Learning for Sustainability in Scotland: origins, progress and prospects

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Lecture outline

Standing on the shoulders of giants - an unsettling experience

Learning for Sustainability: SDGs, personal ethics and a global context

Education policy issues: Learning for Sustainability

‘Learning for Sustainability': A policy agenda of the future?

Standing on the shoulders of giants – an unsettling place to be
James Hutton (1726-1797)
Sir Patrick Geddes (1854-1932)
Prof John Smyth (1924-2005)

What happens to us
Is irrelevant to the world’s geology
But what happens to the world’s geology
Is not irrelevant to us
We must reconcile ourselves to the stones
Not the stones to us

Why Scotland?
Taking the ‘long-view’ of sustainability
We see no vestige of a beginning, no prospect of an end

James Hutton, *Theory of the Earth*, 1788

Siccar Point, East Lothian. Historically the most important geological site in the world ...
The gap between the vertical and horizontal rocks is 430-860 Myr = 70 Myr

The ‘Anthropocene’: A distinct geological stratum?

James Watt (1736-1819) - Steam engine
James Young (1854-1932) - Distilling paraffin from coal and oil shales
Deep-mined coal
Deep-sea oil exploitation
Learning for Sustainability: SDGs, personal ethics and a global context
It's not all about polar bears!

- Qualitative research reveals that in motivated individuals who have already adopted lower-carbon lifestyles, protecting 'the environment' *per se* is not the primary value stimulating most interviewees' action; typically, they were more concerned about the impacts of climate change on people in developing countries.
- Biospheric values were important but not as important as altruistic values.

Rachel Howell, 2013
So we need ESD and Global Citizenship then?

The role of contact with ‘nature’

- Influences on the development of pro-environmental behaviours included ‘direct contact with nature, eco-literacy (knowledge of basic ecological principles and understanding of one’s place in the ecosystem), sense of place, connection to nature, critical and reflective thinking skills etc, and a sense of being willing to take responsibility for one’s actions’ (and so become agents of change) (Christie & Higgins, 2012).

- ‘Education, specifically the process of teaching and learning outdoors, is well placed to deliver aspects of these positive, connecting experiences’. This means that a rounded concept of learning for sustainability must acknowledge the significance of what is often called ‘global citizenship’ (as per Howell’s research) and outdoor learning experiences. (Christie & Higgins, 2012)

- ‘Nature immersion elicited ‘higher valuing of intrinsic motivations’ and ‘lower valuing of extrinsic aspirations, whereas those immersed in ‘non-natural environments’ reported increased valuing of extrinsic aspirations and no change of intrinsic aspirations’ (Weinstein et al, 2009).

We are all dependent on planetary systems – a part of rather than apart from the environment
Outdoor Learning can help young people engage with biodiversity and understand and care about complex issues – e.g. ‘ecosystem services’, sustainability & climate change.

“A useful text?“

“To be honest, and I don’t want to hurt your feelings, but I started reading this and I stopped after the first paragraph – it was boring.”

Ella Higgins (aged 11)

So we need ESD, Global Citizenship and immersive experiences in nature then?
A report for UNESCO to mark the end of UN DESD – exploring associations between 20 case-study schools that commit to LfS/Outdoor Learning and their measures of attainment.

Students in these schools showed:
- enhanced learning, motivation & readiness to learn;
- development of skills for life, learning & work;
- increases in confidence;
- improved reputation & standing of the establishments in their communities; improved staff morale, wellbeing & motivation;
- enriched ethos of school & improvements to the community spirit.

The contributions of ESD to ‘quality education’ (UNESCO)

- Education is more effective when global and local sustainability issues are integrated throughout the curriculum. When curricula is delivered in local social, economic, and environmental contexts, traditional learning outcomes are maintained or even heightened while additional, enhanced, and transformational learning occurs to both primary and secondary students.
- All of these attributes coincide with higher order skill levels in the PISA tests.
- ESD and PISA are synergistic in many ways.

Education policy issues: Learning for Sustainability
Policy drivers for Learning for Sustainability

- Historic/longstanding interest in ‘sustainability education’ in Scotland
- Commitment to recycling and renewable energy – and related education
- Endorsement of UN Decade of Sustainable Development
- Collaborative development on a national scale – between Government, NGOs, NDGBs, academia
- ‘Divergent evolution’ - policy distinctiveness and divergence from the rest of the UK

Climate Change (Scotland) 2010 Act

Scotland’s demand for electricity should be met by renewables by 2020, and that a greener economy could support 130,000 jobs by 2020.

(Strategic priority – “Transition to a Low Carbon Economy”)
‘If everyone in the world consumed natural resources at the rate we do in Scotland, we’d need three planets to support us’

WWF Briefing Paper (2010), Defining One Planet Schools

‘Learning for Sustainability’ Timeline

- 2010 – ‘Scottish National Party’ make manifesto commitment to One Planet Schools
- 2011 May - SNP win election
- 2011 November – ‘One Planet Schools Working Group’ established by Dr Alastair Allan, Minister for Learning, Science & Scotland’s Languages
- 2012 December - Working Group submit Learning for Sustainability Report to Scottish Government
Definitions …

The members of the Working Group agreed on the term learning for sustainability as it was closest to the remit of the Working Group, and this is the term used by the General Teaching Council in the revised Professional Standards for teachers:

… a whole school approach that enables the school and its wider community to build the values, attitudes, knowledge, skills and confidence needed to develop practices and take decisions which are compatible with a sustainable and more equitable future.
One Planet Schools Ministerial Advisory Group

Five Key Recommendations

• all learners should have an entitlement to Learning for Sustainability;
• every practitioner, school and education leader should demonstrate Learning for Sustainability in their practice;
• every school should have a whole school approach to Learning for Sustainability that is robust, demonstrable, evaluated and supported by leadership at all levels;
• school buildings, grounds and policies should support Learning for Sustainability;
• there should be a strategic national approach to supporting Learning for Sustainability.

Scottish Ministers accepted all 31 recommendations in March 2013

Learning for Sustainability Implementation Group

The role of the Implementation Group is to drive forward the 31 recommendations of the Learning for Sustainability Report in the context of the curriculum.

The group will report progress to Scottish Ministers by the March 2016.

Secretariat is provided by Scottish Government and the UN Centre of Expertise in ESD (LiSScotland)
The General Teaching Council for Scotland
Professional Standards for Teachers

Leadership

Values

Learning for Sustainability

"Valuing as well as respecting social, cultural and ecological diversity and promoting the principles and practices of local and global citizenship for all learners."

UN Regional Centre of Expertise on ESD for Scotland
‘Learning for Sustainability Scotland’

- Scottish Government support
- Scottish Universities and Colleges support
- Voluntary Sector support
- Key focus is on community involvement more so than formal education
- Along with other NGOs and NDGBs - a key means of delivering Government LfS objectives
Universities and Colleges: Practical, pragmatic and philosophical approaches

- Education, public awareness and training
- Colleges – traditional and increasing focus on sustainability – especially in ‘trades’
- Academic critique and public discussion (Aberdeen, Edinburgh, Glasgow, Stirling etc.)
- Teacher Education – and the TEIs (especially Glasgow & Edinburgh).
- Pre-service training and continuous professional development

Pre-service training of teachers

- What do we tell applicants before they enrol on our programmes?
- What do we prioritise when they are ‘in the door’?
- What is explicit, implicit and null (Eisner, 1985)
Pre-service training and the GTCS Professional Standards

A proposed disclaimer for Teacher Education Institute websites?

The Professional Standards of the General Teaching Council require commitment to 'values', 'leadership' and 'learning for sustainability'. Are you willing to agree to commit to these throughout your future career as a teacher? YES/NO

If 'Yes' press 'Continue' to complete your application
If 'No' – go and do something else as a career – have a good life (preferably not damaging our planet)!

CONTINUE

Continuous professional development for teachers

- Professional Development opportunities through Government Agencies (Education Scotland), NGOs (e.g. RSPB, Eco-Schools etc.), Non-Departmental Governing Bodies (Forestry Commission, Scottish Natural Heritage), Charities (Field Studies Council) and universities
- Edinburgh University efforts
  - Massive Open-access On-line Course (MOOC) in 'LfS - Developing a personal Ethic'
  - Learning for Sustainability - Connecting Classrooms' (British Council)
  - Audit tool for TEIs - General Teaching Council, and LiSS (Gordon Cook Trust)
- Outdoor Environmental Education – experiential approaches to learning - 5-day training course (EU Comenius Project since 2003)
- University-wide on-line course in 'Sustainability & Social Responsibility' (for 2016-17)
- MOOC in 'Learning for Sustainability: for teachers and facilitators'

The ‘Three Hs’
Education for Heart, Hand & Head
Contemplate the significance of ‘deep time’ for you... What are you made of? ‘Elemental’ Learning... From ‘Problem-based learning’ to ‘Issue based Exploration’.

Learning for Sustainability: Developing a personal ethic

Sessions:
- Week 1: January 10, 2015
- Week 2: January 24, 2015
- Week 3: February 7, 2015
- Week 4: February 21, 2015
- Week 5: March 7, 2015
- Week 6: March 21, 2015
- Week 7: April 4, 2015
- Week 8: April 18, 2015

What are you made of?

Water + Carbon Dioxide = Plant growth + Oxygen
Continuous professional development for teachers

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'Learning for Sustainability': A policy agenda of the future?
Learning for Sustainability – policy coherence

New Programme for Government

Health

Environment and Natural Resources

Education and Skills

International Development

CIE

Skills

LIS

UNESCO has provided a focus for coherence on its Life Lines

Climate Change

Further and Higher Education

LD

Template User Guide to Enhance Biodiversity and Promote Ecology in Sustainable Schools

This document should be used as a guide for meeting the criteria set out within Section 7: Sustainability of the Scottish Building Standards Non-Domestic Technical Handbook
The SDGs offer a vision for the world that I believe the people of Scotland share … the aims set out by the UN form an agenda for tackling some of the world's greatest problems. Unlike the Millennium Development Goals these will not be restricted to developing countries but will be universal, applying to all countries including Scotland.
Nicola Sturgeon, First Minister, July 2015

This government is doing all in its power to eradicate poverty in Scotland – but it will never be an excuse for poverty to be an excuse for failure … and we will not have completed our work until every child in every community has every chance to succeed.
Angela Constance, Education Secretary, May 2015

SDGs and ‘Closing the attainment gap’
United Nations: Sustainable Development Goals

SDG goal 4.7
By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.

The Scottish Parliament general election is due to be held on Thursday 5 May 2016. We will elect 129 members to the Scottish Parliament. What will be in the manifestos of the political parties?

The goal of education is to form the citizen. The citizen is a person who, if need be, can re-found his civilisation.
Eugen Rosenstock-Huessy (1888-1973)
Learning for Sustainability in Scotland: origins, progress and prospects

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Key websites for LfS developments in Scotland …

- GTCS Revised Professional Standards
  http://www.gtcs.org.uk
- Learning for Sustainability Ministerial Implementation Group
  http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/LearningforSustainability
- Learning for Sustainability Scotland – EM University Regional Centre of Expertise in ESD (Scotland)
  http://learningforsustainabilityscotland.org/
- UNESCO Re-orienting Teacher Education to Address Sustainable Development
- University of Edinburgh Outdoor Learning resources etc.
  www.education.ed.ac.uk/outdoored/
- Free to access MOOC (Massive Open Online Course) in Learning for Sustainability (University of Edinburgh)
  https://www.coursera.org/course/sustainability
- Education Scotland (2015) How Good is Our School

MSc Programmes at the University of Edinburgh

There are three MSc programmes available at Moray House School of Education. All are available on a full-time or part-time (up to 8 years) basis, and most of the taught courses can be run as non-credit bearing CLPL.

The three programmes are:
- Learning for Sustainability
- Outdoor Education
- Outdoor Environmental & Sustainability Education

There are currently Scottish Funding Council scholarships available.

Visit the website for details:
www.education.ed.ac.uk/outdoored/