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Introductions:

Today we are presenting on our paper titled "Connecting Environment and Community: Building Students' Capacities as Future Environmental Professionals", which is grounded in an examination of a module we began running in 2021 as part of this BSc degree.

Slide Two:

Before we tell you more about the module, we just wanted to introduce you to the broader degree course and focus.

The course is about people's relationship with and management of the environment. We take a three pronged approach to this during the course with a focus on people, planet and place. In doing so students benefit from learning from a number of different perspectives and subject disciplines and this is why the course is quite unique. So they will learn from some physical geographers about the environment, but they will also learn from academics who are experts in environmental psychology, environmental planning and development, sustainability experts and those that have worked in environmental assessment and consultancy roles in industry before their academic career. This makes the course unique and exciting as well as holistic in its approach to environmental management.

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So as we find ourselves in a period of environmental emergency, it became clear to us through our observations, student feedback, and feedback from industry professionals that we need to transform environmental management teaching.

Critically, we discussed how we need to prepare students to become professionals who respond to environmental challenges as intersectional crises that require community-driven solutions. Understanding governance, science and technology, is of course essential – but being able to understand people and the communities our graduates will eventually work with, as well as being able to communicate environmental projects, is equally important. Additionally, we wanted to give our students the opportunity to understand their capacity as current and future change-makers. Through our discussions, we decided that implementing this approach requires a change in mindset to appreciate a more nuanced and multi-disciplinary style of education.

So in response to this need, we developed a module centered around building students' capacities to recognise the need for genuine inclusion and diverse representation to achieve authentic participation in environmentally focused projects. We also decided we wanted to use a transformative learning approach in delivering this module because, as Leichenko, Gram-Hanssen, and O'Brien (2021) show, using transformative learning tools to prompt students to challenge their perspectives and explore their roles in creating change can help develop their sense of agency in relation to environmental crises.

So this module was initially developed in response to two central challenges:

- 1) To deliver a transformative learning experience which provides students with the skills, values, and knowledge to prioritise inclusivity in their current and future working practices.
- 2) To support students to lead and implement environmental decision-making processes which are rooted in genuinely inclusive practices, and which account for the voices of all those affected by

the decisions made. This is representative of the similar global struggle for equitable environmental projects and policies.

To respond to these challenges, we decided to co-design a new second-year module within the BSc Environmental Management degree programme and we called it 'Environmental Psychology in the Community' (EPiC).

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So the EPiC module content needed to use innovative teaching methods to develop students' confidence as leaders in a variety of environmentally focused fields, providing them with the opportunity to connect their academic knowledge around subjects such as environmental justice with learning about different methods to increase public engagement and participation techniques across the environmental sector. Essentially our central focus was to give students the skills to use established community engagement methods, whilst also transforming how they understand their role as people who might achieve inclusive goals in environmental management. Through our aim to offer this module as a transformative learning experience, we also wanted to give students the opportunity to examine their own worldviews and perspectives, and critically assess these in connection with their fellow students.

To respond to the challenge of creating a transformative learning experience, we followed an experiential learning process by combining the sharing of knowledge and theory through lectures with opportunities for students to actually experience the public participation methods we were teaching them about.

For example, in one lecture the students actively took part in guided and facilitated conversations following a particular format which is designed to encourage all voices to be heard in a supportive environment. The format the students learnt about and experienced is called the Timeout method, developed by a Finnish organisation. We chose this as it is a method we have used in our research projects linked to climate education, and thought it was a good opportunity to inform our teaching through our research experience. The timeout method is particularly suitable for guiding challenging conversations between different groups or individuals.

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In the Timeout dialogue the lecturer – in this instance myself - acted as the discussion facilitator, and guided a conversation around what it feels like to live and learn in interesting times (with a specific focus on climate crisis, biodiversity crisis and pandemic). We followed the methods of the Timeout guidance closely, which involves setting up ground rules for the discussion space, establishing our roles in the activity, agreeing on the question we are examining, and using certain dialogue tools to encourage inclusive engagement. We began, for example, by thinking through this image on the slide.

We used this activity as an opportunity to take on the challenge of transforming the classroom environment, giving students the chance to step out of their roles as receivers of knowledge and be the leading voices in the room through sharing their personal thoughts and experiences. In some written feedback one student described how the "timeout session was a great opportunity to listen and understand my fellow classmate's feelings and thoughts towards the climate crisis. Although our degree is wonderful in terms of learning about environmental issues [...] there is little space for discussion of our individual concerns and feelings towards environmental degradation. This is something I personally find therapeutic and beneficial. I think this method could be incorporated

into parts of sessions to be informative and helpful for first and second years". Another student wrote that "It was a really good opportunity to share burdens. Talking about things you struggle with and realising other people have similar experiences and feelings is super valuable".

Another way that students also learnt about and then took part in inclusive, community-focused discussions was by using a World Café approach. This is an approach which involves creating a relatively informal 'café' set up, with different groups sat at tables around the room. Each group will then engage in rounds of discussions which last for about 15 minutes or so. In each round, they will discuss a slightly different theme or topic which links to one overarching theme or question.

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Each table will have nominated a host at the beginning, who will take notes on what is being said during the conversations. You can see examples of these notes here, which were written on paper table clothes we put out. During the EPiC module World Café activity students considered ways to challenge climate inequality with a focus on decolonising environmental thinking and practices. The questions they had to focus on were:

- How might you have you personally encountered forms/impacts of colonialism, even if you did not realise it at the time?
- Why is decolonising the environment such an important task, and how can we all be a part of this work?
- How have colonial legacies shaped environmental thinking and management, both historically and in the present?

So here, we showed them how to bring the topics they examined in the lecture content of that week, which centred around decolonisation and climate inequality, into connection with a method for fostering public engagement in environmental conversations.

We finished the lecture by talking about the importance of creating a suitable atmosphere and format to encourage in depth and critical dialogue in supportive situations when focusing on environmental and sustainability topics and projects.

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More broadly, during the module we also examined many 'real-world' projects in which environmental decision-making processes had either taken place or were taking place at that time, and considered the role of community inclusion and participation in these real-world events. For example, as this happened in early 2022, students spent one session reflecting on COP26, which had taken place in Glasgow in late 2021, and worked to develop an imaginary pitch to run COP27 that would address their reflections. Students drew on their critical reflections to create pitches which considered issues of equality, diversity and inclusion.

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The assessment for the module was also innovative and involved students working in small groups, identifying and researching an environmental issue / topic / project and then leading on visioning, developing, and delivering their own participation projects. Examples of the environmental projects included seminars to discuss a proposed new airport, the refurbishment of a schoolyard into an environmental space, consideration of sustainability and environmental issues in school uniform choice, and the development of a new module with a focus on hopeful futures. Students used a

range of participation methods, including the Timeout method and the World Café method, but also methods such as Deep Mapping, which involves getting people drawing envisioned futures.

The assessment required students to assume the roles of environmental facilitators – some chose the roles of environmental consultants, schoolteachers, and the local council. The remaining students were the participants and as such were assigned roles that they embodied as they considered the various discussions and topics. These roles included the students taking part as residents, school children, and degree students. In this task students were encouraged to emphasise inclusion and think about what true representation and participation looks like. Through taking on different roles the students were encouraged to inhabit a range of perspectives, helping them to consider diversity and the variation of responses that they may encounter in their professional futures and in their quest to contribute to the creation and development of sustainable societies. This module content and assessment are an example of a teaching approach which transforms students' capacities as both individuals and future environmental professionals.

We offered formative feedback on draft seminars and worked closely with each group to develop their ideas.

We also wanted students to have the opportunity to self-evaluate the success of their public participation programme. We therefore asked them to write 500 words reflecting on the process of developing the project. This also gave them the opportunity to share their own reflections on, for example, their role within the group work.

This assessment directly responded to transformative learning goals of supporting students to explore options for new roles, relationships, and actions, planning courses of action and acquiring new skills, testing out new roles and building confidence, and taking these skills and perspectives into the future.

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Our project has had multiple positive outcomes, which can be demonstrated through both student feedback and student action. Firstly, the teaching style was appreciated by students who said:

"This module was really interesting, specifically loved the second half, lessons on relevant things within society", and "The teaching was informative and engaging, covering a range of topics".

Students also commented on the assessment. Comments include: "The second term assessment was [...] a good way to understand how to implement what we had learnt in the lectures and interesting to see the different ways students approached it"; "The last assessment was great to have creative freedom, and not to write a report or essay!"; and "I liked that it enabled us to be creative and inventive".

Having the unusual opportunity to share their perspectives and feelings about environmental change in class through methods such as the Timeout dialogue activity was also positively noted by students. Students commented that this activity brought "everyone together into the same conversation" and that it "It was a really good opportunity to share burdens [...] Talking about things you struggle with and realising other people have similar experiences and feelings is super valuable". Importantly, as a direct result of engaging with the conversation element of the course, the students have been motivated to work with me to secure funding from the UWE student union. This funding is allowing the students to take the lead on developing and running a programme in collaboration with the UWE sustainability team this year called Climate Conversations and Cake. This involves monthly sessions run by and for Environmental Management students and is a result of students'

reflections on their experience, and their desire to implement opportunities to apply their learning more widely.

As a direct result of our experience of teaching this module, as well as the positive student feedback and their expressed desire to extend their learning, we have also developed a new third-year undergraduate module (Environment and Behaviour) building on the foundations laid by the EPiC module. Within the third-year module we will provide students the opportunity to fully immerse in visualizing alternative and hopeful futures. Our decision to focus on hopeful futures in the third-year module was confirmed when one group of students focused their assessment for EPiC around codeveloping an environmental management module centred on hopeful content.

Other academics and industry experts also commented on the innovation of this module to bring social sciences and a focus on people into a degree programme that is not previously known for this. Additionally, during its university accreditation the programme, and particularly this module, was commended for its authentic and inclusive approach to assessment.

In fact, during accreditation assessors commented 'The programme team is commended for acting on student feedback to develop an engaging and forward-thinking programme.' The module team share values which encourage a 'nothing about us, without us' approach. These values permeate the design of module content and teaching approach, recognising the importance of equality, diversity and inclusion and encouraging students to continue developing these values in their learning and journey to professional graduates.

The combination of the innovative assessment and teaching approaches used in this module responds directly to the challenge to begin transforming environmental management curriculum in higher education; the module supports students to both utilize inclusive working practices and understand how to work towards a future centred around sustainable societies.

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In preparation for teaching this same module to a new cohort of students in January next year, we have considered a few key ways we can improve the module. These improvements are based on both our reflections on delivering the course, and on student feedback.

Firstly, in response to feedback from a student who said: "I really enjoyed this assessment, but it was very long going through all of them on the day and I feel like by the later groups everyone was pretty tired" we will be exploring delivery options — less students this year, but if not we were going to run over two sessions. This will allow for more depth to be generated in the sessions and the discussions. We are also planning to provide additional guidance and opportunities to practice role playing and perspective taking throughout the module weekly teaching sessions i.e. we have changed one week to be about seminar practice.

Second, we will be spending more time deconstructing the requirements of the assessment brief with students earlier on in the term. We will also be providing students with support to practice their public participation seminars to other class members, benefiting from peer review and feedback, prior to sharing it on the date of their assessment.

Third, in consideration of our focus on the importance of representation, we have considered new ways to demonstrate the importance of inclusive thinking and meaningful representation across the module content. For example, when citing works on our lecture slides, we will make a concerted effort to include a photo of the author, as well as provide some knowledge about them and their background. This goes some way in helping students understand whose voices and stories they are

engaging with. When discussed with students, this suggestion was met with considerable enthusiasm.

In the next cohort we will also have Degree Apprentice students on the module. These students are studying for their BSC in Environmental Management over five years while simultaneously working in industry. We anticipate that there will be a cascading of knowledge and experience through these students into the environmental and sustainable organisations they work in as these students bring new knowledge to their work practices.

We firmly believe this module could be enhanced through further collaboration with other colleagues working in our sector. For example, in the coming year we are planning for colleagues working on real-world environmental projects to join the class as guest speakers, sharing their experience with the students. We will also be making a visit to a local farm, where students will have the opportunity to engage directly with professionals in the environmental and agricultural sector. They will also have the opportunity to learn about the practical challenges of equality, diversity and inclusion at a local level.

Finally, we want to stress how the values of the teaching approach could be adapted for a variety of subjects and settings, and the specific content of EPiC could be directly used to guide other environmentally-focused degree programmes in other higher education institutions. It offers an accessible and innovative programme of study which does not require specific technologies, extensive digital training, or additional financial support. It is for this reason that we are seeking avenues through which to share and gather feedback on this project idea. Sara has also recently been appointed as an external examiner at Glasgow Caledonian University, with a view to guiding the integration of social sciences/people-focused thinking into an environmental management degree at another institution. She will be specifically drawing on lessons from delivering this module to do so.

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We are looking forward to answering your questions, but we have a few areas where your advice and views would be really useful:

How can we expand the impact of this module?

Can you see ways of applying this approach in your own teaching practice?

Is there any specific ways you feel this module could be enhanced?

Does this module approach resonate with other teaching approaches you are familiar with?

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