EDUCATION FOR SUSTAINABLE DEVELOPMENT

CO-CREATING COMMON AREAS OF NEED AND CONCERN

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ABBREVIATIONS:

- Community Engaged Learning (CEL).
- Continuing Professional Development (CPD).
- Equality, Diversity, and Inclusion (EDI).
- Education for Sustainable Development (ESD).
- Foundation for Environmental Education (FEE).
- Higher Education Institutes (HEIs).
- Sustainable Development Goals (SDGs).
- University College Cork (UCC).
- Volatility, Uncertainty, Complexity, and Ambiguity (VUCA).
Executive Summary

Two virtual workshops entitled ‘Education for Sustainable Development: Co-Creating Common Areas of Need and Concern’ were held on 18th and 19th November 2021 in order to identify and explore common areas of need, concern, and ethos for Education for Sustainable Development (ESD) at Higher Education Institutes (HEIs) in Ireland.

The workshop had representatives from a range of HEIs across Ireland. These representatives participated in open discussions related to establishing a comprehensive ESD curriculum. The common challenges and opportunities that exist in the current teaching and learning system that hinder the development of this curriculum were identified during these discussions. **ESD requires collective action** and the shared challenges experienced within HEIs must be addressed to establish an interdisciplinary and standardised ESD curriculum.
The main challenges include:

- **Lack of free time** available to students and staff to engage with sustainability.
- **Insufficient resources** and support available to teaching staff (including funding and training).
- **Lack of skills** and knowledge amongst staff to integrate sustainability into their teachings.
- **Inadequate support** for ESD from higher level management.
- **Difficulty engaging** with individuals who lack an interest in sustainable development.

The main opportunities available to facilitate the creation of the ESD curriculum include:

- Developing comprehensive professional development training around sustainability, with an emphasis on peer-to-peer learning.
- Utilising the existing Green-Campus Network to facilitate the development of an interdisciplinary ESD curriculum.
- Developing a standard for ESD across all further and third level institutions.
It is critical that students and all staff (including those in higher management positions) across all HEIs in Ireland are equipped with the essential knowledge of sustainable development.

To achieve this, a standardised ESD curriculum must be developed.

Students can offer valuable insights into the higher education system and must be included as equal co-creators in this process. ESD will enhance the academic experience of all students and allow graduates to act as informed global citizens which will benefit both their professional and personal lives.

This report has been prepared for circulation across the Green-Campus Network, Higher Education Authority and the National Forum for the Enhancement of Teaching and Learning in Higher Education. It can also act as a resource for those who were unable to attend the workshop sessions and for individuals who are interested in ESD and sustainability within Higher Education.
A collaborative and inclusive approach to the development of the ESD curriculum must be taken in order to identify the existing gaps in the syllabus.
University College Cork (UCC) is one of the leading higher educational and research institutions in Ireland. It was the first University in the world to receive a Green Flag from the Foundation for Environmental Education and UCC is ranked 8th globally in the 2021 UI Green Metric World University Ranking of sustainable universities. UCC has an award winning Green-Campus programme that works to integrate sustainability into all research, teaching, and learning that takes place across its campus.

The Green-Campus Ireland programme was established in 2007 as an evolution of the Green-Schools programme. Green-Campus Ireland is coordinated by the Environmental Education Unit at An Taisce.

With members in 77 countries, the Foundation for Environmental Education (FEE) is the world’s largest environmental education organisation. The Environmental Education Unit of An Taisce is the Irish National Operator for all programmes of FEE. FEE is a non-governmental, non-profit organisation promoting sustainable development through environmental education.

The aim of the Green-Campus programme is to encourage a collaborative approach to environmental education, management, and action within and between third level institutions in Ireland. It works to promote climate action and the implementation of sustainable initiatives across its member campuses as well as ensuring that staff and students within the Green-Campus community can meaningfully engage with sustainability and environmental decision-making processes. Participating campuses must complete a flexible and adaptive seven step process to implement the programme into their institution.
ESD is defined here as equipping learners with the relevant knowledge (the what), the key dispositions and skills (the how), and the values (the why) of sustainability. Its principal aim is to motivate and empower learners to integrate sustainability into their personal and professional lives and further enable the creation of a more sustainable and just society for all.
1. BACKGROUND

Step 5 of the Green-Campus Programme (Linking to Learning on Campus) requires the Green-Campus committee to integrate environmental topics into certificate, degree, and master's programmes to provide valuable graduate attributes and practical life experience for students. It encourages the incorporation of sustainability across all areas, including areas in which the link with the environment may not be immediately obvious.

Step 6 (Informing and Involving the Campus and Wider Community) aims to spread information related to sustainability and Green-Campus activities, both on and off campus. This includes informal learning, the hidden curriculum, and sharing of experiences and knowledge with stakeholders, the local community, and Green-Campus programmes in other institutions. The Green-Campus Network aims to deliver ESD so that all graduates in Ireland are informed environmental stewards who are equipped with the knowledge, skills, values, and ethos to integrate sustainability into all aspects of their lives.

All Green-Campus committees must be composed of both students and staff and have the support of the Head of Campus to meet the requirements for the Green-Campus Programme. The majority of Green-Campus committees are composed of students from a variety of backgrounds and disciplines, representatives from the Student’s Union, as well as academic, teaching, research, and administration staff.
The National Strategy on Education for Sustainable Development in Ireland 2014 - 2020 promotes a proactive and transformational ESD and stresses the importance of ‘education for sustainable development rather than education about sustainable development.’

This sentiment is echoed throughout the Green-Campus Programme.
At the global scale, United Nations Educational, Scientific, and Cultural Organisation (UNESCO) articulates a clear aim for ESD and states that ‘in order to guide and empower learners, educators themselves need to be empowered and equipped with the knowledge, skills, values, and behaviours that are required for this transition’.

UNESCO further highlighted the need for educators to understand the interlinkages, transformative actions, and pedagogical approaches to all 17 U.N Sustainable Development Goals (SDGs) which address the human and ethical, social, economic, and environmental pillars of sustainable development. In a call for action, this document also suggests that Higher Education Leadership needs ‘to develop concrete, time bound plans on how to implement the whole institution approach to ESD together with their members and the local community’.

To accelerate the expressed needs for embedding of ESD into the formal curricula across Ireland, UCC collaborated with Green-Campus Ireland to deliver two immersive workshop sessions focused on the transdisciplinary nature of sustainability as framed by the SDGs. These sessions were used to determine shared challenges and opportunities within higher education related to ESD and acted as professional development sessions for teaching staff. The findings of this report will provide the opportunity for teaching and learning enhancement within and across disciplines in HEIs.
The objectives of the workshops were:

01. To engage with Green-Campus Programmes from a variety of institutions and **build a collective voice** to facilitate the integration of ESD into all areas of higher education.

02. To **explore the common needs, challenges, concerns, and opportunities** relevant to ESD amongst Irish HEIs with staff and students as co-creators in this process.

03. To utilise the input received in the workshop sessions as a basis for **developing and integrating ESD into the curriculum** and HEIs across Ireland.

04. To **exchange and share experience** as well as lessons learned whilst navigating issues of sustainability within Higher Education and to **identify the potential for collaborative solutions**.
THE FOLLOWING OUTCOMES WERE EXPECTED FROM THE WORKSHOPS:

To deepen understanding of specific needs between teaching staff and students by creating an inclusive space to facilitate peer-to-peer dialogue and learning through sharing of good practices.

To establish a foundation for the development of a transdisciplinary module in Sustainability which can be delivered throughout the Green-Campus Network.

To compile the information collected from the workshop sessions into a synthesis report that is to be disseminated across the Green-Campus Network, the Higher Education Authority, and the National Forum for the Enhancement of Teaching and Learning in Higher Education.

To foster a community of interest to explore the challenges and opportunities associated with ESD, exchange best practice, and catalyse collaborative work amongst Green-Campus Partner Institutions.
3. Methodology

To achieve the objectives and outcomes outlined above, two 90 minute virtual workshop sessions were hosted by UCC and Green-Campus Ireland on the video conferencing platform Zoom. The workshops were advertised across the Green-Campus Ireland and UCC Green Campus social media accounts and through the Green-Campus Network channels.

Students and teaching staff were able to register to attend the sessions using Eventbrite, a global self-service ticketing platform. A Zoom link was sent out to all those who registered and reminder emails were sent out an hour and 15 minutes before the workshop sessions began.

The sessions included brief presentations by workshop facilitators to create awareness around multi-institutional curriculum such as the Higher Diploma in Sustainability in Enterprise; the SDG Toolkit to enhance ESD learning and teaching; and the student perspective on sustainability in the curricula.

These topics created context for informal discussion groups where participants shared their experiences and thoughts on ESD in Higher Education.

<table>
<thead>
<tr>
<th>SESSION</th>
<th>TIME</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Workshop 1</td>
<td>18:30</td>
<td>18 November 2021</td>
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<tr>
<td>Workshop 2</td>
<td>13:00</td>
<td>19 November 2021</td>
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The original format of the workshops had intended to have separate sessions for students and teaching staff respectively before bringing both groups together for a final session to discuss the challenges and opportunities of ESD.

To facilitate open dialogue and meaningful peer-to-peer collaboration, it was decided to invite staff and students to participate in all workshop sessions to maximise outcomes and ensure that both groups were active and equal contributors to the development of ESD in Higher Education in Ireland.
3. METHODOLOGY

The workshop sessions had representatives from HEIs across the country. **A total of 54 people registered for the workshop sessions (36 staff and 18 students).** 26 individuals registered for the sessions but did not attend.

Workshop 1 had 9 attendees and workshop 2 had 19 participants (including 5 facilitators in each session). The input received during these workshops was recorded to facilitate the creation of this report.

15 different campuses were represented in the workshop registrations (UCC, TUS, TUD, DCU, GMIT, UCD, DBS, Maynooth, IT Carlow, MTU, TCD, and 4 College’s of Further Education).

As an effort to be as inclusive as possible, a Google Form survey was created and sent to all individuals who registered for the workshops. The purpose of this Form was to provide teaching staff and students who could not attend the workshop with an opportunity to contribute to the development of ESD in Ireland.
## Table 1: Overview of the workshop programme

<table>
<thead>
<tr>
<th>TIMING</th>
<th>SESSION</th>
<th>PRESENTER</th>
<th>DETAILS</th>
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<tbody>
<tr>
<td>5 minutes</td>
<td><strong>Opening remarks</strong></td>
<td>Dara Dever</td>
<td>Welcome and introductions.</td>
</tr>
<tr>
<td>5 minutes</td>
<td><strong>Introductory Address &amp; Background on ESD</strong></td>
<td>Dr John Barimo</td>
<td>Outline of the purpose and format of the workshop, and background on ESD.</td>
</tr>
<tr>
<td>5 minutes</td>
<td><strong>A Students Perspective on ESD</strong></td>
<td>Niamh Guiry</td>
<td>Student perspective on the need for ESD to foster sustainability literacy.</td>
</tr>
<tr>
<td>5 minutes</td>
<td><strong>The SDG Toolkit Project</strong></td>
<td>Dr John Barimo</td>
<td>Overview of SDG digital Toolkit and how this resource can be used to enhance ESD.</td>
</tr>
<tr>
<td>20 minutes</td>
<td><strong>1st Breakout Session</strong></td>
<td>Dr John Barimo</td>
<td>Challenges &amp; Opportunities for ESD within Ireland, your institution, and your discipline.</td>
</tr>
<tr>
<td>5 minutes</td>
<td><strong>Lightning Round</strong></td>
<td>Dr Maria Kirrane</td>
<td>Synopsis of the discussions in each breakout group.</td>
</tr>
<tr>
<td>10 minutes</td>
<td><strong>Examples of Good Practice in ESD</strong></td>
<td>Dr Maria Kirrane</td>
<td>Examples of good practice with a transdisciplinary and multi-institutional approach to ESD.</td>
</tr>
<tr>
<td>20 minutes</td>
<td><strong>2nd Breakout Room</strong></td>
<td>Dr John Barimo</td>
<td>Exploring the Creation of ESD Curriculum &amp; Staff Professional Development.</td>
</tr>
<tr>
<td>5 minutes</td>
<td><strong>Lightning Round</strong></td>
<td>Dr John Barimo</td>
<td>Synopsis of the discussions place in each breakout group.</td>
</tr>
<tr>
<td>5 minutes</td>
<td><strong>Closing Remarks</strong></td>
<td>Dr John Barimo</td>
<td>Creation of a word cloud to summarise the workshop.</td>
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</table>
3.1. Good Practice Examples

Dr Maria Kirrane gave a short presentation during which she outlined a number of examples of good transdisciplinary practises related to ESD that have been piloted and implemented in UCC over the past several years:

UW005 is the university-wide sustainability module in UCC. Established in 2016 as a pilot programme. 15 different disciplines are encompassed in this module. Free and open to staff, students and the public to enrol.

UW005 SUSTAINABILITY

The content taught in UW005 evolves and develops each year.

Joint flagship programme at UCC, in collaboration with Maynooth University & Sligo IT. Brings together science, enterprise, academia, & industry.

SUSTAINABLE FUTURES

Aims to drive sustainability and the decarbonisation of society.

Works to empower businesses to meet legal environmental requirements and critical climate goals.

LIVING LABORATORY PROJECT

Based on partnership with key stakeholders.

All projects must be aligned with the sustainability goals contained in UCC’s 2016 Sustainability Strategy.

WORKS TO EMPower businesses to meet legal environmental requirements and critical climate goals.

Based on partnership with key stakeholders.

All projects must be aligned with the sustainability goals contained in UCC’s 2016 Sustainability Strategy.
4. Sectoral Feedback

Sectoral feedback was gathered on the perceived challenges and opportunities for ESD within Ireland, HEIs and disciplines, the development of an ESD curriculum and related Staff Professional Development, and on attendees’ perception of ESD opportunities at Irish HEIs.

See Appendix A for details of comments submitted. A post workshop survey was also distributed to those who had registered for the workshop but did not attend on the day.

4.1. Challenges

Four key themes emerged with regard to the challenges facing ESD in Ireland:
1. LACK OF SKILLS & KNOWLEDGE

Whilst the vast majority of teaching staff seem aware of the current climate crisis and the array of sustainability issues, such as biodiversity loss, that are facing us in the 21st century, many lack a comprehensive understanding of these complex interconnected issues affecting all facets of our societies.

Additionally, many may have insufficient skills and language to communicate issues of sustainability in an engaging manner that will empower students to become positive agents of change in their professional, civic, and personal lives. Staff need confidence to incorporate sustainability into their teachings within the relevant context of their discipline and this gap in sustainable literacy hinders the integration of ESD into higher and further education curricula. Additionally, there is more need for trans- and interdisciplinary engagement when addressing wicked or VUCA issues (such as climate or human migration crises). VUCA represents unpredictable and dynamic challenges that require innovative and non-traditional approaches to problem-solving and collective goals, like sustainable development.

Furthermore, the existing third level education systems in Ireland are complex organisational structures addressing an array of institutional missions, and a lack of understanding of university processes acts as a barrier to both staff and students when attempting to further sustainable initiatives in HEIs.
The absence of free time to dedicate to ESD is a common challenge that faces staff and students in every institution in Ireland.

The difficulties of juggling the existing academic workload, extracurricular obligations, personal responsibilities, and family life is a universal experience faced by all. This greatly hinders people's ability to engage with existing sustainable initiatives in their respective institutions, develop new innovative sustainable projects, and explore how current teachings could be connected with ESD.

Workshop participants unanimously agreed that the hectic higher education system is hindering staff and student engagement in this area. Some staff called for time to be allotted for new curriculum development and stressed that the ESD integration should not just be another layer added to a heavy workload.
The integration of ESD into further and higher level education is not a straightforward endeavour. The absence of sufficient financial, academic, administrative, and technical resources is a significant obstacle to achieving ESD goals.

Ample resources are essential in the development of sustainable initiatives, innovative environmental programmes, and original research. Higher management of HEIs need to support ESD by investing in their students, staff, departments, and infrastructure. Plentiful resources for ESD is essential if significant progress is to be made in integrating sustainability into the curriculum of HEIs, especially under timelines articulated in the U.N. 2030 Agenda.

Embedding ESD into the current system will require significant human resources. A notable gap that was identified in the workshop sessions was the lack of dedicated staff available to work in this area. There is no ESD Officer in any HEI. Given the scale of the task at hand, institutions must create specialised roles and support mechanisms dedicated to integrating sustainability into the curriculum, providing staff and students with strategic guidance and oversight, and identifying and overcoming challenges as they arise.

All HEIs must allocate staff and create specialised departments that are devoted to embedding sustainability across all operations, teaching, research, and outreach if substantial progress is to be made in this area.
It is extremely difficult to engage with those who lack an interest in sustainability. Climate change is the common concern of humankind and it is only through collective goals and efforts that sustainability issues can be addressed and solved. The misguided assumption that ESD is not related to all academic disciplines is prevalent amongst staff and students. Education curriculum and programmes of study must be designed and resourced to successfully engage with all students and teaching staff in HEIs and communicate the universal and inclusive values of ESD.

**Student engagement is integral to the development of ESD.** There is often a disconnect between college/departmental initiatives and student needs. Consultation sessions should be held with student representatives from a variety of academic backgrounds to ensure that their needs are being addressed. Student input is critical to reinvent the curricula and ensure that an effective, engaging, and coherent ESD system is implemented.

Currently, many academic and administrative staff are not making the connection between understanding the SDGs (Sustainability Literacy) and future employability and career-oriented goals for students. **Outreach efforts and information dissemination must be a priority** if ESD is to be mainstreamed across further and higher education in Ireland in order to have a significant positive impact on advancing the SDGs by 2030. **Radical, tangible, and immediate action needs to be taken to mitigate the ever-growing climate crisis** and this urgency needs to be communicated in a manner that will empower individuals with transformative learning experiences and enable them to take action and demand action from their institutions.
The importance of peer-to-peer learning and Continuing Professional Development (CPD) was repeatedly highlighted at both workshops. Comprehensive, accessible, and inclusive training sessions for teaching staff is essential to build understanding and competencies in the area of sustainability. These training sessions will equip staff with crucial knowledge that will allow them to meaningfully and confidently incorporate sustainability into their lecture material, academic research, and personal lives. Given the time constraints on teaching staff, the training sessions must be delivered in a flexible and non-prescriptive manner to allow all staff to access these resources while maintaining disciplinary integrity.

Many staff are already working and teaching in areas related to the SDGs but may be unaware of this overlap. The training sessions will allow staff to make the connection between their respective discipline and sustainable development, and guide staff to reframe their existing teaching materials to align with ESD goals. Ideally these connections between SDGs and curriculum would be reflected in activities, assessments, and learning outcomes as well as relevant course descriptions.
4.2. OPPORTUNITIES

These training sessions could also be an opportunity to **break down barriers in the academic world** if facilitated within a transdisciplinary framework. There is a significant pressure on staff to be an expert in one’s respective area. Staff may lack self-confidence if they do not think that they already hold an ample awareness of sustainability. Peer-to-peer training and sharing of insights will encourage staff to explore ESD areas which will consequently create a supportive environment that advocates for ongoing learning and development.

There is a great opportunity to train a cohort of staff in HEIs across the country who have an active interest in issues of sustainability who will then be able to lead their colleagues and students as ESD champions. The **SDG Toolkit website was highlighted as an essential open-sourced resource** that is freely available to staff and students that will enhance teaching and learning related to ESD and can be tailored to meet institution needs within limits of the Attribution-NonCommercial Creative Commons licence.
Participants identified a critical need to establish a **sustainability standard** for all higher and further education institutions in Ireland. A dedicated and coherent sustainability strategy will allow ESD to be comprehensively embedded into the third level educational system. A standard, similar to the standard that has been established for Equality, Diversity, and Inclusion (EDI) is needed to encompass all aspects of ESD. The SDGs could provide significant support in the development of this standard as these goals provide us with a universal language, unanimously ratified by the UN Member States, that gives us common ground to communicate and the ability to look holistically at all aspects of society through the lens of sustainability.

**Standardisation is an essential requirement in the development of an inclusive, innovative, and interdisciplinary ESD** and the cultivation of curiosity in the area of sustainable development. The implementation of an effective and high quality ESD strategy will be beneficial to students and staff and enhance individual HEIs environmental performances.

An **established strategy will also provide more opportunity to apply for and receive funding and resources**. It remains to be seen what policies and supports will be contained within the revised National Strategy on Education for Sustainable Development in Ireland whose release has been delayed due to the Covid-19 Pandemic.
Consequently, students would develop a deep understanding of environmental matters and demonstrable sustainability literacy, a skill which is becoming more and more important to employers, in Ireland and internationally. Additionally, students will be able to engage in strategic, critical, and anticipatory thinking and have the ability to appreciate local and global perspectives on sustainability matters. The development of a comprehensive national sustainability strategy for HEIs will demonstrate the high regard third level institutions have for sustainability issues.

A number of dedicated committees and forums made up of representatives from HEIs all over the country would be needed to coordinate and develop this standard. All decisions must be made in a transparent manner, and in line with the inclusive ethos of ESD. Diversity, gender balance, and equality must be central when electing members to these bodies. Workshop participants suggested utilising academic incentives and teaching awards to assist the integration of ESD into the curriculum. There is also an opportunity to evaluate assessment methods for ESD and interdisciplinary courses to maximise student engagement.
The interdisciplinary nature of ESD creates a great opportunity to remove barriers amongst disciplines including STEM, business, law, arts and humanities, social sciences, and vocational education in the pursuit of critical sustainability goals. The established Green-Campus Network will act as a national resource that will enable inter-institutional collaboration. However, it is essential to include all Irish HEIs in this process and not just Green-Campus Network member institutions. The alliances that exist between Green-Campus programmes will allow for the sharing of knowledge and resources to expedite the integration of ESD into our HEIs. The development of ESD will strengthen these connections and the Network as a whole. ESD must be geographically inclusive, encompassing institutions located across all four provinces of Ireland, located in both rural and urban areas.

It is vital that ESD is accessible to all students and staff and inclusive of all levels of academic ability, socio-economic background, and discipline. Furthermore, there is a strong cohort of students who have been actively involved in climate action for several years. Collaborating with activist students as equal co-creators would be a great opportunity to further ESD efforts in HEIs in Ireland. There is also the opportunity to develop a multi-institutional approach to ESD to provide equal opportunities and avoid duplication of process. HEIs could share experts, knowledge, and resources to deliver hybrid and virtual ESD experiences. The transdisciplinary nature is not limited to the academic world as it encompasses traditional and indigenous understanding of sustainable development.
INTRA-INSTITUTIONAL COLLABORATION ACROSS A DIVERSE SET OF CURRICULA, DISCIPLINES, AND VOCATIONS IS ESSENTIAL TO ACHIEVE THE SHARED VISION OF ESD.
Participants were asked to reflect on the strengths and challenges when establishing a multi-institutional approach to ESD and how shared collaboration could facilitate the integration of the SDGs into further and higher level education. Three main themes emerged from these discussions.
1. HEI PARTNERSHIP

In order to design and implement an engaging ESD curriculum in Ireland, all HEIs, including those that are not a part of the Green-Campus programme, must be involved in the development process. Buy-in from every HEI in Ireland is essential as a diverse range of input will lead to a more engaging and inclusive ESD curriculum. Transparency will also be critical to this process. Fostering and maintaining open dialogue and communication with all stakeholders will help build support for ESD and the integration of the SDGs into further and third level education. A model based on trust and collaboration will allow HEIs to act as equal partners and for the sharing of essential resources and expertise.

Coordinating activities and reaching unanimous agreement between all institutions is a significant undertaking. It is likely that a variety of obstacles, including disagreements on curriculum content, will be encountered during the ESD development process. Conflict resolution strategies should be put in place to solve any potential disputes that may arise. A non-hierarchical approach should be taken to allow all HEIs to be heard and ensure that every institution has equal opportunity to shape the creation of the ESD curriculum.

Students are key stakeholders in further and third level education. They must be included as co-creators in the development of the ESD curriculum. The creation of student advisory boards made up of undergraduate and postgraduate students from a variety of disciplines will allow for an adequate survey of students’ thoughts and ideas. Meaningful dialogue can be facilitated through a variety of means including committee meetings, open forums, and town hall style meetings. These spaces will enable students and staff to connect and allow student needs and gaps in the ESD curriculum to be identified and addressed.
There is a critical need to increase awareness of sustainability issues amongst all those working and studying in HEIs in Ireland. The development of a dedicated ESD curriculum will allow sustainability to be mainstreamed across all courses and departments in further and third level education. It will be a challenge to engage with staff and students who have little to no interest in studying the SDGs. This must be accounted for in the development process. Engagement campaigns framed around ESD and the SDGs could be run in HEIs. Strategic communications should be devised to compel individuals to invest their time and attention in issues of sustainability, and get proactive with climate action in their academic and personal lives.

Before the SDGs can become embedded into teaching and learning activities in Ireland, staff must be adequately trained in these areas. Staff members have various degrees of understanding of climate change and sustainability and so CPD must be tailored to deliver comprehensive training to all skill levels, from introductory classes to advanced streams. The appointment of an external consultant or expert body to deliver staff training sessions will overcome any competitive factors. A move needs to be made from voluntary sustainability training to mandatory for all staff (academic and facilities) in HEIs to allow the effective delivery of ESD. Once more, issues concerning free time during the academic year were raised as a challenge to creating an ESD curriculum.
Collaboration must occur on all levels to facilitate the integration of sustainability into third level education. Therefore, higher level management must also be educated on the intricacies of climate change and climate justice.

A whole systems perspective is essential to reach the 2030 SDGs. This will help solidify sustainable development as a key element of higher and further education and embed the SDGs into all degree programmes. There is also an opportunity for cross-institutional training for those who are interested in sustainability.
The ease at which ESD can be integrated into current modules was a compelling point that was raised during the brainstorming sessions. Undoubtedly, the development of an ESD curriculum structure and standardised assessment methods will be a complex process. Further education institutes may provide staff with more flexibility when integrating these module changes in comparison to universities. It must be recognised that the establishment of new modules and the act of changing existing modules is a time-consuming and complex undertaking.

Furthermore, all module changes will need to go through the necessary screening and approval processes by professional accreditation boards. The bureaucracy that exists in third level education could possibly delay the creation and implementation of the ESD curriculum. The time-sensitive nature of climate change means that momentum and support for sustainable development needs to be built quickly. **ESD cannot afford to be impeded by red-tape.** This is an urgent initiative that needs to be implemented as soon as possible to maximise its impact.

Given the performance based framework of higher education that exists in Ireland, there is an opportunity to establish **ESD Teaching Awards or a National Digital Badge** to encourage teaching staff to integrate sustainability into their modules. Similar to the ESD curriculum, the structure of any potential award or badge would have to be designed and approved by a specialised committee.
Workshop participants were invited to contribute to a word cloud to mark the end of the workshop session. The following question was posed to attendees: ‘What words best describe ESD opportunities at Irish HEIs?’, and attendees were invited to submit 3 words that they believed best described ESD opportunities within HEIs in Ireland. **Collaboration, cooperation and unity** were the dominant themes in the word cloud (see Figure 2). The importance of inclusivity and co-creation within the process of developing ESD was made clear in addition to comprehensive training for teaching staff to facilitate the integration of sustainability into their lectures.
4.5. Post-Workshop Survey

To be as comprehensive as possible and include those who registered for the workshop but could not attend on the day, a Google Form was sent out to all individuals who signed up for the workshop sessions via Eventbrite. Based on the workshop discussions and prompts, a short questionnaire was created to allow individuals to give their perspective on integrating ESD in Higher Education (see Appendix B for survey questions and responses).

The response received via the anonymous Google Form was consistent with the feedback gathered in both workshop sessions. Once more, the critical need to comprehensively integrate ESD into teaching and learning practices in Irish HEIs was highlighted. Given the perilous nature of the climate crisis, a failure to incorporate principles of sustainable development and social justice into third level curricula would be a grave disservice to those whose lives and livelihoods are threatened (and being destroyed) by the effects of climate change. All staff and students need to be equipped with this essential knowledge, especially as the effects of climate change continue to become more and more apparent in the coming years, both nationally and internationally.

The need for a standardised sustainability model was also emphasised. A comparison was drawn to the Athena Swan charter. This initiative is HEA funded and it works to support impactful and long-lasting gender equality work in the higher education sector. A similar initiative related to ESD would provide invaluable support to HEIs and facilitate the integration of sustainability into the core of third level education. A lack of resources continues to be an obstacle to Green-Campus members and without extensive and enthusiastic support from higher management within third level institutes, ESD cannot be integrated into the curriculum.
5. Conclusion

The HEIs across Ireland have the paramount responsibility of educating the current and next generation on the detrimental and widespread effects that the climate crisis is having on our planet, and its inhabitants.

The social justice and human rights implications of the climate catastrophe must be at the forefront of our minds and actions to ensure that no one is left behind in our pursuit of a sustainable and equitable world. Given the influence and impact HEIs have as employers, educators, in research, commercial enterprise, and as partners in local communities, institutions must lead by example and ensure that sustainable development is amalgamated into the building blocks of our curriculum and our higher education system as a whole. The SDGs provide collective goals and language that is universal in nature and they can be utilised as an entry point for broader discussions on sustainability.

In light of the urgent need for the creation of just and sustainable societal structures, changes need to be made at an institutional, regional, national, and systemic level. The integration of ESD into the curriculum of Higher Education will enhance teaching and learning experiences and equip students, staff, and the wider community with the capability to understand and tackle matters of sustainability. ESD requires collective action and the cultivation of collaborative links across disciplines and institutions. The Green-Campus Network has created an invaluable nexus between member HEIs that will be crucial in the development of this system. Teaching staff and students across the Green-Campus Network will be co-creators in this process during which they will be able to offer valuable insight and constructive guidance. In return, they will gain vital knowledge of the language, values, principles, and ethos that act as the foundation for ESD and the SDGs.
These workshop sessions successfully identified common ground between students and staff and between HEIs around the country.

The principal challenges and common themes that were identified over the two workshop sessions can be regarded as a call to action.

The following are the main challenges that were identified at the workshop sessions:

- Many staff currently lack the skills and knowledge necessary to integrate sustainability into the curriculum.

- The 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 in our current higher education system.

- Inadequate support and commitment of higher management to ESD and sustainability goals as strategic priorities within many HEIs.

- Engaging with students and staff who are not interested in sustainability or active in environmental initiatives is a persistent obstacle that must be overcome to successfully integrate ESD across all disciplines.
There are many opportunities available when integrating ESD into the curriculum:

- There is a great opportunity to provide **professional development training** to equip staff with essential knowledge around sustainability that can be incorporated into their teachings. Peer-to-peer learning and training should be utilised to maximise results.

- The interdisciplinary nature of ESD will allow **HEIs to work together using the existing Green-Campus Network** to collaboratively create ESD curriculum and CPD training that draws on the strengths of various HEIs.

- There is ample scope for the development of a **sustainability standard** across all HEIs to facilitate the amalgamation of ESD into the curriculum.
The principal barriers and opportunities that exist in relation to creating an ESD curriculum and facilitating Staff Professional Development were also identified:

- An all-Ireland HEI partnership is essential in the ESD development process. It will be difficult to coordinate all HEIs but all institutes must be included to design an inclusive and engaging ESD curriculum.

- The curriculum needs to be designed in a transparent manner to build trust and support for the integration of sustainable development into third level education.

- Students are key stakeholders that hold valuable insight into the Irish academic experience. There is great opportunity to facilitate peer-to-peer learning and the identification of ESD needs and gaps.

- Mandatory CPD would be effective in furthering ESD but it must be tailored to all skill levels.

- All changes made to modules will need to be approved by accreditation boards, which could slow down the creation of the ESD curriculum.

- Our approach to ESD must encompass the urgent nature of climate change.
EDUCATION FOR SUSTAINABLE DEVELOPMENT
Co-Creating Common Areas of Need and Concern

JOHN BARIMO

Welcome

SUSTAINABILITY LIVING LABS
REAL LIFE PROBLEMS
SUSTAINABLE FUTURES

ACADEMIC STRATEGY
CONNECTED FUTURES

OPPORTUNITIES & CHALLENGES
DR MARIA KIERNANE

WE SHOULD BE SETTING AN EXAMPLE
SHARE RESOURCES

WHAT DO STUDENTS WANT TO LEARN?

LISTEN TO STUDENT IDEAS

INTERGRATE SDGs INTO ALL COURSES

CLIMATE LITERACY

TRAINING MODULE

PEER TO PEER

STAFF CONFIDENCE

WE NEED OPEN PARADIGM

SHARE EXPERIENCE

SHARE TIME & FUNDING

WHOLE SYSTEM APPROACH

EXECUTIVE \"SCHOOL OF MADNESS\"

STAFF TRAINING

TRAIN STAFF BEFORE STUDENTS

I'M NOT AN EXPERT
LET'S WORK TOGETHER!

GREEN WEEK

SHARE EXPERTISE

WORK COLLECTIVELY

ALL IRELAND EFFORT

CROSS CAMPUS

CROSS UNIVERSITY

EXPLORING THE CREATION OF ESD CURRICULUM & PROFESSIONAL DEVELOPMENT

WITH INCENTIVES

OTHER

SUSTAINABILITY STANDARD
ESD has the potential to be a catalyst for positive change in our higher education system and advancing our national commitments to the SDGs, but only if adequate time, resources, and funding are allocated to this area. While individual and community-based actions are undoubtedly important in the fight against climate change and the realisation of the SDGs, systemic change is needed to allow for the creation of a sustainable future for all.

The integration of ESD will solidify sustainability as an indisputable priority within higher education in Ireland whilst enhancing student and staff understanding of the alarming reality of the climate crisis and the need for sustainable development. ESD must be developed in a collaborative partnership that incorporates the student voice into the process and curriculum in order to achieve mutual goals. The transdisciplinary nature of ESD will build and strengthen ties between disciplines and cultivate curiosity that will fuel original research and innovation while also providing a feedback loop for further ESD curriculum development.

It is clear that a nationwide ESD standard needs to be created. The Green-Campus programme has achieved a great deal, but there is only so far a voluntary bottom-up initiative can go in terms of achieving the institutional transformation that is now required. This standard must be able to adapt and grow in response to the ever-changing nature of the escalating climate crisis and sustainable development needs. The sustainable strategies utilised by HEIs and the guidance given to students and staff must be regularly reviewed and assessed in order to ensure that the most up-to-date information is being disseminated.
It may also be necessary to collaborate and coordinate with organisations such as the Irish Universities Association to find common ESD standards, practises, and principles similar to the Charter for Irish Universities or the Irish Campus Engage Charter on Civic and Community Engagement so as to provide a shared vision to meet greater societal needs. Such a strategy could prove effective since the Irish Institutes of Technology are being transformed into Technical Universities.

By equipping our staff and students with this critical knowledge, they will be enabled as agents of change within their respective fields, institutions, and local communities. ESD will enhance learning, teaching, and the overall academic experience of all students and staff in HEIs. It will give students the invaluable opportunity to reach their full potential and become informed citizens that are able to thrive in a global world. **Empowering individuals to become active citizens is the goal of ESD that can be achieved if the challenges and opportunities identified through these workshops are acted on.**
The purpose of the 1st Breakout Session was to identify the challenges and opportunities associated with ESD and to find common ground across institutions. Attendees were given the prompt 'ESD Challenges & Opportunities' and asked to frame this prompt around four key areas: resources, skills, interest, and other. Staff were asked to consider existing systemic limitations and contemplate how these may be best overcome. Students were asked to consider if they feel that their instructors understand their needs and whether they feel empowered by their instructors in the area of sustainability.

Attendees and facilitators used Jamboard to contribute their thoughts during the two Breakout Sessions. The following is the information that was harvested from the 1st Breakout Session in both workshops:

**Resources:**
- Limited free time for both students and staff.
- Lack of funding for ESD and interdisciplinary teaching in general.
- More resources and dedicated staff. Lack of ESD officers.
- All Ireland Sustainability 101 needed.
- For credit.
- Staff CPD.
- Shared curriculum.
- Scale of the challenge is huge. Not enough stepping up to the stage.
- What are the implications of our impacts? What is core business, what is so important to experience?
- How do we embed into the entire system? How do we make it a whole institution issue?
Resources:
- Need a sustainability standard, for all aspects, a standard like EDI.
- Collaboration is key.
- Failure to engage with students.
- Not making the link between understanding SDGs and future employability/career goals of students.
- Overall college strategy required.
- Access to conversations across the college where management decisions are made without consideration of sustainability.

Skills:
- Lack of knowledge of university processes.
- Lots of opportunities to integrate with service learning or community engaged learning (CEL) existing in institutions.
- Students unsure how to positively contribute to ESD.
- Assessment methods for ESD/interdisciplinary courses need to be constructed and approved.
- Staff need confidence to incorporate ESD into their teaching.
- Set the example at an institutional level first.
- Staff lack skills and knowledge of ESD. Need better knowledge of the SDGs and how to integrate them into the curriculum and individual modules and courses.
- Peer-to-peer interactions with staff are not happening enough.
- Introduce training modules for students and staff.
- Not everyone is aware of what others are doing, and may already be addressing sustainable development/SDGs within disciplines and across institutions.
- Not everyone is aware that SDGs have economic, social and environmental pillars, sustainability is not just environmental sustainability.
- Reframing existing practises to fit ESD.
- Sustainable procurement needs to be included across all universities.
- Green procurement weighted equally with cost?
- A cohort of staff within individual colleges can be trained to allow them to lead others who are interested (champions).
Interest:

- Difficulty engaging with non-environmental students/staff who are not interested in sustainability.
- People don’t realise that disciplines like social work fit into ESD, it’s much broader than just "green" disciplines. Need to overcome the assumption that ESD isn’t related to certain departments, it is linked in some way to all disciplines.
- New students might be more open-minded. Opportunities to engage with the younger cohort of Fridays for Future students.
- There is interest but not a connection - young people want things to happen quickly.
- Could Ireland be the worldwide best practice example at climate literacy in third level education?
- Showing the value of ESD to all. Develop academic incentives/other incentives to interest students.
- Huge interest e.g. looking at green initiatives in laboratories.
- Engaging students in SDGs through assessment (assessment co-design). How to get feedback from students about SDGs as a learning tool?
- Lack of (limited) interest at management level - helps therefore if students and staff can build interest in this area. Need to engage with management of colleges/campuses to get them on board. Perhaps work through the Irish Universities Association.
- Need to hear more from the students and understand their specific needs.

Other:

- Absence of metrics to recognise the importance of ESD.
- Ethics - to embrace ESD we need to look at business schools and the traditional economic interpretation and teaching.
- Lack of "whole-system" approach e.g. buildings departments not engaged.
- Challenges can seem overwhelming.
- Opportunity with new Climate Action Plan and need for Climate Education/Training for all staff in public sector organisations.
- Sustainability Standards needed.
- Opportunity to integrate into all courses since the SDGs are relevant to all courses.
- Language and framing around ESD/SDG can be an issue with inclusion and access.
- Student engagement is difficult in shorter courses.
The 2nd Breakout Session invited participants to explore how all HEIs can collaborate with common purpose to achieve the shared goals around ESD and the integration of the SDGs into the existing curriculum. The title of the prompt for this session was: ‘Creation of ESD Curriculum & Staff Professional Development’.

Staff and students were asked to consider the strengths and challenges to a multi-institutional approach to ESD and to explore perceptions, narratives, and values around sustainability. Attendees were also encouraged to utilise the chat function during the sessions for thoughts, ideas, and questions to collect as much information as possible.

The following is the information that was harvested from the 2nd Breakout Session in both workshops.

- Peer-to-peer is essential for both staff and students. Opportunities to have open dialogue between staff and students to identify needs and gaps.
- Need buy-in and input from every institution.
- Some staff/students might not have interest in studying SDGs which makes it hard to engage.
- CPD to help staff at different levels of understanding. Some that are transdisciplinary but maybe some that are discipline specific. Also maybe more specific to individual modules or disciplines (such as social, environmental or economic).
- If we can’t have a mandatory ESD module for all students within a HEI because of the Bologna agreement, perhaps each degree programme needs to have some foundation module or component within a module about sustainability.
- Mandatory training for staff (academic & facilities) in sustainability/SDGs, climate action and solutions.
• Help staff overcome inhibitions such as thinking they must be experts in sustainability so they don’t bring it into the curriculum. Can ESD be a joint discovery among teaching staff and students?
• Professional accreditation bodies.
• Open development and sharing of resources across all institutions.
• Needs to be authentic.
• Student advisory board need to be included in the development of ESD.
• Cooperation, transparency, open dialogue, inclusivity. Co-created solutions are required.
• ESD in all programmatic reviews.
• ESD Teaching Award: national level as an incentive for teaching staff.
• Staff need to be addressed first using CPD in order to allow them to deliver ESD effectively.
• Need a standard for sustainability for teaching and assessments.
• ESD needs to be integrated on all levels, including higher level management, not just students and lecturers.
• ESD and associated training needs to move from voluntary to mandatory.
• Open source: need collaboration across Irish HEIs. Share everything, put your institution's stamp on it.
• Co Creation: Adequately survey students' thoughts and ideas, this can help create buy-in.
• Joint curriculum needs to be developed between all higher institutions to ensure national buy-in.
• Potential lessons learned from Climate Action Region Offices (CARO) training on climate action? CARO has 6 programmes that target different roles/functions across local authorities (champion leadership, raising awareness, building capacity, empowering change, delivering action, and actioning policy). CARO empowers organisations, citizens and enterprises to allow the implementation of effective and measurable climate action.
• Shared expertise: how can the SDG's be relevant in Human Resources or across different disciplines e.g. engineering etc?
• Cross-institution opportunities for training groups who are interested in sustainability.
• Momentum needs to be built quickly.
• New Technical Universities provide huge opportunities.
• Could An Taisce Green-Campus host initial training?
• Potential for hosting training during Green Week? March as conducted by UCC during Green Week 2021. End of year training week in GMIT - taster module in ESD possible.
• Niche area, opportunity to make it mainstream across all courses/departments.
• Accreditation boards, needs to be approved,
• Open dialogue between staff/students/colleges/departments.
• Need to establish a structure.
• Direct connections, focus needs to change. Equip students for future (personal and academic).
• Time-consuming to develop new modules/change modules.
• The SDGs are relevant to all areas, fits into modules.
• Is it easy to integrate ESD into current modules?
• More flexibility in further education vs universities?
• Increased awareness. Staff and students need to know what exists and what needs to be done.
• National Digital Badge for staff on integrating ESD in the current module.
• Athena Swan: staff member in each department is given time from lecturing to work on it within each department. Senior managers also. Driven by HEA.
• Further education students only there for one year so difficult to squeeze new components in, would need to be restructured.
• Every level 5 student in the country has to do communications, isn't ESD equally as important and could this be done? Same for springboard courses.
• Staff and students might not have time within the academic year.
• Body/Person to come to a campus and train staff - external consultant/group/ - overcomes the competition factor.
• Assessment might be difficult but if it's accessible it could be popular.
• If lecturers were trained in incorporating SDGs into what they are already doing, changing their thinking on what they are doing, it could be incorporated into every course.
• Nationwide module for students to tap into - not reinventing the wheel.
• Importance needs to be pushed from management perspective and Green Campus groups, staff time could be given to it.
• How to sell to the students? Enhance marketability.
Question 1: What are the 3 most important factors for you when it comes to embedding ESD into our teaching and learning practises?

Answer: It is critical to integrate ESD into our teaching and learning practises in 3rd level. How can we expect students to take sustainability seriously if it is not part of their 3rd level education?

Question 2: Do you have any suggestions on how we can incorporate ESD more effectively into the curriculum?

Answer: The Department of Education and HEA should be following the Athena Swan model of incorporating sustainability into 3rd level education. Athena Swan is being rolled out for EDI (Equality, Diversity and Inclusiveness) very successfully. One of the driving forces for encouraging third level institutes of technology to take part in Athena Swan is that it affects their government funding. Something similar needs to be done for sustainability and ESD.

More resources need to be available for colleges and Green-Campus groups to tap into in order to help and support them to incorporate ESD into their curriculum. For example some group they could contact who would come to the college or online provide workshops to staff and students on how to do this. Provide models that are already working elsewhere and help set them up, etc.

Question 3: Do you have any concerns about integrating ESD into the curriculum?

Answer: Yes, there is not enough support to do so. There is not enough of a push/requirement from senior management to carry this out and there are not enough resources available to help Green-Campus groups to implement it.

Question 4: Any other feedback or comments?

Answer: Green-Campus groups need more help/support/resources to incorporate ESD into the curriculum and management within 3rd level institutes need to be persuaded of the benefits of doing so.
LET'S WORK TOGETHER

For our common future!

NATIONAL FORUM
FOR THE ENHANCEMENT OF TEACHING AND LEARNING IN HIGHER EDUCATION

UCC GREEN CAMPUS