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## What’s stopping us? Unpacking the constraints to epistemic agency in management education for climate change adaption

Dr Annie Snelson-Powell; Dr Farooq Mughal; Dr Kostas Iatridis (University of Bath)

The risks to humanity of climate change are stark, hastened by business operations globally that consume finite resources and generate harms to the natural environment, where the decisions of managers (Morrell & Learmont, 2015) are underpinned by capitalist perspectives (Hoffman, 2021), the primacy of profits (Kaul & Luo, 2018) and economic growth (Colombo, 2023). Blame has long lain at business schools’ doors (e.g. Mintzberg, 2005; Parker, 2016) since they are influential organizations in the response to this challenge, uniquely positioned to educate future managers to act responsibly in corporations, since they control the approach to learning and generate knowledge to support this activity. So it is perplexing that business schools do not appear to be keeping up, in terms of their performance with respect to this critique (e.g. Colombo, 2023). We are thus interested in what maintains and underpins this ‘lag’. Our proposed essay will explore key underlying barriers to progress as it relates to the power and persistence of traditional management perspectives. In particular we will question how business schools and management scholars are influenced or constrained in their readiness to advocate for paradigmatic change to address climate concerns, by the existing systems of management and regulation of knowledge production, selection, and utilization within society (Jacob & Hellström, 2018)?

This is a particularly puzzling question since climate concern has become mainstream and pervades our university’s policies and initiatives. There is huge growth in research and significant attention in the Academy. So what is holding us back in this existential quest? What comes next from business schools likely requires different perspectives, and implies profound change which has hitherto remained latent. The necessary shifts imply a fundamental reframing of how we think about what we teach, in business schools. In considering how education must change, to respond to the deteriorating climate conditions, we are required to challenge the normative epistemic frameworks that govern how knowledge is (re)produced (Sosa, 2013). We then ask what does learning look like, that recognizes the embeddedness of human activities in the natural environment, that values a holistic stewardship of broader systems, and that can collaborate and connect to activate the necessary innovation for human survival and prosperity? How does organizational life need to change? How must business schools change to support the change-ready mindsets of future managers in a new era of climate crisis? These questions have yet to be sufficiently theorized to support forward momentum for research, where debate has come to counterpose the existing paradigms and radical degrowth agendas as incompatible. We propose instead that a consolidated research agenda is needed to differently explore the nature of epistemic agency, such as the distinction between different types of agency (re)produced in business schools, and the relationship between epistemic normativity and freedom. In this way we might better help managers and managers-to-be, to navigate the landscape of beliefs and knowledge, and their justification for decision-making in practice. In sum, our essay highlights the limitations and scope of freedom in making choices and forming beliefs about businesses and climate change, and the degree of control we have over our beliefs. We will develop a model to help identify the implications of these distinctions for our understanding of rationality, self-interest, and the dynamics of disagreement that arise in epistemic contexts of business schools.

## Building competencies using responsible business real-life case studies

Dr Anupam Mehta (University of Birmingham)

This paper uses real-life case studies to address the challenges of building competencies in responsible business among students who represent future business decision-makers. While teaching materials on sustainability are abundant, merely teaching such content is not enough.

This article emphasises the crucial role of teaching cases in cultivating critical thinking skills, particularly in responsible business practices. It draws upon evidence from developing and utilising a real-life case study on Ruscombe Food and Drinks Ltd, a London-based small and medium enterprise (SME) struggling with financial challenges while contemplating a significant investment with sustainability implications.

The case integrates financial and environmental considerations into this strategic investment evaluation process. It provides the actual financials of the company, including the income statement, balance sheet, and cash flow statement since its inception in 2017. This case is based on primary data collected via interviews with the company's CEO.

While numerous teaching cases exist on sustainability issues within large enterprises, more cases need to address the dilemmas and challenges SMEs face in making sustainability decisions. The case study discussed in this paper focuses on an SME scenario, providing a unique perspective on the complexities inherent in such contexts.

The case study was incorporated into a management accounting module within a second-year BSc accounting and finance programme involving a class of 80 students. Before the session, students were provided with the case study, allowing for thorough preparation and engagement during class discussions.

This paper finally discusses the outcomes of the case discussion, presenting the arguments, insights, and learning experiences derived from examining the SME's sustainability-related investment decision. Through this analysis, the paper underscores the significance of integrating responsible business perspectives into an educational context, primarily by utilising tailored teaching cases. Finally, the paper builds on the framework for developing and using these cases that can be used by faculty members to create their cases, focusing on the responsible business aspect they want to incorporate into their teaching cases.

## Sustaining Green Knowledge Exchange in a Hybrid Learning Environment: The Role of Green Willingness and Learning Exchange Ecosystem

Dr Samuel Ogbeibu (University of Bradford); Dr Jude Emelifeonwu (Global Banking School)

The exchange of environmental sustainability knowledge (green knowledge) between lecturers and students is argued to depend on the willingness of the class participants to acquire, cross-fertilize, assimilate, retain, demonstrate, source feedback, and re-evaluate (ACARD-SR model) green knowledge that is supported by a learning exchange ecosystem (LEE – see Figure 1. Emelifeonwu & Ogbeibu, 2021; Yu et al., 2022). Class participants’ willingness is pertinent considering the global call by the United Nation’s Global Compact for organisations such as academic institutions to conform to and commit towards the attainment of the sustainable development goals (SDGs) (Al-Faouri, 2023). Studies argue that academic institutions are core drivers of green knowledge, and pro-environmental behaviours can be consistently undergirded via increased green education-centred curriculum initiatives (Ni et al., 2024). Though this debate seems to hold in some economies like Finland, Estonia, and Croatia with regards to quality education, other developed economies like the United Kingdom is yet to successfully deal with major challenges endemic within its systems for quality education and climate action (Sustainable Development Report, 2023; Sahoo, Kumar, and Upadhyay, 2022). Apparently, recent findings indicate that the climate change challenges have to do with institutional and human capacity on climate change adaptation, mitigation, early warning, and impact reduction, while the quality education challenges relate in part to learners’ acquisition of the skills and knowledge required to engender sustainable development (United Nations Department of Economic and Social Affairs, 2024a, b). Studies also argue that several indicators such as global citizenship education, mainstreaming education for sustainable development, greening of the curricula, students’ green assessment and teacher green-centred education are important for reinforcing academic institutions’ efforts towards addressing the identified challenges (United Nations Department of Economic and Social Affairs, 2024b; Wamsler, 2020).

However, we contend that the extent to which these indicators can be achieved also largely depends on the willingness of the academic institutions’ students and lecturers to commit towards embracing green-centred knowledge exchange and exhibiting pro-environmental behaviours (Al-Faouri, 2023), and this act is thus conceptualised as green willingness. Green willingness in this context therefore refers the disposition – the push factor (Dawson & Henley, 2012) – of individuals to conceive, commit to, produce, improve, or advance pro-environmental behaviours or achieve environmentally friendly results irrespective of the nature of assistance or response received (Akhtar et al., 2021; Gomes et al., 2023). The importance of green willingness becomes more apparent in the face of recent growing transitions of learning exchange to a hybrid learning environment (HLE - virtual and physical classrooms) driven by the effect of the Covid-19 global pandemic (include recent education focused covid-19 citation). Studies contend that constant changes in technology and digitalisation can impact the green willingness of class participants to continue effective green knowledge exchange in a HLE (Wamsler, 2020). This is also a consequence of the need for, and pressure on academics and students to consistently adapt to, and or adopt constantly changing technologies and digital norms of implementing green knowledge exchange initiatives in a HLE (Ni et al., 2024).

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Fig. 1: The ACARD-SR model

Therefore, we seek to investigate how green knowledge exchange in a HLE can consequently be sustained to bolster quality green education and climate actions of academic institutions by examining the influence of LEE on green willingness of class participants. We build on the ACARD-SR model that is anchored on the social learning, scaffolding, collaborative learning, and the stakeholder theories (Bandura, 1986, Brunner, 1960; Freeman et al., 2018; Vygotsky, 1987). Successful implementation of the ACARD-SR model is contingent on the efficient deployment of the LEE (Emelifeonwu & Ogbeibu, 2021). LEE consists of drivers such as learning exchange mode, information support systems, learning climate/environment, students’ equality and diversity, and social interaction. We postulate that these drivers can help to pull students’ green willingness to become actively engaged in green initiatives that can bolster quality green education and climate actions.

## Innovating on Social Impact Bonds to develop a theoretical framework and early-stage funding model for dual community and biodiversity outcomes: The case for Rewilding Africa

Dr Ezra Carlson; Dr Bruno Bonizzi; Professor Christopher Mowles (University of Hertfordshire)

The 2030 Agenda for Sustainable Development sets out 17 sustainable development goals (SDGs) that require participation from finance, business, and policy actors to overcome the lack of engagement with private capital to support these goals. Sustainable finance is an emerging field and an effective institutional mechanism to finance SDGs that simultaneously achieve positive social and environmental outcomes with financial returns. Social Impact Bonds (SIBs) combine multi-stakeholder partnerships with social and environmental objectives and outcomes to fund SDG projects. Despite the growing popularity the application of SIBs to poverty reduction and agriculture and environment policy sectors is relatively underrepresented when compared with other sectors (INDIGO, 2023). Furthermore, SIBs are in their infancy, undertheorized and more understanding of their key (non-financial) social) and financial (risk-return) dimensions require further investigation (Albertson et al., 2020; Care et al., 2023). A unified framework that helps private investors understand and evaluate these assets is needed (e.g., Schinckus, 2018) that applies a finance-based lens and research questions that compare and contrast their advantages and disadvantages, greenwashing, and other ‘additionalities’ from payments entirely contingent upon success (Care et al., 2023).

Rewilding Africa (RWA) is a social enterprise addressing an important social challenge in South Africa at the intersection of rural communities and ecology. It is aimed at transforming the old-style donor support funding or the 1970s colonial-style nature reserve models that have resulted in a lose-lose for both rural communities and the ecology that remain disconnected. As such, Africa’s vast remaining wilderness areas are under threat. Human encroachment, the adverse impacts of mining, agriculture, and climate change have degraded the health of these vital ecosystems. At the same time, rural communities in South Africa living in or near these ecosystems face high unemployment, poverty, and a constrained local economy, resulting in limited access to opportunities to improve their livelihoods and adapt to climate change trapped in a cycle of adverse poverty. Thus, contemporary social impact models are desperately needed to address this interconnected tension between rural communities, ecology, and exclusion.

To progress, RWA needs to demonstrate and measure the dual community and biodiversity outcomes of their model by developing the next phase prototype that empowers both local communities by providing them with opportunities for economic growth through conservation-based businesses that place conservation, agriculture and other sustainable businesses and livelihoods at the heart of their conservancy model. However, like many social innovation projects, their funding gap is preventing them from progressing – they cannot get funding until they have a prototype and visa-versa. Furthermore, SIBs are mostly used for single-outcome sustainability projects (e.g., Rhino Bond) as opposed to dual-outcome models used to overcome the 'funding gap' challenge. Our research aims to address the shortcomings of developing and innovating upon SIBs for this purpose. We have access to rich data through our collaboration with RWA to several other African conservancies and affiliations. Our contribution will be to develop a theoretical framework and model in the context of dual community and biodiversity outcomes.

## Industrial Symbiosis and Socio-Economic Benefits for SMEs

Pragatheeshwar Iyappan (Glasgow Caledonian University)

1. Introduction

Industrial symbiosis, a collaborative approach where businesses exchange resources, offers well-documented environmental and economic benefits (Ahmad Fadzil et al., 2022; Carissimi et al., 2023; Cicchiello et al., 2023; Tan et al., 2022). However, its social impacts, particularly for empowering small and medium-sized enterprises (SMEs), remain underexplored. This study explores into the often-neglected social dimensions of industrial symbiosis, focusing on its potential to contribute to regional economic development, job creation and community well-being (Dwikat et al., 2023; Suryantini et al., 2024).

2. Methodology

A systematic literature review (SLR) was conducted using the PICO framework to identify relevant research questions:

Population (P): SMEs

Intervention (I): Industrial symbiosis

Comparison (C): Enablers, challenges, and drivers of socio-economic resources

Outcome (O): Factors influencing sustainable competitive advantage of SMEs

Four databases (Scopus, ProQuest, EBSCO and Web of Science) were searched with relevant keywords. The PRISMA method was employed to refine the initial set of 1235 articles to a final selection of 90 high-quality publications.

3. Preliminary Results (Descriptive Analysis)

A recent surge in research interest is evident, with most publications concentrated in the last two years (2023-2024). "Sustainability" is the most prominent keyword, reflecting the research focus. Network analysis revealed connections between keywords like "industrial

symbiosis," "sustainable development," "challenge," "case study" and "waste," suggesting a growing interest in addressing waste management challenges through industrial symbiosis. Additionally, an analysis of publication trends shows a dominance of research from “China” and a focus on the "Resources and Materials" industry.

4. Thematic Analysis

Template analysis effectively explored and organised complex data themes, capturing the interdisciplinarity of responsible management challenges. It examined the interplay of elements and strengthened the case for its use as the initial step in thematic analysis (Yasin et al., 2023; Laasch et al., 2023; Wuersch et al., 2023). Next, a thematic analysis is underway to explore the themes identified through template analysis. Currently, three themes have emerged.

4.1. Drivers for SME Participation in Industrial Symbiosis

This theme unpacks the interplay of economic inducements, environmental anxieties and social concerns in shaping SME decisions and strategies for adopting symbiosis.

Economic Incentives: Cost reduction (Daquin et al., 2023; Giannoccaro et al., 2023; Mallawaarachchi et al., 2023; Yazan & Fraccascia, 2020), resource security (Khan et al., 2023), and access to new markets (K. Liu et al., 2022).

Environmental Pressures: Waste management regulations (Xue et al., 2023), resource depletion concerns (Anane et al., 2023), and pressure to adopt sustainable practices (Schlüter et al., 2022).

Social Considerations: Community development (Lucia Mortensen et al., 2023) and fostering collaboration within the local economy (Taqi et al., 2022).

4.2. Social Impacts of Industrial Symbiosis on SMEs and Communities

This theme dissects the social symbiosis-SME nexus, exploring its potential for job creation and skills development while acknowledging concerns like social inequities and potential community conflicts.

Positive Impacts: Job creation (Yu et al., 2023), skills development (Oughton et al., 2022; Rentería Núñez & Perez-Castillo, 2023), and community revitalisation (Chen et al., 2022).

Potential Negative Impacts: Social inequalities arising from uneven benefits distribution (Corsini et al., 2022; Harfeldt-Berg & Harfeldt-Berg, 2023; Noori et al., 2023) and community conflicts if concerns are not addressed (Mannino et al., 2015).

4.3. Strategies for Overcoming Barriers and Maximising Social Benefits

This theme explores barriers and possible future strategies for maximising social benefits. Government policies should focus on providing financial incentives and knowledge sharing, while industry associations can play a pivotal role in empowering SMEs to maximise their participation in social symbiosis initiatives.

The Role of Government Policies: Providing financial incentives (Liu et al., 2023; Herbst, 2023), promoting knowledge sharing (Liu et al., 2023), and streamlining regulatory frameworks (Wang et al., 2018).

The Role of Industry Associations: Facilitating networking opportunities (Schlüter et al., 2022) and capacity building programs (Guo et al., 2016; Spekkink, 2015; Walls & Paquin, 2015).

5. Conclusion (Relevance of the Proposal to Track 1: Greener, particularly second theme - Regenerative Business)

Industrial symbiosis, embodying circular economy principles, minimises waste generation and maximises resource utilisation. This study investigates SME motivations for joining symbiotic networks, fostering a shift towards collaborative, circular resource management within production processes. While emphasising social impacts, job creation and community development can indirectly contribute to a more sustainable and regenerative business ecosystem. Highlighting waste reduction and the shift in business design towards resource efficiency strengthens the proposal's alignment with Track 1: Greener's focus on Regenerative Business.

## Embedding Carbon Literacy within Curriculum for a Responsible Management Education

Dr Anjana Basnet; Dr Divya Patel (University of Salford)

The United Nations declared the period from 2020 to 2030 as a decade of action to achieve the 17 Sustainable Development Goals (SDGs), which include a global climate action goal i.e. SDG 13. To tackle the climate change crisis, the Paris agreement contains an ambition to limit the global warming to no more than 1.5℃ (UNFCC, 2016). However, the current pace of climate action plans has been deemed insufficient to effectively address climate change.

SDG 13.3 identifies the critical role of the education in tackling the climate crisis through climate change education (CCE). The higher education sector plays a critical role in instilling behavioural change to address global climate change (Srkoc et. al., 2021). Globally, students and youth are demanding comprehensive and high-quality climate education to prepare for a greener future. However, an analysis of national curriculum frameworks across 100 countries reveals that almost half (47 percent) do not even mention climate change and while 95 percent of teachers recognize the importance of teaching students about climate change severity, only about one-third can effectively explain its effects in their specific regions (SDG Goals Report, 2023).

The UK Department of Education (DOE) has therefore called for all educational institutions, including the Higher Education sector to embed CCE in the curriculum to reduce our environmental footprint, particularly in the pursuit of achieving net zero emissions (DOE, 2023). Despite its importance, CCE remains limited and fragmented (Molton-Hill et al.,2019).

This paper provides an overview of how Business Schools, exemplified by the case of Salford Business School, are embedding CCE in their curricula to contribute to addressing the global climate crisis. This paper serves a dual purpose. Firstly, it presents a practical illustration of the ‘broad focus’ strategy (Rusinko, 2010) employed in integrating sustainability in management and business education. Specifically, the paper will present insights gained from the pilot carbon literacy training project, which is currently available to students pursuing a postgraduate degree in International Business. Secondly, the paper reflects on the opportunities and challenges faced by students participating in the pilot carbon literacy training project, as well as the instructor overseeing the project.

This paper acts as a knowledge sharing paper and it will be valuable to anyone that is thinking about embedding climate change education on their programme/s.

## Thriving Futures: Crafting the DNA of a Post-growth Business Model

Antje Otto; Dr Susann Power; Prof Kristel Miller (Ulster University)

The complexities to meet the UN Sustainable Development Goals are understood in the context of the interdependency of health, economy, and environment. The emerging post-growth discourse understands this interdependency, reflected in a tri-fold critique of the prevailing economic model. Post-growth asserts that current economic policy for Sustainable Development and Green Growth are insufficient and lack robustness to address planetary boundaries and global dilemmas. The discourse problematises our ‘addiction to growth’ as hindering radical systems transformation for a future economy beyond growth.

A post-growth future prioritises health of people and planet, putting forward a vision of an economy which seeks to bring production and consumption patterns inside the safe and just space for humanity. Despite growing interest, the discourse has been subject to major critique for lack of transition pathways and likely agents. This has directed attention amongst scholars to the nature and role of business due to their major influence on the economy. In responding to critics, the post-growth field have identified SMEs as possible agents to affect economic change due to making up 99,8% share of the total EU economy (European Commission, 2022). Early conceptual work on post-growth business models too, recognise the inter-dependency of economic, social, and environmental spheres. A post-growth business model reflects value processes beyond the financial bottom line, operating within a solid social foundation and respecting the ecological limits.

This qualitative research explores the emerging post-growth discourse from a business management perspective. Earlier post-growth business models frameworks are largely conceptual and still require comprehensive empirical assessment. Little is known about its operationalisation. How these principles can be realised for SMEs, what barriers and drivers exist are questions explored empirically in this research with the aim to review extant post-growth business models both, its realism, and the potential for businesses to contribute to a new economy to emerge.

To advance the post-growth business model concepts, a synthesised framework is presented illustrating the different dimensions which could make up a post-growth business model. Exploring this conceptual model through the lens of business model theory provides an analytical framework to answer questions on how SMEs can innovate and implement principles of a post-growth business model. This process also created a first link between the post-growth discourse and the business management field. In examining the conceptual framework against empirical findings, the research offers living examples illustrating how concepts can be translated into tangible realities, thus seeking to identify pathways to transform the niche for wider SME adaptation.

This research’s novel contribution is in bridging the post-growth and business management fields. Furthermore, the framework put forward, provides the foundation for empirical assessment to address knowledge gaps within both fields.

## Soft skills for the Green Transition: organisational learning and development needs and implications for education

Dr Karen Cripps (Oxford Brookes University)

As a ‘Just and Green Transition’ (hereon referred to as the Green Transition) becomes an essential part of core business operations via legislation, consumer, and civic interest, it is critical to develop a diverse pipeline of talent. The question that drives this research report, is how organisational soft skills keep pace with this changing environment and how climate change coaching can support the transition.

Deloitte and IEMA (2023: 22) highlight that because all jobs require green skills, organisations must develop an “environmentally sustainable mindset as the norm for everyone”. This depends upon developing an understanding of what skills/mindsets are needed, and how to go about developing them. Microsoft (2022) categorise green skills as encompassing; functional expertise, technical knowledge, data and digital expertise and broader transformational expertise (such as creative problem-solving and change management). This aligns with a spectrum of ‘instrumental’ skills that are more technical/functional in nature, through to ‘transformative’ that require a range of interpersonal and learning skills (Kwauk and Casey 2022). This spectrum is extended to include ‘life’ green skills in a recent report by the UK Parliament Post (Simmonds and Lally 2024)

It is argued that there is a need for more research understanding of the relationship between mental health and workplace behaviour (such as productivity, absenteeism/presenteeism and turnover) in the context of climate change, and organisations should arguably be prepared to mitigate for potential negative impacts (Brooks and Greenberg 2023). Paradoxically, according to a PwC (2024) CEO survey, despite the perceived significance of climate change in the way companies create, deliver and capture value, climate actions related to ‘implementing initiatives to upskill or reskill’ the workforce as part of a just transition are not prioritised in the same way as actions related to decarbonisation and climate adaptation. If organisational recruitment, talent development and retention is aligned to Green Transition strategy, then it seems natural to assume that capacity building and engagement should also develop.

The research presented here is the outcome of ongoing work in partnership with Climate Change Coaches (Cripps 2023). This is based upon survey (n 250) and interview (n21) methodology of sustainability practitioners across global organisations. It explores attitudes to the perceived importance of technical versus soft skills in the green transition work, and how training and learning approaches might support this, with a particular focus on the role of coaching. It identifies how sustainability practitioner roles are evolving, and the particular opportunities and challenges this raises for organisational learning and training approaches. A particular focus will be given here to the implications of this for management education in aligning to the soft skills identified by organisations as fundamental in driving the green transition. It will examine alignment with competency and mindset frameworks that underpin business and management education, and specifically consider how the implications of the research findings on informing a transformative pedagogy.

## Developing a “Purpose Ecosystem” in Higher Education through Humanistic Business Education and Moral Imagination

Dr Giancarlo Ianulardo - Research Seed Funding Competition winner (University of Exeter); Dr Roberta De Angelis (Cardiff University)

The aim of this research project is to enhance the 'Connected Curriculum' research programme in Higher Education by making students and teachers co-participants in a 'Purposeful Education Ecosystem', thus promoting a shared vision towards the implementation of the United Nations Sustainable Development Goals.

Through the development of the mass university and the increasingly close relationship between university and society, higher education has come to play a crucial role in shaping current and future generations who will, for better or worse, shape our future. However, as Barnett noted, research and teaching have been separated, whereas these two functions are intimately linked. This has led some scholars to develop an integrated vision of the nature and purpose of the university, the Connected Curriculum, which is more suited to the challenges of the XXI century. The driving idea behind this research programme to transform and reinvigorate modern universities is 'connectedness', which can be established across multiple dimensions.

The Connected Curriculum framework aims to translate world-leading research into world-leading education on the 'premise that students learn by participating in research and inquiry' (Grindle & Tong 2022, 108). We believe that this vital principle in higher education should be integrated into and directed towards strengthening the 'purpose ecosystem'. This is an emerging network of multiple intermediaries, initiatives and organisations that share 'efforts and beliefs in changing and redefining the purpose and nature of business by advocating broader non-financial performance outcomes' (Stubbs et al 2022, 1097). We argue that for this to be effective, it needs to be integrated into educational curricula, taking the educational ecosystem one-step further.

At the heart of the Connected Curriculum, as embedded in the module I intend to develop, is humanomics, which, thanks to its multiple ramifications, can link education and research. Indeed, the relationship between education and research should be studied based on their mutual reinforcement when they are combined, or their impoverishment when they are separated. According to this vision, the role of human agency, with all its desires, passions and goals, becomes central to a humanistic view of management. This is why, in our project, humanomics, as proposed by scholars such as McCloskey, Melé (2016) or Nobel laureate Vernon Smith, should be at the heart of the curriculum.

In line with recent educational research, such as that of Barnett, who has called for higher education to be "realist", "critical", "practical" and "imaginative", we will embed in the course we teach principles that are "realist" in terms of the specific environment in which students operate, "critical" of current practices that are not directed towards the common good, "practical" in terms of providing students with the conceptual tools to change the environment for the good, and "imaginative" in terms of developing their moral imagination for new solutions, "practical" in terms of equipping students with the conceptual tools to transform the environment for good, and "imaginative" in terms of developing their moral imagination to find new solutions to the ever-growing environmental challenges, as the current Circular Economy movement purports to do.

## Transversal skills that promote sustainability - An experiential learning activity for students

Siara Isaac; Valentina Rossi, Yousef Jalali (Swiss Institute of Technology (EPFL))

This workshop will provide educators with an activity to develop three transversal skills relevant to sustainability: systems thinking, perspective taking and negotiation. We identified these skills as relevant to enabling students to constructively contribute to sustainability in

their future professions (Isaac and de Lima, 2024):

* **Systems thinking** in relation to sustainability allows students to better understand complex phenomena, improving their ability to consider the nexus of technological,

environmental, societal, and economic issues. Often, students lack this ability and

therefore fail to thoroughly contextualize and analyze complex issues, hindering their

overall problem-solving skills.

* Ability to take **different perspectives**, including seeing the related priorities and

constraints of different stakeholders, is essential when designing solutions or

interventions. Additionally, prompting reflections from diverse points of view has

proven to have a moderate correlation to ethical reasoning.

* **Negotiation skills** allow experts from different fields to put forward their set of

priorities, objectives and limitations that will strengthen the final outcome, specifically when working in teams. In the context of sustainability, negotiation skills are particularly important because experts frequently encounter divergent points of view.

It has been observed that engineering student teams who received specific negotiation skills training produced better results.

Although there is a wide agreement that higher education students need stronger transversal

skills, these are often underdeveloped due to the wrong assumption that transversal skills will be learned by simply putting students in situations that require them (Isaac, Petringa, et

al. 2023). On the contrary, research shows that transversal skills should be specifically addressed and structured in teaching practices (Picard et al. 2022; Isaac, Petringa, et al.

2023). This activity employs the trident framework for teaching transversal skills: knowing (strategies and models to implement the skill), experiencing (opportunities to apply the skills

and encounter relevant difficulties) and learning by experience (meta-cognitive/emotional

reflection to promote transfer) (Isaac, Petringa, et al. 2023). The trident framework has been used in the design of several activities aimed at the integration of transversal skills in higher education.

Working with tangibles (LEGO blocks) in a low stakes environment, the activity occurs in two

phases. First, participants will receive a brief theoretical input on sustainability, systems thinking and negotiation strategies. Next, they will engage in the experiential activity based on a case study, centered on the design of a product, from the perspective of four assigned roles. They will establish priorities related to the role they represent and leverage negotiation strategies in an interdisciplinary group to ensure the integration of each role's different priorities in the prototype design. During this process, participants will examine multiple dimensions of the sustainability of a project, explore the complexity of thinking in systems and consequently, the potential trade-offs between different and often contrasting factors.

We will conclude with a brief meta-reflection on the activity.

This experiential workshop has been conducted for faculty members and students at several institutions. Participants are invited to adopt the workshop to better support the integration of sustainability related transversal skills in their own institutions.

## Organisational values and ethical work: Insights from a qualitative study of UK tech sector

Andrew Maile (University of Birmingham)

This paper presents qualitative findings from 30 in-depth interviews regarding the importance of organisational moral-alignment and five propositions for making values 'land’ in tech-based businesses.

‘Tech ethics’ seeks to respond to the ethical challenges that the rapid development of technological innovation and data-driven technology pose (Dennis et al., 2023). Yet, despite its promise, there are several limitations that tech ethics suffers from in practice. These limitations include being “vague and toothless”, having “a myopic focus on individual engineers and technology design” and being “subsumed into corporate logics and incentives” (Green, 2021, p.209). The tech sector has also engaged in “ethics washing”—self-regulatory efforts that evidence ‘shallow’ ethical behaviour—and “ethics bashing”—the trivialisation of ethics and moral philosophy—prompting much criticism from both academic and tech communities (Bietti, 2023).

The challenge with tech ethics is their global and abstract value. When moral principles become enshrined in laws and codes—the typical product being a code of ethics—this tends to promote a ‘sticks and carrots’ style of moral conduct (Schwartz and Sharpe, 2010), as opposed to one which calls upon a moral agent to exercise professional integrity and agency towards moral ends. While it is indeed difficult to accept that all agents will be capable or willing to evidence moral agency, a virtue-ethically informed code of ethics would be more suited to these purposes (Kristjánsson & Fowers, 2024). The extent to which tech ethics can effectively influence or guide values held and exercised within an organisation is limited, and less obvious than the localised values that an organisation ascribes to – either formally or informally. Indeed, the culture existent within an organisation can either nurture, or undermine, an individual’s good character—the state of an agent’s being that involves moral values.

Findings identified in this qualitative study reveal that organisational values can influence individual moral conduct through social economics experienced within organisations, by means of organisational culture and internal reputation/identity. Accordingly, this paper offers insights from the UK tech sector, and proposes that for organisational values to possess a commanding influence on organisational identity/culture, the organisation needs to: (i) Make organisational values part of company DNA; (ii) Ensure personal and organisational moral alignment; (iii) Allow for internal reputational coherence; (iv) Promote values-based leadership and followership; and (v) Embed the values in all aspects of organisational operations.

These propositions/recommendations, offered in view of establishing a moral and ethical work culture, are in turn explored as both an antidote to, or avenue for avoiding, unethical and irresponsible business conduct, and as a consideration for the role organisations can play in the personal moral development of employees. Informed by these findings, this paper proposes that tech-ethics needs to draw from and appeal to a virtue ethical moral foundation. If tech ethics looked more akin to well-embedded organisational values, tech ethics may be perceived as less abstract and more relevant. As such, tech ethics may be better equipped to prevent ethical misconduct and corruption, and aid in achieving social justice, diversity, inclusion, and sustainable innovation.

## Scratching at the glass ceiling: Female entrepreneurship as a catalyst for social transformation and poverty alleviation

Clare Rhine, Professor Kristel Miller, Professor Jackie McCoy, Dr Lesley Dornan (Ulster University)

The quest for gender equality within the entrepreneurial landscape is emblematic of the pervasive “glass ceiling” metaphor – a barrier that seems both invisible and unyielding, hindering progress for women in the fight for gender equality. Yet, this metaphor doesn’t fully encapsulate the nuanced and enduring endeavours women have historically undertaken, particularly the more localized efforts, focusing instead on the big names and popularized female role models and Western perspectives. This research transcends the conventional narrative of shattering barriers, framing female entrepreneurship as a meticulous art of etching away at the glass, causing wide-reaching and ever growing spiderwebs of change and impact.

Presenting a theoretical framework developed through a case study within an Internally Displaced Person’s (IDP) camp along the Myanmar/Thailand border, this study explores how female entrepreneurship acts as a subtle, yet powerful, chisel. Female entrepreneurs, with each endeavour, meticulously engrave their legacy onto that once-impenetrable glass ceiling. This framework, encompassing economic, social, psychological, and political dimensions, suggests that every entrepreneurial act by women is another scratch on the glass, collectively contributing to a lattice of fissures that herald the weakening of old barriers, making way for the next generation of women.

The methodology for this research involved a mixed methods approach utilizing quantitative demographic surveys in addition to qualitative focus groups and semi-structured interviews. This case study was conducted within a conflict impacted context, where traditional roles for women are often most rigid (Gunewardena and Seck, 2020; Wu, Li, and Zhang, 2019). Here, female entrepreneurship doesn’t just contribute to economic growth (Kaciak and Welsh, 2019); it’s an instrument of empowerment, change and a testament to resilience. The scratches made by these entrepreneurs are marks of progress, etching a pathway for subsequent generations of women and girls to follow, making the glass ceiling ever more vulnerable to future efforts. Findings from this research illustrate that entrepreneurship is not an isolated act, but a cycle of influence. As women carve out their success, they redefine societal norms and expectations (Henry et al., 2021; Salahuddin, Mahmood and Ahmad, 2021; Sutter, Bruton and Chen, 2019), laying a clearer path for others. Each entrepreneur’s experience adds to the intricate web of cracks, ensuring that the ceiling is continually challenged. This research posits that by supporting female entrepreneurship, particularly in fragile environments, we cultivate a force capable of transforming society (Espinosa, 2019). These women do more than change economic outcomes; they become architects of a shift in the social norms of their community (Morrison, 1998; Welter et al., 2003). Through their collective etchings, they redefine what is possible, leaving indelible marks that clear the way for others.

In conclusion, the paper advocates for strategic support for female entrepreneurship as a catalyst for broader social change, as a means of poverty alleviation and furthering gender parity. It is a call to recognize the power of persistent, incremental efforts – each scratch at the ceiling – as a strategy for emancipation, empowerment, and economic development.

## Apprenticeships as Altruism or Investment: Shared Value and Fair Work

Paul Quigley (University of Glasgow); Amy Close (Glasgow Caledonian University)

The Scottish Government has tried to increase the number of apprenticeship opportunities available to people in Scotland over the last ten years. This has led to an increase in new apprenticeship starts, yet fewer than one in five Scottish employers hire and train apprentices. There has been a lack of understanding within academic literature about what drives employer decision-making around apprenticeships to support government efforts, a problem that has been addressed by recent research into the structural factors and ideas that drive apprenticeship engagement in Scotland (Quigley, 2023). This research involved a series of case studies of large Scottish-based employers, and supplementary interviews of relevant stakeholders, including skills practitioners, learning providers, business groups, HR professionals, apprentices, and trade unions. This work utilised and further developed a framework initially created by Bredgaard (2017) to categorise employers based on their engagement with, and attitude to, labour market policies.

Quigley argues that there are four categories of employers in Scotland in relation to apprenticeship engagement; committed employers, sceptical employers, passive employers, and dismissive employers. Each of these employer types is characterised by distinct motivations and behaviours, and employers may move from one category to another over time. This conference paper will address the findings related to committed employers. These are organisations that engage with apprenticeships and view them positively. Committed employers are primarily motivated to engage with apprenticeships by one of two key factors; either as a means of investing in workforce development, driven by labour market pressures, or by notions of ‘giving back to communities’, guided by ideas of corporate social responsibility. These motivators lead to different approaches to apprenticeships within these organisations, resulting in distinctly different outcomes.

Evidence suggests that when an employer is primarily motivated by a sense of CSR, the organisation casts itself in the role of the benevolent altruist, and the apprentice is understood as a fortunate beneficiary of corporate kindness, rather than the relationship being understood as a mutually beneficial economic arrangement. Committed development driven organisations however invest in apprenticeships with a view to skills development and succession planning, which encourages these employers to offer fairer pay and conditions to apprentices to encourage them to remain with the organisation beyond the period of the apprenticeship.

Altruistic committed employers report greater problems with apprentice performance and retention compared with development centric organisations. As CSR motivated organisations feel that they are doing the apprentices a favour, there is then a deeper sense of frustration with poor performance, or feeling of betrayal when people leave. This cycle is now causing some of these organisations to reconsider their strategy of engagement. It is therefore the case that the understanding of apprenticeships primarily as an altruistic endeavour poses a threat to the growth of apprenticeship opportunity in Scotland. Promoting apprenticeships based on the notion of shared value in line with the Scottish Government’s Fair Work policy can allow apprenticeships to be utilised to not only provide meaningful opportunities for skill development, but as a vehicle for fair work and positive social transformation.

## Crafting an Innovative Solution of Integrating Generative AI in Coursework and Assessment

Dr Feng Jiao, Keith Wong, Dr Emmanuel Murasiranwa, Dr Syed Tarek, Dr Alison Watson (Arden University)

Generative AI tools have gained widespread popularity among students as aids for understanding various topics. However, as these tools are increasingly incorporated into Higher Education (HE) assessments, concerns have arisen regarding their potential for academic misconduct. Therefore, the development of an ethical framework is essential to govern the appropriate use of generative AI in coursework and assessments. Moreover, integrating generative AI tools into academic assessments should be viewed as an innovative approach to mitigating academic misconduct, rather than outright rejection of their use in HE.

This study addresses this need by devising an ethical protocol aimed at facilitating effective and responsible integration of generative AI tools in academic assessments, benefiting both students and staff. We recognize concerns regarding the normalization of plagiarism and potential threats to academic integrity and scientific inquiry posed by generative AI tools. Through an exploration of generative AI's definition and misuse, our research uncovers various unethical practices, including plagiarism facilitated by AI-powered paraphrasing tools and contract cheating services. Additionally, we highlight potential risks such as manipulation of grading systems and identity theft, emphasizing the critical need for robust protocols.

With a better understanding of unethical implementations of generative AI tools in students’ study journey, our research aims to address the main objectives of summarising unethical implementations, identifying vulnerable assessments, understanding the impacts of false positives and negatives in AI detection tools, and design an ethical protocol of guiding generative AI implemented by students.

Moreover, the study also proposes an ethical experiment which introduce generative AI tools to students in assisting them to achieve a better academic performance. Instead of increasing the sensitivity of AI detectors for in the current grading system, the experiment breaks the traditional assessment that only consists of presentations or written reports; instead, the new assessment involves the creation of visual artifacts, the implementation of independent research skills and combined with the practices of academic theories and principles in business management. This experimental approach aims to encourage students to deeply engage with course content and synthesize their knowledge in a novel format, fostering innovative learning experiences while maintaining academic integrity.

Ultimately, the proposed ethical protocol and the innovative solution of engaging generative AI tools in assessment is to balance the benefits of generative AI tools with ethical considerations, ensuring the integrity of academic assessments while fostering innovative learning experiences. Furthermore, we endeavour to extend the implications of our research beyond academia to a broader community, including AI businesses. Through this outreach, we aim to offer recommendations for enhancing the accuracy of AI technologies. This includes strategies to mitigate false alarms—both positive and negative—generated by AI detectors, improving the identification of human contributions within generative AI content, and bolstering the accountability mechanisms surrounding copyright issues related to generative AI tools.

## Educational Technologies – student self-reflection and the importance of teaching soft skills

Dr Georgina Gough (University of the West of England)

This paper reflects on the potential for competences to be taught and assessed within higher education. Here, competences are taken to include soft skills which relate to students’ ability to act morally and ethically. Literature on the nature and assessibility of competence provides context for the discussion. ‘Appropriate’ competences are derived from the work of Wiek at al. (2011), UNESCO (2017) and Advance HE/QAA (2021). It is suggested in the Advance HE/ QAA Education for Sustainable Development Guidance (2021) that competences be central to curricula in order to “transform how staff and students view issues related to sustainable development” (p21) and that they lead to “both parties questioning their own and societies’ ways of thinking, ways of practicing and ways of being, which is central to a transformational learning experience” (ibid.). The paper proposes that whilst students can be made aware of the nature and the value of responsible management and sustainable development, and of competences identified as being useful for achieving sustainable development, current practice within the HE sector in the UK is not well aligned to facilitating and assessing the achievement of all such competences.

Interdisciplinary respect and collaboration are core to notions of sustainable development competence. This paper explores tensions between pressures which ‘push’ HEIs and students to disciplinary specialism and competition (for example institutions ranking systems, Research Excellence Framework, Teaching Excellence Framework, and, professional, statutory and regulatory bodies (PSRBs)) and those which advocate for more collaboration within and between institutions (such as education for sustainable development (ESD), the United Nations Sustainable Development Goals (SDGs), anchor institution status and some research funding criteria). Metrics which are used to measure ‘success’ within and by HEIs are also considered here. It is proposed that metrics which ‘reward’ inter-, multi- and transdisciplinarity are needed to complement existing metrics. HEIs must meet the challenge of developing interdisciplinary respect, transdisciplinary competence AND subject specialism; of developing generalists as well as specialists, both of whom appreciate each other; and of seamlessly combining systems thinking with self-awareness and efficacy.

This proposal stems from the perspective that responsible management education must be fair in relation to what it promises and what it can honestly deliver.

## The metaverse: Are we, and is it, ready? A L7 apprenticeships case study

Rebecca Hindley; Dr Lisa Grover (University of Exeter)

*Please note this is being presented as a paper.*

**Context**

Digital readiness and technology skills are significant concerns within the 4IR (Marr 22) not just for undergraduates, but it is also argued that future leaders have opportunities to use technological change to create more inclusive workplaces (WEF 2024).

Currently within universities, synchronous teaching activities tend to be delivered via Teams or Zoom. However, students report 'Zoom fatigue'. Several potential causes of this have been identified, including the closeness of the faces of attendees, the webcam constraining the visibility of movements, and the cognitive load from looking at your own face (Li et al., 2022). Further, Zoom/Teams do not offer apprentices a university experience that is distinct from their work experiences.

It is also difficult for students to create a community in the virtual space. Although Teams and online forums go some way toward connecting students, these current methods are largely text-based. Evidence that where we do create opportunities for discussion and collaboration, they are valued comes through in positive module feedback.

**Scope**

To enhance our L7 degree apprentices ‘future-fit’ and ‘future-thinking’ digital literacy, as a pilot study, we delivered an online seminar using metaverse software giving 15 learners the opportunity to meet each other in an immersive digital world as 3D avatars. Following the seminar, participants were interviewed to discuss how they felt about the experience, and what they perceived could be the uses or value the technology could offer in their workplaces. We will share our insights into the whether innovation through use of the metaverse presents new opportunities for augmenting online teaching.

**Our pilot**

The aims of our project were three-fold. First, to introduce our apprentices to a technology they may not yet be using, or even considering for their workplaces. Whilst enabling them to experience a recent technology and develop their digital skills, using this innovative learning environment we could challenge them to consider where this and other technologies could offer future workplace benefits, or disadvantages (Jackson et al, 2024). Secondly, to explore whether this innovative environment enhanced the inclusivity of the learning experience by encouraging all participants to interact, connect with each other and build an online community (Burnett et al, 2022). Thirdly, the project aimed to explore whether fatigue was reduced by creating a novel experience using avatars rather than video (Bombari et al, 2015).

**Project presentation focus**

We propose a case study presentation with the following objectives to:

* Share our experiences as lecturers of using a metaverse environment for teaching.
* Share the findings of our research about what L7 degree apprentices thought of their experiences of using the metaverse environment for learning.
* Discuss our insights into the potential and the current limitations of metaverse environments for teaching in Higher Education.
* Use digital tools to facilitate interactive audience engagement gathering their experiences of, and thoughts on, the potential of metaverse pedagogy.
* Enable participants to take away practical ideas on how they can approach management education using the metaverse, learning from our mistakes, and our successes.

## PRME SIP 2.0: Enhancing Quality and Maximising Stakeholder Value

Dr Laura Steele (Queen's University Belfast); Dr Petros Vourvachis (Loughborough University)

Producing and submitting a Sharing Information on Progress (SIP) report represents one of the key commitments of any PRME signatory, as well as a helpful way to inform and engage stakeholders, including faculty, students, industry partners, and accrediting bodies. In March 2024, PRME launched the ‘PRME Commons’, a multilevel technological platform to facilitate global knowledge exchange across business schools, which includes a self-reporting database (‘SIP 2.0’). Representing a significant shift from ‘SIP 1.0’, Signatories will now be required to answer nine questions aligned with the Seven PRME Principles and upload supporting evidence including objects (statements, policies, public media, etc.) and narratives (complementary context and/or stories). This interactive workshop will (1) address shared challenges and opportunities in relation to the transition to SIP 2.0; and (2) generate actionable ideas for how we can use SIP 2.0 and the PRME Commons to enhance value for organizational stakeholders. It will consist of a mix of short, focused breakout sessions and plenary discussions. The overarching aim is to increase participants clarity and confidence in terms of producing their next SIP report, as well as support them in maximising the value–and minimizing the burden–associated with reporting. Information and ideas generated through the session will be shared with the wider PRME UK and Ireland community afterwards via a blog post.

## Collaborative Sustainability Integration Project (CoSIP)

Dr Uchenna Tony-Okeke; Dr Jaliyyah Bello; Dr Nikhil Sapre (Coventry University)

Transformative and reproductive dimensions form the core of the educational system and the tensions and balance across these two dimensions remains varied through time and between countries (Desjardins, 2015). The transformative dimension played a pivotal role in transforming societies as evidenced in OECD countries (Inglehart & Welzel, 2010). As the sense of urgency grows on the need to accelerate transformative approaches given the looming 2030 deadline to archive the United Nations Sustainable Development Goals (SDGs), the need for a range of systems that can support fundamental changes in systems and designs has come to the fore. This study focuses on Desjardin’s (2015) transformative dimension and will harness advancements in teaching and learning practices along with improved digital access in deepening the integration of the SDGs within the curriculum and across varied pedagogical approaches in higher education.

As highlighted in Rockström et al (2021) and Sachs et al (2021), it is unlikely to meet many of the SDGs by 2030 or even 2050 without concerted and decisive action. This is further complicated by the impact of COVID-19, as noted in Allen and Malekpur (2023). However, COVID-19 can be a potential catalyst for a fundamental shift in approach towards a more sustainable future, as articulated in Fioramonti et al (2022), but it will require a transformational and accelerated approach as Hepburn et al (2020) insists.

In recognising the pivotal role of higher education institutions (HEIs) in supporting the SDGs, Exposito and Sanchez (2020) emphasise the responsibility of HEIs in contributing to the generation of sustainable practices, as well as influencing how sustainability is taught, modelled, and implemented. While many HEIs have committed to sustainability in the form of campus sustainability initiative and the integration of sustainability within the curriculum also known as Education for Sustainable Development (ESD), an authentic engagement that results in actionable outcomes in partnership with industry and the third sector remains harder to find.

For ESD to be truly impactful, the broadest set of stakeholder views and input will need to be integrated, and we propose that this can be achieved via a collaborative framework that seeks global perspectives. An evolving approach is the use of Collaborative Online International Learning (COIL) as part of a broader set of collaborative learning approaches, and this can be a very useful tool for promoting deep collaboration as disclosed in Rubin (2017). De Hei et al (2000) also provided evidence of additional intercultural competences developed through collaborative learning. The opportunity to engage a wider set of stakeholders is a very useful attribute of COIL, and this will be vital in developing sustainability approaches across HEIs and stakeholder, as well as in evaluating the impact of solutions implemented by companies, governments and third sector partners.

Our project focuses on developing a Collaborative Sustainability Integration Project (CoSIP) to promote the integration of the SDGs within HE curriculum through stakeholder inclusive COIL projects. It will develop a toolkit that can facilitate seamless adoption and implementation by other HEIs globally, as well as provide guidance on measuring and analysing the impact of the inclusion of SDGs framework in mainstream curriculum. The CoSIP will be based on three broad themes, Socioeconomic Growth, Climate Change and Financial Inclusion.

## Skills for Sustainable Innovation: A Competency Framework for Inclusive Innovation Informing Policy in a Regional Economy

Dr Shirley Davey (Ulster University); Prof. Michael Brennan (Ulster University); Charlie Tuxworth (Celsio Ltd)

Innovation is widely recognised as a key driver of economic growth, social well-being, and environmental sustainability. Inclusive innovation is the process of developing and implementing new solutions that address the needs and aspirations of a broad range of stakeholders, especially those who are marginalised or underserved (George et al., 2012; Adams et al.,2016). The global pandemic has impacted billions of lives across the world and has revealed and worsened the social and economic inequalities that have emerged over the past several decades. Addressing inequality is the first step towards sustainability (Ashford et al.,2020); and innovation is increasingly needed to address rising inequality. ‘Unless we see meaningful intervention by the government or business community, a widening inequality gap is likely to get worse’ (World Economic Forum, 2023). Recent developments in Education for Sustainable Development (Brennan and Sabogal-Paz, 2023) have highlighted the significance of transdisciplinary approaches to producing and circulating knowledge, as well as transforming higher education for global sustainability (Parr et al. 2022).

This paper introduces the Innovation Competency Framework for Inclusive Innovation (ICF) research project which was commissioned by the Department for the Economy (DfE) and addresses the need for a greater understanding of sustainable innovation by businesses in Northern Ireland. The research provides a greater understanding of the innovation skills landscape through a review of emerging international innovation competency frameworks through collaboration with ISO (Tidd, 2021; Davey and Brennan., 2022) and the views of key regional stakeholders. Additionally, this work supports the priorities in the Innovate UK (UKRI, 2022) report on Net Zero and the need for innovation skills development.

The methodology involved a stakeholder engagement process, consisting of interviews, and workshops, to elicit the perspectives of representatives from academia, industry, government, and civil society in Northern Ireland.

This research highlighting the importance of sustainable approaches offers a novel and holistic perspective on innovation competencies, which integrates technical, humanistic, and critical dimensions, and emphasises the importance of inclusivity, diversity, and ethics in innovation.

The project represents a significant step towards establishing a shared vision and language for innovation competencies in Northern Ireland and creating a culture of inclusive innovation that benefits all segments of society. Globally, major initiatives are underway to develop and deploy technology-based solutions to climate change (UKRI, 2022), this research highlights the importance of fundamentally changing the international innovation skills landscape to develop human-centric innovation skills urgently needed to ensure we have the people and solutions we need now, and those we will need in the future, to secure a prosperous and efficient transition to net zero.

## Implications for the Use of AI And Tactical Automation To Mitigate Nepotism (Wasta) In Employee Recruitment and Selection

Dr Vic Benuyenah; Dr Mona Mustafa (University of Birmingham)

Despite the considerable hype glorifying the benefits of artificial intelligence (AI), machine learning (ML) and automation in business (Murugesan et al., 2023), the relationship between the effectiveness of such tools in recruitment and selection practices has not been articulated or researched sufficiently (Benuyenah, 2021). As such, much of the discourse remains anecdotal and sparse, particularly in the field of business pedagogical studies. While HR textbooks have begun to discuss the use of automation, the pace and depth of such coverage remain limited, leading to less and less application of such tools in practice. What is even more compelling is the pace at which organisations apply artificial rather than human tools in the recruitment and selection process, particularly in places where corruption and biases can occur.

Using selected studies and our combined research and teaching experience in the region, we explore the growing implications of AI and automation in mitigating the incidence of nepotism in the Gulf Region. The closest commonly used word for nepotism in Arabic is ‘wasta’. As a culturally relevant concept, its application to hiring is taken for granted yet vastly contested (Elbanna & Fatima, 2022; Mello et al., 2023). Wasta is perceived as the ability to use family or tribal affiliations to gain unmerited favour (Forstenlechner et al., 2012). When wasta is applied to recruitment and selection practices, it tends to reduce fairness (Benuyenah, 2021) and can lead to sub-optimal hiring decisions, yet the problem is not about organisations or recruiters electing to use wasta; supply-side forces often drive the labour market towards the acceptance of wasta. For a few job openings, thousands of applicants can apply, often leading to pressure on hiring officers and other stakeholders. To mitigate the questionable practice of wasta in the recruitment and selection process, organisations might want to prevent human biases by deploying a system that is both equitable and efficient, perhaps including lean HR (Benuyenah 2021).

The question that needs examining is whether AI impacts recruitment and selection decisions positively or negatively. As the recent AI revolution has yet to be regulated and fully adopted by recruiters, researchers might consider a more targeted investigation of the above variables.

We propose that the new generation of AI, ML, and automation implies that the new form of HR practices will be very different, and researchers and academics need to begin exploring its shape and form and how the new HR will improve recruitment outcomes.

## Capturing the material impact of educational programmes

Dr Jenny Davidson (Newcastle University); Sheri-Leigh Miles (Net Positive Futures)

Our presentation highlights the efficacy of the collaborative approach taken by Newcastle University Business School and Netpositive Futures to create an online tool which measures the material impact of educational programmes against the Sustainable Development Goals. We will share how our cross-sector collaboration has bridged academic discourse and practical implementation, and show how through our partnership we have translated theoretical insights into actionable strategies with real-world impact.

Our action planning tool has helped us to measure the overall impact of an Executive MBA programme at an individual and organisational level. We will explore how this might be translated into an important reporting mechanism for HEI’s who seek not only to measure the sustainability content within their curricula but the material impact that this is having within and beyond the institution.

In presenting our approach we’ll highlight how it contributes to the cultivation of responsible leadership, fosters sustainability, and contributes positively to societal and environmental challenges. In addition to the tool itself we will also explore core activities which run throughout the programme which complement and support its use including; the underlying pedagogy, use of technology and how through the use of processes such as moral reflexivity, learners adopt a responsible approach to their leadership style and consider the wider impact of their actions on society and the environment.

We’ll discuss limitations and emerging themes from the evaluation of our approach and explore how (or indeed if at all!) we have met our initial aims to develop leaders who have a deep knowledge and understanding of the global challenges set out in the sustainability agenda and who recognise their role in tackling them alongside a mechanism for measuring the impact of their actions within and beyond the programme.

Finally, we make recommendations for how our findings might be used in different educational settings and in developing a robust and transparent reporting mechanism for HEI’s.

## 'Slow down’ the business school: Fast Education and The Politics of Time

Dr Constantine Manolchev; Dr Ryan Nolan (University of Exeter)

Not all Business Schools are the same, but they can all do better to confront the challenges we face today. A respectable literature has addressed their shortcomings to manage complexity, offer inclusive environments, and harness the power of learning to deliver social justice. There have been calls to diversify and broaden management curricula, for example, by including indigenous voices (Hrenyk and Salmon, 2024). There have been warnings to address power imbalances within them, through a ‘decolonization’ project, reflecting parallel changes in society (Woods et al., 2022). Scholars have also urged Business Schools to move away from profit-based instrumentality, and deliver civic impact (Colombo, 2023).

We agree that business schools must transform to address grand challenges, yet argue for an approach premised on slowing down. This may seem strange at a time when crises are mounting, but we propose that decoupling the accelerating pace of change in management education and research offers a viable approach to tackling today’s challenges. In doing so, we critique urgent calls for new social-sustainability agenda setting, AI technology implementation and so on, as well as recent advocacy for prescriptive theorizing in management (Hanisch, 2024). Undoubtedly well-meaning, such approaches propose using theory to bring about more ‘desirable’ futures (Gümüsay and Reneicke, 2021). Rather than focusing on what’s next (however positive the vision), we argue that transformation must come from deeper engagement with the conditions that constitute the historical present—management education is a foundational element of such a project.

In engaging with the present we draw on the concept of ‘contemporaneity’ (Osborne, 1995; Bevernage, 2016), which does not denote a new historical period, nor a new way of accounting for the coexistence of multiple processes in time. Rather, it is a complexity approach, which accounts for the (collective) coming together of (subjective and intersectional) times that characterize our contemporary experience of being in the world. Such an approach, and the politics of time it raises, has three significant consequences for management education, research, and practice.

First, it rejects the view that the present is a conduit for the future and demonstrates the need to understand the conditions that render the present what it is. It shows that as long as these conditions are experienced subjectively and yet collectively in the times of people’s lives, they cannot be reduced to a unified set of future outcomes because certain peoples' presents are other people's futures.

Second, it is a call to ‘complexify’ (Tsoukas, 2011) management education and research. That is, rather than simplifying complex phenomena for learning purposes, it suggests the need to develop the pedagogical complexity to confront organizational and social complexity.

Finally, it proposes the need to slow-down learning experiences. This accepts the accountability and agency to resolve grand challenges from within the present, exploiting its evolutionary potential, and not seek to displace it with ‘this’ or ‘that’ future. In this way, management education and research can play a pivotal role in this transformation and enable ‘decent education’ as a precursor to decent work (Duffy et al., 2022).

## Incorporating Human Rights Into the Curricula of Undergraduate Business Degrees

Sara Pacheco (Global Campus of Human Rights)

Business and Human Rights (BHR) education in business schools can play a crucial

role in strengthening the protection of human rights and the environment by providing future

business leaders the tools to address the adverse social and environmental impacts of corporate activities. At the undergraduate level, the lack of BHR education in business schools is a missed opportunity to provide students with the understanding that human rights is a transversal issue to business from the start of their business education. This research aims to highlight the urgent need of including BHR education in undergraduate business degrees, as well as to discuss its current and ideal practice. To achieve this goal, the author carried out 15 semi-structured interviews with BHR experts and performed a qualitative analysis of these data together with eight undergraduate BHR-related course syllabi. The study identifies four factors that seem to have been contributing to the incorporation of BHR education in the curricula of business schools, as well as how to leverage them: (i) changes in the discourse of accreditation entities; (ii) the organisation of professors and business schools in networks, such as the GBSN for Business and Human Rights Impact Community and UN PRME; (iii) the increasing demand from students to learn about sustainability-related topics; and (iv) the increasing demand from companies for graduates who are able to navigate BHR issues and contribute to a low-risk business profile, due to the growing pressure from consumers, investors and employees to change their current way of operating. The study also found there is a consensus regarding the optimal learning outcomes, teaching methods, and content of BHR modules or courses, as well as the compulsoriness of an introduction to BHR for all undergraduate business students as part of their degree. The ideal incorporation of BHR in the curricula would be a specialised BHR stand-alone course or module combined with a curricular emphasis on BHR, which would require concerted effort from a multidisciplinary educational committee. Even though not exhaustive, the results of this research shed some light on how to advance BHR education in undergraduate business degrees.

## Equipping leaders to influence others for a healthier, greener, fairer society.

Dr Michelle Mahdon; Prof Andreas Wihler; Yaxin Zheng; Prof Niels Van Quaquebeke; Prof Ilke Inceoglu; Prof Ruth Sealy (University of Exeter)

To be a force for change in the face of a planetary climate crisis we need Responsible Leadership. Such leaders need an ability to be polymathic in mindset, skills and approach in order to:

- focus on all stakeholders including society, environment, employees, not just shareholders;

- follow a moral compass and ethical values and apply these actively;

- build and maintain relationships while also working actively towards the co-creation of leadership with others;

- apply their values and relationships to the implementation of CSR strategies and to corporate governance;

- adopt a global focus in combination with a local focus and balance both approaches for the most optimal outcome.

Leaders need to be effective on all areas to successfully achieve organisational, team and individual goals and contribute to a better society. To do achieve this endeavour, leaders need robust insights to enable self-reflection and tools that move them to action and continuous improvement.

In our interactive session, world leading experts in Responsible Leadership from the University of Exeter will offer a theory-guided practical perspective on the skills, behaviours and mindset involved in Responsible Leadership. We will review what Responsible Leadership encompasses and how (future) leaders can develop their knowledge and behaviours to navigate a faster than ever changing, complex work environment. We will offer those attending a chance to assess their own Responsible Leadership using our new survey platform, TEXL, that uses scientifically validated measures as the basis for insights into excellence in leadership, promoting reflection and action. We will then invite those attending to work together to reflect on the insights they’ve gained and what this means for what they need to do next. We will focus the session on leaving with actions, after all, insights need intervention to result in improvement.

Our session will energise, inspire, and equip educators and leaders with the skills and sensibilities they need to influence others as change agents. In line with the PRME aim to address the UNSDGs and the University of Exeter’s 2030 strategy goal to promote a greener, healthier, fairer society, we offer leaders a framework within which to map their own Responsible Leadership, with a focus on self-reflection and the importance of soft skills, in order to understand how to make a difference. In this interactive workshop we offer tools to use, take away and share, that enable leaders to gain robust insights and feedback over time on how they perceive themselves in these areas and crucially how their leadership is seen and felt by others.