Embedding Ethics, Responsibility and Sustainability in the Curriculum within a Masters in Management Programme

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Abstract

Purpose: This paper showcases the processes of embedding Ethics, Responsibility and Sustainability (ERS) in the curriculum within a Masters in Management (MiM) programme at Nottingham Business School (NBS), UK.

Design/methodology/approach: The paper offers critical discussion of the multifaceted development and redesign of the MiM, with specific attention on the external and internal factors that influenced the processes and how the team navigated the alignment of different strategic priorities and practical constraints in embedding ERS in the curriculum.

Findings: Of particular interest in the journey are multiple and parallel negotiations of balance between opportunities and challenges; developing separate, focused modules on sustainability vs embedding it across modules; and navigating different stakeholders interest and voices. An argument is presented for a need to adopt a systematic and joined up approach for integrating ERS within a programme.

Originality: The NBS MiM offers a platform to bring together aspects of learning and critical thinking on sustainability and an opportunity to personalise different students' experience and conceptual appreciation of sustainability with real world application. A model to systematically embed ERS at a programme level is presented. Practical implications: A holistic and integrated strategy for co-creating the curriculum and learning journey is shared. The model can be adapted to different institutional dimensions across disciplines.

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Introduction

Ethics, Responsibility and Sustainability (ERS) has emerged as an important conceptual framing for what contemporary businesses must take into consideration and hence it is now an essential element of management education (Setó-Pamies and Papaoikonomou, 2016; Painter-Morland *et al.,* 2016). Although there is critical discussion about how the three concepts intersect and differentiate (Torelli, 2021) and each follows a different path, their overall focus is on enhancing societal welfare. Such a focus is also explicit in the United Nations (UN) Sustainable Development Goals (SDGs) which provide *"a shared blueprint for peace and prosperity for people and the planet"* (United Nations, n.d.). This is the most universal and widely adopted grand challenge, one that requires co-ordinated and sustained effort from many stakeholders. The role of universities is now recognised as crucial in that they may shape students' attitudes and provide them with the necessary knowledge, skills and critical analysis to make decisions as consumers and future professionals to help bring change (Setó-Pamies and Papaoikonomou, 2016).

Masters in Management (MiM) programmes are popular conversion master's degrees offered by many Business Schools in the UK and across the globe. They tend to attract predominantly international student population, and thus hold the potential to spread awareness, knowledge, skills and competencies as well as application of sustainability to address global grand challenges. This paper critically discusses the multifaceted review, development and redesign of a MiM programme at Nottingham Business School (NBS), with specific attention on the external and internal factors that influenced the processes and how the team navigated the alignment of the different strategic priorities and practical constraints in embedding ERS in the curriculum.

Some studies adopt a bottom-up, programme-level approach that integrates the three levels of educational philosophy: teaching pedagogies employed by educators, structural elements of programme design, and students' learning processes (Figueiró and Raufflet, 2015; Greenberg *et al*., 2017). However, this approach often overlooks the reality that integrating ERS also benefits from top-down mechanisms (Rusinko, 2010; Young and Nagpal, 2013), such as strong institutional support (Painter-Morland *et al*., 2016). In response, this paper adopts a multi-level model (after Setó-Pamies and Papaoikonomou, 2016; Figueiro *et al*., 2022), extending research that combines top-down and bottom-up approaches and drawing attention to the inherent complexity of ERS integration into curriculum. For instance, bottom-up efforts are reflected in decisions around content integration and associated teaching pedagogies across management disciplines, including strategy, marketing, finance, human resources, and operations. The top-down influences stem from efforts to align curricula with institutional vision, strategic priorities, and external pressures. The existing literature highlights the risk of business schools failing to "walk the talk" (Rasche and Gilbert, 2015). Much research on ERS integration focuses on sustainability-related drivers - such as alignment with initiatives like PRME - and the pursuit of prestigious accreditations (e.g. AACSB, AMBA, EQUIS). Limited attention has been on other drivers, for example, the characteristics of the student population that may shape the nature of ERS integration.

Although embedding ERS related issues into existing curriculum is an established practice, programme level integration and systematic approaches to do so are still in infancy. This paper provides original insights into the processes the team at NBS worked through with a view of inspiring discussion and action among colleagues. The need for educators to share good practice and learn lessons from each other is essential in sustainability transformation (Strachan *et al*., 2023).

The paper is structured as follows: first, the conceptual framework is presented. This guides the discussion throughout the paper. The external factors that impact curriculum design and development

are considered. Specifically, focus is on quality standards and practical frameworks and extant literature. NBS and the MiM as the case example are then presented bringing live the detail in the conceptual framework. This includes showcase of process together with discussion about the external and internal factors related to embedding ERS in the curriculum. Reflections on the opportunities and challenges in embedding ERS within the NBS MiM programme review and redesign precede the conclusion.

Conceptual Framework

The conceptual framework shows a visual depiction of the multi-factorial external and internal influences on the nature of curriculum design in Higher Education (HE) using the MiM at NBS as a case example. Recent trends have shaped the features of the modern approach to be based on inclusive and participatory co-creation with businesses, students, and professional bodies (Beckmann and Schaltegger, 2020; Jahn *et al.*, 2012; Schaltegger *et al.*, 2013). Our framework illustrates how the different external and internal influences interact within a continuous and non-linear processes of review and redesign and include multiple stakeholders.

The framework also draws attention to the interplay and ongoing negotiation of the top-down and bottom-up approaches, highlighting the role of an ERS champion as a key actor. It captures the tensions encountered during the review and redesign of the MiM and shows the role of navigating competing priorities—such as the reconciliation of internal and external stakeholder interests. The model is deliberately non-linear reflecting the complex reality characterised by overlapping phases and interdependent dimensions.

Figure 1 below presents the conceptual framework. In the sections that follow, each element of the framework is discussed in turn. The authors benefit from sharing their insights at the completion of the work, for now. The risk in positioning the conceptual framework here at the start of the paper is acknowledged as this may convey an impression that it was deductively derived. Rather, the approach was abductive in nature emerging through an iterative process of reflection, stakeholder engagement, and practice-based insight, and not solely extracted from theoretical constructs and previous research.
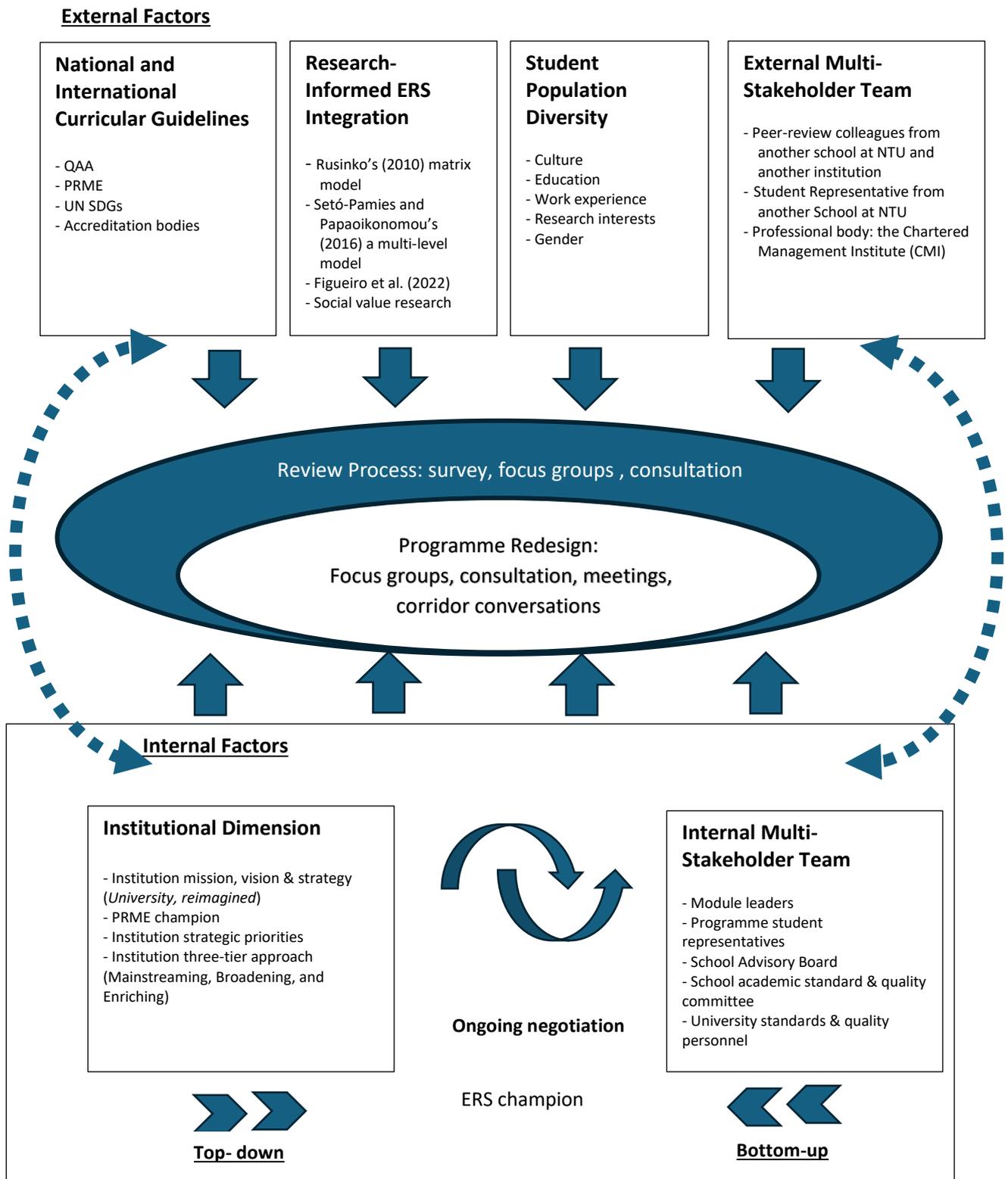
External Factors

National and International Curricular Guidelines	Research-Informed ERS Integration	Student Population Diversity	External Multi-Stakeholder Team
- QAA - PRME - UN SDGs - Accreditation bodies	- Rusinko's (2010) matrix model - Setó-Pamies and Papaoikonomou's (2016) a multi-level model - Figueiro et al. (2022) - Social value research	- Culture - Education - Work experience - Research interests - Gender	- Peer-review colleagues from another school at NTU and another institution - Student Representative from another School at NTU - Professional body: the Chartered Management Institute (CMI)

Review Process: survey, focus groups , consultation

Programme Redesign:
Focus groups, consultation, meetings, corridor conversations

Internal Factors

Institutional Dimension

- Institution mission, vision & strategy (*University, reimagined*)
- PRME champion
- Institution strategic priorities
- Institution three-tier approach (Mainstreaming, Broadening, and Enriching)

Ongoing negotiation

ERS champion

Top- down

Internal Multi-Stakeholder Team

- Module leaders
- Programme student representatives
- School Advisory Board
- School academic standard & quality committee
- University standards & quality personnel

Bottom-up

Figure 1. The conceptual framework (Source: Authors' own work)

External factors influencing curriculum design and development

National and international curricular guidelines

In recent years, initiatives have pushed business schools to embed sustainable development within the curriculum and across the entire institutional system and operations. The Quality Assurance Agency (QAA) offers the UK HE quality code with guidance for programme design (QAA, 2018). QAA provides impartial regulatory and collaborative quality assurance and enhancement, partnering with HE providers across the UK and internationally to ensure that students experience the highest quality of education (ibid). It publishes Subject Benchmark Statements outlining the nature of study and academic standards expected of graduates in specific subject areas – what they should know, do and understand at the end of their studies (QAA, 2023). These reflect a top-down approach to curriculum design.

Alongside this, QAA publishes Quality Codes, including Education for Sustainable Development (QAA, 2021) which focuses on incorporating sustainability in curricula and developing related competencies. QAA avoids conceptual debates and encourages a practical, challenge-based approach.

The Principles for Responsible Management Education (PRME) is another key initiative that emphasizes long-term societal welfare (Gupta and Cooper, 2022), facilitating ERS and SDG integration into business education and operations (Godemann *et al.*, 2023). PRME (2024) sets out seven principles guiding business schools' progress:

1. Purpose - advance responsible management education for inclusive prosperity.
2. Values - place societal and planetary accountability at the core.
3. Teach - integrate responsible management into curriculum and pedagogy.
4. Research - study institutions and global conditions to inspire better practices.
5. Partner - collaborate across sectors for better management education and practice.
6. Practice - apply responsible principles in governance and operations.
7. Share – exchange experiences to enhance collective learning.

Becoming a PRME signatory signifies commitment to embedding ERS into teaching, research, operations and partnerships (Eustachio *et al.*, 2024). Master's-level PRME reporting shows increased sustainability-learning integration (Godemann *et al.*, 2023). However, embedding ERS remains challenging due to diverse interpretations of the principles (Assumpção and Neto, 2020) and lack of quality assurance (Rasche and Gilbert, 2015). Critics argue PRME signatory efforts are "not good enough" (Laasch, 2024, p. 111), with signing seen as offering limited change (Solitander *et al.*, 2012; Høgdal *et al.*, 2021).

Other accreditation agencies – AACSB, AMBA, and EQUIS – along with professional bodies and the International Organisation for Standardization (ISO) have their own ESR/ SDG standards and impact measures. AACSB, AMBA, and EQUIS are especially influential for business schools (Rasche *et al.*, 2013).

Next, attention turns to research-informed ERS integration and review literature.

Research-informed ERS integration

Previously, Business Schools were criticised for failing to provide employers and society with socially conscious and moral practitioners who contribute positively to their local communities (Parris and McInnies-Browers, 2017). As a result, a growing number of business schools have begun to re-evaluate and redesign their curricula and programme structures to better align with ERS (Høgdal *et al.*, 2021).

However, there is growing concern that while ERS integration is increasingly visible within curricula, it often amounts to a superficial gesture (Figueiró and Raufflet, 2015; Banerjee, 2011), with 'good' management practice still portrayed as devoid of morality and ethical considerations (Ghoshal, 2005). Some evidence suggests that many business schools are still not fully "walking the talk" with ERS integration often confined to elective modules and selective integration thereby limiting management students' exposure to sustainability education and undermining its overall credibility (Rasche *et al*., 2013, p. 82). One framework for illustrating differences in curriculum integration practice is Rusinko's (2010) four-quadrant matrix (Painter-Morland *et al*., 2016).

On two dimensions, narrow–broad curricular and existing–new structures, the matrix model shows four different approaches to integrating ERS into curriculum from more straightforward Quadrant I 'Piggybacking' and Quadrant II 'Digging deep' approaches to advanced Quadrant III 'Mainstreaming' and Quadrant IV 'Focusing' approaches (Painter-Morland *et al*., 2016). Examples of the Piggybacking approach include adding subject-specific sustainability content to existing core modules, whereas the Digging Deep approach involves offering dedicated sustainability-focused modules, often as electives (Painter-Morland *et al*., 2016). While in some ways these approaches are perceived as simple and unproblematic, the effectiveness of symbolically integrating a standalone ERS module in developing responsible future leaders has been questioned (Ghoshal, 2005; Solitander *et al*., 2011; Rasche and Gilbert, 2015). Moreover, parallel criticism highlights that ERS content—when included in core modules—is often treated as a peripheral, disconnected add-on rather than being embedded as a central theme (Høgdal *et al*., 2021). This reflects a broader weakness in ERS integration across both core and elective offerings and poses the risk of sending misleading signals to students about the role and importance of ERS in management education (Blasco, 2012). To mitigate this risk, a consistent mainstreaming approach which demonstrates a more balanced ESR content across disciplinary curricula is perceived as a more effective approach (Rasche and Gilbert, 2015; Painter-Morland *et al*., 2016; Beckmann and Schaltegger, 2020).

Another notable good practice when integrating relevant ERS content into curricula is the coordinated collaboration with both internal and external stakeholders (Young and Nagpal, 2013). Such collaboration fosters reciprocal learning between stakeholders and students, enriching the educational experience and grounding it in real-world relevance (Fougère *et al*., 2019). It is argued that an inclusive and participatory co-creation process helps shape what is taught, ensuring content reflects the real world (Beckmann and Schaltegger, 2020; Jahn *et al*., 2012; Schaltegger *et al*., 2013; Young and Nagpal, 2013), while also reducing resistance to change (Velazquez *et al*., 2005).

Research also suggests that deepening ERS integration into curricula requires moving beyond curriculum and content design (i.e. the curricular level) toward the adoption of effective pedagogical strategies (i.e. the instrumental or pedagogical level) to foster meaningful shifts in students' mindsets and perspectives (Setó-Pamies and Papaoikonomou, 2016; Figueiro´ *et al*., 2022). This underscores the need for a bottom-up, programme-level approach that integrates the teaching pedagogies employed by educators, the structural elements of programme design, and the processes of student learning (Figueiró and Raufflet, 2015; Greenberg *et al*., 2017). A focus on *how* we teach rather than simply *what* we teach calls for a thoughtful alignment between curriculum design and suitable teaching pedagogies. In management education, critical pedagogies and the facilitation of transformative learning (Figueiró and Raufflet, 2015) or deep learning (Sterling, 2010) are perceived as important to enact fundamental changes in sustainability-related perspectives and practices (Figueiro *et al*., 2022). Scholars argue that promoting a sustainability mindset involves developing the capacity to adopt diverse worldviews and to think in new, ethically grounded ways (Stubbs and Cocklin, 2008) and that this cannot take place through conventional didactic classroom teaching which simply

confirm the overall soundness of the status quo. For some, this shift in students' mindset requires the development of a more 'complicated understanding' which entails exposing students to multiple perspectives and drawing attention to the knowledge-power tensions inherent in sustainable development initiatives, and the impact of these practices on marginalised stakeholder groups (Banerjee, 2011).

Fostering transformative learning - defined as a change in worldview and a shift in one's underlying frame of reference (Mezirow, 1998) - is also seen as a means of deepening students' understanding of sustainability (Sterling, 2010). According to Sterling (2010, p. 25), transformative learning influences students' deeper assumptions and hence, results in a change or "*seeing things differently".* To design and teach a successful academic programmes, educators need to identify key ERS competencies to use as a reference point (Wiek *et al.*, 2011). Questions regarding which ERS competencies are conveyed through programme design and classroom strategies are thoroughly discussed elsewhere (cf. Wiek *et al.*, 2011; UNESCO, 2017; Laasch *et al.*, 2023).

The bottom-up approach, while important, has been criticised for overlooking the role of top-down mechanisms in successful implementation (Rusinko, 2010; Young and Nagpal, 2013), and for lacking a systematic perspective that accounts for the institutional and contextual factors which can explain why such initiatives may fail (Painter-Morland *et al.*, 2016). In management education, we are witnessing an increased attention to institutional conditions which either hinder or enable ERS integration efforts (Figueiró and Raufflet, 2015). Recognised challenges include complexities of bottom-up change processes (Greenberg *et al.*, 2017), resource constraints (Solitander *et al.*, 2011), resistance from powerful organisational actors (Beggs and Dean, 2007), competing institutional pressures (Rasche and Gilbert, 2015), and misalignments between explicit learning goals and the implicit dimensions of the learning environment (Blasco, 2012; Høgdal *et al.*, 2021). Enabling factors have been identified to include the pursuit of prestigious accreditations (Gupta and Cooper, 2022), the presence of institutional champions (Solitander *et al.*, 2011), strong leadership support, faculty readiness, and incentive structures that promote engagement with ERS (Painter-Morland *et al.*, 2016; Beddewela *et al*, 2017; Greenberg *et al.*, 2017).

Setó-Pamies and Papaoikonomou's (2016) and Figueiro *et al.*'s (2022) work on multi-level models place curriculum at the centre of a more holistic, institutional lens of ERS integration. A key distinguishing feature in their multi-layer models is the underlying assumption that universities function as multilevel learning environments, where the different levels are interdependent and require the engagement of multiple stakeholders. Setó-Pamies and Papaoikonomou (2016) identify three levels to allow for the infusion of management education with ERS values: Institutional level (faculty, university), Curricular level (course design, modules) and the Instrumental level (specific methodologies). Figueiro *et al.* (2022) include four levels: Contextual dimension (governmental regulations), Organisational dimension (institution profile), Curricular dimension (disciplinary or cross-, inter-, or multidisciplinary), and Pedagogical dimension (teaching/classroom strategies). The conceptual framework in Figure 1 was inspired by these two models and thus comprises four interrelated dimensions:

 (a) Contextual Dimensions, which refer to the national and international curricular guidelines for postgraduate programmes, alongside diversity in the student population;

 (b) Institutional Dimension, shaped by the institution's profile—its mission, vision, and strategy—as well as formal policies, including a three-tier, institution-wide procedural approach;

(c) Curricular and Pedagogical Dimension, informed by insights from this literature review on ERS integration;

(d) Multi-stakeholder Team Dimension, encompassing both internal and external stakeholders.

Introducing NBS as a case example

Nottingham Business School (NBS) has a mission *"to provide research and education that combines academic excellence with positive impact on people, business and society".* As part of this, NBS fosters a culture of ERS and supports the SDGs across the school. Nottingham Trent University (NTU) and NBS have a 'University reimagined' strategy, with 'Embracing Sustainability' as a key strategic pillar placing sustainability at the heart of all activity.

Sustainable and responsible management education is core to NBS' DNA, and the school has been a PRME Champion for four consecutive terms. This has supported incremental transformation and allowed NBS to share good practice as a leading institution in responsible management education and serve as an ambassador for the PRME community and beyond. The School uses SDGs as a framework across programmes via a three-tier model: (1) Mainstreaming, (2) Broadening, and (3) Enriching.

1. **Mainstreaming** integrates sustainability into all programmes via school-wide modules. Early engagement with ERS and SDGs reinforces their importance, enabling students to embrace key concepts and begin the development of related competences.
2. **Broadening** builds on mainstreaming and facilitates subject- or theme-specific integration within programmes and modules. ERS and SDGs are embedded into core discipline-specific modules, expanding scope and deepening engagement across subject areas and disciplines.
3. **Enriching** complements mainstreaming and broadening. It enables personalised student journeys through personal and professional development opportunities and is a key component of NBS' ERS and SDG strategy embedded within the curriculum.

The MiM at NBS

The MiM at NBS is the largest postgraduate programme within the school. It comprises five distinct qualifications: MSc Management, and four different pathways[i] specialising in Business Analytics, International Business, Sustainable Leadership, and Global Supply Chain Management.

The programme is a conversion masters, designed in content and pedagogy as a generalist programme for career entry point graduates from non-business and management backgrounds (QAA, 2023: p. 3). The programme is designed to align with the PRME Principle 2: Values to develop knowledge and critical awareness; embrace equality, diversity and inclusion; and promote responsibility for the planet, decent work, and society. These values are embedded in the guiding question of what constitutes a 'good manager', influencing multiple aspects of programme and module design. The teaching and learning strategy offers a blended (or hybrid) learning experience.

Taught modules are organised into three semesters. During semester one the curriculum is shared across the pathways and students study six core modules (see Figure 2). In semester two students share further three core modules, although the focus of the second semester is on specialisation and students take four pathway specific modules. Semester three is dedicated to the major projects. Professional Practice is programme long focus on personal and professional development.
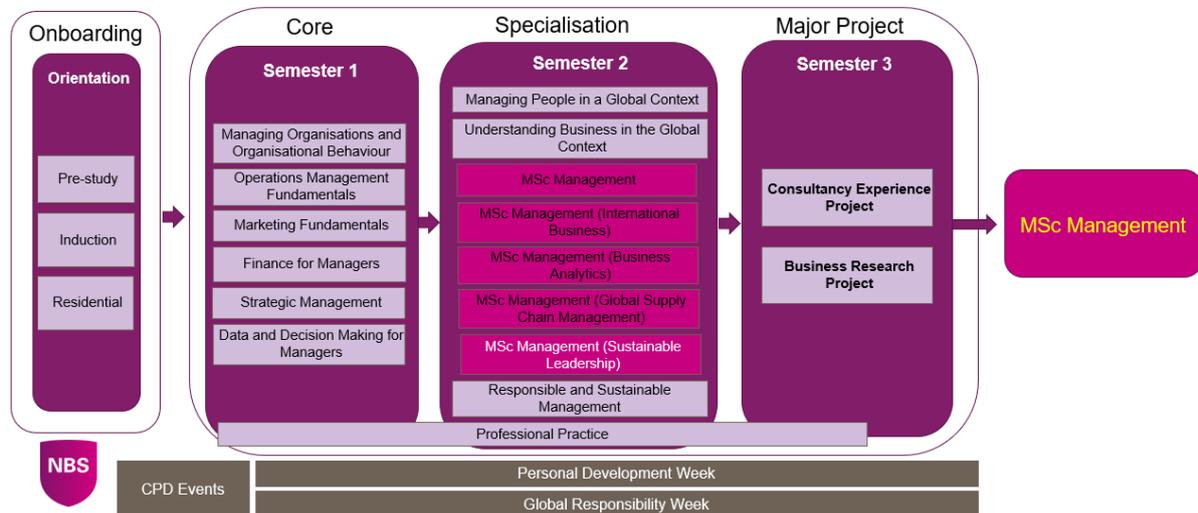

Figure 2. NBS MiM structure (Source: Authors' own work)

Given that the MiM is a conversion masters, students on the programme come from varied backgrounds including engineering, English, physics, philosophy, real estate and construction, sports sciences, and many other disciplines. The student population is largely international, with the biggest proportion from India, Nigeria, and Sri Lanka in recent years. Students also come from Afghanistan, Cameroon, China, France, Hong Kong, Indonesia, Italy, Ivory Coast, Morocco, Pakistan, Poland, Romania, Thailand, Ukraine, UK, USA, and Vietnam, to name but a few represented on the programme in 2023-2024. Gender balance is relatively even, and students fall within the mature age bracket. These characteristics place acute demands on NTU/ NBS and the extended programme team to respect individual learners from diverse communities to ensure equality of opportunity and inclusion. Diversity is also a key strength of the suite, reflecting the real world of management in a global context. The academic staff team (Programme Leadership, Module Leaders, and tutors) is as diverse in background, education, work experience, and research interests as the student population. The aim is to capitalise on this diversity and offer an enriching, challenging, and well-supported learning experience. Personalisation is a strategic priority within NBS, and differentiated teaching (Thuen Jørgensen and Brogaard, 2021) helps meet the idiosyncratic needs of students.

The NBS MiM curriculum review and programme redesign

Embedding ERS in the MiM at NBS has evolved in multiple parallel phases over time, and included reviewing and making changes to specific modules, programme wide review and redesign, and the development of a new sustainability focused award.

Ongoing review and enhancement

NBS has ongoing, annual and periodic (triennial) programme review and enhancement processes, involving a rigorous multi-stakeholder approach aligned with sector good practice. Recently, two major work packages advanced the ongoing integration of ERS and SDGs into the curriculum. Working to the NBS model, efforts focused on (i) mainstreaming[ii] and enriching via a school-wide shared module, Professional Practice; and, (ii) broadening sustainability considerations by integrating ERS and SDGs into selected core and specialist route modules. These include core Managing Organisations and Organisational Behaviour, and Strategic Management modules; and specialist modules like International Human Resource Management, Building Resilience and Sustainability in Technology-enabled Supply Chains, and Contemporary Management Studies. For brevity, focus here is on Professional Practice for mainstreaming and enriching, and Managing Organisations and Organisational Behaviour to illustrate broadening.

The Professional Practice module is focused on personal and professional development. Alongside a rolling calendar of extracurricular Continuing Professional Development (CPD) events, a Personal Development Week and Global Responsibility Week, which the school organises every year, it offers students an opportunity to personalise their learning journey throughout the year. Students are provided opportunities to engage with theoretical models and experiential learning events to expand their horizons and challenge their beliefs, actions, and behaviours, with the purpose of encouraging them to seek out alternative ways of engaging with others, solving problems and making decisions. Semester one is focused on mainstreaming and includes taught content and guided reflection. During the second semester emphasis turns to enriching. Students complete 20 hours of CPD activity, which they link to ERS in the summative assessment for the module.

Managing Organisations and Organisational Behaviour is the first core module. The purpose of the module is to introduce students to management and organisations, and develop their understanding with a view to develop their critical awareness and appreciation of the multiple demands on managers operating in different organisational settings. The SDGs provide an analytical framework for workshop discussion activities which ask the students to consider the relationships between management and leadership issues, ERS, and the impact organisations may have on the achievement of the SDGs. For example, students are invited to consider the SDGs 3: good health and well-being in relation to scientific management, SDG 5: gender equality in relation to perception, diversity and inclusion, and SDG 8: decent work and economic growth in relation to what makes a good manager.

Further workshop content includes examining the role of management and leadership in organisations with attention on the economic imperative, legal frameworks, and principles of ethics as three key considerations. Class discussion about the interplay and prioritising these three aspects in organisations are encouraged together with critical reflection about students' own positions and perceptions of importance and the order in which these may guide managerial decision-making (Taylor, 2007). In this way, ERS does not form a separate element to the study of management and leadership but rather is integral to the learning of the core concepts.

The QAA (2021) Education for Sustainable Development competencies framework offered a useful structure for considering the students' development on three levels: knowledge and thinking, practice, and values. Research on social value helped us realise that sustainability related practice or education cannot begin with the values first, as there are huge differences in peoples' orientation and values, and their behaviour is often aligned with their value base (see for example Raiden and King, 2022: pp. 23-27 on social value orientation, and Marcus *et al*., 2015 more broadly on connections between values and actions). Acknowledging the diversity in the student population, including the different disciplinary backgrounds and how some come with training on 'softer' people focused issues and others from 'harder' and data focused areas such as engineering, it is likely that there will be

variations in their values. Thus, it is important to support their study of the conceptual matter first and get them thinking and reflecting on their values and connections to SDGs after. Hence the progress from the Managing Organisations and Organisational Behaviour core module where discussion is concept oriented to Professional Practice which draws in personal and professional development. Together the two modules help put ERS on the study agenda officially and give practical tools for students to start making links between mainstream management and leadership concepts and concerns/ questions and ERS.

The mainstreaming, broadening, and enriching presented a useful starting point for the MiM and wider team at NBS aligned with the Quadrant I 'Piggybacking' (Integration of sustainability within existing structures by adding sustainability to individual sessions of courses or modules) on the Rusinko's (2010) matrix. At the same time, as the Professional Practice module is a School wide module, this was an explicit expression of integrating ERS on multiple levels: institutional, curricular, and instrumental level, with significant learning for students, as per Setó-Pamies and Papaoikonomou's (2016) multilevel framework. The programme curriculum was aligneded with NTU's University strategy, *University, reimagined*, which demonstrates the University's commitment to doing the right thing for people, communities and environment - embracing sustainability is central to this strategy.

Programme redesign

In addition to the ongoing review, the MiM at NBS has recently undergone a major redesign. This presented an opportunity to critically evaluate and refresh the curriculum. The process was informed by several stages of external and internal consultation and co-creating. This consisted of external consultant research: the Tomorrow's masters report (CarringtonCrisp and EFMD Global, 2022) and a consultancy team conducted focus groups and a survey with the NBS students at that time. While the student facing research was under way, an opportunity for consultation with the NBS School Advisory Board, which consists of Alumni and employers locally and globally, was also embraced. As part of regular meetings, the needs of employers and what they envisaged future master's qualifications to showcase were discussed. There were also a series of formal and informal meetings with Module Leaders.

Three specific multi-stakeholder team events were organised where Student Representatives from the programme, School Academic Standards and Quality Committee members, University Standards and Quality personnel, a peer-review colleague from another School within NTU and another peer-review colleague from a different institution, a Student Representative from another School within NTU, and professional body: the Chartered Management Institute (CMI), were brought together. These events were half-day to full-day co-creation and action oriented get togethers with the aim to seek a diverse range of voices.

The information generated throughout was carefully documented both in formal minutes of meetings, taking pictures of workshop activities and outputs, and recording notes from discussions and informal conversations. The ERS Champion (the Programme Director) was the central hub who first at each stage analysed the information, and then convened teams together to review and discuss the information gathered. Institutional templates provided some structure, albeit these tended to be output/ outcome focused and were used more extensively towards the end of the processes.

With regards to Education for Sustainable Development, focus within this was two-fold: (i) embedding ERS in modules, including an explicit commitment to sustainability in the module learning outcomes

(MLOs), and (ii) to develop a new sustainability focused award, the MSc Management (Sustainable Leadership). The latter was a long-term ambition of the ERS champion, albeit it was supported throughout my many actors, including members of the School Advisory Board, Student Representatives from the programme, and the peer-review colleagues.

In terms of the programme content, one challenge in the design and development of the curriculum for MiMs is the need to cover extensive ground because of the generalist offer, including different functional areas of management such as strategy, marketing, finance, human resources, and operations; as well as current trends and cross cutting themes like systems thinking, data, technology and artificial intelligence, employability, diversity and inclusion, and sustainability. Thus, the programme review and redesign teams must continually negotiate a fine balance of what to include and exclude as standalone modules and what content to integrate into the wider curriculum. Some of this was resolved by moving from 'Piggybacking' to Rusinko's Quadrant II 'Digging deep' (employing Painter-Morland *et al.* [2016] terminology) and integrated sustainability through new stand-alone module: the Responsible and Sustainable Management module (see Figure 2) that is core to all students in semester two. At the same time, the inclusion of ERS within the other MLOs allowed to tap into Quadrant III 'Mainstreaming'[iii] and integrate sustainability within existing structures but with the emphasis on a broader cross curricular perspective.

Development of the new award, MSc Management (Sustainable Leadership), moved the practice to Quadrant IV 'Focusing'. This award includes new modules on Sustainability transition, Climate solutions for a net zero future, and Social value and Environmental, Social, and Corporate Governance (ESG). Together, work on the modules across the suite and the new award, enhanced the practice on Setó-Pamies and Papaoikonomou's (2016) multilevel framework. It is the team's mission, vision and practice that sustainability is embedded in all managerial work, and not a separate part of managers' work. Multiple voices in the consultations processes supported this view, including explicitly expressed need for sustainability skills by School Advisory Board and CarringtonCrisp and EFMD Global (2022) highlighting sustainability as one of the key areas of interest to future students.

Discussion

Opportunities in embedding ERS

The processes of embedding ERS in the curriculum within the MiM at NBS presented many important opportunities. It served as a vehicle for alignment of the University and NBS strategic priorities, and an expression of intent and commitment to advancing the field of management education by offering a new MSc Management (Sustainable Leadership) award. It also helped in including the consideration of ERS in different modules in a joined-up way.

The conceptual model illustrates the range of factors and stakeholders involved and the ongoing processes of consultation and negotiation, which allowed for the development and work through an inclusive co-creating approach. This work was guided by national and international guidelines and research and took into account non-sustainability related factors such as the diversity in the student population.

Deep processes of thinking about the values and the right approach for us were necessary. Both, benefits and challenges to having a separate module in this space are acknowledged together with the benefits and challenges related to embedding ERS content across modules. The prospects for deepening conceptual understanding and giving space to enhance knowledge, skills and

understanding at different points in the curriculum weigh the balance in favour of the embedded approach. The students' development from early core modules through ongoing personal and professional development to specialisation is narrated. This paper offers a platform for bringing together aspects of teaching and thinking on ERS, and an opportunity to personalise the students' experience and learning on the different awards. Strategically this approach has been many years in the making, and this paper only showcases the MiM as a recent highlight of the review and design interventions at NBS. The three-tier NBS model focuses on gradual evolution and practical feasible action by mainstreaming, deepening and enriching. The authors appreciate that this does not respond to calls for radicalizing managers' climate education for example (see Laasch, 2024). The approach is more gradual and ever evolving and builds appreciation, understanding and ownership of ERS among the many stakeholders involved.

Contribution to practice is a showcase of aligning curriculum design with the University and school level strategic priorities; using the NBS model at school level to help balance good practice by standardisation of ERS within one module and at the same time encouraging innovation and creativity within the wider programme team to tailor subject specific consideration of ERS within a range of modules. This is with the rationale that by mainstreaming *and* broadening and enriching one avoids the possible stifling of sustainable management education as a unique selling point. The aim has been to make known the processes that have helped us achieve the collective co-creation of a multilevel approach whereby the programme level influence serves as the anchor for good practice. For individuals interested in developing this space, the hope is to give ideas that they can consider and integrate into their development of responsible and sustainable management education. The ambition is to inspire other programmes in the UK and beyond in embedding ERS in the curriculum. This is a continuous improvement process. Enhancements take time and require people with vision and commitment to leading values-driven learning journeys.

Challenges in embedding ERS

Together with the many opportunities and learning, multiple and parallel challenges throughout the processes were also faced. In the conceptual framework, the visual depiction of the abductive approach which emerged through an iterative process of reflection, stakeholder engagement, and practice-based insight is shared. This meant a degree of uncertainty was inherent in the practice throughout and at times it was difficult to find time for both progressing the work and create space for reflection.

The modern inclusive and participatory co-creation approach to curriculum design was well aligned with the ERS champion's (Programme Director's) value system and mode of operandi. However, this was not the case for all actors and stakeholders involved in the process. Therefore, one of the central challenges was findings ways to orchestrate the collective work in such a way that all stakeholders have a voice. As some of the formal meetings required more structured agenda to manage the competing interests and contributions, much effort was put in complementing the formal work with informal meetings and corridor conversations. Gathering such 'data' and analysing it then became yet another challenge in the process and required firm professional steer. The informal work supported open communication, relationship building, trust, and both preparation for and work after the formal events. The ERS Champion was a central feature in this ongoing negotiation, potentially yet another challenge or obstacle to successful embedding of ERS. Where there may be varied interests and agendas involved in curriculum design, embedding ERS in a meaningful way does require values-driven work as well as structural support (for example in the form of institutional strategy as was in this case).

The non-linearity in the processes of review and redesign may present another challenge if not carefully managed. It can be difficult to articulate overlapping phases and interdependent dimensions especially to external stakeholders who are not familiar with the institution. This can become confusing to different stakeholders and as above, requires a strong steer from, for example, the ERS Champion.

The interplay and ongoing negotiation of the top-down and bottom-up approaches requires knowledge and personal commitment to navigate competing priorities and making of compromises.

In terms of the curriculum itself, to us it was the practical constraints, the need to cover extensive ground because of the generalist offer, including different functional areas of management as well as current trends and cross cutting themes, that formed one of the key issues in the negotiation of a fine balance of what to include and exclude as standalone modules and what content to integrate into the wider curriculum. Elements of ERS are included in core modules and a module dedicated to ERS was introduced. The approach risks tension and/ or overlap and confusion if the students' learning journeys are not carefully narrated in a way that makes the philosophy of the practice explicitly clear to them.

Finally, the focus on promoting transformative learning that results in critical reflection and change can be challenging to deliver. It is an imperative that needs of the student population are considered. In this case, the diversity in the student population both in their disciplinary background and nationality meant that their experience included a major shift away from didactic teaching and there was a need to prepare them for more critical engagement gradually.

Conclusion

This article provides a case example of a Masters in Management (MiM) programme in a business school that has systematically embedded ERS across its curriculum. In the conceptual framework a holistic and integrated strategy at the programme level is shared. This offers practical insights into curriculum design and institutional alignment for embedding strategic ERS. The work offers a new articulation of embedding ERS in a systematic way and co-creating the learning journey for students. It offers a three-tier integrated approach which can help ensure progression and student experience. This contribution addresses a gap in the literature by demonstrating a replicable model as a novel framework for embedding ERS in any discipline (both existing and new programmes). Colleagues can take the conceptual framework and adapt it to their specific institutional dimensions and use it as a model to consider what external and internal factors are relevant to them. National and international guidelines often offer an impetus for a way forward. Research can also help inform and support the development of a rationale for change, for example, where an ERS Champion finds resistance. Sharing this approach will hopefully inspire action by others – it is a call to further responsible management education.

Integrating ERS at the programme level can enhance graduate employability. The authors certainly learnt from the consultations that it aligns well with increasing employer demand for sustainability skills. Given the diversity in the student population the potential to spread awareness, knowledge, skills and competencies across the globe to address global grand challenges is considerable. ERS in the curriculum can also strengthen the institution's competitive positioning, higher education brand value and student recruitment as sustainability credentials within programmes influence student choice. For institutions like NTU who position themselves 'to do the right thing' embedding ERS in the

curriculum supports the school and university unique selling point. Moral stance is not ill-aligned with commercial advantage but there could be fears/ perceptions of greenwashing. Authenticity and transparency are important for walking the talk.

This case example hopefully also serves as a springboard for future research. Within NBS, the team are currently evaluating the new MiM and also look onward to supporting colleagues across the school in extending their efforts to embed ERS in their curriculum in marketing, finance, and apprenticeships. The authors call for research on the influence of university, school and programme level leadership on embedding ERS. Research is needed in investigating if/ how integrating ERS might be possible bottom up where senior leadership commitment to sustainability has not been explicitly articulated in institutional strategy. Equally, it would be useful to research the reverse: if/ how integrating ERS might be possible top down where a local level ERS Champion is missing. Research would be useful sector wide, both in-depth case studies and larger programmes, to investigate the impact of programme level integration of ERS on both students, their careers, and employer organisations. It would be useful to explore how the MiM impacts upon graduates' sustainability related knowledge, skills and competencies and to what extent they can apply the learning in the workplace as part of their role. Future study can also explore how graduates with knowledge, understanding and skills in ERS shape and change the workplace and what the evolving needs of future MiM programmes might be in the changing business landscape.

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[i] The pathway awards are MSc Management (Business Analytics), MSc Management (International Business), MSc Management (Sustainable Leadership), and MSc Management (Global Supply Chain Management).

[ii] Noted is the disconnect in the use of wording, e.g. 'mainstreaming' in Rusinko's matrix and the NBS model. Here wording from the NBS model is employed. Where the discussion relates to the academic model's, wording relevant to the model(s) is employed.

[iii] Using Rusinko's wording here.