conceptual ground for the ESD, as they set the stage for HE learning.

### Why are we embedding ESD on Oxford Brookes Foundation modules?

The climate, biodiversity and inequality crises are not the only compelling reasons to embed ESD into HE curricula, assessment and pedagogy. Student expectations outlined in the most recent NUS survey illustrate that 91% of students think all their modules should include sustainability (SOS UK Skills survey, 2020). From an institutional perspective, quality requirements are now firmly on senior management radar with ESD now compulsory in all QAA Subject Benchmark statements. Finally, employers are searching out graduates with the collaborative, cultural and 'soft skill' competencies ESD pedagogy explicitly develops, noted as most lacking by employers (Global Skills Gap, Symonds 2019).

### What is ESD pedagogy?

Within the multidisciplinary fields of sustainability education research, a consensus now exists on a cluster of core sustainability competencies, two of the most recognised frameworks being UNESCO (2017:10) and UNECE (2018). Broadly, these competency sets develop the ability to question, interpret or act on knowledge as informed, engaged and empowered citizens.

In terms of how to operationalise these learner competencies, more examples of practice are needed, yet a rich body of pedagogical expertise is often already employed by Foundation teaching teams that can form a sound basis on which to build ESD. Areas of expertise such as communicative language methodology, student-centred approaches, scaffolding learning and reflective activities are often established staples on Foundation level programme design and are germane to ESD pedagogy.

### Core ESD tenets: studentcentred, transformative and action-oriented learning

ESD pedagogy also draws heavily on the value of explicit meta-learning; a praxis based reflective approach with the goal of transformation or change. Mezirow's Transformative Learning Theory (2000) highlights "disorienting dilemmas"; the struggle or liminal space learners inhabit when their perspectives, worldviews or normative behaviours are challenged. Disrupting these 'meaning frames', which determine our ways of seeing, understanding and acting, is challenging and sometimes painful, but pivotal to the changes needed to 'unlearn' unsustainability.

### The POP toolkit: a simple set of prompts for ESD teaching, learning and professional development

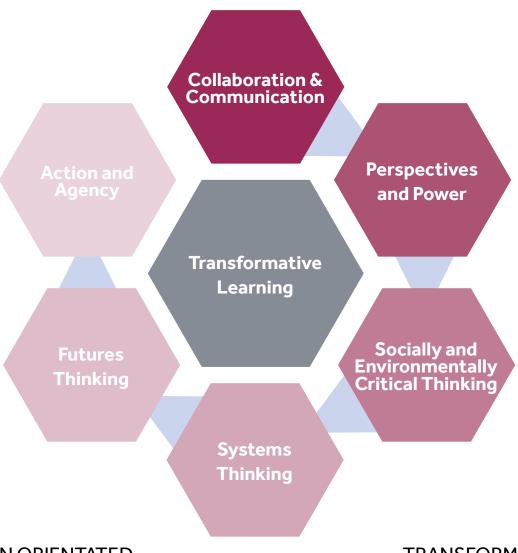
With this list of lofty aspirations, it is understandable that those new to ESD might feel a sense of overwhelm or lack confidence in starting with ESD competencies and pedagogy. The Pedagogies of Purpose (POP) toolkit was therefore developed to provide a starting block to move practice beyond simply teaching about sustainability topics and themes alone. The UN Sustainable Development Goals (SDG's) for example, can provide a comprehensive view of global challenges, but it is developing the skills, attitudes and approaches to these goals, that will enable our students to tackle them.

The toolkit distils core ESD competencies into a simplified visual, to guide embedding ESD principles into teaching, learning and assessment. It has Mezirow's (2000) transformative learning at its axis, with six surrounding tiles presenting core ESD learning domains; Collaboration and Communication; Perspectives and Power; Socially and Environmentally Critical Thinking; Systems Thinking; Futures Thinking and Action and Agency.

Addressing each of the prompt questions for each tile engages not simply a focus on sustainability topics but promotes "ways of thinking, ways of practising and ways of being', which are central to ESD's goal of transforming society (UNESCO, 2017:20).

### **Pedagogies of Purpose Toolkit**

### LEARNER CENTRED



### **ACTION ORIENTATED**

### **TRANSFORMATIVE**

### **Toolkit prompts**

- What opportunities are there for communication and collaboration?
- Are multiple perspectives or 'lenses' engaged? Who is advantaged/disadvantaged and who has the power to change this?
- What social and environmental issues are embedded?
- Which systems are relevant or interlinked? Which SDGs are implicated?
- What are probable, possible or preferable future scenarios?
- Why learn about this? How do I/can I contribute to change?
- What are the potentially transformative learning areas/disorienting dilemmas?

Examples below illustrate some of the ways in which the toolkit has been used for assessment design, a student learning aid, whole module design and as a professional development tool.

### Operationalising the POP toolkit An assessment on Intercultural Communication (ICC)

One example of students using the toolkit to develop core ESD competencies can be seen in the new video assignment on a compulsory L3 module, Intercultural Communication. Students workshop the toolkit to explore aspects of their own cultural identities. Working through the tiles, they collaborate in groups to discuss ICC theories of prejudice, othering and stereotyping from their own cultural lived experiences. They explore these from diverse perspectives, thinking about power dynamics and preferable future scenarios. Students are encouraged to question and challenge established narratives around, for example, racial, gender or disability dimensions, and reflect on how their actions might contribute to cultural change. They also engage in 'socially and environmentally critical thinking by critiquing norms and narratives within cultures that have a negative impact on society and the environment, such as gender stereotypes or mass consumer culture, referencing the connections between social, economic and environmental systems and related Sustainable Development Goals (SDGs). The toolkit facilitates critical engagement with core ESD competencies through reflective pedagogy that engages the student personally with sociocultural, environmental and social learning theories.

### A student learning aid on Global Issues

A further example of students using the toolkit to support sustainability learning is a studentselected research project on an organisation or social movement advocating for change on the Global Issues module. Students reflect on all the tiles, but focus initially on Systems Thinking, using the UN Sustainable Development Goals (SDGs) as a framework of reference, allowing them to see the interrelated systems within which their issue sits. They are then scaffolded to explore possible, probable and preferable future scenarios, employing Futures Thinking, through a seminar discussion and strategy mapping activity. What needs to be done and in what order? Who has the power to enact these steps? Who does not? Lastly, students identify drivers and barriers

to tackling their chosen issue and what action and agency they see potentially within their own spheres of influence such as voting, campaigning, allyship or simply in engaging through discussion and debate. This can be structured as an information gap task, where learners can work collaboratively on individual tiles and develop ESD critical thinking and communication competencies.

### Curriculum design on Problem Based Learning (PBL)

A further example, from colleague and Foundation co-ordinator Clare Nukui, illustrates how ESD can be embedded into the design and delivery of a module as a whole. The PBL course asks students to select and research a social or environmental issue identified in Oxford for a group led learning project on this study skills module. Students design their own research process and negotiate roles and responsibilities to present a poster presentation of their findings. Examples include how to ease traffic congestion in the mediaeval city of Oxford or how to preserve independent Oxford traders in the face of ecommerce and chain stores. Here a collaboration and communication focus is taken, consciousness raising not only on sustainability subject areas, but also on the process of team building, collaboration and problem solving. The course engages integration of each of the competency areas, as students delegate tasks and evaluate possible solutions to sustainability challenges.

Nukui highlights the challenges inherent in deskilling the tutor role from 'expert' to 'facilitator', transferring the responsibility for learning to the learner. This requires both tutors and learners to embrace complexity and uncertainty and rethink roles. Acknowledging the iterative, messy nature of the learning process is helpful here, alongside a commitment to move from safe to 'brave spaces' (Winks, 2017) to develop the real world skills and competencies skills needed for a fitter future.

### A Professional Development (PD) Tool

Finally, the toolkit can help support professional development by using the prompt questions to critically reflect on practice. An example of this in a sustainability workshop sees educators propose skills most needed by students entering the workplace. These are then matched to different tile domains and ranked according to

perceived levels of challenge/usefulness to particular subject areas and to pool ideas. This offers opportunities to explore embedding ESD competencies, mapping skills across modules, sharing good practice and inviting educators to explore ESD further, through for example, the comprehensive Advance HE and QAA ESD Guidance (2021).

The POP toolkit does not aim to be prescriptive, but aims to open the door to ESD competencies and pedagogy and tease out purposeful contributions to creating a sustainable future over a broad range of teaching and learning contexts. ESD pedagogy in many ways is just good pedagogy, but it has the added orientation of pedagogy to do good; pedagogy with purpose.

### **Helpful ESD Takeaways**

Examples here hope to illustrate how ESD can be built into a range of Foundation activities, assessments, module design and educator development using the POP toolkit. Key takeaways from embedding ESD into the Foundation Programme at Brookes are:

- educators do not need to be sustainability 'experts' to start embedding ESD into teaching and learning
- transformative pedagogy is an iterative and often messy process
- making the transformative meta-learning explicit is pivotal
- engaging collaborative, participatory approaches such as group work, information sharing and inquiry based learning is key.

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### **Towards Student-Centred Learning:**

Using Exploratory Practice with Undergraduate Students in an International Branch Campus in China

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This paper investigates the application of Exploratory Practice as a tool to support student-centred learning (SCL). This study was designed to address the challenges Chinese students face when joining the British higher education system, namely a low level of independence due to different educational experiences. Two sets of surveys and interviews were used to collect data. The outcomes suggest that Exploratory Practice can be successful in realising the principles of SCL; however, students expressed difficulties in taking control of their own learning. Further research is required in order to test the application of these approaches in larger classes.

Key words: Chinese student, Exploratory Practice, learner differentiation, EAP, higher education

### Introduction

Focusing on what needs to be taught rather than how this content should be learnt has been a major criticism of higher education in China (Zhou, Knoke and Sakamoto, 2005) highlighting a potential issue with learner training and insufficient independence when compared to Western education. Students educated in China often struggle after joining international universities, as they have different expectations of what constitutes a 'good learner' (Pham and Hoang Pham, 2021). Therefore, HE and international foundation programme professionals should carefully consider how to engage students with such educational experiences and support the adaptation to different expectations these students may face.

In 2019/20, approximately 142 000 Chinese students enrolled onto British universities (HESA, 2021). These students often struggle with the shift to a more independent and active learning style (Yu and Moskal, 2019). This is also the case for a large proportion of the student cohort at the University of Nottingham Ningbo China, who mainly join from Chinese institutions. Moreover, the current 'post-Covid-19' education era, in which remote teaching and learning has become a standard, has furthered the challenge these students face.

This paper will focus on an intervention designed to incorporate student-centred learning (SCL), embodied by the

implementation of Exploratory Practice (EP) into a credit-bearing optional UG module. The structure of this article will be based on Hattie's (2015) DIE strategy to strengthen and utilise opportunities for reflection. The first part, Diagnosis, will introduce the context of this study, exemplifying the need for the intervention with a particular focus on the principles of SCL and Exploratory Practice. Following this, Intervention will introduce the context of the experimental class discussed in this paper. Finally, the Evaluation section will briefly discuss findings and recommendations.

### Diagnosis: Problem and Rationale

As signalled in the introduction, the shift from teacher to student-centred learning (SCL) may be problematic for those students who lack independence. However, SCL is not only concerned with student activities. Teaching professionals, therefore, should be sufficiently trained to ensure 'sound principles and pedagogic theories' are present in each class when implementing SCL (McKenna and Quinn, 2021: 110) without neglecting the students' background. There are nine critical SCL principles listed by the European Students Union, and these demand that SCL needs ongoing reflective practice on what is suitable for each individual cohort of students and active engagement between learners and their contexts, teachers and materials (2015 p. 5-7).

Exploratory Practice (EP) has been of primary importance when designing and implementing this study, as one possible approach to implementing SCL. Developed towards the end of the 20th century, it 'proposes a fully inclusive approach whereby learners are seen as key developing practitioners; co-researchers alongside their teachers' (Hanks, 2019 p. 143). EP can, therefore, embody SCL and provide students with a non-restrictive framework ensuring learner differentiation. Puzzles, which EP revolves around, could be compared to research questions that either teachers or students select based on their own interest and which become the centre of teaching and learning activities. For instance, Why is there a gap in numbers between male and female studying International Communications? or Why are Economic Y2 students less willing to attend live lectures after having lecture recordings? Students strive to 'solve' these puzzles, going through various fluid stages that support and enable independence and strive to improve the quality of life in the classroom (Leigh and Kozbial, 2017).

### Intervention: Context

The module described in this paper (Exploratory Practice – Introduction to Academic Research and Working with Feedback) was designed as a response to teaching professionals' concerns relating to students' independence and engagement with optional, credit-bearing Nottingham Advantage Award (NAA) UG modules, and it was added to the portfolio of this programme. The goal of NAA is to ensure

that students have more opportunities to develop attributes and skills and engage in activities that will enhance their overall learning experience within the hybrid context of an international branch campus in China. For that reason, the learning outcomes (see Appendix 1) have been aligned with the above ensuring that these add to the overall variety of attributes and skills offered by the existing NAA modules.

The intervention took place in autumn 2020. 22 students attended EP class for eight weeks. Students were recruited through a self-enrolment system that was advertised during the student induction. All students had to answer six screening questions to ensure they understood the purpose of this module (conducting research and working with formative feedback), the time needed to engage with all activities and the final assessments. Out of 54 applications, 9 Year 1, 9 Year 2 and 4 Year 3 students (12 females and 10 males) were selected. The classes focused. on the principles of Exploratory Practice, the need to be a reflective student, as well as on highlighting the clarity of expectations for each week and giving formative feedback based on in-class tasks and homework (see Appendix 2). When researching their own puzzles, students had to ensure the topic was based on the adapted principle of EP – improving life quality on campus, rather than in the classroom (see below for selected examples).

The teacher followed the set syllabus but acted more as a person monitoring and asking

further challenging questions than testing attainment of certain learning outcomes. This was particularly challenging for the students during the first weeks of the course, as several expected more corrective feedback in terms of their own project and clear guidance on what was considered right or wrong. Instead, a more explorative approach was used, and alternative routes or additional external sources were suggested.

The assessment focused on process (reflective tasks – portfolio evidence) rather than product (outcomes of the research). Portfolio tasks were based on reflective responses to a set prompt related to a particular educational experience, for instance, reflecting on the most difficult part of designing a questionnaire. The portfolio included seven elements, three done in class and four outside (see Appendix 2). This was done to emphasise the value of formative feedback and the need for the ongoing reflective process within higher education.

### **Evaluation: Findings**

The first observation is that all but one student were able to produce a meaningful poster outlining their own personal research based on the selected puzzle. Although the final poster presentation was assessed on a pass/fail basis, only one student created a poster that did not include sufficient data analysis. The same person failed the portfolio evidence tasks, which meant that student did not engage with either of the elements. This could mean that the process behind 'solving' the puzzle supported

Table 1 Selection of EP puzzle

Student No	Year of Study	Puzzle
1	1.	Why is there a gap in numbers between male and female studying International
1.		Communications?
2.	3.	To what extent do students agree with the existing assessment types?
3.	3.	Why some people can balance their study and social activities well?
4.	2	Why do NUBS* students skip compulsory academic classes?
F	2.	Why are Economic Y2 students less willing to attend live lectures after having lecture
5		recordings?
6.	2.	Why Student at UNNC experience psychological problems?
7.	1.	Why is students' concentration span different?

 $<sup>*</sup> Notting ham \, University \, Business \, School \,$ 

the final poster delivery and overall engagement with the class.

Focus groups (week 2), surveys (week 1 and week 7) and exit-interviews (after the final class) were used to collect students' impressions of their experience and academic progress, particularly when looking at their attitudes towards Exploratory Practice. This was done to triangulate data findings with the teaching journals kept by the main tutor and students' portfolio tasks.

Overall, students were very positive towards being responsible for their own learning, although several (6) expressed how difficult it was at the start when they had to plan and manage various research related tasks, for instance looking for respondents or finding relevant literature.

The reflective pieces used for their portfolios indicated that most students (18) would have done their own project differently considering what they knew at the end of the module. One student, for instance, emphasised the importance of trialling a questionnaire, something he had disregarded and which made subsequent tasks more complex. Through surveys (12) and interviews (3), the majority of students expressed appreciation for being able to focus on their own interests; moreover, the comprehensibility and actionability of formative feedback was praised by several students in surveys (11).

However, there were comments suggesting a need for more corrective rather than suggestive feedback (mainly Year 1 students). The duration of the module (8 weeks) and time for each class (2h) were indicated as insufficient by 6 students (5 Year 1 and 1 Year 3). Additionally, 11 students mentioned that although formative feedback was of high quality, this is hardly the case for other modules where the number of students is much higher (between 40 to 80 students). These findings suggest that the transition from teacher to student-centred learning can be a struggle, particularly for Year 1 students with recent experience of the GaoKao examination preparation. The participants often expected the teacher to be more involved in a direct correction of, what was perceived by them, mistakes. The idea of this transition

is not unique to Chinese students; however, the indicative experience of teacher-led learning should be acknowledged by course designers and teacher trainers. This could be included in induction sessions for teachers dealing with Chinese learners with no or little prior experience of British Higher Education. Knowing where our students are coming from, their backgrounds and their goals can improve the curriculum delivery, but knowing how to gradually move towards SLC will increase the success rate of these students (Pham and Hoang Pham, 2021). This summative approach to everyday learning should also be replaced by gradually more frequent reflective and formative tasks.

### Conclusion

This paper aimed at investigating the application of EP as an example of SCL approaches. It illustrated key challenges that Chinese learners face when joining British universities, namely the importance of taking ownership of their own learning. Exploratory Practice was briefly described as key for supporting student development and the shift to more independent learning based on the examples of a module designed specifically for the purpose of this study. This paper then briefly outlined key comments that students expressed after completing the course. These comments indicated an overwhelmingly positive change in students' approaches to independent work and being responsible for their own learning. Moreover, the students' work (reflective writing, academic posters, poster presentations) showed their commitment to the project and Exploratory Practice principles. However, further research with larger classes, more common at tertiary level, is needed to see how applicable this approach to SLC is, as it entails higher teaching workload related to deeper differentiation and personalisation of formative feedback.

### Appendix 1

**Educational Objectives** (over-arching intentions of the course)

The purpose of this module is to:

**EO1:** Introduce students to basic data collection activities (drafting research questions using principles of Exploratory Practice [6\*]; creating and trailing

quantitative surveys [6]; analysing findings

[4]; presenting and explaining findings [4] – poster presentation)

### EO2: Improve students' ability to work with formative feedback (demonstrate understanding of tutors' comments by annotating feedback [3] and planning actions based on feedback to improve performance [4])

EO3: Develop students' capacity in becoming reflective learners (familiarising [1] and understanding [2] each stage of a given reflective cycle, noticing the differences between [3] and consciously applying descriptive and reflective accounts in learning [3])

**Core Learning Outcomes** for teachers (skills & knowledge ss must be able to demonstrate by the end to pass this module)

By the end of the course a successful student will have been able to:

- LO1: Prepare [6], deliver [1] and defend [4] a coherent poster presentation based on individual research (f, q)
- LO2: Use [5] formative feedback to identify [4] own weaknesses within the framework of reflective accounts and improve [6] performance (c, d)
- LO3: Plan [6], generate [6] and actualise [6] a portfolio based on class-to-class activities below (a, b, e)

### Learning Outcomes (Student facing)

By the end of this, module you should be able to:

- **a. use** the *reflective cycle* to support your personal *reflection* [5] on the progress on any given academic task
- **b. create** [6] a portfolio of written evidence (reflective narrative) based on the module work
- **c. analyse** [4] and **review** [5] formative feedback from teachers and peers and plan [6] actions to improve your performance
- **d.** be more successful at **self-evaluation** [5] and **self-assessment** [5]
- **e. explain** [2] the main principles of Exploratory Practice and puzzles
- **f. design** [6] a survey and **interpret** [5] data collected to address your puzzle
- **g. present** [2] your poster based on your research and **engage** [4] in the Q&A session

<sup>\*</sup> Revised Bloom's Taxonomy level

### Appendix 2

	- FF								
WEEK	UNNC	Module breakdown	Teaching Activities (Teaching tasks etc.)	Homework					
1	3	Module Introduction	<ul> <li>Reflective cycle (introduction)</li> <li>Brief Introduction to Puzzle (EP)</li> <li>Marking Criteria (introduction and application)</li> <li>Writing 1: Reflecting on a past exam (P.Ev. 1)</li> </ul>	HM: Analyse Marking Criteria using our readability tool [1h] T creates feedback; Diagnostic survey SURVEY 1					
2	4	Basic research skills 1	<ul> <li>Marking Criteria – lexical analysis and reflective writing re-cap</li> <li>Critiquing an example puzzle</li> <li>Research cycle (introduction)</li> </ul>	HM: Writing 2 (home) – no feedback from T – P.Ev. 2[1h] FOCUS GROUP					
3	5	Basic research skills 2	<ul> <li>Working with Feedback (1) and reflective writing re-cap</li> <li>Formation of the final draft of the puzzle</li> <li>Introduction to data collection techniques (questionnaire)</li> </ul>	HM: Drafting a questionnaire [1h]; re-write Writing 1 (P.Ev. 3) [40 min]					
4	6	Basic research skills 3	<ul> <li>Piloting a questionnaire with the classmates</li> <li>Introduction to data analysis</li> <li>Writing 3: Reflecting on the progress (P.Ev. 4)</li> </ul>	HM: Use feedback from Ts and classmates to improve the questionnaires [1h 30 min] Reflective piece 3 (in-class)—T creates feedback					
5	7	Academic Poster Presentation (concept)	<ul> <li>Working with Feedback (2)</li> <li>Final draft of the questionnaire</li> <li>Main concept of the Poster</li> <li>Data analysis</li> </ul>	HM: Create a draft of the poster [25 min]; data collection [1h]; re-write Writing 3 (P.Ev. 5) [35 min]					
6	8	Poster Presentation Workshop 1	<ul> <li>Collating, presenting and using data</li> <li>Poster creation</li> <li>Writing 4: Reflecting on the progress (P.Ev. 6)</li> </ul>	HM: Library search [1.5h]; continue poster work [30 min] Reflective piece 4 (in-class)—T creates feedback					
7	9	Poster Presentation Workshop 2	<ul><li>Working with Feedback (3)</li><li>Poster presentation practice</li></ul>	HM: Prepare poster presentation [2h] SURVEY 2					
8	11	Poster Presentation	POSTER PRESENTATION	HM: Writing 5 (home – P.Ev. 7) [1h]					

INTERVIEWS took place within 2 weeks after the poster presentation. Glossary: P.Ev. – Portfolio evidence; T – Teacher;

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### The Brick Lane field study:

### Facilitating a legitimate sense of place through remote learning

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This article considers the importance of nurturing a sense of place among International Foundation year students and reflects on the challenges and experience of delivering an "in situ" experience via remote learning. We focus on Brick Lane, a renowned street in East London, as a subject and location of learning in a discussion of field studies and the switch from learning in the field to learning online. Despite predictable challenges associated with remote delivery, we highlight unexpected positives for teaching and learning and, applying terminology from Lave and Wenger (1991), observe that a remote field study affords valuable opportunities for learning through legitimate peripheral participation.

### Introduction

The notion of "place" holds particular significance within UK Higher Education. Universities are known by their locations, whether at the level of town, city, or county: it is not necessary to add the word 'university' to 'Warwick', 'Cambridge', or 'Essex', say, to signify a seat of learning. University marketing materials demonstrate a clear understanding that the desirability of a particular physical space is a key factor in establishing the desirability of a university as a venue for study, particularly for international students, with prominence typically given to an institution's most aesthetically-pleasing architecture, and emphasis on proximity to geographical sites of interest. "Place" is key, whilst entry to university life is voiced as "having a place". Thus, a student on an international foundation programme first seeks the offer of a place, and then aims to perform well enough to be able to "take their place" on a degree programme.

The International Foundation Year (IFY) at Queen Mary University of London (QMUL) aims not only for students to take their place, but also to gain "a sense of place", or belonging, which is both literal and metaphorical. There is a commercial, pragmatic reason for this: the institution benefits financially from persuading international students to feel sufficiently "at home" to want to continue their education at QMUL. Of greater importance to teaching

staff, however, are the pedagogical and pastoral benefits of instilling a sense of place in learners. The first task completed on core EAP modules is a group project which connects students to their new surroundings as they explore issues relevant to subject modules within East London (c.f. Holloway and Fenton, 2021). As an introduction to the programme's educational philosophy, this serves as a demonstration of what Lave and Wenger (1991) describe as "situated learning" through "legitimate peripheral participation". Students are newcomers encountering and participating in communities of practice (Wenger, 1998) - including but not limited to the discourse communities of their future fields of study - and learn through meaningful social interaction. Their participation is legitimate, in Lave and Wenger's terms, both in the sense that it involves activity congruent with their goals and trajectories, and in the way the resulting project work is valued as meaningful, insightful learning

QMUL IFY's EAP modules attempt to derive legitimacy through incorporation of content from subject modules taught by university faculty (established members of academic communities of practice); themes and readings from History, Politics, and Management all feature prominently, whilst teaching and learning practices from Human Geography have been of particular importance in the design of tasks

that celebrate and exploit the in-situ nature of an on-campus, university-run foundation programme. The IFY Human Geography syllabus includes a range of authentic encounters with East London both as a subject and venue of study, perhaps best exemplified by a field walk in Brick Lane, an increasingly well-known East London Street within a mile of QMUL's two main campuses.

### Field study

Fieldwork as a distinctive pedagogy sets apart the discipline of Geography: 'field trips are immersive, challenge assumptions about how places are used and understood and offer fresh perspectives' (Lloyd et al, 2015; Phillips and Johns, 2012, cited in Fuller et al, 2021). Therefore, when, due to the Covid-19 pandemic, the 2020-21 Brick Lane field study could not be delivered on site, the challenge arose to recreate it remotely without losing its distinct qualities. Could a remote field study still uncover 'culturally multiple, dynamic and connective aspects of place' (Massey, 1994, cited in Wylie, 2009, p676)?

Hoke et al (2020) suggest that in any field study the instructor builds 'a narrative, a context-rich story about a place'. In the remote field study, such instruction involves drawing on items normally associated with place such as street names, trees, buildings, street furniture, images and different sensory aspects. According to Rodaway (1994, p4), the senses and reality are related; it is therefore apt to direct students towards their senses in exploring place. For the purpose of this remote field study, in addition to the five senses of touch, taste, sight, sound and smell, recognising emotions and imagination about place make possible an additional immersive experience of place.

### The Brick Lane remote field study

The remote field study took the form of a live online lecture on MS Teams. The lecturer uses slides alongside spoken narrative and prompts to guide the learner (a 10-minute excerpt from the field study is available as a video: https://vimeo.com/674139627). The field study commences beneath the Banglatown insignia in Brick Lane. Students are invited to apply their imaginations as they are taken from

one site to another. The narrative of each site is unfolded – its buildings, street fixtures, sounds, smells, touch and taste: at the southern end of the Lane, the aroma of spices at the Bengali confectionery shop; at the northern end, the sickly smell of sugar and milk at the Cereal Killer Café and, on the opposite side of the street, the scent of hot salt beef with mustard escaping from the Jewish bagel shop; close to the mosque, the tastes and smells of curry in preparation; at the corner of Fourier Street and Brick Lane, the sound of the call for Friday Prayers; it is a cold and wet day and we feel the touch of the rain on our faces as we stand listening to the story of Bernard Cops, a Jewish man who was a boy in Brick Lane in the 1930s - we imagine his world then and, momentarily, compare it to the Brick Lane of today; there is the smell of drains that draws our eyes to the distinctive manhole covers embellished with symbols of the garment trade around the Lane; we are drawn to characteristic buildings that housed the Huguenots, then the Jews, and today the gentrifiers. The narrative of the remote field study continues identifying spaces where students are encouraged to recognise global traces of place in the local, and to apply imagination, senses and emotions towards an immersive sense of place. An online seminar follows in which students discuss and reflect on the field study experience.

### Evaluating the remote field study

As national lockdown restrictions are gradually being relaxed, there is more opportunity to evaluate the differences between in-situ and remote field studies; therefore, this research is in progress. However, during the period of remote teaching and learning, subject lecturers observed these differences through student interactions during the remote field study, in the follow-up webinar, and by evaluating the quality of subsequent written work, as follows:

There are negative elements to the remote field study. For example, not all students access from overseas, as some are quarantined or isolating in their room in halls in London where the idea of experiencing the global in the local may be more challenging, regardless of efforts of the imagination. Additionally, we lose the observations, comments, and unpredictable

occurrences that contribute to the rich narrative of an in-situ field study. As with all synchronous online learning, issues of connectivity and platform compatibility pose the constant threat of disruption.

Yet, surprising positive elements are revealed in the remote field study: technical problems notwithstanding, students engage with new digital skills of significant relevance and value in a rapidly changing world (Fuller et al, 2021); we neither walk nor stand in the cold and the wet; when the instructor is narrating on site, students tend to wander from the group to photograph street art or take selfies, and in not being fully engaged, have the experience but potentially miss the meaning, whilst in the remote study, student comments and questions suggest that they remain focused; students reported that, while studying online, activities like the field study were vital in giving them an experience of 'real London' that is not accessible through the media. A 'global sense of place' is a key phrase in this field study and has much more significance when students are on the other side of the globe although engaged in a local, London-based learning experience. Inclusivity is significantly more attainable remotely than on site, as students who ordinarily would be unable to participate in the field study because of physical access reasons can participate in the same way that their peers do. The PowerPoint file and audio recording served as fixed reference points that seemed to enable students to recall and employ more detail in their discussions and written coursework

To return to the terminology of Lave and Wenger, participation is still figuratively peripheral, even if it is no longer physically so, and the increased quality of student contributions increases the legitimacy of their participation in the encounter. An online field walk can be an inclusive way to engage foundation students with communities of practice.

### **Conclusion**

If learning, as Lave and Wenger (1991) argue, is an ongoing, situated, and fundamentally social act then an 'in-situ' university-based pathway course has significant advantages for learners over alternative 'ex-situ' routes into higher education: it places them physically, socially, culturally, and intellectually where they aim to be. However, "sense of place", and the IFY's endeavours to nurture a sense of place, was clearly problematized by the pandemic forcing course delivery off site. Yet the movement off-site of elements of our course that we had thought of as a vital literal manifestation of situated learning has, arguably, emphasised the situatedness of all learning, and has shown us that situated learning through legitimate peripheral participation can occur wherever a community of practice operates, even when that is not an actual physical space.

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## Using H5P to create interactive asynchronous and synchronous learning activities

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Freely available software, H5P, was used to create interactive and engaging asynchronous and synchronous learning activities. Various content types were trialled and thoughts, based on classroom experience, are given on how to use them in the most effective and innovative way. In particular, consideration is given to H5P as a useful tool to support HyFlex learning, and also the advantages it has for learning in the fields of International Foundation maths and physics.

### Introduction

H5P is a free, open-source framework for creating interactive HTML5 content (H5P, 2013). A large range of activities exist—those that the author has found most effective with classes are described here.

Since August 2021, Newcastle University has had a license for staff to create H5P resources. These resources can be embedded into websites or with various Learning Management Systems (LMS). In the author's case, International Foundation courses in Maths and Physics are hosted on the Canvas LMS and individual pages contain a range of embedded H5P resources that students can access.

The content types broadly fall into two camps: presentational (charts, accordions (see below), 360 images/videos, etc.) and assessment (a huge variety exist, often in combination).

All assessment tasks allow for tailored feedback comments (e.g. general feedback according to percentage marks, or specific per-question feedback). H5P also includes a handy report feature that allows real-time access to student data on all tasks, whilst integrating with the LMS gradebooks if required.

### **Useful features**

In this section, those activities that the author has found to be more useful will be discussed: to wit, this showcases those content types that have been successful out of a large number trialled, and it should be read that those not listed here were

generally less interesting to students, irrelevant to maths and physics teaching, or not appropriate for accessibility reasons. Some of these activities are available to try in a recent case study (Mackay, 2021). While H5P can be transformative to the student experience, and many of the activities listed below are very quick to set up, some of the more useful activities like Drag and Drop and Branching Scenario can be more time consuming. Steinert et al (2017), also describes the didactic features of many of these content types.

### Accordion

The accordion is a structure that allows text panels to be revealed and hidden again, and has become a very effective way of presenting content

Since using H5P, existing courses have been edited to replace bullet pointed lists with accordion. The advantages are three-fold: it reduces the wall of text that can be intimidating (see Figure 1 overleaf), particularly to international students for whom English is not their first language; it creates a consistent and more professional theme throughout the course; and it is far quicker than creating something similar with buttons in HTML.

Another way in which this has been used is to create scaffolded questions, whereby the panels reveal additional hints that students can optionally reveal, before a final panel holds the solution.

Students have appreciated this type of setup for challenge questions.

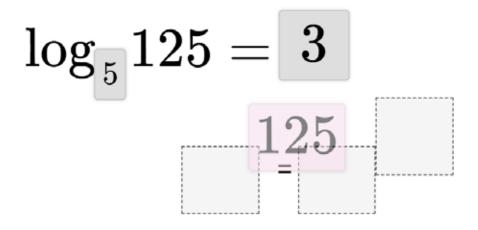


### Figure 1

> Example 1 Example 1 > Example 2 > Example 2 > Example 3 Example 3 Given the implicit function  $\sin y + 3x^2y^3 + 1 = 0$ Find an expression for Solution Differentiate term by term. In this case we will need to use the product rule with the second term  $\cos y \frac{dy}{2x} + 3x^2 (3y^2 \frac{dy}{2x}) + y^3 (6x) = 0$ Now simplify the terms  $\cos y \frac{dy}{dz} + 9x^2y^2 \frac{dy}{dz} + 6xy^3 = 0$  $\frac{dy}{dx}(\cos y + 9x^2y^2) + 6xy^3 = 0$ and rearrange to get the gradient.

Figure 2 Log-form and Index-form

Drag the numbers across from the log-form to the index-form.



### **Drag and Drop**

In the author's opinion, Drag and Drop is one of the most versatile content types, which allows the creation of resources which are not available elsewhere (c.f. quizzes and fill in blanks, which are more widely available via other software). Consider the following three examples of created content:

In an introductory maths lesson, the goal is to emphasise the link between numbers expressed in log-form and in index-form. An expression is displayed in one form and the base, power and number can all be dragged into the blank spaces of the other form. A check

is then performed to see that the student has transformed it correctly. In this way, Drag and Drop is being used to help reinforce a mathematical structure (see Figure 2).

- 2. In a physics lesson on resistor circuits, the blank spaces are gaps in a circuit into which resistors can be dragged, so that the final arrangement has a required total resistance. Again, the software automatically checks if the correct arrangement has been made, and students can receive appropriate feedback.
- 3. In a lesson on trigonometry, the draggable items are variously labelled triangles, which

are dragged into correct columns on a table, depending on whether they should be solved with sine or cosine rules (or dragged to a bin graphic if they fit neither). A lesson on quadratics matched graphs and discriminants in a similar way. The general approach can also be used for a variety of categorisation tasks, where objects may be dragged onto a Venn diagram or other logical structure.

### Crossword

A crossword activity exists that also allows for a mystery word to be created from letters of the solution. The author realised that the answers to the clues can be numerical (a crossnumber, if you like), and this has been used to good effect in those topics where answers are often numerical values, such as definite integration.

### **Hotspots**

Hotspot activities allow students to click on a certain area of a diagram. This has been used in identifying electrical components of a particular type (e.g. click on all the resistor types). However, the best use that has been made of this is for Spot The Error activities (explained in more detail, below).

### Fill in the blanks

While cloze exercises are usually lower order thinking, they are a useful tool to support international students. A novel way of using such activities is to create escape-room style learning activities, where the missing "word" is a code, or calculated value.

### Quizzes

There are multiple quiz types, particularly useful to summarise topics, including an option to make question sets out of various other content types outlined above.

### **Branched scenario**

Branched Scenario allows for non-linear learning adventures, where the student responses influence how the rest of the activity plays out. So far the author has used it to create tasks where students have some agency in their approach, but ultimately are led down different paths to the same goal (for the pedagogical sake of discussing findings with the group at the end). However, in terms of differentiating in the classroom, again with International Foundation students of varying ability, the Branched Scenario has much potential. Consider designing an activity that leads

to harder questions if students answer successfully, or eases off if students are struggling – this is something that the author intends to explore further.

### Advantages for teaching maths and physics

Unlike various other software that the author had toyed with, a major benefit of H5P is that it allows for LaTeX notation (inline and standalone). For maths and physics, this is incredibly important to display equations and mathematical symbols correctly.

Furthermore, a big problem in modern maths teaching, particularly online, is the ease by which students can find answers by entering their questions into AI engines, such as WolframAlpha. While there is value in students familiarising themselves with such software, it is at odds with traditional mathematical problem solving. While some educators have taken approaches such as asking students to create videos to explain their techniques and solutions (Will, 2020), this can be more challenging for international foundation students who may not have the vocabulary to explain, yet are still very mathematically adept.

The author has therefore developed the following key idea in his teaching, which he has termed Spot The Error questions, and which uses a Find Multiple Hotspots content type. Students are presented with both a problem and a handwritten solution thereof (produced with a graphics tablet and whiteboard app). However, each solution will contain a deliberate mistake, designed around common student errors or misconceptions. The goal of the activity is therefore to analyse the problem line-by-line and identify the error (see Figure 3). This sort of activity can be extended in a variety of ways, such as students presenting the correct solution, or discussing why a student might make such a mistake – the type of deeper thinking that can't be easily Googled. For International Foundation students, coming from a range of backgrounds and with varying mathematical abilities, questions like these are invaluable. They tend to be unlike any that students would have encountered in their prior education, thereby levelling the playing field with no students having previous exposure to these question types.

On that final point, caution must also be exercised with the variety of H5P tasks being given to International Foundation students. Given that many of the more advanced tasks are of a style they have not seen before, they will require additional instructions to access them. For nonnative speakers, this may be an issue. Therefore the author recommends using fewer content types which provide the most benefit, such as those described above

### **Feedback and Summary**

H5P has been found to be a useful and simple way of creating effective and engaging resources that can be used both synchronously and asynchronously to support student learning on our International Foundation maths and physics courses.

A majority of students have described how they enjoy these activities because "there's no time pressure and I can work through them at my own pace" and "I can check my answers straight away". They particularly like the drag and drop tasks, perhaps because it is more tactile than other work that they do in maths lessons.

Finally, as the author's findings have been disseminated, colleagues have come to appreciate the benefit of H5P and it is finding a place in other International Foundation courses across the centre.

### Figure 3

Click on the line where the first mistake has been made.

If a is a root then (x-a) is the factor 1 of 1 errors.

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## Improving Students' Experience in Learning Mathematics Through Modelling Real-World Problems

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Mathematics lecturers are often keen to find ways of connecting mathematics with the real world. A successful attempt at this increases the motivation and decreases the anxiety of students in learning mathematics. This article evaluates the framework for delivering a mathematical modelling module to foundation-level students. A step-by-step example of studying mathematics through modelling will be provided, followed by a discussion regarding the benefits and challenges of this approach. The discussion in this article is based on a survey of related literature as well as my own experience.

### Introduction

Arguably, the key to a successful mathematical module is connecting classroom learning to the real world. Mathematics is a science of order, structure, and relations, that has evolved from core practices, such as counting and measuring, into wider, much utilised aspects, such as predicting and drawing (e.g., stellar structures). However, it can be a challenge for students to derive the possible applications and the usefulness of the topics they learn. Gainsburg (2008) stated that the more advanced topics in mathematics usually result in less engagement from the students.

More recently, as technology and science become inseparable, it is expected that mathematics lecturers ensure their students can create effective solutions in cases of real problems and use mathematics robustly in their daily lives. This requires students to enjoy the process of learning mathematics instead of fearing it (Kaiser, 2014). In adapting our curriculum, it became important to explore new approaches and methods in the educational sector. In mathematics, one of those new approaches is teaching by means of models.

This article examines the role of mathematical modelling as a tool to allow students to "experience" mathematics and the process of solving real-world problems. Note that I will be using the module called Scientific Programming and Mathematical Modelling (SPAMM), which I designed and taught at Warwick University's International Foundation Program (IFP), to illustrate the arguments.

### Mathematical modelling framework

Mathematical modelling is defined as the transformation of any real-world phenomena or problem into a mathematical form in which it can be solved, applied, or translated into another field of study. For instance, when looking at animal behaviour, their strategic activities, such as foraging, or hunting, can be modelled using Evolutionary Game Theory. The model is then applied by practitioners within the subject field or translated into other areas of study, such as biomathematics or ecology (refer to Alpern et al., 2019 for an example of this). Consequently, a mathematical model must be simple and flexible

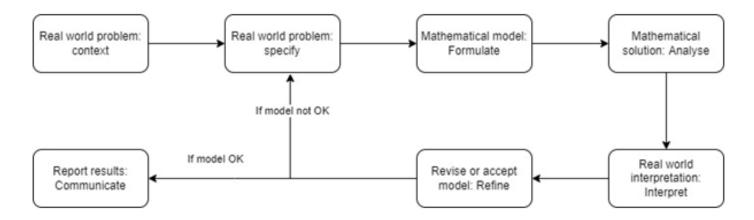


Figure 1 The 7-step process of mathematical modelling (adapted from Stillman et.al., 2007)

Teaching mathematical modelling with real world applications invariably involves the use of data, a graph or a diagram and a 7-step process, as illustrated in Figure 1. An example of this is in modelling population growth to demonstrate differential equations. The first step is getting students to understand the context and the value of having a model to predict human population growth. In step 2, population data is provided for students to specify the question, such as 'given the data, determine a relationship for the change in population over a period of time'. In step 3 students formulate the model using mathematical terms and applying simplifying assumptions. Hence, for our example this would be that the population grows at a rate proportional to the size of the population. This relationship is described in mathematics by a differential equation and so in this way the expression is introduced. In step 4 students apply their knowledge from lectures to derive a solution, and in our example solving the differential equation for population gives an exponential growth relationship. In step 5 the solution gets applied to the original situation and tested against the data in step 2. In step 6 they can choose to accept their model or refine it through thinking critically about its limitations and if necessary, going back to step 2. In the final step (step 7), they learn to robustly communicate their results.

### Benefits in teaching mathematical modelling

Within the International Foundation Program, using models in mathematics teaching is an effective way to motivate students, eliminate their anxiety, and allow them the opportunity to use mathematics to solve a problem they can relate to. According to Blum and Ferri (2009), first year undergraduate students that attended an optional mathematical modelling module went on in the next term to outperform students that had not taken it. It was also determined that the students showed positive attitudes towards mathematics when using the modelling approach, shown by higher attendance and participation.

Learning mathematics through modelling also improves students' understanding of mathematical terms and descriptors.

When learning about the concept of correlation, students in the SPAMM module went through the 7 steps of modelling. The purpose of their study was to understand if factors such as height or weight might affect class attendance. Students had to specify their questions and made simplifying assumptions such as: less walking time is assumed to cause higher attendance. Thus, their study investigated whether weight or height affect travel times between classes. They collected data and calculated the

correlation coefficient r. The last step of modelling allowed the students to identify the limitations of correlation. They even suggested an important observation regarding this topic - that is, correlation does not imply causation.

One may argue that the study above concerns with fitting the data and not so much about providing insight through models. However, this simple study allows them to experience the use, application, and limitations of correlation through modelling. As a result, they can recall this concept easily during the exams, highlighting the values of experience in understanding (Carreira & Baioa, 2018). This also tackles the language barrier issue of international students in remembering the many mathematical terms. Each of these terms now connects to their experience, which they can draw on in the long-term, as opposed to memorising the definition days before an exam.

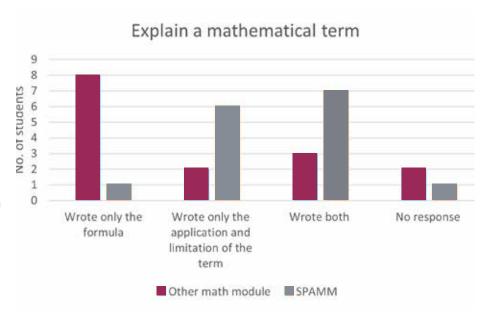
Student module feedback for SPAMM in 2019-20 was from 7 students and was consistently positive with mean ratings of between 4.6 and 4.7 out of 5 in all categories. These included organisation and structure, staff support, development of new skills and how interesting the module is.

An independent survey by the author in 2022 explored how students in the SPAMM module explain maths terms compared to students in a different maths module. The survey was taken a week after a statistics class test for the other module and two weeks after a case study for the SPAMM module. 15 Students were chosen randomly from each module and given a worksheet in which they had to write the formula, applications, and limitations of the maths term confidence interval, which all students had been taught in their respective modules. Figure 2 shows that students learning mathematics through modelling prefer to explain a term using its application and limitation to the real world. 7 students from the SPAMM module also chose to use both the formula and applications, suggesting modelling still facilitates an understanding of relevant formulas. On the other hand, the majority of students from the other module tend to rely on their memory to describe a term using only a formula. This shows that SPAMM students retain a longer and a more comprehensive understanding of the mathematical concepts compared to the students from the other module.

### Challenges in teaching mathematical modelling

Most of the problems that employ real data require the use of statistical tools. Statistics is concerned with chance and probability rather than absolute values and the definite solutions that students are used to in mathematics. Therefore, notation and language differences need to be understood and this can be even more of a challenge for international students, where the same terms can have different meanings in maths and statistics.

One approach to tackle this is to emphasize the importance of assumptions in constructing a model. When demonstrating a linear relationship model for example, the lecturer must ensure that the assumptions made in step 2 or 3 highlight the purpose of the model as a predictor, so giving mean values rather than definite values. This understanding should also be reinforced when refining and communicating the model (step 6 & 7). It is also important to remind students that all mathematical models are predictions rather than absolute truth. However, under specific assumptions, some models can be useful.



**Figure 2** Type of explanation given for a mathematical term by 15 students in the SPAMM module and another mathematics module.

### **Conclusion**

Connecting mathematics to the real world is important for increasing students' understanding for and motivation to study any mathematical subjects. It is particularly beneficial to equip a foundation level student with the ability to connect mathematics with the real world so they can develop mathematical thinking which they can use for their future studies. Using real data and context is a useful way to show students the applicability of mathematics, and this can be done through mathematical modelling. Teaching mathematical modelling allows students to establish a relation between mathematics and daily life and to further develop their problem-solving skills. However, there are some challenges in delivering this subject. One of them is the inconsistency of notation between mathematics and statistics. In both cases, it is important that the lecturer is familiar with the 7 steps of mathematical modelling to ensure that materials can be delivered appropriately. This way, students can identify the connection between mathematics and the real world and experience the practical aspects in learning mathematics.

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### Supporting repeating students through individualised learning plans

### **ABOUT THE AUTHORS**



**Jinying Ma** 



**Kathryn Paterson** 

This article describes an attempt to improve repeating EAP students' engagement in learning through the use of individualized learning plans. It describes a project which used semi-structured interviews to find out why students failed and followed up on those interviews with learning plans and bespoke workshops addressing the needs identified. The impact of the project is evaluated by final interviews about students' perceptions regarding the usefulness of the project, final assessment results, attendance data, and observation of students. The implications of these results are analyzed and future directions for the project laid out.



**Stuart Donaldson** 



Stephen Blowers



Junyi Li

### Introduction

At Xi'an Jiaotong Liverpool University (XJTLU), students who fail a module in the Year 1 Foundation Programme are required to repeat before progressing to the next year. In 2020-21, in a cohort of 5014 Year 1 students, 224 were repeating the year due to failing their English for Academic Purposes (EAP) module(s). However, as observed, and evidenced in literature (Cleland, Arnold & Chesser, 2005: Keithia & Alf, 2008; Stevens, 2013) repeating students are often absent, and may receive little extra guidance and feedback. As a result, they frequently have ongoing difficulties and continue to fail. It is therefore imperative that there is an increased focus on identifying the reasons for poor performance amongst this group of students and that intervention strategies be investigated for their potential to improve engagement.

In Semester 2, 2020-2021, the researchers piloted a voluntary intervention project with a sub-set of 16 repeaters out of the total 224 repeating students through the Continuing Support Division with the aim of identifying reasons for these repeating students' poor performance and offering bespoke support through the use of Individualized Learning

Plans (ILPs) and tailored workshops. These 16 students were selected because all were studying degree pathways managed by XJTLU's Taicang Campus, hence their majors were of a similar focus.

### Intervention

The intervention project consisted of three stages; initial interview, workshops and final interview.

### Stage 1: Initial interview

The initial semi-structured interview aimed to identify why students failed EAP, and to formulate ILPs.

Interview questions focused on possible factors leading to their poor academic performance, non-attendance, learning behavior problems, low levels of language skills, insufficient learning strategies, and personal issues (Rouche & Snow, 1977; Kulik, Kulik & Shwalb, 1983).

The second part of the interview involved creating an ILP that consisted of both short and long term goals, written in collaboration with the student, addressing some of the challenges described in their interview. A sample is shown on the following page.

### **EAP Individual Learning Plan** Long term goals • Successfully complete EAP Module (XX) Short term goals Attend more EAP (XX) classes • Arrive at your EAP classroom sessions ahead of the time the class is due to start • Improve your participation in EAP classes **Activity Target** By date **Date achieved** • Arrive on time and scan the QCR attendance code. Attend more (AA) EAP (XX) classes • Make a note how ahead of the time you arrived at your EAP classroom • When you go to your EAP class in • Make a note of your questions and tell me week [BB], ask at (BB) what they were, how you felt when asking least two questions them. during each class. **Review** • I can now... • I still need to work on... • Revised Plan agreed... Student signature \_ Interviewer signature \_ Date of next review \_

### Stage 2: Workshops

Workshops addressing common needs identified in the initial interviews were developed. During these workshops, ILPs were reviewed. Common themes arising from the interviews related to student feelings of anxiety, lack of confidence and motivation in EAP classes. This suggested that consideration of repeating students' affective filters (Krashen, 1982) was an important factor in curriculum design. Therefore, a decision was taken to have each workshop led by two teachers, to offer students as much individual support as possible and try to mitigate the affective filter. An example of one bespoke workshop was speaking assessment preparation. Tasks were designed not only to offer the students targeted speaking practice, but also to ensure that they understood the assessment's core requirements. Since the workshops were small, considerable individualized support was provided to students, and every attempt was made to create a low-anxiety context. Student comments suggested that they felt more confident after participating due to the one-on-one interaction that they had with the workshop leaders. The students were encouraged to take this feeling of confidence to their EAP classes and assessments in the hope that that they would be able to better manage their own affective filters.

### Stage 3: Final interviews

Final interviews were conducted to discover participants' perceptions of the intervention project.

### **Participants**

16 year 1 EAP repeaters were invited for the first interview and 8 attended. These 8 were invited for the final interview, and 2 took part.

5 workshops were offered with the overall aim of equipping students with the key skills for Semester 2 EAP assessments.

2 students participated from the beginning to the end by attending both interviews and 2 workshops each.

### **Findings**

Several themes regarding the reasons for having failed EAP in the previous year were identified from interviews.

- English proficiency and EAP skills. All 8
  interviewees demonstrated relatively low
  English proficiency in the interviews, and
  stated issues with EAP skills, in particular,
  academic writing and speaking.
- Learning strategy. 4 participants discussed difficulties adjusting to university study, stating issues including ineffective use of self-study time, and insufficient care when reading coursework requirements. None of the 8 participants requested additional support from their tutors or demonstrated effective strategies to respond to their EAP weaknesses.
- Attendance. All 8 participants missed some or many EAP classes. Poor attendance was mainly caused by three factors.
- Time management 4 students stated they overslept.
- Online mode 3 students stopped engagement due to the online teaching.
- Perception of class relevance 4 students felt EAP classes were not addressing their specific needs, and not essential in terms of learning or assessments.
- Personal issues. A conflict with parents led one participant to disengage from EAP classes and assessments. Part-time employment inhibited involvement in EAP for another participant.

### Impact of the intervention

The impact of the intervention was evaluated by considering research data from the two completing students. This data consisted of their perceptions of this project, attendance data, and academic performance.

• Both participants spoke positively about

	Workshop 1 – Speaking (Presentation)	Workshop 2 – Speaking (Interview)	Workshop 3 – Listening & Vocabulary	No class due – to speaking assessment	Workshop 4 – Paragraph Writing	Workshop 5 – Essay Writing
Timeline	(S2 WK9)	(S2 WK10)	(S2 WK11)	(S2 WK12)	(S2 WK13)	(S2 WK14)
Number of attendees	7	1	4		0	0

- this ILP project, believing it helped them and equipped them with more effective learning strategies.
- Both participants showed improvement in attendance. Participant A attended all EAP classes after the first interview while he had previously missed more than half of his EAP classes. Participant B attended more EAP classes after the first interview.
- Both participants showed academic improvement, as evidenced in their final EAP scores. Both participants successfully passed their repeating EAP modules. Although participant B failed the initial final assessment, she later took and passed the resit exam.

The above evidence tentatively suggests this intervention has played a positive role in changing these two repeating students' learning behaviors and achievements.

### Limitations

This project highlighted some issues that need further investigation. The main limitation of the intervention was low attendance, particularly for the final interview and later workshops. This meant that the sample size was smaller than originally intended, which in turn makes it difficult to extrapolate the findings. There are a few factors that might have contributed to this.

- 1:1 interviews vs group workshops. The
  initial interviews were individual (1:1) but the
  follow up workshops were group focused
  with some individual ILP review time. There
  could have been a mismatch between the
  students' expectations from attending their
  individual interview and the subsequent group
  workshops.
- Procedural issues in conducting the interviews. Guidelines were sent to the interview team for conducting the interviews. However, reviewing the completed interviews highlighted a wide variation in terms of the depth and range of content. Some goals set were more specific and reasonable than others, e.g., attending 80% of EAP classes by not staying up at night so not oversleep the next day vs attending all EAP classes.
- Timing. The workshops occurred in the later part of semester 2 when some students were engaged in exams or coursework.

Correspondingly, some possible solutions could be adopted in the future.

 1:1 interviews vs group workshops. Future workshops could focus more on underlying individual issues of the students (class

- room engagement, study strategies, time management) rather than replicating existing EAP support.
- Procedural issues. A standardized approach to conducting interviews should be adopted through the provision of interviewer training where good examples of questions and goal setting skills are shared.
- Timing. The intervention would be significantly more useful for the students if it was timetabled in semester 1. An earlier intervention process would allow more individualized support which responds to the issues mentioned above to be offered.

### Conclusion

There is some evidence to suggest that this pilot intervention project using ILPs has been successful. It responded to individual student's issues through a process of setting individualized goals. Workshops tailored to these students offered topics to meet their specific needs, and allowed for close teacher support, lowering students' affective filters. However, the sample size was small and the participation rate was low. It is clear from the above limitations above that considerable improvements could be made to any future intervention.

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## In Form Exchange

## **Pathways Preview:** Promoting Positive Pre-Arrival for Pathways Students in a Pandemic

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The needs of students in transition to Higher Education requires careful consideration, handling and planning, and the effectiveness of the offering needs to be monitored and adjusted as situations change. Marshall says, "how best to ease the transition into HE via different pathways needs to be addressed" (2016, p13) and whilst true for all students, offerings for those in transition to pathways programmes requires thought, creativity, and care.

At Kaplan International Pathways, we focus attention on students before they arrive at our colleges. For example, personalised messages as Confirmation of Acceptance for Studies (CAS) are issued and follow-up calls, so students know next steps for visa applications. Weekly calls focus on visa outcomes and advisors encourage students to make and share travel plans so we can assist with arrangements. Finally, College Directors host pre-departure briefing webinars and admissions staff follow up, to ensure students successfully start their courses and begin attending classes.

Morgan tells us

"arrival at university is a seminal moment in [students'] lives, especially if it is the first time they have lived away from home, studied at a large institution or been exposed to a range of different cultures and life experiences." (2012, p21).

### The rapid shift from in-person to online – how?

We had honed a successful Welcome Week approach for in-person study. In Summer 2020 when the realities of Covid-19 meant we knew future students might join online, there were concerns that online induction would need specific elements to ensure success. The activities we had developed to help students settle into their programmes may not be easy to replicate, online. Also, a mix of online and face-to-face students at each college might potentially lead to disparity. We reviewed the offering and decided what might work in remote

settings, but this was all untested. With the large September 2020 intake looming, would remote students switch off their computers and withdraw from their programmes?

We designed a new learning resource,
Pathways Preview, to give students a chance
to experience the online learning environment
and to meet college staff before their
courses started. Offered to all students, and
encouraged, it was not compulsory as we could
not guarantee that students would have access,
motivation or interest, in joining ahead of
courses commencing. We had to be hopeful, yet
conservative in expectations of engagement.

### What pre-arrival resources might international pathways students need?

Pathways Preview comprised generic, preparatory, asynchronous self-access online materials. Available in the final month before enrolment, videos and interactive resources help students

- understand what an online class will be like, especially important given our active learning approach where participation is expected: students in classes need to offer thoughts, ask questions, and challenge one another
- · book a demo class with a live tutor
- learn more about non-academic aspects of life in college, such as keeping healthy and safe, and how to make friends in a pathways environment, where students will meet others from over one hundred different nationalities
- hear about support services and be signposted to similar offers at universities

Other materials cover time management and guidance on how to prepare to be a student at pre-undergraduate or prepostgraduate level. There is a walkthrough of the platforms that we use such as Teams and Zoom. We also include information on digital

assessments. Like many institutions, we have recently accelerated our technology-supported approach to assessing students, which has been necessary as so many have been studying remotely from colleges, during the past two years. We now make greater use of short quizzes online and our in-house KITE platform which delivers adaptive English language tests. Familiarisation with this is valuable.

Networking is something we encourage students to take seriously, so that they can make the best of the opportunities they have, once they are at university, to build social capital, as Phamidentifies:

"the social relationships and networks with significant others... including peers... could support or hinder students' transition outcomes." (2021, p19-20)

So, the section on online reputation and networks helps students start to curate their digital presence and begin to build connections. Finally, alongside the generic content, applicable regardless of which college students attend, we have included some specific information about students' particular colleges. This helps students to find out more about their College Director and teachers. Putting a face to a name helps students feel more connected.

### How successful is Pathways Preview?

By the end of the Autumn 2020 intake, we had over 50,000 page views (figure 1). Our January 2021 intake took us to close to 100,000 page views. This is impressive given 6,000 students complete pathways programmes each year, on average fifteen pages per student. Overwhelmingly, video content was the most popular in the early days.

We introduced Pathways Preview at speed and with the key aim of ensuring the retention of students in the very early stages of their programmes. We think Pathways Preview delivered what we might have expected, on these measures of effectiveness:

- Mitigation of technical challenges; around 1 in 20 students, as a maximum, were said to experience difficulties in connecting and orientating around the VLE at the start of their programme; college staff noted that this was generally much smoother than they anticipated
- Very few students withdrew; our crosscollege retention rate remained static at 975%

One more qualitative measure was preparedness; college staff repeatedly commented students had never been better prepared for their pathways programme. Many students had started their programmes knowing how to navigate the VLE and there were fewer orientation queries. This meant that once term began, students could engage with learning materials very quickly and begin developing skills and theoretical knowledge, rather than efforts being on acquiring digital skills. We know that Pathways Preview,

alone, did not achieve this but we are confident that it contributed to this positive outcome

### What's next for Pathways Preview?

It was decided in late 2020 that Pathways
Preview would not be just a short-term Covid
response; providing more pre-arrival materials
was something that we had considered prepandemic, but we finally had the impetus. The
resource continues to be developed and we
are gathering more student and staff feedback
early in 2022 so we can plan updates for the
2022-23 academic year.

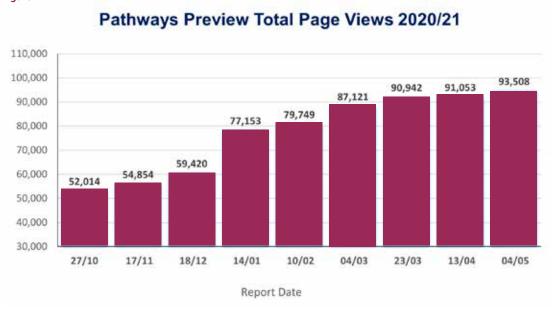
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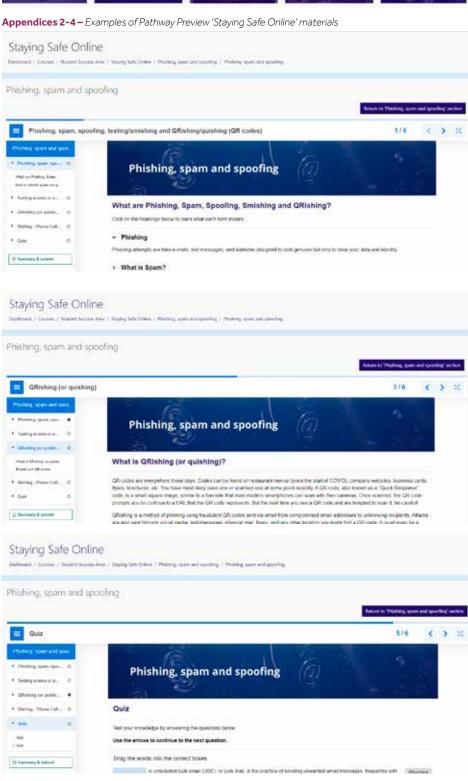
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Appendix 1 - Topics in Pathway Preview





## Website assignments: an inclusive medium for developing transferable skills

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This article focuses on website assignments and their potential as an inclusive medium for developing foundation students' digital transferable skills. Application and challenges on foundation, pre-sessional and degree courses are presented, with discussion of employability skills, assessment and inclusivity.

### Introduction

As digital media and technological tools have reshaped the way we communicate and work it is imperative that graduates in all disciplines develop the transferable digital skills needed for their future careers (Simatele, 2015; Chartered Institute for IT, 2021). These skills can be honed through digital media assignments, such as podcasts, blogs, e-portfolios, videos and blended media websites, which have become more common in higher education in recent years (Reyna & Meier, 2020; Reyna 2021). Accessibility to digital assignment creation has also widened, with website builders such as Google Sites, Wix and WordPress making the process easier for students without specialist IT experience.

### Application and challenges

Oxford Brookes University has supported the introduction of website assignments in foundation, pre-sessional, hospitality and nursing programmes. On the International Foundation Arts, Humanities and Law programme, students create a blended media group website using Google Sites. Student evaluations have been positive, highlighting the combination of practical and creative elements, and the opportunity to develop website building skills.

Multi-media website assignments have also been piloted on the Pre-master's Certificate. The task consolidates students' understanding of key concepts and skills involved in undertaking research at master's level. Students produce an individual Google Sites website, which includes a draft stage with video screencast feedback. Evaluation from students and quality assurance has also been very positive, identifying elements such as level of interest and innovation, detail in the formative feedback and development of new transferable skills.

In terms of challenges, these have primarily related to register and referencing. Stakeholders have raised pertinent questions about genre, with topics ranging from theoretical underpinnings to formality and appropriacy of writing style and referencing. On the above-mentioned courses, the justification for requiring a formal academic style and Harvard referencing has been that academic web content is sometimes written in this register and includes referencing. One alternative is for students to adopt a more personal reflective writing style and replace Harvard referencing with embedded url links to sources.

### **Employability skills**

There may be an assumption among foundation and pre-sessional teaching communities that employability skills are not a priority when designing curricula. Naturally, tasks and assessments tend to focus on enabling students to complete assignments on destination courses. However, from these pilot schemes it appears that digital media assignments provide an opportunity to focus on transferable skills from the outset.

### InForm Exchange

Significantly, development of these abilities often aligns with universities' strategic planning. For example, at this institution the education and enterprise 5 year strategic plan aims to ensure the provision is 'current, accessible and adaptive to [students'] evolving career goals' (Oxford Brookes University, 2022, p.32).

On undergraduate and postgraduate programmes blog and e-portfolio website assignments have also been introduced. Events management students have linked their websites to subsequent job applications and public health nursing graduates have continued to use e-portfolios after graduation to inform professional qualifications. In these cases, a possible limitation of continuing to use a website for career purposes is loss of access, so students are encouraged to create them using an external website builder (e.g. Wix or WordPress) or tied to a personal gmail account (Google Sites).

### **Assessment**

When assessing cloud-based digital assignments an important consideration is whether or how to limit students' ability to work on their websites once an assignment deadline is reached. On the foundation and pre-master's courses a new Google Site is created for each student, but the lecturer remains the owner and the student designated as co-editor. The student's access rights are then changed to viewer on the deadline. They are also required to upload the text to Turnitin for similarity checking, attachment of rubrics and return of summative feedback.

Creation and application of assessment criteria also raises a number of important questions. These include the extent to which digital skills should be assessed, how they can be described and implications for teaching. Responses will depend on many factors, such as course subject, learning outcomes and nature of tasks. On the pre-master's website, digital literacy is assessed under the umbrella term 'presentation', which is weighted at 20% of the assignment mark and split into organisation and presentation of materials,

and use of multi-media content. Regarding instruction, to help students familiarise themselves with website building tools there are plenty of freely available video tutorials, but dedicating class time to work on projects has been beneficial in these and other contexts (Vandermolen and Spivey, 2017).

### **Inclusivity**

An unexpected positive outcome on the foundation and pre-master's programmes was achievement for students who were less successful in conventional assessments. The students enjoyed curating various media and the opportunity to demonstrate their knowledge and understanding in different ways. These early results suggest that website assignments may provide a more inclusive format for students to engage with their programmes of study, especially those who may have less experience or expertise with long-standing written genres like essays and reports.

### Conclusion

Overall, the above website assignments have motivated students to create work of high quality and creative diversity, and in some cases to use them for employment related purposes such as job applications and professional qualifications. As an emerging assignment genre, websites appear to have great potential for widening participation, harnessing creativity and developing students' vocational skills.

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### The International Student and Institutionalised Vocabulary:

### Preparing Students for (Further) Success

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IFP and Pre-sessional tutors are extremely good at understanding the needs of International Students going on to study in a UK higher education institution. As such we spend time developing resources, tasks and lesson plans relating to Academic Word Lists, Subject-Specific Word Lists, useful academic collocations and phrases etc. I propose that without equipping our students with our own individual Institution Word Lists we are denying them the ability to reach their full potential.

As EAP tutors we take pride in knowing that we prepare our students to cope with the rigorous demands of HE study in the UK. The bridge we create which leads our students towards a confident and successful approach to their chosen UG or PG subject studies is a carefully constructed one. We decide on the building blocks, be it essay writing and its myriad of components, safe use of sources, producing effective notes, critical thinking etc. Many a carefully thought out syllabus will include a considerable amount of vocabulary-based input and many a teacher will consider Nation's vocabulary classifications (2001).

A couple of years ago I moved from coordinating and teaching on International Foundation Year programmes and Presessional courses to having direct contact with students on their UG and PG courses in both a formal classroom setting and on a one-to-one basis. It became evident to me that prior vocabulary input, whilst definitely of use, had been missing something vital for our International cohorts and as we continue to push academic vocabulary, research is emerging that questions our over-emphasis on this (Masrai, Milton, El-Dakhs and Elmenshawy, 2021, p13).

We may introduce our students to the Academic Word List, subject-specific vocabulary, collocational language, words and phrases categorised by cause-effect/ compare-contrast/problem-solution and we may highlight linguistic terms indicating formality or caution. Without doubt, these are all useful, but it is surprising that despite us giving so much thought to and dedicating so many contact hours to vocabulary-based input, we are often forgetting to help our students cope with a lexis screaming 'here I am' right under our very noses. This is the language of our own Institution. This is the kind of language which is not subjectspecific and may not be high-frequency yet is paramount to student success words such as 'weighting', 'extenuating circumstances', 'late submission', 'penalty', 'module specification'. Schmitt and Schmitt (2014) argue the need for vocabulary other than high-frequency to be actively taught and regularly incorporated into teaching and learning contexts and materials. Our own institutional vocabulary fits into this argument. What can be low or mid-frequency can equate to high stakes vocabulary in that both understanding and acting on these lexical items are a major factor in student success and progression. In addition to this is the fact that tutors on pre-sessional courses often have students in one class who will go on to study different subject areas and for whom an effective interdisciplinary word list does not exist (Durrant, 2014). Perhaps we should therefore dedicate more time and resources to producing effective new institutional word lists ourselves rather than relying on the general ones we have always used.

For International Students such 'university terminology' is new and confusing. Even our home students can feel perplexed by such vocabulary - indeed in my more recent role as Academic Skills Advisor I regularly come across home students who are unsure of what some of the university terminology means or who complain of the fact that they are expected to understand it all in term 1 with no real guidance. Students having transferred from one HE institution to another may have the added conundrum of translating Institution 2 vocabulary back into Institution 1 vocab before they fully understand what their new student handbooks, module specifications or assessment briefs are telling them. For example, the term 'Special Circumstances' in one university may be 'Extenuating Circumstances' in another or may even be 'Mitigating Circumstances' in another, without having any difference in meaning. We need to ensure that all our pre-sessional programmes enable all our International Students to confront such terminology with familiarity and with confidence.

Another thing that has struck me is the lack of consistency in style, format and terminology used in assignment briefs. In fact, the very word 'brief' can be confusing if students have only previously come across the terms 'assignment', 'essay title' and 'instructions'. Going back to my original point here, there are different styles and formats for briefs according to Academic School and across Subject Areas in each school. A good example is within the School of Arts and Humanities in my current institution. Taking some examples: a UG Interior design brief consists of 750 words; 23 words are task specific i.e. necessary to understand the key concept of the brief and therefore to submit work of a pass level or above. In a Graphic Design brief of 958 words, an understanding of 100-120 words

is needed to understand the key concept of the brief and therefore to submit work of a pass level or above. Compare these to a UG Journalism brief comprising of 209 words, of which 43 must be acted on in order to complete the task successfully. When we are covering the typical IFP/Pre-sessional syllabus content of 'inferring from context' and 'focusing on key words only', we usually do so from the point of view of a specific reading text which bears no resemblance to an assignment brief and in my current work with UG and PG International Students I am endlessly asked to meet with students and go over briefs with them, carrying out these very strategies. Don't get me wrong, we have taught our students well on their preuniversity programmes to understand and use these strategies, but we have not fully enabled them to reach their full potential and it feels like a glaring omission.

I suggest that we tailor our schemes of work, materials and specifically our vocabulary teaching much more closely to what our students will really see once they are on their UG/PG course at our own individual institutions. Working more closely with subject lecturers would of course be great; however budget, time constraints and notably the rise in Part Time Hourly Paid (PTHP) posts can make this tricky at times. I have produced an Institution-Specific word list (as opposed to Subject Specific or Academic Word Lists), which then allows me to experiment with, in a time-efficient manner, ways of creating memorable vocabulary and text comprehension learning experiences for International Students. This can range from very simple activities such as crosswords or word-definition matching activities (enforced online teaching has made me much more confident in creating opportunities for students to compete/ play online through easily accessible apps

such as Kahoot, Mentimeter, Quizlet, Makebeliefscomix), through to longer activities analysing, condensing and producing critical reviews of briefs.

Ultimately it would be good to have some kind of institution-based corpus with our body of texts being institutional handbooks, regulations, policies and procedures, briefs etc and to create our own vocabulary lists based on our own frequency of use. These lists would be pertinent only to our own students and not necessarily those in other institutions, and certainly would not resemble the current frequency lists we use. However, as I have already mentioned, frequency may not be high, but the need for comprehension and ensuing action on such vocabulary is crucial for student success.

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## **Decolonising an IFP:**The Experience So Far

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In 2016, British students, inspired by South Africa's 2015 Rhodes Must Fall protests, campaigned asking, "Why is my curriculum white?", shifting the focus onto universities and their relationship with colonialism. Currently the focus of decolonising work is on British based undergraduates. But what of international students on Foundation year courses? How do we decolonise International Foundation Programmes (IFP), which by their nature are philosophically at odds with the decolonising process as programmes aimed at preparing students for British undergraduate study?

### What did we do?

In Autumn 2020, we established an interdisciplinary decolonising working group with interested academics from the Warwick IFP. Initial meetings identified:

- 1. We had diverse levels of knowledge and understanding
- 2. We had our own questions and personal motivations.
- 3. A long-term commitment is required to do this justice.

We read extensively, attended Continuous Professional Development (CPD) across multiple institutions and engaged in supportive debate to explore our personal responses to our learning. Using Padlet we recorded and shared our ideas.

The journey, at times, was academically and personally unsettling; however, through engagement with each other and with inspiring CPD our resolve strengthened. The initiative felt enormous but, as one conference speaker suggested, if we "do small parts as collectively it has an impact" but most importantly, 'do something'.

### **Aims**

We established our aims to enable us to work with common language: acknowledging why decolonising is important for our department, knowledge-exchange, supporting staff and raising issues uncovered with senior staff.

We agreed our working definition of decolonising the curriculum:

- Representing an intersectional community
- Creating a curriculum which reflects students, staff, and local community
- Acknowledge, address, and challenge pre-existing systems and dominant discourses.
- Empowering change striving for equity over equality and enabling an inclusive equitable space
- To recognise the inherent value brought to the IFP through the unique experiences of students, staff, and the wider community
- Acknowledging and challenging the ongoing systemic impacts of the colonial project

### **Ethnic Names**

One initial work was inspired by "How To Respect My Ethnic Name." We observed that many students adopt an anglicised name. Informal conversations with students revealed that many are 'given' these names pre-arrival by agents in home countries to make teachers lives easier. This was an area that we could and must address, especially as names form the basis of identity and are often culturally significant. Studies by Marrun (2018) and Kohli and Solórzano (2012) suggest that (re)naming practices are acts of racial microaggression.

This was raised at a faculty level, where this practice also affected incoming UG International students too. As a result, the university is now working with agents around this practice.

### **Internal Staff Survey**

We wanted to know how familiar staff were with decolonising the curriculum, how they understood it, and to gather questions/ concerns that people had around it.

Responses unveiled a mixed understanding of what decolonising means. Some wanted more information, "to be honest I am not sure what it entails", others were concerned to avoid tokenism, "I am worried I would get it wrong and cause more harm than good".

From these responses it became clear that providing staff training was essential.

### **Staff Training 1**

In February 2021, we introduced the decolonising initiative. In a workshop, staff worked in subject groups crowdsourcing ideas using Padlet. They identified "challenges/barriers/fears" as well as "possible avenues of change/ change that has already taken place." Feedback from the session was positive (scoring an average 4.5 out of 5). Comments included "Useful to have some time to .... think about the importance of this and how it could be implemented" and "So much to think about! I am excited to see .... how the initiative progresses", and, "I'm really grateful for the opportunity to feed into it and learn from it." Staff also indicated that they wanted more, "It would be helpful to have some sense of the different ways we can go about with it as a department" and "I feel like we need a lot more collaborative time though to really make any progress."

### **Staff Training 2**

June 2021, we invited a keynote speaker to share their inclusive assessment practices. We wanted to bring an external voice to the discussion having been inspired by others ourselves. Comments included "Really enjoyed the keynote speakers - very engaging with some useful practical tips on how to improve and adapt our curriculums/ teaching environments". We offered optional sessions, which ranged from a topic refresher, facilitated staff discussion, activities that led to sharing resources via a collaborative Miro board, to hearing about case studies of ongoing decolonising work. Staff commented that they "enjoyed hearing practical suggestions from colleagues actually moving into implementation." The practical element was held in response to the request for more collaborative time. "Lots of useful things to think about ... at first I was sceptical as it's such a busy time but on reflection I now have a good list of things to really think about over the summer."

### **Next steps:**

We continue to support all staff through training and discussion. We aim to create a central bank of online resources and conduct research with alumni into their experiences of issues around ethnic names, views on the IFP's purpose and the extent to which a decolonised curriculum does/ does not disadvantage them.

### Recommendations/ Conclusion

Our advice to other IFPs undertaking this initiative is that it is a lengthy process, requiring commitment and learning. At times, it requires uncomfortable but necessary discussions, as IFP students prepare to encounter an increasingly decolonised curriculum as undergraduates. Undertaking CPD is vital to develop the knowledge and understanding that underpin this. Working in collaboration is valuable in sharing ideas and gaining support – and we are interested to work with other IFP institutions. Finally, it is acceptable to

make mistakes – to do nothing would be the mistake. It is vitally important that international students, wherever they learn, should do so in institutions that recognise the value and experience they bring to the course.

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### This is a call for papers for Issue 22 of InForm

The submission of papers is now invited for the twenty second edition of InForm from members of the academic community associated with international foundation programmes. Issue 22 will be published in March 2023. 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. InForm also includes a letters page with readers' responses to the articles included in previous editions. Letters should be no longer than 200 words. Journal articles (of no more than 1500 words) should be sent by email to <code>inform@reading.ac.uk</code> by 12.00 pm on 9th January 2023. For more information and a full writer's guide or if you wish to discuss an idea for an article, please email us on <code>inform@reading.ac.uk</code>





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