

# Education for Sustainable Development - Narrative

**Education for Sustainable Development (ESD) can be thought of as a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities. Building the capacity for such future-oriented action is a key task of education. (UNESCO, 2013)**

‘ESD allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future.

Education for Sustainable Development means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption’ (UNESCO, 2014).

One of the optimum ‘moments’ for engaging learners with sustainable development is through their experience of higher education: for many, this is the arena for significant encounters with critical thinking, provocative questions and alternative ideas about our current patterns of development and our potential to devise new ways of living. It is fertile space for ESD. (Ryan & Tilbury 2013)

Effective ESD requires active enquiry-based teaching and learning methods that motivate and inspire learners to modify their behaviour and take action for sustainable development. Accordingly, Education for Sustainable Development promotes and affords students the opportunity to experience teaching approaches that ‘promote exploration, innovation, entrepreneurship, critical-thinking and problem-solving’ (L&T Strategy 2018-24).





## THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

These are a collection of 17 global goals set by the United Nations General Assembly in 2015 for the year 2030. The SDGs are part of the United Nations General Assembly: "Transforming our World: the 2030 Agenda for Sustainable Development".

The goals are broad and interdependent, yet each has a separate list of targets to achieve. SDGs cover a range of social, economic and environmental development issues including poverty, hunger, health, education, gender equality, clean water, affordable energy, inequality, urbanization, global warming, environment, and social justice. Implementation as of 2016 is described as "Localizing the SDGs" to highlight the role of local institutions and local actors.



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	<p><b>NO POVERTY</b> End poverty in all its forms everywhere</p>		<p><b>INDUSTRY, INNOVATION AND INFRASTRUCTURE</b> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p>
	<p><b>ZERO HUNGER</b> End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p>		<p><b>REDUCED INEQUALITIES</b> Reduce inequality within and among countries</p>
	<p><b>GOOD HEALTH AND WELL-BEING</b> Ensure healthy lives and promote well-being for all at all ages</p>		<p><b>SUSTAINABLE CITIES AND COMMUNITIES</b> Make cities and human settlements inclusive, safe, resilient and sustainable</p>
	<p><b>QUALITY EDUCATION</b> Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p>		<p><b>RESPONSIBLE CONSUMPTION AND PRODUCTION</b> Ensure sustainable consumption and production patterns</p>
	<p><b>GENDER EQUALITY</b> Achieve gender equality and empower all women and girls</p>		<p><b>CLIMATE ACTION</b> Take urgent action to combat climate change and its impacts*</p>
	<p><b>CLEAN WATER AND SANITATION</b> Ensure availability and sustainable management of water and sanitation for all</p>		<p><b>LIFE BELOW WATER</b> Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p>
	<p><b>AFFORDABLE AND CLEAN ENERGY</b> Ensure access to affordable, reliable, sustainable and modern energy for all</p>		<p><b>LIFE ON LAND</b> Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>
	<p><b>DECENT WORK AND ECONOMIC GROWTH</b> Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p>		<p><b>PEACE, JUSTICE AND STRONG INSTITUTIONS</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and</p>
	<p><b>PARTNERSHIPS FOR THE GOALS</b> Strengthen the means of implementation and revitalize the global partnership for sustainable development</p>		

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## Sustainability in the curriculum

At Ulster, we take the stance that there is no definitive knowledge content that should be included in a curriculum addressing sustainability or sustainable development. Rather, we adopt a suggestive approach that draws on indicative curricular themes (Tilbury & Wortmann, 2004; Blewitt, 2012), which broadly align with the 17 SDGs across the three spheres of environment, society and economy. These indicative curricular themes may be more or less relevant to each disciplinary area and might be used and adapted as 'entry points' to develop and embed sustainable development in the curriculum. Many programmes will already encompass these ESD themes and can easily align existing classes explicitly with the SD goals. For example, if we take Goal 2, 'Zero Hunger', this could be incorporated into an English class by asking students to analyse media stories on hunger; a maths class by asking students to calculate daily nutrition requirements; or in a history class by asking learners to research and compare characteristics of historic famines.

Sustainable Development Goals Spheres		
BIOSPHERE	SOCIETY	ECONOMY
GOAL 6: Clean Water and Sanitation GOAL 13: Climate Action GOAL 14: Life Below Water GOAL 15: Life on Land	GOAL 1: No Poverty GOAL 2: Zero Hunger GOAL 3: Good Health and Well-being GOAL 4: Quality Education GOAL 5: Gender Equality GOAL 7: Affordable and Clean Energy GOAL 11: Sustainable Cities and Communities GOAL 16: Peace and Justice Strong Institutions	GOAL 8: Decent Work and Economic Growth GOAL 9: Industry, Innovation and Infrastructure GOAL 10: Reduced Inequality GOAL 12: Responsible consumption and Production
Indicative Curriculum Themes		
<ul style="list-style-type: none"> <li>▪ Natural resources management</li> <li>▪ Food and farming</li> <li>▪ Ecological systems</li> <li>▪ Waste / water / energy</li> <li>▪ Biodiversity</li> <li>▪ Climate change</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sustainable communities</li> <li>▪ Cultural diversity</li> <li>▪ Intercultural understanding</li> <li>▪ Sustainability in the built environment</li> <li>▪ Travel, transport and mobility</li> <li>▪ Health and wellbeing</li> <li>▪ Peace, security and conflict</li> <li>▪ Citizenship, government, democracy</li> <li>▪ Human rights and needs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Alternative futures</li> <li>▪ Leadership and change</li> <li>▪ Learning organisations</li> <li>▪ Corporate Social Responsibility</li> <li>▪ Consumerism and trade</li> <li>▪ Globalisation of economy</li> <li>▪ Accountability and ethics</li> <li>▪ International development</li> <li>▪ Sustainable and ethical tourism</li> <li>▪ Population</li> </ul>

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## Pedagogical approaches for ESD

There is a broad consensus that effective ESD requires a learner centred approach (Barth and Burandt, 2013) and a shift towards active, participative, and experiential learning methods that engage the learner and make a real difference to their understanding, thinking and ability to act.

Below is a list of five pedagogic components that encompass a range of learning and teaching approaches that staff at Ulster might use to bring these elements into the learning environment.

1. **Thinking creatively for future scenarios** – by using role play, real-world inquiry, futures visioning, problem-based learning, and providing space for emergence.
2. **Systemic thinking and analysis** – the use of real-world case studies and critical incidents, project-based learning, stimulus activities, and the use of the campus as a learning resource.
3. **Collaborative learning** – including contributions from guest speakers, work-based learning, interdisciplinary/ multidisciplinary working, and collaborative learning and co-inquiry.
4. **Participatory learning** – with emphasis on group or peer learning, developing dialogue, experiential learning, action research/learning to act, and developing case studies with local community groups and business
5. **Critical reflection** – including the more traditional lecture, but also newer approaches such as reflexive accounts, learning journals, and discussion groups.

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## References

Barth, M.; Burandt, S. (2013) Adding the “e-” to Learning for Sustainable Development: Challenges and Innovation. *Sustainability* 5, 2609–2622.

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Tilbury, D. & Wortman, D. (2004). *Engaging people in sustainability*. Gland, Switzerland & Cambridge, UK: Commission on Education and Communication, IUCN.