"One child, one teacher, one book, one pen can change the world."

Malala Yousafzai

United Nations, 12 July 2013
But what is ESD? Theory to Practice

Education for Sustainable Development (ESD) empowers everyone to make informed decisions for environmental integrity, economic viability and a just society for present and future generations, while respecting cultural diversity. (UNESCO 2013)

The National Strategy on Education for Sustainable Development (IRELAND, 2014) aims to....equip learners with the relevant knowledge (the ‘what’), the key dispositions and skills (the ‘how’) and the values (the ‘why’) that will motivate them and empower them throughout their lives to become informed active citizens who take action for a more sustainable future.
What is Sustainable Development

Sustainable Development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (United Nations 1987)

The UN Sustainable Development Agenda (2016) – 17 Goals 169 Targets:

Irelands Key Role and Key Player
Education for Sustainable Development (ESD)

ESD, an enabler for sustainable development:

ESD is galvanizing pedagogical innovation:

Importance of stakeholder engagement for ESD

ESD has spread across all levels and areas of education

ESD is a catalyst for a transition in education, teaching, learning and professional development.
Technology is the cross-cutting pedagogical spark for all three pillars of sustainable development:

- Economic growth
- Social inclusion and
- Environmental balance
ICTs and the 2030 Agenda for Sustainable Development and the SDGs

“The spread of information and communication technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies, as does scientific and technological innovation across areas as diverse as medicine and energy.”

Four specific targets that reference ICT in the SDGs:
- Education (SDG4.b)
- Gender (SDG5b)
- Infrastructure for universal and affordable access to ICTs and the Internet in LDCs (SDG9.c)
- Means of Implementation (SDG17.8)
How education and technology underpin ALL of the SDGs

https://www.youtube.com/watch?v=8MGhaJVO2s&index=1&list=PLpoIPNIF8P2NUFB2p2Hjwn273LP1Z3XkR
The New Generation Gap:

Digital Natives VS Digital Immigrants

Cursive Writing VS Computer Coding
The Digital Native and the Junior Cycle

Core Principles of the ‘New Framework’ for the Junior Cycle and ‘Statements of Learning’ given that these ‘juniors’ spend up to 5 hours a day online. Statement #:

6. Appreciates and respects how diverse values, beliefs and traditions have contributed to the communities and cultures in which they live.

7. Values what it means to be an active citizen, with rights and responsibilities in local and wider contexts.

8. Understands the origins and impacts of social, economic and environmental aspects of the world around them.

10. Has the awareness, knowledge, skills, values and motivation to live sustainability.

Ireland Department of Education
The Junior Cycle, Gender and the growing STEM Gap 1976 vs 2016
Digital Literacy

Digital literacy is the ability to effectively and critically navigate, evaluate and create information using a range of digital technologies.

Digital literacy does not replace traditional forms of literacy.

Digital literacy is much more than a combination of the two terms.

DIGITAL information is a symbolic representation of data, and LITERACY refers to the ability to read for knowledge, write coherently, and think critically about the written word.
ESD and ‘Digital Literacy’ similarities

Both require:
- Learning to ask critical questions
- Learning to clarify one’s own values
- Learning to envision more positive and sustainable futures
- Learning to think systematically
- Learning to respond through applied learning and
- Learning to explore the dialectic between tradition and innovation
What’s real news?
What’s an ad?
Students can’t tell!
Digital Literacy and the Major Thrusts of ESD

Reorienting existing educational programmes to address sustainability

Increasing public understanding and awareness of sustainability

Providing training to advance sustainability across all sectors
The Digital Divide is an ESD Divide
The ESD impact in a ‘Digital’ Knowledge Society:

Will change our:
– Ways of thinking: creativity, critical thinking, problem-solving, decision making and learning.
– Ways of working: communication and collaboration.
– Skills for living in the world: citizenship, life and career skills, and personal and social responsibility.
The Critical Challenge for ESD

Data ≠ Information ≠ Knowledge ≠ Wisdom
“Education is the most powerful weapon which you can use to change the world.”
Nelson Mandela