# CONNECTIVITY & INCLUSIVITY

## IN HIGHER EDUCATION:

A solutions' based approach from environmental sustainability

# THE GOLDEN THREAD OF CONNECTIVITY AND INCLUSIVITY IN HIGHER EDUCATION

The golden thread running through this project and this report is that we can learn from connectivity within nature's ecosystem to recognise our interdependence with nature and other humans. This helps us to understand how to connect with one another in contemporary times when we have silos and fragmentation brought about by social, technological, developmental, ecological, economic boundaries and hierarchies.

Connectivity is the antidote for fragmentation. This theme runs through the workshops undertaken and therefore this report. It emphasises that there is fragmentation, siloing and disconnection between operations, departments, projects, and between institutions and the people within. The C&I project aimed to pilot the practice of operationalising and highlighting the need for connectivity and inclusivity in human interactions, which are so essential for growth and development.

EDIA is not the central message in the report - it is a concept that is known by audiences but we want to make the point that the individual concepts of equality, diversity, inclusion, and accessibility can be explained through connectivity in ecology.

In this project and in this report, we aimed to understand what EDIA meant to participants and to reveal gaps in practice, knowledge, understanding, interpretation, policy, etc. While we have equality and inclusivity as part of the goals of the United Nations Sustainable Development Goals (UNSDGs), we have shown through this project that gaps can be filled if people, institutions, and units are more connected and inclusive.

*Dr Cecilia Medupin, Convener & Principle Investigator,
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# EXECUTIVE SUMMARY

Connectivity & inclusivity in higher education & environmental sustainability: a solutions' based approach (pilot study) (C&I) is a pilot project led by ecologist, Dr Cecilia Medupin, at the University of Manchester (UoM). The study is part of the UK's Natural Environment Research Council (NERC) Engaging Environments project and builds on previous work by the Women in Environmental Science (WiES) network (https://www.meri.manchester.ac.uk/wies/about).

Premised on the belief that connectivity and inclusivity are key to the success of any environment, this project used UoM as a case study to explore the importance of connectivity and inclusivity in higher education (HE) institutions and how it can be improved. This research was carried out through two workshops hosted at UoM in 2022. The following report presents a summary of the workshop activities and their outcomes. The workshops included presentations from expert guest speakers, knowledge exchange sessions, breakout sessions, workshop assessment, and participant feedback. The report also includes a toolkit to support those interested in exploring questions of connectivity and inclusivity at their own institutions.

The report highlights the role of Equality Diversity, Inclusion, and Accessibility (EDIA) in creating a connected and inclusive place to work and study, and the need for practical application of policy, effective communication, training, and strong leadership. The findings of this report will be disseminated across the university and other key stakeholders.

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# CONNECTIVITY AS THE ANTIDOTE TO FRAGMENTATION

01

# 01 CONNECTIVITY AS THE ANTIDOTE TO FRAGMENTATION

The earth's ecosystem depends on a well-connected ecological web. A healthy river, for example, supports biodiversity amongst plant and insect life allowing fish populations to thrive. In turn, thriving fish populations provide a livelihood for anglers and a source of food for humans and animals. These connections between human beings, animals, plants and their physical surroundings underpin the long-term persistence of the earth's ecosystem.

In nature, connectivity can be defined as the unimpeded flow of energy (e.g. carbon), materials (e.g. detritus), genes among populations and organisms across spaces, habitats, patches, or regions of interests so that species can function effectively within an ecological system. It is a measure of the extent to which plants and animals can move between habitat patches, as well as the extent to which non-local ecosystem functions associated with soil and water processes for example are maintained (ConnectGreen, 2021).

**Human connectivity therefore, is the unimpeded flow of human energy, materials, departments, units and shared policy implementation across and within organisations across spaces, or regions of interests, so that individuals can function effectively within their organised systems.**

The concept of connectivity amongst human beings had always existed from pre-historic times. People coexisted with one another, there was a sense of culture, value, interdependence and connectivity (Ember, 2020). However, in modern times and due to increasing human population densities, increased urbanisation, migration, technological advancement, high socio-economic disparities, more people live and work in isolated conditions and, institutions are increasingly siloed with failures in the effective engagement of horizontal coordination[,]. These factors have accelerated the interchange between people and cultures and defragmented institutions and organisations in ways that undermine human connectivity. Therefore, the process of bringing human minds together effectively holds the key to consciously accelerating human progress in what is known as conscious connectivity (Harish, 2016).
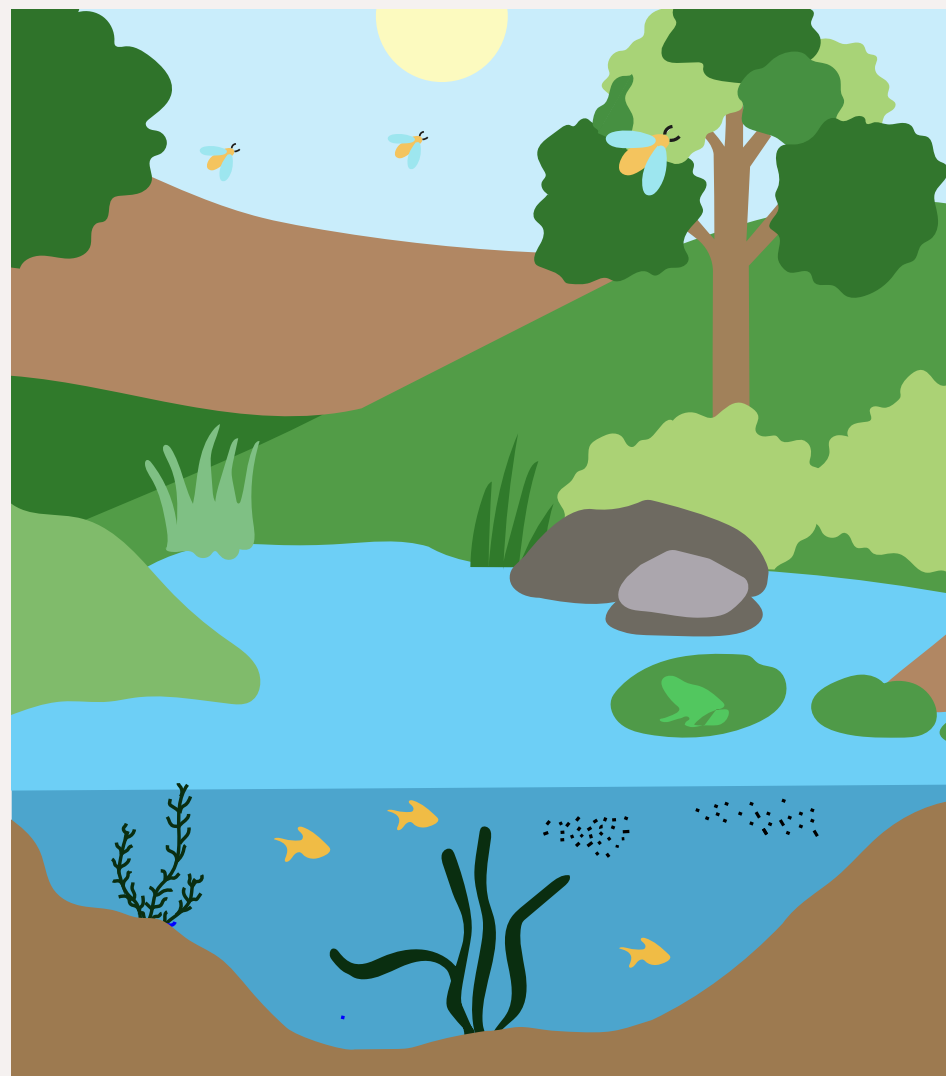
**Human connection is a deep bond that is formed when people feel seen, heard and valued.**

Soga and Gaston (2021) outlined the different degrees of connectivity humans have with nature, and they demonstrated that humans have the ability to connect in similar ways with other people. These forms of interaction are either affective or cognitive (e.g., based on proximity to others, being aware of their presence, etc.) fostering the different forms of human interactions and connectivity. The benefits of these forms of interactions include improved health and wellbeing (Martino et al., 2017), valuing others, and appreciating the opportunities for conscious communication. The recent pandemic is also a testament to this!

To genuinely interact with others, not only cognitively but also affectively, a space needs to be created where we can reflect, feel valued, be seen, and heard. Through cognitive interaction, we can connect, share emotions and feelings without any direct emotional stimulation to oneself. However, when an individual connects affectively, their feelings are engaged, enabling them to listen attentively, ask more questions to learn more, and be empathetic.

*Genuine interaction between human beings involves both cognitive and affective connectivity*

Human networks are a vital part of connectivity and inclusivity. Improved connectivity and inclusivity are also required in HE institutions because they too suffer from fragmentation because of siloed working practices (departments, faculties), different access to facilities, and institutional hierarchies, for example. These problems are consistent with contemporary working life beyond HE where more people work in isolated conditions and institutions lack horizontal coordination. These factors have fragmented most institutions and organisations in ways that devalue human connectivity. Therefore, connectivity and inclusivity in HE could mean:

- More effective networks within institutions and healthy institutional processes.

- No one is left behind.

- Shared responsibility and implementable coordinated action across the institution.

- A place where academic excellence and performance is equal to professional and personal progress.

- A culture of openness and a safe space for all.

## Connectivity, inclusivity, and sustainability

This study responds directly to many of the UN Sustainable Development Goals (SDGs). First and foremost, it is inspired by the connected nature of the earth's ecosystems that are essential to a thriving world. Working together to protect ecosystems from fragmentation will help to secure the health of our waters and land for future generations (SDGs 14 and 15). The best way to maintain ecological and human connectivity is to think globally and act locally. The ability to relate to and value the contributions others make to our institutions could lead to reduced inequalities (SDG 10), good health and wellbeing (SDG 3) and strong institutions (SDG 16).

Additionally, the post-2020 global biodiversity framework based on the Convention on Biological Diversity aims to halt loss of biodiversity and associated ecosystem services. While these global policies abound and international environmental laws are transposed into local laws, there are gaps in the implementation of these laws at the local level due to increasing human impacts and climate threats. There is an opportunity to explore ecological connectivity as a vehicle to achieve global conservation goals. [1]

Connected and inclusive networks, therefore, represent the best opportunity to maintain and restore ecological processes that are vital to humanity and all life. Connectivity and inclusivity could ensure that ecosystems around the world will be more resilient and adaptable to global change. Hence, "connectivity" in HE is necessary if we are to go beyond data collection. To address these issues based on the review of ecological connectivity, **human connectivity** within and between people working or studying in institutions is:

1. The antidote for fragmented institutions, departments, units, hierarchy and people (aligns with Talk 1).

2. Not always perfect or comfortable but, needs to be cultivated and practiced (aligns with Talks 3, 5 and the Principles-Focused Evaluation).

3. Sharing the gift of presence – a recognition that nature operates as an integrated sum of its parts. This is imperative as interconnected, diverse, and inclusive of people to promote diverse, unique results (aligns with Talks 2 and 4)

4. Realising that no one is an island- we are an embodiment of interdependence based on effective networks within institutions (aligns with Talks 1 and 4) which represent the best opportunity to maintain and restore healthy institutional processes which are vital to humanity and all life.

5. Intentional i.e., it is vital to human integrity and function (aligns with the outcomes of the breakout sessions and the Principles-Focused Evaluation).

6. Active and needs to be ongoing i.e. necessary to ensure that institutions will be more resilient and adaptable to changes and will have the ability to sustain the work needs of the present and future.

## The C & I Aims and Objectives

This study acknowledged the need for connectivity and inclusivity initiatives, to recognise lived experiences as essential to knowledge sharing and to directly informing practice. We aimed to create an EDIA practice framework and operating principles that is empirical evidence-based and, built on on good practice. Through this means, we can we put our clients (staff and students) at the centre of our thinking and to demonstrate that inclusivity is integral to connectivity.

### The workshops at the University of Manchester, UK implemented the objectives, which are to:

1. Explore the principles of connectivity and inclusivity in practice (through the workshop design and evaluation).

2. Identify opportunities for, and barriers to, connectivity and inclusivity.

3. Explore co-production of knowledge to inform EDIA practices.

4. Create an EDIA practice framework and operating principles that are based on empirical evidence and good practice.

5. Highlight the need for HE leadership, teaching, learning, research and institutional processes to be informed by practices of connectivity and inclusivity.

6. Explore the relationship between connectedness, and inclusivity, and develop ways of addressing conflicts that exist between them.

7. Promote genuine inclusion and diversity in practice.

For these reasons, this study brought together participants from across the university community, including staff, students, researchers, representatives from professional and voluntary organisations and friends of UoM. Participants were brought together in two workshops hosted at UoM in 2022 to share their experiences of connectivity and inclusivity in HE, engage with others, and co-produce solutions for barriers to EDIA.

From guest speakers' presentations, knowledge exchange and breakout sessions, and participant feedback, the key learning outcomes were generated. This report presents a summary of the workshop activities and their learning outcomes. It also includes a toolkit to support those interested in exploring questions of connectivity and inclusivity at their own institutions.
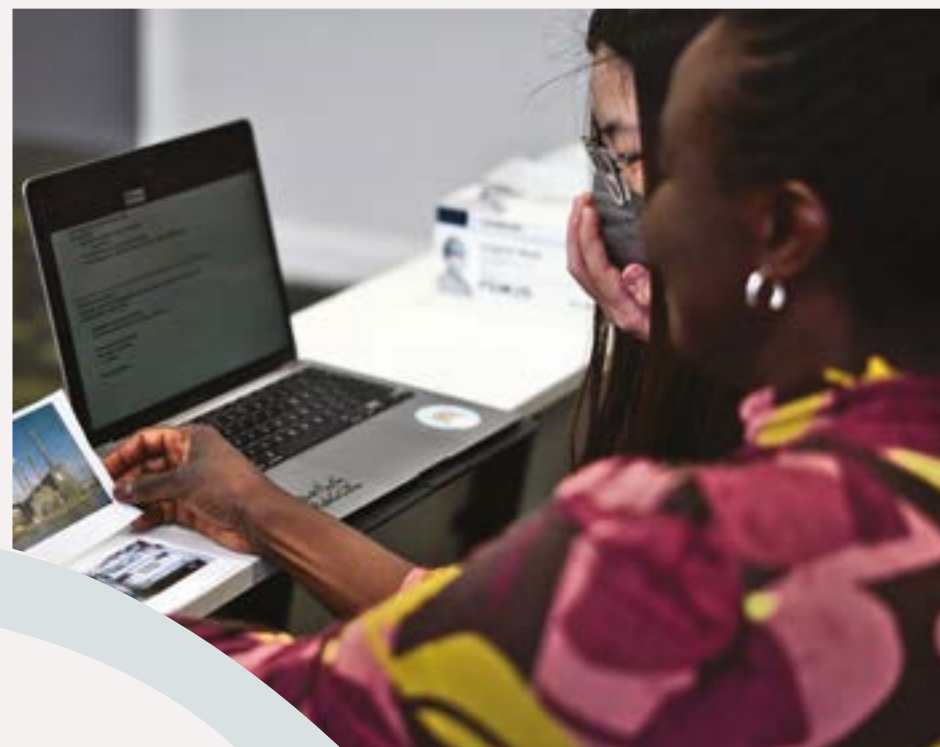
# METHODOLOGY: PRINCIPLES-FOCUSED EVALUATION, AN ALTERNATIVE APPROACH TO INFORMING ACTION
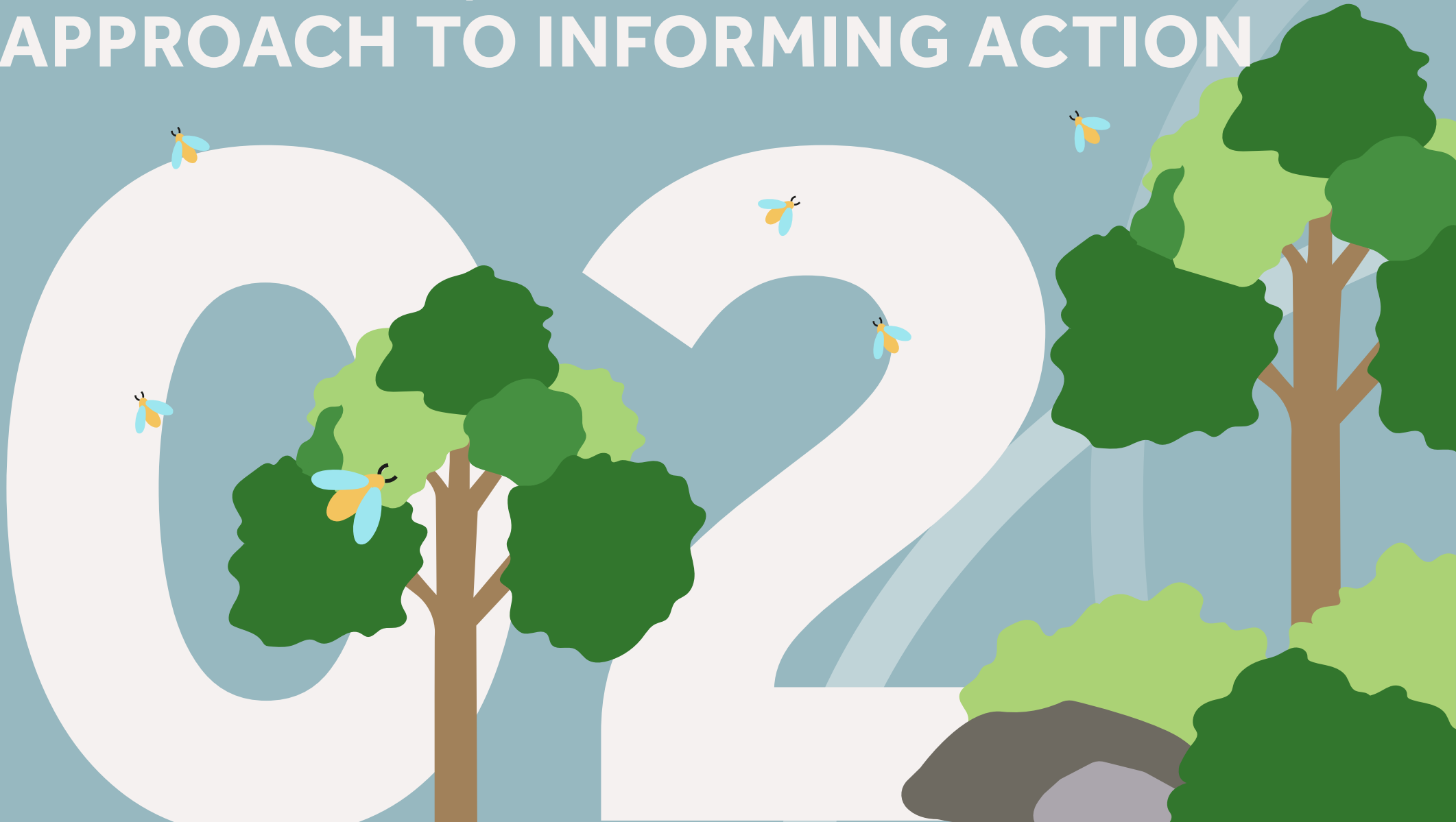
# 02 METHODOLOGY: PRINCIPLES-FOCUSED EVALUATION AN ALTERNATIVE APPROACH TO INFORMING ACTION

**What is 'principles-focused evaluation' (PFE) and why are we using this approach to evaluation in this project?**

Let us begin with some simple trends. Social innovators tend to be so busy bringing about change that they often fail to systematically track their journeys; their decisions and learnings remain tacit and therefore less accessible and shareable. In addition, social innovators often find themselves 'making the path by walking it', pioneering and innovating social change, working with high levels of complexity, uncertainty, and limited information. [4] So, how do social innovators and innovative programs/initiatives adapt within and navigate the turbulence and uncertainties of complex systems change? Very often they adhere to principles. [5]

A principle is a proposition that serves as a guide for our behaviour or evaluation of it. Essentially, principles act like an internal compass; they inform and guide our decisions by telling us how to act. A good principle provides guidance for making choices and decisions, and it is useful in setting priorities, it inspires us, and supports ongoing development and adaptation. Hence, it is not a surprise that principles-based initiatives are led by principles-driven people. But where do principles come from? Principles are derived from lived experience, expertise, values, and research, etc. However, as noted, principles often remain tacit and hidden and therefore they are not shareable and usable to systematically inform action.

Principles-focused evaluation, an approach developed by Michael Quinn Patton (ibid), helps innovators and organisations to uncover the principles underpinning their work. A major premise in principles-focused evaluation is to look for effective principles of practice in action. That is, when examining the principles that underpin their work, we look at and document the practice of the innovators – their responses, their decisions, their actions. Summative evaluation methods traditionally limit themselves to assessing how a programme has adhered to or deviated from predetermined goals. But we can go further by acknowledging, documenting,

*"social innovators often find themselves 'making the path by walking it"*





and learning from innovators' decision-making processes when faced with complexity, adaptation, innovative practices, and examining how these are informed.

Principles can help us guide the development of strategy and a vision, and its implementation. Principles-focused evaluation helps us examine whether the principles underpinning our practice and hence our strategy and vision are clear, congruent, meaningful and actionable, and, if so, whether they are actually being followed, and, if so, whether they are leading to the results we want to see. In this way, principles-focused evaluation can build social innovators' capacity to adapt by making principles (our compass), visible, communicable, testable, and implementable.

Learning to evaluate principles and applying what is learnt from evaluating principles - are they actionable, meaningful, are they leading us to the outcomes we want to see - takes on increasing importance in an ever more complex world where effectiveness depends on adapting to context: climate change, changes in biodiversity and habitat loss, socio-economic crises. In the face of complexity, we need to develop and hone our ability and flexibility to adapt.

### How to undertake principles-focused evaluation

To evaluate whether the principles of a project are actionable, effectively implemented and lead to the desired outcomes, data is collected systematically and continuously. Principles are assessed using criteria and their quality is assessed using a rubric. This work can be undertaken at individual, group or organisational levels (ibid.). As principles of practice are identified, they can be documented in a 'principles framework'. Table 1 illustrates an example framework. This is not the only way to document principles, but it provides a useful template.

To use the framework most effectively, the individual, group or organisation should take dedicated and committed time to outline the desired outcomes of the identified principles, i.e., 'What will be the result if we adhere to this principle?' and outlining the potential dangers and traps of these principles – i.e., 'What would happen if the principles were not in place or followed?"

**Table 1**
**Example of a framework to capture principles informing our practice.**

| PRINCIPLE CATEGORY: |
| --- |
| **OVERARCHING PRINCIPLE #** |
| **OPERATIONAL PRINCIPLE** |

**When to use Principles-focused evaluation**

PFE should be used when:

- There is high level of uncertainty e.g., about how to define the nature of the problem and/or there are disagreements about how to define the problem;

- There is a diversity of stakeholders affected or involved with a range of competing perspectives;

- There is conflicting or confusing evidence or past research – causing controversy and tension – or when there is missing evidence;

- The situation or environment in which the project or initiative is unfolding is dynamic, constantly changing, emergent or is turbulent involving variable contexts;

- Key variables and interactions are unknown in advance. Examples include bringing together diverse stakeholders to work together on defining EDIA strategy or to work together on cross-sector issues such as poverty alleviation, the health system, climate change (ibid.)

*"Principles provide guidance for making choices, decisions, and setting priorities."*

**Principles-focused evaluation used in the 'connectivity & inclusivity in higher education' pilot project**

Principles-focused evaluation was used in this project with the aim of creating an EDIA practice framework and operating principles that is based on empirical evidence-based and good practice. The process involved identifying preliminary principles of inclusive practice in action from in-depth conversations with four practitioners within academia and learned societies, who practice and shape EDIA within Environmental Sciences. The conversations took place under informed consent in April 2022. Each practitioner received and reviewed their own framework of principles of practice, which was created from principles inferred from their in-depth conversations. The frameworks outlined the principles that guide practitioners' work, turning their tacit principles of practice into visible, tangible, and evaluable guides for action. The principles from each practitioner were then analysed and synthesised to create a generalised draft framework of EDIA principles in practice.

The framework was revised by the participating practitioners and includes categories of principles such as 'principles of organisational inclusivity', 'principles of EDIA strategy', 'principles of inclusive culture', and 'principles of leadership'. A copy of the draft framework of EDIA principles in practice can be found in the appendix.

The generalised framework was also used to inform the design decisions of the C&I workshops in a way that embodied principles of EDIA in practice: *how can we create spaces that enable connectivity and inclusivity and dismantle silos and mend fragmentation?* A sample of this framework can be found in the appendix. Surveys undertaken immediately after the workshops revealed that participants felt a sense of inclusion; they felt heard, included, and that they were in a safe space. Further results from the survey can be found in section 5. Future iterations of this initiative aim to further refine the principles of practice and continue putting them into action.

# THE C&I WORKSHOPS

03

# 03  THE C&I WORKSHOPS

**This section of the report summarises two workshops hosted at UoM in 2022**

The workshops brought together academics and the wider academic community to raise awareness about the opportunities for improving connectedness in HE institutions and break down silo thinking. They also sought to promote inclusivity between participants and across different departments and organisations. The workshops were motivated by the need for EDIA initiatives to recognise lived experiences as essential to sharing knowledge and to directly informing practice. This project built on the Women in Environmental Sciences (WiES)

network, established in 2018 at UoM to address interdisciplinary knowledge co-creation. [6]

Each workshop included guest presentations, themed knowledge exchange sessions, a plenary session, breakout sessions, and feedback. Each session explored connectivity and inclusivity in the operations, teaching, learning, leadership, and research of HE institutions. Interviews with guest presenters were also carried out before the workshops.

**By using UoM as a case study, the workshops implemented the objectives, which are to:**

1. Explore the principles of connectivity and inclusivity in practice (through the workshop design and evaluation).

2. Identify opportunities for, and barriers to, connectivity and inclusivity.

3. Explore co-production of knowledge to inform EDIA practices.

4. Create an EDIA practice framework and operating principles that are based on empirical evidence and good practice.

5. Highlight the need for HE leadership, teaching, learning, research and institutional processes to be informed by practices of connectivity and inclusivity.

6. Explore the relationship between connectedness, and inclusivity, and develop ways of addressing conflicts that exist between them.

7. Promote genuine inclusion and diversity in practice.

**Five guest speakers from academia and a professional science organisation presented talks across the two workshops.**

The talks addressed topics including education for sustainable development; EDIA in professional organisations and learned societies; leadership in EDIA; diversity in connectivity and community development; and the Engaging Environments project. In the knowledge exchange sessions, group discussions took place in response to themes chosen by the participants. See Table 2 for the full set of themes and the questions that guided these discussions. Each knowledge exchange session lasted one hour.

**Table 2**
**Themes and questions used for the knowledge exchange sessions.**

1. **KEYS TO A SUSTAINABLE FUTURE: IMPROVING TEACHING AND LEARNING IN HE**

    a. What are the challenges encountered by educators in the delivery of effective teaching methods in contemporary HE institutions? How can these be addressed?

    b. In what ways can educators help learners to think critically and creatively for future scenarios?

    c. What skills/values are expected of learners and educators in HE institutions to effectively protect the earth's environment?

2. **USING REAL-LIFE EXPERIENCES IN HE TEACHING AND LEARNING**

    a. What are the challenges encountered by students that could affect their learning during field courses?

    b. How can students' voices, including those from minoritised backgrounds, be considered in the design of field trips and courses?

3. **LEARNING FROM PROFESSIONAL ORGANISATIONS**

    a. How can we effectively ensure and implement robust EDIA in our leadership and operations?

    b. In what ways can our academic community effectively support our students and staff from diverse communities?

4. **THE VALUES AND SKILLS EXPECTED OF INCLUSIVE PEOPLE, LEADERS, AND FOLLOWERS**

    a. What values and skills are held by inclusive people?

    b. What are inclusive leaders and how can they be developed?

    c. What values and skills are expected of inclusive followers?

The workshops provided a safe space to listen, share ideas, address key questions, and co-create new knowledge. The first workshop explored the meaning, principles, and application of connectivity and inclusivity in HE, using the ecosystem as a foundation on which to build participants' understanding. The workshop was followed by a call for collective action and a commitment to integrating diversity, inclusion, and environmental sustainability. The outcomes from the first workshop were assessed again in the second workshop.

This included the presentation of a draft principles-focused framework to guide the implementation of EDIA at the institution. This framework also provided the foundation for the breakout sessions at the second workshop where participants were invited to share personal stories and use them to identify principles of effective practice for EDIA. The breakout sessions were facilitated by academics and trained facilitators from UoM's Staff Training and Development department.

04

# 04 TALKS

This section presents summaries of the presentations made at the C&I workshops by leaders in pedagogy and environmental sustainability; equality, diversity, and inclusion; a professional science organisation; and people and operational development, including a speaker from the National Environmental Research Council's Engaging Environments Project. Speakers were invited to present on topics that align with EDIA ideals. The key messages from each talk are outlined below.

## Talk 1
## Sustainability in teaching and learning: education for sustainable development



*Dr Jennifer O'Brien, School of Environment, Education and Development, University of Manchester*

Access to quality HE is necessary to preserve the future of our environment. UNESCO's 'Education for Sustainable Development: Towards achieving the SDGs' (ESD for 2030) links pedagogy and learning to bring about societal transformation. [7] It addresses how values and skills are applied across disciplines in HE teaching and learning using practical examples and explores how knowledge can be used to promote inclusive learning outcomes. Education for sustainable development aims to positively shift the minds of learners and teachers in ways that empowers, informs, prepares, and equips them for future challenges. Both staff and students co-design teaching approaches and solutions to complex world issues. Integrating environmental sustainability and EDIA principles, this form of education involves a balanced share of teaching, research, and learning about social responsibility through mutual respect, partnership, and inclusive practices.

Sustainability thinking can teach learners how to identify the link between a subject and its environmental impact. For example, the use of a vehicle is connected to energy consumption, maintenance,

attitudes towards consumption, available resources, and the climate. Consumers, society, academics, policy makers, and professional services all have an impact on this chain. Therefore, co-production of knowledge is important for a culture of sustainability to be achieved. UoM, for example, developed a process for including SDGs through the University Living Lab (https://www.universitylivinglab.org/) as a means to establish partnerships or programmes that connect the institution's academic activities, such as learning, teaching and academic research, with non-academic partners.

Education for sustainability can be developed by improving students' systems thinking competencies through problem solving examples and building on their lived experiences. These approaches can be delivered through the academic curriculum; student engagement on campus; voluntary work; and the development of knowledge, skills, and values.

**Contribution to curriculum development**

Including students' contribution to curriculum development allows HE institutions to adopt one of the SDG objectives – SDG 17 – Partnerships for the goals. The intention is that students feel valued, empowered, and help shape the course of study. They are perceived as potential teachers, bringing their perspectives into the process of learning, and as a force for change making. Engaging students and including their comments in curriculum development and delivery could be achieved through anonymous comments or feedback on taught elements. Reading these comments out to the students during the teaching process, discussing them, and working together to resolve them creates a mutually respectful partnership. The teaching that takes place during fieldwork provides a good example of partnership, inclusion, and the development of skills and values through learning processes. [8]



## Key messages

- **Access to quality HE is necessary for sustainable development.**

- **The framework of education for sustainable development links pedagogy and learning to bring about societal transformation.**

- **Applying sustainability thinking in education can teach learners to see the link between a subject and its environmental impact.**

- **Education for sustainable development integrates EDIA principles as students co-produce the curriculum with their teachers, fostering a mutually respectful and empowering learning environment.**

**Talk 2**
**Learning from professional organisations:**
**perspectives on EDIA from the British Ecological Society (BES)**



*Ms. Karen Devine, Director of Communities and Inclusion, British Ecological Society*

Professional science organisations such as the British Ecological Society (BES) serve as the link between academic researchers, policy makers, governmental and non-governmental organisations (NGOs), students, and members of the community. This links to SDG 17, to build partnerships. BES strives to understand what EDIA means for them; track progress on diversity, equality, and inclusion; practice kindness and respect; and challenge unkind behaviour.

**Professional membership**
Given their diverse membership, the application of EDIA principles is important in BES's leadership, operations, and academic research. BES is the oldest ecological society in the world and has members of diverse ages and professional and academic statuses from around the world. Fifty percent of these members are students with the majority of those being doctoral research students. BES works with these students to maintain the organisation's principles and operations, and to influence change. Working with their members allows BES to strike a balance between leadership and the organisation's decision-making processes.

**Application of EDIA principles at BES**
BES applies EDIA principles in their operations through the work of a few paid employees and their Equality and Diversity Working Group, chaired by the BES President. Their strategic plans are inclusive, evidence-based and bold; their aim is to understand what EDIA means on a day-to-day basis. They have clear expectations laid out for all, including students and staff of member institutions from the top to the bottom of the institutional structure.

Through their activities, BES ensures greater inclusivity through the representation of different networks. For example, the Racial and Ethnic Equality and Diversity (REED) Ecological Network is a supportive platform for ecologists facing any form of racism and marginalisation within the ecological sciences and related disciplines, while the Wildlife and Countryside Link, the largest environment and wildlife coalition in England, brings together 67 organisations to jointly advocate for the protection of nature. Through BES's involvement in the development of operational systems and culture, they shape organisations' policies

and strategies, produce centralised processes for reporting and monitoring, and proactively promote wellbeing for members. The leadership and operational structure motivate each member of staff to be purposefully inclusive.

A vision for a 'people first culture' has been adopted across the organisation. Through this motto, BES advocates for effective communication on EDIA issues and to constantly raise awareness in their operations (SDG 4). Other aspects of inclusiveness in their operations involve actively listening to different perspectives on topics including career stage; professional interests; and personal/ protected characteristics, such as gender and race, and appreciating these differences.

### Challenges of EDIA at BES

The challenges to connectivity and inclusivity BES encountered in their membership include a lack of diversity in the environmental sector due to a lack of diversity in students studying the environmental sciences and ecology and a lack of academics from minoritised groups. They hope to address these challenges by improving support structures including the provision of research grants to those from minoritised groups.

## Key messages

- BES is an important organisation for environmental research in the UK and beyond with a diverse membership.

- BES's Equality and Diversity Working Group was founded to understand what EDIA means for BES and its members on a day-to-day basis.

- BES supports greater inclusivity by representing the diverse interests of different groups and applies EDIA values in their work with other organisations.

- BES adopts a 'people first culture', raising awareness of EDIA in the organisation and seeking to improve support structures for those from minoritised groups.

**Talk 3**
**What is inclusive leadership and how can we create
an inclusive culture in UK higher education institutions?**



*Ms. Banji Adewunmi, Director of Equality, Diversity and
Inclusion, University of Manchester*

Inclusivity starts with "I" and that means inclusivity is everyone's responsibility. Inclusivity is the principal component covering equality, diversity, and human rights. This means that all individuals should feel a sense of belonging in the spaces they occupy. Although inclusion is everyone's responsibility, it takes time to implement. Inclusive leadership (SDG 10) is the bedrock for creating a fair, open, adaptable, and accepting community. To be inclusive, we need to create safe spaces where views can be shared and voices heard. This requires individuals to practice EDIA values and develop certain personal and professional skills.

For example, the values of humility, transparency, empathy, and compassion can be applied by everyone to foster inclusivity without judgement, as can skills such as listening, confidence-building, and prioritisation. Work to foster inclusivity recognises that barriers to inclusivity exist and the need to remove them. These barriers can be systematic, social, or value based. Recognising and genuinely acknowledging their impact on individuals and groups and taking action to address them are important steps towards fostering a culture of inclusivity and connectedness.

*"Identify the problem, be clear about the
change you want to make, and decide how
you are going to make that change."*

## Leaders and followers

**An inclusive environment is created together by leaders and followers.**

### An inclusive leader will:

- Have the right values and skills to foster inclusivity in their organisation.

- Be aware of their own biases and preferences, consider different views and perspectives, and broaden understandings of difference among others.

- Train staff on EDIA principles and lead by example, demonstrating EDIA principles in practice.

- Appreciate and engage diverse talent.

### An inclusive follower will:

- Be open to positive changes.

- Support EDIA representation in their organisation.

- Proactively help others to make their voices heard.

- Take personal ownership of their responsibility to inclusivity.

*"Reflect: understand why you want to make the change and know what you are changing."*

**Challenges to inclusivity in HE institutions**

- Overrepresentation of certain groups and underrepresentation of minoritised groups, such as a lack of diversity in senior positions.

- Barriers to services and opportunities for individuals or groups.

- Negative experiences that can arise from identifying (oneself) as different.

## Key messages

- **Inclusivity is everyone's responsibility, but inclusive leadership is the bedrock for creating a fair, open, adaptable, and accepting community.**

- **Fostering inclusivity requires organisations to practice inclusive values and develop skills such as listening, confidence building, and prioritisation.**

- **Recognising barriers to inclusivity and taking action to address them are important steps towards inclusivity and connectedness.**

**Talk 4**
**Appreciating diversity: a strategy for effective connectivity and community development**

*Ms. Adèle MacKinlay, Director of People and Organisational Development, University of Manchester*

The People and Organisational Development Directorate at UoM is dedicated to creating a more connected, inclusive, and fair organisation. The work of People and Organisational Development, formerly Human Resources, marks a shift in the way the university works with and for staff and students. This talk highlighted a series of values at the heart of UoM's approach to EDIA as well as the changes it is making.

**Connectivity and inclusivity are central to effective leadership and the success of UoM. Key aspects of effective leadership include:**

- Giving voice – not all voices at the university are heard and some are louder than others. Staff must be made to feel confident to speak out.

- Kindness – a culture built on respect and kindness leads to success but can often be forgotten in organisations.

- Listen/understand/act – we must listen to our colleagues and their perspectives.

- Innovation – the university cannot be static but must be open to change and progress.

- Trust – organisations built on high levels of trust and engagement are the most successful.

*"If you talk, you are just repeating what you already know. If you listen, you might learn something new. "*

Fantail (http://www.fantail.uk.com/), an organisation dedicated to fostering inclusivity in workplaces, highlights several helpful principles to follow. Importantly, they also see leadership as critical. Leaders must have a vision for what an inclusive workplace looks like and be able to replicate that. Fantail also emphasises the importance of action, not just words; putting inclusivity at the heart of the institution's activities; and recognising that change is personal. UoM, for example, seeks to help everyone understand why inclusivity and equality are such important parts of the university's work.

UoM has developed a People and Organisation Development strategy to create a more connected and inclusive environment. It also has a separate EDIA strategy to influence change and make UoM the best place to work and study. The university is systematically reviewing all policies and working practices from an inclusion perspective. This includes policies and practices around recruitment and launching a hybrid working pilot to offer greater flexibility. The university is educating leaders and managers to develop inclusive working environments and listening more to staff and student feedback. These changes are reflected in specific goals that will be used to measure the university's success.
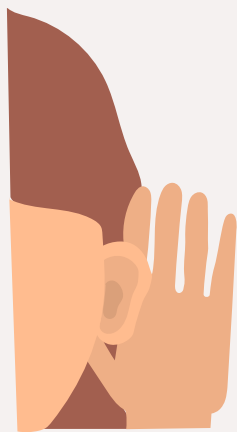
*"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel." – Maya Angelou*

## Key messages

- **Effective leadership is integral to creating a connected and inclusive organisation.**

- **EDIA must be at the heart of an organisation's activities and is key to organisational success.**

- **Policy must be followed with action.**

- **Everyone's voice should be heard.**

**Talk 5**
**What do we mean by Engaging Environments?**



*Professor Hilary Geoghegan, Director of NERC*
*Engaging Environments, University of Reading, UK*

Engaging Environments is a UK-wide platform funded by the Natural Environment Research Council (NERC). The community partners include the universities of Reading, Manchester, Newcastle, West England, the Open University and University College London; alongside Earthwatch Europe, ignite!, BLAST, figshare, Tekiu, SciStarter, and the Open Environmental Data Project.

The platform's vision is a national community that advocates for co-creation as a crucial step in reducing the negative impacts of the climate crisis on most affected people and places in the UK. The Engaging Environments project is a prototype, which showcases why we need to engage others in our sciences as well as promote the principle of self-care and the power of our individual and collective voices.

**What is Engaging Environments doing?**

Co-creation is a crucial step in reducing the negative impacts of the climate crisis on those who are most affected by it, in the UK and elsewhere. The centring of power and authority in particular groups – usually male, usually white – limits these efforts not least by excluding voices from different groups. Researchers from minoritised groups face an unjust system that constrains their engagement in environmental issues. [9] Capacity building and support are key to developing the conditions for co-creating equitable environmental solutions.

This project is building capacity and support for early career environmental scientists and community partners, while simultaneously developing conditions for co-creating equitable environmental solutions. Its activities are supported by development and summative evaluation and integrated anti-oppression training, which is being introduced into partnership working to reduce harms and enable equity. Engaging Environments will provide an additional platform for amplification and a national network, driving a national conversation.

**Next steps**

The Engaging Environments project team are now focussed on telling the stories of the project and the work of the partnership. The aim is to translate the outcomes of this pilot to contribute to understanding 'What makes an Engaging Environment?' The team also seeks to amplify their work as part of the Engaging Environments legacy so that it can be impactful beyond the life of the project. Further stories are being generated relating to key principles and outcomes to reach and influence funders, policy and decision makers in EDI policy, environmental policy, public engagement, and HE institutions.



## Key messages

- Inclusivity in environmental issues is limited by power and authority consolidated by some groups at the expense of others.

- EDIA principles need to be brought into the environmental sector and national conversations about the environment.

- The concept of engaging environments has the potential to engage those from minoritised groups in environmental issues.

- Co-creation and capacity building are key to creating engaging environments.

# KNOWLEDGE EXCHANGE SESSIONS

# 05 KNOWLEDGE EXCHANGE SESSIONS

**The knowledge exchange sessions provided open and welcoming safe spaces for participants to interact and explore solutions to EDIA challenges. These sessions were led by facilitators who invited participants to respond to questions around a chosen theme, fostering fruitful and mutually beneficial discussion between participants.**

Some of the discussions highlighted the extra resources and support needed for academic staff, particularly regarding workload management and sharing, as well as equal opportunities in learning and development for all staff and students, which may require adaptation to meet different needs. Participants also discussed how institution-wide assessments of EDIA could highlight differences across departments and improve cross-departmental communication and information sharing, as well as the need for greater transparency around student selection processes and staff recruitment.

This section goes into more detail on selected themes from the knowledge exchange sessions and summarises participants' responses to the questions that guided the discussions.

**Theme 1**
**Keys to a sustainable future:**
**improving teaching and learning in HE**

Education is central to SDG 4. With the UN's overall objective to build a more just and sustainable world, greater emphasis is placed on the contribution of learning content to the survival and prosperity of humanity. To achieve this, pedagogical elements such as critical inquiry; experiential exposure; participatory learning; envisioning future scenarios; and the presence of influential peers, mentors, or role models have been identified as critical elements of the ESD for 2030 framework.

**What are the challenges educators encounter in delivering teaching methods? How can these be addressed?**

- Lack of student engagement with blended learning approaches that rely on students' self-discipline and interaction with online content.

- Passivity during discussion sessions makes it difficult for lecturers to support student learning effectively.

- Should more engaged learning styles be rewarded over others?

- Attendance at in-person lessons has fallen following the pandemic as online learning has been normalised. Motivation to attend lectures and engage effectively with other students has reduced.

**What are the skills and values expected of learners and educators in higher education institutions to effectively protect the Earth's environment?**

- Ensure **mutual respect and partnership** by incorporating student input into the curriculum.

- **Cultivate values** such as self-discipline, engagement, participation and attendance through teaching.

- Create **connections between taught content and nature.**

- **Make science accessible, relatable and appealing** by utilising practical examples and lived experiences.

**In what ways can educators help learners to think critically and creatively for future scenarios?**

- **Systems thinking** can help students learn about complex issues from a holistic perspective and the relationships between aspects of the system under study to create change. Students should also be taught to recognise their own positionality within these systems.

- **Foster creative and critical thinking** about the environment by stimulating group discussions through open ended questions that make room for different voices and perspectives.

**Theme 2**
**Using real life experiences in HE teaching and learning**

As stated in the ESD for 2030 framework, the use of real life experiences is one of several pedagogical elements that can contribute to the type of inclusive learning needed for societal transformation. Field trips are one way of integrating real life experiences into learning. Field trips allow learners to put into practice the skills they have acquired during lectures and practical sessions.

**What are the challenges encountered by students that could affect their learning during field courses?**

Challenges encountered before or during field trips can help learners to acquire real life experience in the field. These challenges could include:

- Lack of travel documentation or finances (e.g., visa; vaccination status; cost of travel, accommodation, and equipment).

- Cultural considerations (e.g., religious festivals may fall on scheduled field trip days, facilities at field sites may clash with cultural norms).

- Physical, health, and wellbeing issues may require additional planning.

**How can students' voices, including those from minoritised backgrounds, be considered in the design of field trips and courses?**

An inclusive approach is necessary for both learners and teachers to make the most of learning opportunities in the field. While it is important to listen to students' concerns and recognise these barriers, there may also be limits to the changes that can be made and the final solution may not suit everyone. Being inclusive does not mean constantly changing policies but providing an avenue for continuous, inclusive engagement, discussion, and review.

**What skills and values are expected of students/staff in participation in, and delivery of, field courses?**

- Respect for health and safety.

- Open mindedness and clear communication.

- A recognition of the challenges students may face in the field.

- A supportive, collaborative environment.

## Theme 3
## Learning from professional organisations

Professional organisations and learned societies promote academic disciplines and can be open to all, including researchers, policy makers, governmental and non-governmental organisations, students, and members of the public. They play important roles in the emergence and development of new disciplines and professions. Given the diverse memberships of these organisations, UoM's academic community may be able to learn from their operations and leadership around EDIA.

**How can we effectively ensure and implement robust EDIA in our leadership and operations?**

- EDIA training programmes and courses must have clear, attainable objectives. Training should be varied and take place at different intervals to ensure everyone can attend.

- Promote cultural change across the institution through education on EDIA, institution-wide awareness and understanding of EDIA policy, a review of the institution's current practices and facilities, and clear channels of communication on EDIA issues.

**In what ways can our academic community effectively support students and staff from diverse communities?**

- Make sure support can be easily found and accessed. For example, the Disability Advisory and Support Service (DASS) could be made available for both staff and students.

- Improve signposting for support networks.

- Monitor and review support services and policies to make sure they serve their communities.

## Theme 4
## The values and skills expected of inclusive people, leaders, and followers

Inclusive values and the skills to foster inclusivity should be held and practised on a day-to-day basis by everyone, both leaders and followers.



**What values and skills are held by inclusive people?**

**Values:** open-mindedness, humility, transparency, empathy, generosity.

**Skills:** listening, prioritisation, decision making and the ability to take decisive action, speaking out, condence-building, communication.

### What are inclusive leaders and how can they be developed?

An inclusive leader should:

- Make sure education, training, and supporting resources on EDIA are accessible to all, including those in leadership positions, and are relevant and up to date.

- Take positive action and lead by example.

- Support inclusive education and non-educational choices.

- Demonstrate a commitment to equity through their decision making and by delegating responsibilities effectively.

Those in leadership positions should also need for their professionally expertise but in order to acquire additional leadership skills such as promoting inclusivity while in their role.

### What values and skills are expected of inclusive followers?

Inclusive followers should:

- Speak out on EDIA issues and be open to solutions.

- Support the implementation of changes to improve EDIA.

- Take personal ownership of their own inclusivity.

## Storytelling knowledge exchange sessions

These sessions took place during the second workshop. They used storytelling to gain an understanding of what EDIA means to different people and to highlight examples of EDIA challenges within HE institutions. By giving voice to different perspectives, stories not only revealed gaps in EDIA policy and practice but also who is affected, and which groups need to be connected to bridge these gaps.

Participants broke out into separate groups to share personal stories in response to questions asked by a facilitator. While individual stories have not been shared to preserve anonymity, key takeaways drawn from across the stories are presented below. All participants were informed of the codes of confidentiality and inclusivity for this session.

### Contributions to EDIA in practice

Participants highlighted the need for extra support and resources (human, financial, or otherwise) to reduce staff workload. This can be a particular problem during periods of leave when other staff members become responsible for taking on the workload of their colleague, or when new staff members require time to adapt to the institution's processes or a different cultural context. Relatedly, participants highlighted that staff do not always know when they are eligible for sabbatical. In general, there was a call for greater transparency across all institutional processes, including selection criteria for student applications, recruitment and awards, as well as an increased awareness of best practice for EDIA.

### Sexual harassment

Participant stories revealed a desire for informal options for dealing with cases of sexual harassment, at least in the initial stage. However, the institution must have appropriate systems in place to support complainants, to ensure they are heard, and to deal with complaints fairly and quickly. Complainants must also feel there is someone in the institution they trust to report a case of sexual harassment to.

### Marginalisation within the institution

Stories suggested that choosing leaders from diverse backgrounds might be one way of promoting empathy in HE institutions and avoiding marginalisation. Women in particular were highlighted as a minoritised group, facing a lack of flexibility in maternity leave policies and underrepresentation in certain STEM subjects.

### Teacher-student behaviour

Stories showed that teacher approach and course structures are powerful tools for classroom inclusivity and wellbeing. However, teachers must have an awareness of EDIA and how it is practiced in their communication and teaching. An example from the stories shared suggested that one way of achieving EDIA in the classroom is by accommodating the needs of students from different cultural backgrounds.

### Access to facilities for students

Access to student facilities also arose as a theme from the breakout sessions. In particular, appropriate facilities should be available to meet different cultural needs. This might include prayer spaces or toilet facilities during field courses. Staff and students should also be aware of the facilities available to students to improve access to them.

# ASSESSMENT AND PARTICIPANT FEEDBACK

# 06

# 06 ASSESSMENT AND PARTICIPANT FEEDBACK

**This section provides an overview of the data collected from both workshops. It includes interviews with participants as well as a summary of transcribed interviews and information on who took part.**

Data collected from participants show a high level of satisfaction across the workshops. A breakdown of the survey results is available below:

*"Very informative"*

*"Excellent talk on inclusive leadership"*

### Workshop 1

- 100% of participants were either 'Extremely satisfied' (81%) or 'Very satisfied' (19%) overall with the workshop

- 95% of participants were 'Extremely satisfied' with the Speakers at the event

- 76% of participants 'Strongly agree' that the workshop met their expectations, whilst the remaining 24% 'Agree'

- 100% of participants were either 'Extremely satisfied' (52%), or 'Very satisfied' (48%) with the overall structure of the workshop

- 96% of participants were either 'Extremely satisfied' (67%), or 'Very satisfied' (29%) with the workshop objectives

- 95% of participants were either 'Extremely satisfied' (81%), or 'Very satisfied' (14%) with the quality of content

- 100% of participants found the talks and discussion sessions either 'Extremely useful' (55%), or 'Useful' (45%)

### Workshop 2

- 100% of participants were either 'Extremely satisfied' (46%), or 'Very satisfied' (54%) overall with the workshop

- 100% of participants were either 'Extremely satisfied' (81%), or 'Very satisfied' (19%) with the Speakers at the event

- 87% of participants either 'Strongly agree' (41%), or 'Agree' (45%) that the workshop met their expectations

- 85% of participants were either 'Extremely satisfied' (52%), or 'Very satisfied' (33%) with the overall structure of the workshop

- 84% of participants were either 'Extremely satisfied' (56%), or 'Very satisfied' (28%) with the workshop objectives

- 93% of participants were either 'Extremely satisfied) (63%), or 'Very satisfied' (30%) with the quality of content

- 95% of participants found the talks and discussion sessions either 'Extremely useful' (60%), or 'Useful' (35%)

The workshops welcomed participants from around the world. Most participants were from Europe while other participants were from China, Nigeria, the US and India. Ethnic diversity was greater at workshop 1 (57% White; 29% Asian or Asian British; 9% Black, Black British, Caribbean, African; 5% Other ethnic group) than workshop 2 (88% White; 12% Black, Black British, Caribbean, African). The age range of participants at both workshops was mixed and ranged from under 20 to over 60. The workshops were attended by 110 participants in total.

*"We will be implementing some of the ideas into our engagement work."*

*"Extremely helpful given recent experience."*

## Summary of participant interviews

The following provides a general overview of the responses received from interviewed participants on what EDIA means to them, key challenges, and how change can be made.

### What does EDIA mean in practice?

Participants feeding back after the workshops reported that to them EDIA means institutions giving clarity on the support available to staff and students and how to access it. It means leadership must maintain regular, open discussions on EDIA best practice to which everyone can contribute.

### How do you practice EDIA in your work?

As part of their working practices participants reported pro-actively seeking out the opinions of others and listening attentively and respectfully. They also recognised the importance of being sensitive to others' needs as well as their own self-care. Some participants sought to work collaboratively across disciplines and career levels. Others made sure those they managed were treated fairly and had equal opportunities for progression.

### What are the key challenges to inclusivity?

Participants felt that engrained cultures are a key challenge in overcoming barriers to inclusivity as well as an unwillingness to change. They also noted that the burden of creating change must be shared, without relying too heavily on the experiences of already marginalised groups. A lack of time in a busy university setting was also mentioned as a potential barrier.

### How can events like these impact EDIA in HE institutions?

Participants suggested that events like the C&I workshops could make an important contribution to setting an institution's EDIA agenda by starting conversations and raising the profile of EDIA, while the increased focus on diversity, inclusion, and access could encourage greater collaboration across departments and break down silo thinking. Events like these also highlight key mechanisms for change, such as visible leadership and robust policies.

### What would you see as a means/mechanism to embed practices or principles learnt from the event?

- "It starts from the top- engage senior leadership across the institution"

- "There must be visible leadership willing to make changes"

- "We need to recognise there is a problem"

- "We need to put structures in place and processes for that change to happen"

- "Creating the right culture in the organisation for those changes to really embed themselves"

- "Encourage applications from diverse groups of people"

- "It should become a way of life, a way we do things so that the place is a great place to work for everybody"

# 07  KEY MESSAGES AND OUTCOMES

These workshops highlighted key findings for developing learning around how connectivity and inclusivity can be improved in HE institutions. They showed that participants should be provided with high-quality information grounded in lived experiences. This was achieved in the C&I workshops through presentations by experts on the themes explored in the workshops and by encouraging participants to share their own stories. In turn, actively listening to the experiences of others and engaging them in discussion revealed new potential pathways towards implementing connectivity and inclusivity in our community. The workshops showed that an openness to the perspectives of others is essential for change to occur. However, an environment must be created whereby participants feel safe and supported to learn and share in order for these exchanges to take place.

The workshops also reinforced how the values and principles of individuals can inform positive change when put into practice, whether challenging a negative status quo or advocating for equality, and the need to incorporate these practices in HE and the wider academic community.

### Outcomes

Participants have signed up for the 'call to action' outlined below to follow up on the implementation of these outcomes. This call to action was created to further explore the issues foregrounded by the workshops, learn from them, and work towards change.

As well as this report and the toolkit below, the findings of this study were presented to UoM's Senior Leadership Team in 2022 to demonstrate how connectivity and inclusivity outcomes are linked with university and EDIA strategies.

### Call to action

- Provide resources and implement support to all members of the university community.

- Manage staff workload when implementing EDIA monitoring and transparency.

- Help people understand EDIA policies and their structure.

- Turn negative information to positive ends.

- Bring your authentic self to work.

- Teach caring and self-care.

- Offer leadership and active listening in management positions.

- Admit when you do not know and offer to work together.

- Provide practical support in a professional manner.

- Centre others in your actions.

*"Events like these will have a fundamental impact on EDIA in higher education when the right tools for support are provided."*

# 08  THE C&I TOOLKIT

This toolkit provides readers with resources drawn from the C&I study that can be used to promote and start conversations about connectivity and inclusivity in HE institutions. It includes tips for hosting workshops, possible themes for knowledge exchange sessions, and a reflection exercise.

The learning outcomes of this study should be of interest and benefit to all institutions that seek genuine connectedness and inclusivity in their operations, leadership, teaching, learning, and research processes. These include HE and non-HE institutions, policy and non-policy organisations, governmental and NGOs, and other professional organisations.

## Creating a connected and inclusive higher education institution

Based on the outputs from both workshops, connectivity and inclusivity could be achieved at UK HE institutions if the following points are embedded into leadership processes, teaching, research, and operations:

1. Create a welcoming atmosphere where members of the community can be open, share and connect.

2. Promote open-mindedness and learning beyond the academic curriculum.

3. Advocate for a range of perspectives to be heard.

4. Turn principles into practice across teaching, research, learning and operations. This might include, for example, transparency in decision-making processes.

5. Provide adequate training in C&I for those in managerial roles – these skills are essential for effective leadership.

## Tips for hosting connectivity and inclusivity events

1. Events should be **fun, educational and inspirational.**

2. Create a **welcoming atmosphere** where participants are enabled to engage, interact, and be open to new ideas.

3. A **well-organised event** can be a great motivator for participants and supports learning.

4. Have a **clear purpose** for your events and individual sessions. What are your objectives?

5. Bring **different people** into a common space to explore ideas. This can help participants to think holistically and consider new perspectives.

6. **Actively listening** to the experiences of others and engaging them in discussion can reveal new ways to implement connectivity and inclusivity in our communities.

7. Make sure **information and resources** shared are **high quality and up to date.** Knowledgeable and inspiring speakers can be a big motivation for positive change too.

8. Grounding discussions in **practical examples and case studies** can help participants to understand how connectivity and inclusivity can be implemented, and to identify when it is not.

9. **Call for responsibility** because inclusivity starts with 'I'!

**Tip:** Table 2 provides some example questions to use for discussion.

## Possible themes for connectivity and inclusivity events

- Improving teaching and learning in HE.

- Using real life experiences in HE teaching and learning.

- Learning from professional organisations.

- The nature of 'inclusive leadership'.

- Storytelling as a tool to understand EDIA's meaning, impact, and challenges.

## Reflecting on principles

This study used PFE to create a draft EDIA framework. Consider the following questions to reflect on your own principles and how they influence your approach to EDIA.

- What are your principles?

- To what extent do you adhere to them in your behaviours?

- If you do adhere to them, what are the consequences and results? What might the consequences and results be of not adhering?

Developed by Michael Quinn Patton, [6] these questions can be asked and answered as an individual, as a group working together and engaging with one another within a project or organisation, or as a community or initiative. When you engage with these questions and answers in a formal, systematic, and committed way, you are then evaluating principles: you are evaluating their meaningfulness, your adherence to them, and their effectiveness.

**According to Patton (ibid.), principles inform and guide our choices when we are confronted with change, complexity, and uncertainty, and PFE examines:**

1. Whether principles are clear, meaningful, and actionable, and if so,

2. Whether they are actually being followed and, if so,

3. Whether they are leading to desired results.

Tip: Table 1 offers a framework for principles-focused evaluation.



# What participants said about the workshops

- **Facilitation style embodied connectivity and inclusivity**
- **Felt welcomed**
- **Very informative**
- **Well organised**
- **Engaging**
- **Positive - workshop, vibe around the whole event**
- **Fantastic**
- **Highly enjoyable conference**
- **Speakers were inspiring**
- **Conversations were so insightful**
- **Provided much food for thought**
- **Happy to help further**
- **Fabulous session, as ever**
- **Learnt about using a holistic approach**
- **Valued storytelling**
- **Great turn out**
- **Excited to hear about next steps**
- **Looking forward to hearing any updates**

- **Particularly important workshop**
- **Great event**
- **Great job on evaluation**
- **Wonderful to see people in real life**
- **Small steps can make a huge impact on inclusivity in the future.**
- **Enthusiasm for the subject and people is inspiring**
- **Very useful, very enjoyable**
- **Gained so much from it**
- **We will be implementing some of the ideas into our engagement work**
- **Understood how we can make change**
- **Excellent talk on inclusive leadership**
- **Powerful graphical representation of model construction of societies showing exclusion, segregation, integration and inclusion— really hit home personally**

**Workshop 1**
**Interveiws with participants**



Ctrl/ Cmd + Click

*https://www.youtube.com/watch?v=tuOaB6EdQy0&t=4s*

**Workshop 2**
Interveiws with participants



*https://www.youtube.com/watch?v=Zvzm9H-dFf4*
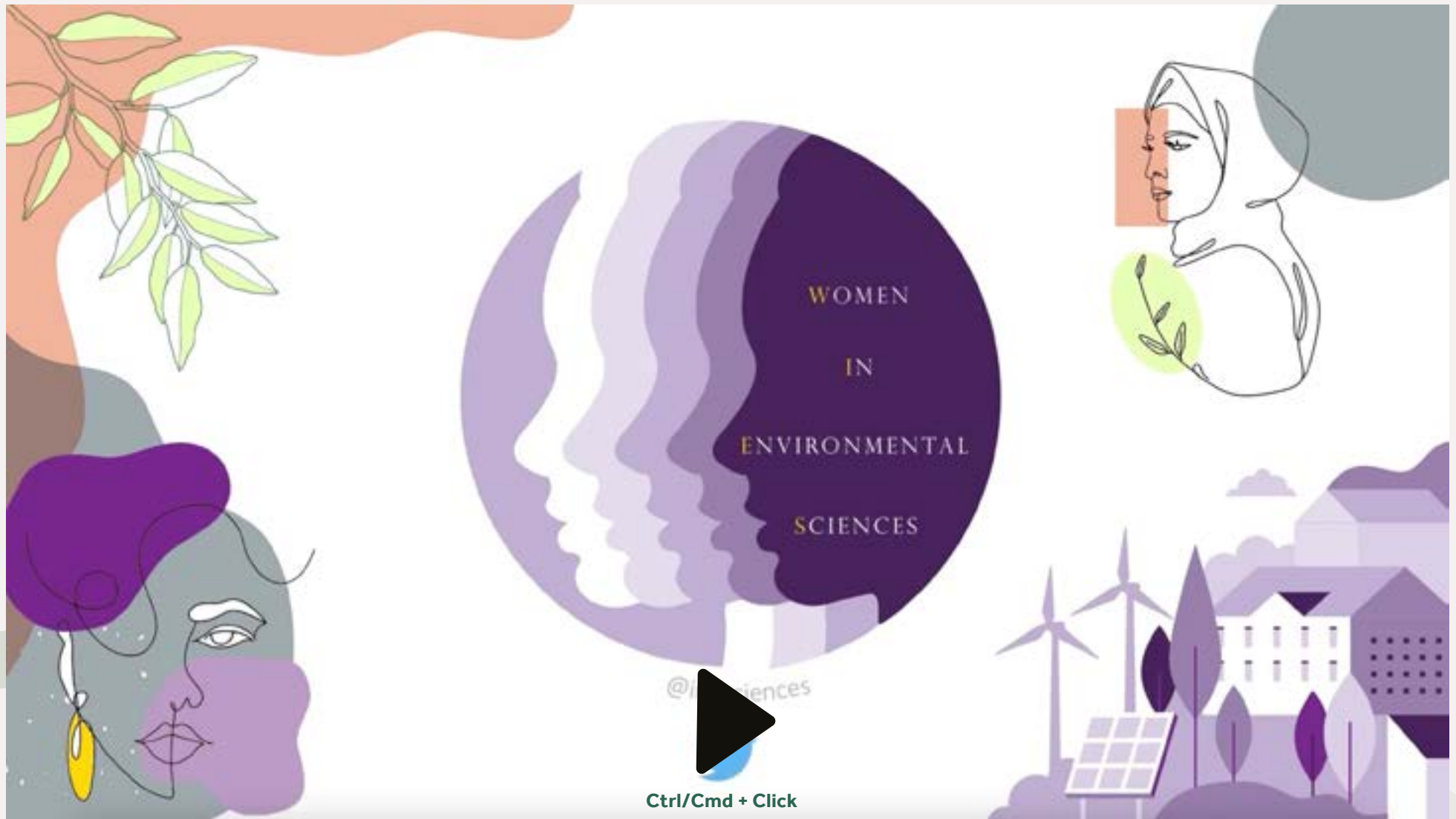
# 09 APPENDIX: DRAFT EDIA PRINCIPLES IN PRACTICE FRAMEWORK

**This framework has been created from the wisdom and practice of EDIA practitioners as part of the Connectivity and Inclusivity in HEI workshops. As a draft framework, it is not complete, and it is intended only to represent what a framework for principles in practice may look like. It is not EDIA guidance.**

In the framework below...

- **Operating principles** provide tactical guidance; that is, guidance on how an overarching principle should be operationalised

- **Overarching principles** provide strategic guidance

Please note that the numbering of the principles does not represent its importance; it is for reference only.

| | PRINCIPLE CATEGORY: PRINCIPLES OF ORGANISATIONAL INCLUSIVITY |
|---|---|
| **OVERARCHING PRINCIPLE 1** | **Recognise, protect, and support protected characteristics and intersectionality** |
| **OPERATIONAL PRINCIPLE** | Engage in honest, detailed, individual conversations with staff, team members, researchers to understand diversity and protect diverse characteristics without invading individual's privacy |
| | Recognise that protected characteristics and diversity are not always visible |
| | Facilitate and provide resource for the creation of local support communities, networks, and spaces |
| | Promote and support dedicated programmes by and for minoritised and self-identified groups |
| | Ask respectfully what people need, listen to individual needs, recognising that people know themselves best, e.g., they know their own requirements and limits, how to care for themselves and what they need to care for themselves |
| | Recognise and frame around the expertise and lived experience of minoritised groups to inform, frame, and shape policy and practice |

| OVERARCHING PRINCIPLE 2 | Put in place infrastructure and governance for inclusion |
| --- | --- |
| OPERATIONAL PRINCIPLE | Put in place structures of governance that represent inclusion in practice: inclusive representation and inclusion of perspectives at decision-making levels (e.g., co-chairing of an inclusion board by CEO and staff) |
| | Frame needs, analysis, findings, responses, pathways of change, outcomes, and scaling/replication through the lens of 'inclusivity, equity, and the value of difference'; frame options through (local) context analysis |
| | Engage with stakeholders continuously and consistently to ensure alignment and that emergent issues are captured |
| | Actively recruit women and minorities into the organisation's governance infrastructure (e.g., the board) |
| | Actively create work/research environments that meet the needs and promote agency of women and minorities |

| OVERARCHING PRINCIPLE 3 | Support and promote a cohesive approach to EDI across the organisation |
| --- | --- |
| OPERATIONAL PRINCIPLE | Build and nurture partnerships to ensure pathways for communication, discussion, and awareness raising |
| | Benchmark and learn about excellence in practice from a diversity of settings and organisations; gain inspiration and learn from others' insights |
| | Evaluate impact and implications of your practice |
| | Capture knowledge of practice and build institutional memory |
| | Promote reciprocity in co-creation: build trust based on honest interactions and shared interests |
| | Promote mutuality: work toward win-win arrangements |

| OVERARCHING PRINCIPLE 4 | Recognise the balance between the group's responsibility and its mandate on the one hand, and the local and individual context on the other to ensure equitable and inclusive actions |
| --- | --- |
| OPERATIONAL PRINCIPLE | Identify, convene and engage the multiple local and diverse stakeholders involved |
| | Collectively discuss and identify issues and challenges to ensure that they are understood and framed inclusively |
| | Discuss and identify objectives and corresponding actions to address challenges and issues |
| | Key actions are mobilised by localised group effort; develop localised strategy and localised awareness |

| PRINCIPLE CATEGORY: PRINCIPLES OF EDIA STRATEGY | |
|---|---|
| **OVERARCHING PRINCIPLE 5** | **Take a cohesive approach to EDI across the organisation** |
| **OVERARCHING PRINCIPLE 6** | **Ensure that practice is grounded in ethics and core values** |
| **OPERATIONAL PRINCIPLE** | Bring to the fore where there are inconsistencies to enable a clear understanding for the need for action |
| | Discover and discuss matters from the grassroots and strategy levels |
| | Create spaces and opportunities for consultation and co-creation |
| | Create ways of sharing knowledge and experience among different groups and members of the organisation in ways that acknowledge and accommodate their needs, situation, capacity, etc. |
| | Make visible the layers, connections, and interconnections within the organisation to break down sources of disjointedness/disconnect, complexities and inconsistencies |
| | Look for and note intersections and interactions among interrelated and emergent issues |
| | Undertake equality impact assessment |
| | Adopt reflective practice to ensure the relevance and contextual fit of decisions and actions |
| | Take an evidence-based approach; whenever possible, draw from a range of sectors |
| | When evidence/literature is not available, apply the methods, concepts and approach of Action Research |
| | Illustrate/exemplify implications (of e.g., what not taking action looks like; what following good practice looks like) |
| | Move forward, taking one challenge at a time |

| | |
|---|---|
| **OVERARCHING PRINCIPLE 7** | **Have a bold vision, state it clearly, share it** |
| **OPERATIONAL PRINCIPLE** | Ensure the message of the EDIA vision is adapted for sharing at all levels of the organisation |
| | Make every contact/interaction count |

| PRINCIPLE CATEGORY: PRINCIPLES OF INCLUSIVE CULTURE | |
|---|---|
| **OVERARCHING PRINCIPLE 8** | **Embed and nurture a strong culture of inclusion in your organisation** |
| **OPERATIONAL PRINCIPLE** | Be welcoming – make everyone feel recognised, appreciated, and respected |
| | Recognise that building a culture of inclusion is a slow, organic process |
| | Recognise that EDI work is an ongoing, continuous process |
| | Use data on EDI to inform activity planning, decision-making, and strategic planning to hold ourselves to account |
| | Recognise that culture matters; normalise the recognition that there is inequity so that we can address it |
| | Start small; build around existing infrastructure to open up spaces to discuss EDI |
| **OVERARCHING PRINCIPLE 9** | **Create an inclusive environment where all regardless of their background, personal characteristics or circumstances are able to fulfil their potential** |
| **OVERARCHING PRINCIPLE 10** | **Inclusion begins with "I"** |
| **OPERATIONAL PRINCIPLE** | Dare to take a step in creating genuine and authentic inclusive environments; not taking a step isn't an option |
| | Recognise that moving towards inclusion is a phased, emergent, step-by-step process |
| | Celebrate and recognise progress |
| | Recognise and support teamwork; don't underestimate what a small group of people can do |

| PRINCIPLE CATEGORY: PRINCIPLES OF LEADERSHIP | |
|---|---|
| **OVERARCHING PRINCIPLE 11** | **When leading on EDI, listen, advice, shape, build connections** |
| **OPERATIONAL PRINCIPLE** | Raise awareness: provide resources; signpost resources; discuss resources<br><br>Make yourself available<br><br>Lead by example<br><br>Value and nurture allyship<br><br>Draw from your professional experience and lived experience<br><br>Engage in personal reflexivity<br><br>Recognise your position of power and leverage it to make a difference |
| PRINCIPLE CATEGORY: PRINCIPLES OF ACCESSIBLITY IN PRACTICE | |
| **OVERARCHING PRINCIPLE 12** | **Embed and nurture a strong culture of inclusion in your organisation** |
| **OVERARCHING PRINCIPLE 13** | **Recognise the complexity in requirements to enable accessibility** |
| **OPERATIONAL PRINCIPLE** | Provide support to stakeholders (staff, researchers, communities) to ensure safeguarding against harms<br><br>Provide support to stakeholders (staff, researchers, communities) to be able to deliver on the (new and increasing) demands of accessibility |
| **OVERARCHING PRINCIPLE 14** | **Create a safe space for people to voice their thoughts and views** |
| **OPERATIONAL PRINCIPLE** | Provide safe spaces to have challenging conversations about diversity<br><br>Recognise the different ways that are accessible to different groups; enable different channels for contact and communication<br><br>Identify the common language to talk about EDI<br><br>Make yourself accessible without harming yourself |

# 10 BIOGRAPHIES OF CONTRIBUTORS

**Dr Cecilia Medupin** is a Senior Lecturer at the Department of Earth & Environmental Sciences, University of Manchester, UK. Dr Medupin has a proven track record of leading design, delivery and evaluation of interdisciplinary environmental science workshops. Nationally, Cecilia is the convener of WiES, a co-investigator on NERC's Community for Engaging Environments, and a member of BES's Equality and Diversity Working Group. Cecilia brings her experience of being an African woman with diverse experience of living and working in the UK. She is the convener for the pilot study, connectivity & inclusivity in higher education and environmental sustainability: a solutions' based approach.

**Dr Jen O'Brien** is Principal Fellow of Advance HE and Senior Lecturer in Human Geography at the School of Environment, Education and Development, Faculty of Humanities, University of Manchester, UK. Dr Jen O'Brien is an Inaugural Fellow of the Manchester Institute of Teaching and Learning and the university's Academic Lead for Sustainability Teaching and Learning. Jen is the pioneer of 'Creating a Sustainable World: 21st Century Challenges and the Sustainable Development Goals' which runs through UCIL, the University College for Interdisciplinary Learning (UCIL). UCIL offers students a transformative learning experience in ideas that sit across degree specialisms. Using the Sustainable Development Goals as pedagogy, all learners become teachers as they share their knowledge.

**Ms. Karen Devine** is Director of Communities and Inclusion for the British Ecological Society, a member-based organisation with almost 7,000 members globally. Inclusivity is a core value of the society and Ms Devine's activities include promoting equality, diversity, and inclusion across all areas of the society's work and she has key roles within external cross sector working groups for Wildlife and Countryside LINK looking at ethnic diversity in the environment sector.

**Ms. Oyebanji (Banji) Adewunmi** is the Director of Equality, Diversity and Inclusion at The University of Manchester, UK. Ms. Adewunmi is a highly skilled and very experienced professional who brings her expertise and professionalism into her work and other activities. One of her notable achievements is the EDI initiative at the Barts Health NHS trust in London.

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**Professor Ann Webb** is Professor of Atmospheric Radiation, Head of Department and Former Associate Dean, Graduate Education, at the Department of Earth and Environmental Sciences, University of Manchester, UK. Ann's research work remains at the interface between disciplines, with radiation and (sun) light as a central theme. She has strong links with the Medical School and photobiologists as well as modelling and experimental work in the atmospheric sciences. She has held numerous roles at the World Meteorological Organisation (WMO), was President of CIE (Commission Internationale de l'Eclairage, or International Commission for Illumination) and she is currently UV Working Group lead for the International Radiation Commission and member of the Editorial Board for the WMO Commission for Instruments and Methods of Observation (CIMO) Guide.

**Professor Dave Schultz** is Professor of Synoptic Meteorology and has worked for the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory and the University of Oklahoma. In 2006, he became a professor of Experimental Meteorology at the University of Helsinki and Finnish Meteorological Institute. He has a range of interests including but not limited to convective storms, synoptic- and mesoscale meteorology, cloud and precipitation microphysics, integrating weather and social science research, earth history, climate and paleoclimate modeling, air chemistry, teaching, and scientific publishing. Dave has won numerous awards for his contribution to the American Meteorological Society Editor's Award and for teaching excellence. He is the Chief Editor for *Monthly Weather Review* and the Director of the Centre for Crisis Studies and Mitigation. He is author of *Eloquent Science: A Practical Guide to Becoming a Better Writer, Speaker, and Atmospheric Scientist.*

**Professor Hilary Geoghegan** is Professor of Geography at the School of Archaeology, Geography and Environmental Science, University of Reading, UK, and joint Head of Department of Geography and Environmental Science. She is also Director of NERC Community for Engaging Environments and Co-editor of Area (RGS-IBG). Hilary is a cultural geographer specialising in enthusiasm. Through her research, she seeks to understand more fully what motivates and sustains individual and collective participation in activities, hobbies, interests, projects, and research. Hilary is interested in relations between people and the material world, particularly as they change over space and time. To date her research has examined passions for technology, architecture, wetland birds, weather, and trees.

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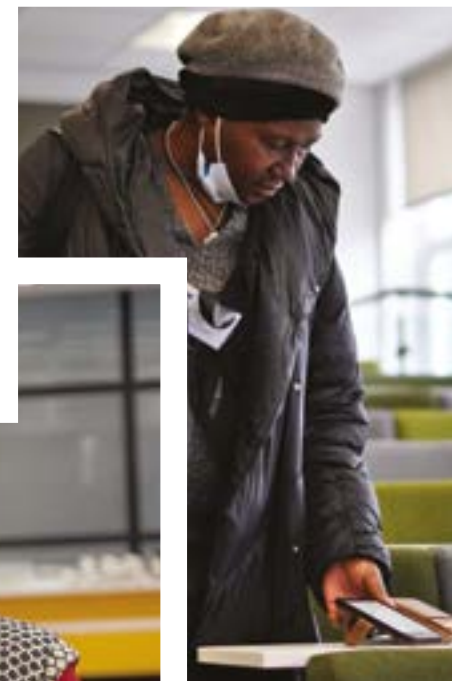
# 11 NOTES

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