

Enterprise and Entrepreneurship Education: Exploring a new Dynamic Model to Integrate Sustainability Within Curricula

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Abstract: This paper recognises sustainability's role as a core competence of all entrepreneurs and reviews and discusses the drivers for and challenges of integrating 'Education for Sustainable Development' (ESD) within entrepreneurship curricula. The authors have contributed to this literature and have discussed at length the development of the field from both academic and practitioner perspectives. The paper includes reference to policy initiatives promoting the integration of ESD within Higher Education, and the competencies that all graduates are expected to achieve, and discusses the challenges faced by HE providers and Enterprise Educators in particular. Building on the contributions of Moon (2022) and Moon et al. (2022) the authors posit that a new dynamic model based on Passion for the subject, Pride in the university, Personal contribution, and Performance impact, is a novel approach for recognising some of the challenges faced but also the cross-cutting and transdisciplinary benefits of a renewed focus on Impact – using the UN Sustainable Development Goals as a framework – and building on *identity* as a foundation.

Keywords: Enterprise and Entrepreneurship Education, Sustainability, ESD, EntreComp, GreenComp, Identity.

1. Introduction

EntreComp (2016) cites ethics and sustainability as core competences of all entrepreneurs, and more recently GreenComp (2022) cites the green skills needed to develop economies across the world. Thus, integrating ethics and sustainability within curricula is essential for enterprise and entrepreneurship education (Moon et al. 2022). AdvanceHE and QAA (2021), two leading professional bodies for Higher Education in the UK, published *Education for Sustainable Development Guidance* as a landmark report seeking to influence educators to incorporate ESD within their curricula. Similarly, 313 Higher Education providers have signed up to the *SDG Accord (2023)* committing them to achieving the United Nations Sustainable Development Goals (SDGs) and this includes integrating sustainability into the curriculum. The latest report on progress, *SDG Accord Report (2022)*, cites 227 HE signatories and numerous institutional benefits of SDG integration. However, challenges highlighted included: staff capacity, budget constraints, and an absence of training. Thus, there appears to be a gap between policy and practice, between what is desired and what is being achieved. The purpose of this paper is to narrow that gap by providing a new model based on Passion, Pride, Personal Contribution and Performance Impact that is both theoretically robust but also practically implementable. Two hypotheses are thus posed: Ho1. Institutional challenges to integrating ESD into the curriculum can be overcome by placing an emphasis on impact. Ho2. Personal challenges to integrating ESD into the curriculum can be overcome by placing an emphasis on identity.

2. Drivers and challenges

The Advance/HE (Ibid) guidance provides sustainability competences that all graduates should achieve. Howarth et al. (2019) were among the first authors to comment on progress with integrating ESD into the curriculum. Nottingham Trent University (NTU) is cited as a beacon of best practice after being accredited by the National Union of Students 'Responsible Futures' accreditation audit indicating the university's commitment to sustainability within the formal curriculum. Key drivers at NTU are in Figure 1.

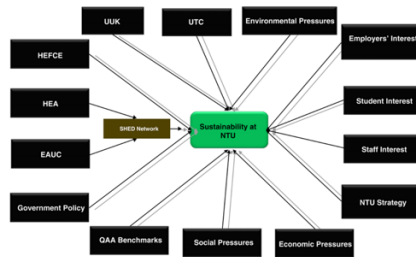


Figure 1: An overall summary of sustainability drivers at NTU in 2009, Howarth et al. (2019).

Guiry et al. (2022) report on integrating ESD into the curriculum based on experiences at HEIs in Ireland. The main challenges highlighted include: ‘Many staff currently lack the skills and knowledge necessary to integrate sustainability into the curriculum; lack of free time available to staff and students to engage with sustainability, both academically and through extracurricular activities; insufficient resources, including funding and training for ESD; the absence of dedicated ESD Officers was highlighted as a major deficiency; inadequate support and commitment of higher management to ESD and sustainability goals as strategic priorities; engaging with students and staff who are not interested in sustainability is a persistent obstacle to successfully integrating ESD across all disciplines’. These were subsumed by Guiry et al. into four key themes (Figure 2).



Figure 2: Challenges facing ESD, Guiry et al. (Ibid).

Guiry et al (Ibid) conclude that time, resources, and funding need to be allocated to overcome some of these challenges. They also recommend that ESD is developed in collaborative partnerships including the student voice, and the need for a national ESD standard.

3. Discussion

This paper recognises the above drivers and challenges and presents a new model based on four pillars: Passion for your subject, Pride in the university, Personal contribution, and Performance Impact. Based on a paper by Moon (2022) which develops a model based on ‘Identity’, we hold that the next step in integrating ESD into the curriculum is to be more holistic and more person centred. This approach recognises that HEIs need to balance commercial and educational imperatives and in so doing fundamental tensions can result in a ‘loss of identity’ for both the university as a whole and for individual staff. Rebuilding this sense of identity is crucial to integrating ESD within curricula.

Moon (2022:2) states: “...educators, even if they are mapped onto different teaching, research or practice pathways, still need to demonstrate the impact of their work. This has led to lecturers integrating an emphasis on employability skills, researchers conducting more applied research, and practitioners being used to inspire students based on their experience.” These trends are evident in all HE providers. However, the question of lecturer identity and how it has changed or is changing or will change is under researched.

Is a focus on identity important? Suarez and McGrath (2022), in a working paper for the OECD, cites empirical research which relates the professional identity of teachers to considerable influence on students’ performance

and attitudes, and to the way educational policies are interpreted and implemented. These findings largely relate to the school context. However, Boyd and Harris (2010) found that former teachers that became academics faced tensions about the value of abstract knowledge compared to work-based practice, and about what a lecturer in teacher education should be, and this encouraged them to hold on to their existing identities as schoolteachers rather than as academics.

More recently, Harness and Boyd (2021:1) posit that academics 'develop multiple identities ...and these have a strong influence on practice...' and describe some academics as having to negotiate different identities. These authors point out that there is a tension within higher education caused by the 'primacy of research.' These tensions between the potentially different identities or multiple identities of lecturers associated with teaching, research and practice pathways in HE is an important focus of this paper.

4. New dynamic model based on Identity.

Moon (2022) recognises that many universities have signed up to either the United Nations Higher Education Sustainability Initiative (HESI, 2012) or the SDG Accord (2018), committing to progress towards achieving the SDGs including integrating ESD within the curriculum. This commitment, therefore, heralds real change in ethos and practices i.e., 'identity'. There are implications here for the changing identity of the Higher Education provider but also for individual lecturers. Moon (Ibid:4) presented a new dynamic model of lecturer identity based on two concentric circles (Figure 3).

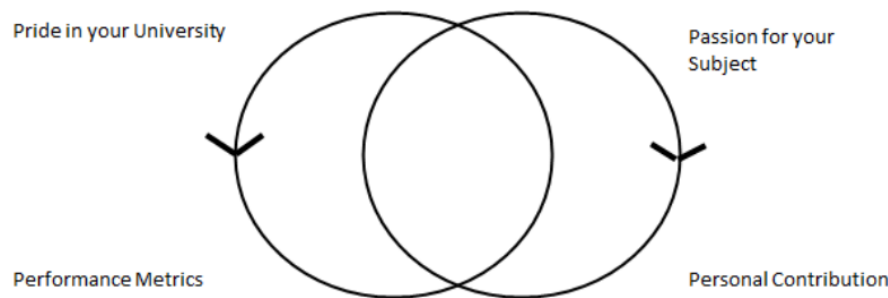


Figure 3: Dynamic model of lecturer identity, author image.

If the concentric circles are moving in the same direction, then they can be mutually reinforcing leading to higher motivation and performance impact. If the circles are moving in opposite directions, then the result could be tension and frustration and lower performance impact. The model is yet to be tested and it is possible that positive impact could result from 'disruptive' tensions and challenges. However, the model is designed to provide a basis for discussion and review.

There is some support for such a model in the literature if one considers the positive affect of being passionate about one's subject discipline and teaching (e.g., Robson 2020 regards lecturer passion as a pre-requisite for inspirational teaching) and being proud of one's organisation can have a positive influence on lecturer performance (Nadatien et al, 2019). Similarly, if one's personal contribution is recognised by students, staffs, and leaders, then this is also likely to be motivating (c.f. Salbiyah, 2019). However, if performance metrics mitigate against such personal recognition, then the result could be staffs feeling frustrated or disenfranchised (c.f. Otache, 2022).

Further, placing emphasis on the long-term needs of students can have positive benefits (c.f. Mesny et al, 2021). And whilst Kioupi and Voulvoulis (2019) guard against overly prescriptive focuses on the SDGs, they do relate Education for Sustainability and Sustainability Competencies within a normative framework (see Figure 4.) that provides a basis for monitoring and evaluation.

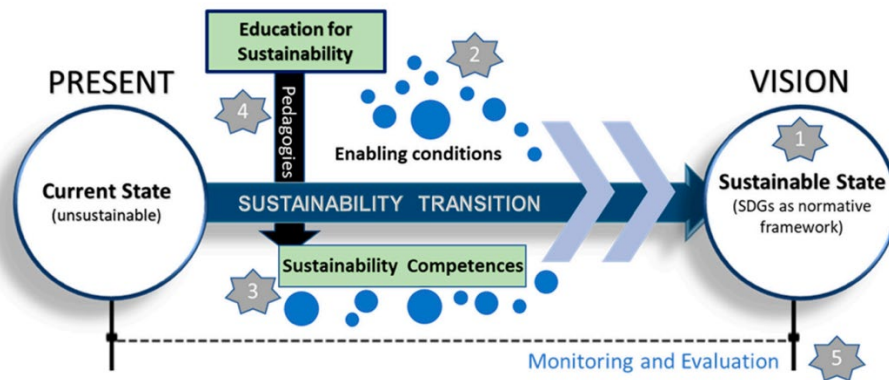


Figure 4: Educational framework for sustainability transformation (Kioupi and Voulvoulis, 2019:6).

5. Conclusions

The purpose of this paper was to narrow the gap between policy and practice in HE considering the need to integrate ESD into the curriculum. Two hypotheses were presented: Ho1. Recognised institutional challenges to integrating ESD into the curriculum can be overcome by placing an emphasis on impact. This paper provides some support for the focus on impact i.e., in relation to the SDGs. However, the integration of the ESD into the curriculum needs to be within a normative framework allowing for monitoring and evaluation.

Ho2. Recognised personal challenges to integrating ESD into the curriculum can be overcome by placing an emphasis on identity. This paper provides some support for the focus on identity as there are numerous tensions in academia that lecturers must deal with. The focus on identity can provide some succour to lecturers faced with multiple and conflicting pressures on their time such as the need to balance teaching with research and practice.

There are strategic and operational implications for Higher Education seeking to integrate ESD within curricula. In terms of strategy, it is important that if any HE provider makes a commitment to a policy initiative such as the HESI or the SDG Accord then follow up action is the result. Such actions need to be mutually agreed, reviewed, and evaluated in such a way that these lead to positive change for all stakeholders.

In terms of operations, it is important to check that existing processes do not mitigate against such positive change. Typically, senior leadership in higher education signs up to the policy and staffs endorse the strategy. However, middle management can be stuck with entrenched ways of working and be ineffective at positive implementation. With identity as a focus, then both the HE provider and individual lecturers can take a more positive and holistic approach to development based on impact.

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