ESD and Quality Education: the third reason

The Learning Teacher Network
Istanbul, 2014

Charles Hopkins
UNESCO Chair, York University, Toronto, Canada
Origin of ESD

• Agenda 21 - 40 negotiated issues grouped in four sections:
  1/ Social & economic issues
  2/ Environmental issues
  3/ New major groups to be engaged
  4/ **Means of implementation**

• ESD came from the section on “**Means of Implementation**”
  – Plus part of every other chapter of Agenda 21
  – ESD is found in the UN Conventions on CC, Biodiversity,
    Desertification, Forestry, all UN Conferences Work Programmes
    etc.
What is Education FOR Sustainable Development

ESD/EDS is the contribution of the world’s education systems, public awareness systems, training systems to enable us to learn our way towards a more sustainable future.

Education, Public Awareness and Training (ESD) (Chapter 36 of Agenda 21)
The 4 Thrusts of ESD

1. Access to quality basic education
2. Reorienting existing education
3. Public awareness and understanding
4. Training programs for all sectors

Agenda 21 -92, UNESCO-96, UNCSD -98, JPOI-2002
Emergence of ESD

Activity/Implementation

1992 96 2000 02 05 09 12 14

?
Many Possible Responses to ESD in Schools

1. Ignore:
2. Form a club: (eco-school or UNESCO ASP)
3. Teach **ABOUT** sustainable development
4. Invent another adj. “Sustainability Ed”
5. Engaging ESD in core disciplines: (Projects)
6. ESD as very purpose of our education systems (educate **FOR** Sust. Dev) including TEI, Ministry of Ed, private sector, etc.
7. Embed within the sustainable community initiatives (RCE)
History
Geography
P. E.
Science
Music
Economics
Art
Language
Math
Social Studies

The Curriculum Castle
Understanding ESD

Manitoba Ed Goals

1/ To ensure education in Manitoba supports students experiencing and learning about what it means to **live in a sustainable manner**.
“Our aim is to enhance pupils’ coherent identity and positive self-conception, develop their generic competences and subject-specific knowledge and skills and through that help pupils to develop themselves as humans and citizen who are able and willing to live in a sustainable way and build a sustainable future.”

“We also say that our schools have to develop their working culture so that by their own activities they both exemplify as well as promote sustainable wellbeing”.

Irmeli Halinen, Finnish National Board of Education
Three Reasons for ESD

1 – World leaders agree in 1992 to use education, public awareness and training to implement Agenda 21
Three Reasons for ESD

2 – It is our moral responsibility
Three Reasons for ESD

3 - ESD contributes to a quality education
   - purpose
   - content
   - pedagogy
Quality Education?

“There is no one definition, list of criteria, a definitive curriculum, or list of topics for a quality education.
- Quality education is a dynamic concept that changes and evolves with time and changes in the social, economic, and environmental contexts of place.
- Because quality education must be locally relevant and culturally appropriate, quality education will take many forms around the world. (UNESCO, 2005, p. 1)”
Possible ESD contributions to Quality ED

- Achievement
- Engagement
- Attendance/retention
- Relevant learning
- Attitudinal change
- Skill set development:
  - Collaboration
  - Communication
  - Learning to learn
  - Applying disciplinary skills
- Behaviour
- Relationships
- Creativity
- School safety
- Reduced vandalism
- Equity in achievement
- Problem solving
- Responsibility
- Global citizenship
- Concern for others
PISA 2009 Results

Reading
Korea
Finland
Singapore
Canada
New Zealand
Japan
Australia
Netherlands
Belgium
Norway

Mathematics
Singapore
Korea
Finland
Lichtenstein
Switzerland
Japan
Canada
Netherlands
New Zealand
Belgium

Science
Finland
Singapore
Japan
Korea
New Zealand
Canada
Estonia
Australia
Netherlands
Germany
ESD and Quality Education Research

• How can ESD update and improve educational purposes/outcomes?
• How can ESD help to improve and enrich curriculum development?
• How can ESD guide students to have the knowledge, skills and values to care for and solve the sustainable development issues that will arise in their lifetime?
• How can ESD help strengthen the partnerships between schools and other stakeholders, including the surrounding community?
• How can ESD promote innovation in the teaching-learning conceptual framework?
1 - How can ESD update and improve educational purposes/outcomes?

“Interviews reported that students studying in ESD schools in several countries (China, Estonia, Europe, Germany, Japan, Mongolia, Peru, Sweden, the Netherlands, United Kingdom) developed stronger critical thinking skills, a deeper understanding of the topics under study, and better research skills as well as acquiring the necessary preparation for the job market (Latvia).”
1 - How can ESD update and improve educational purposes/outcomes?

“Students also demonstrated excellent communication, writing and mathematical skills in Germany while university professors in Sweden stated that graduates from ESD schools entered university with an excellent preparation for post-secondary studies”
2 - How can ESD help to improve and enrich curriculum development?

“..several reports (Canada, Europe, Mongolia, Peru, Scotland, Taiwan, United Kingdom, United States) mentioned that students found the ESD approach to increase the relevance of the content they were learning.”
2 - How can ESD help to improve and enrich curriculum development?

“ESD was reported as giving more “meaning” to school curricula because it was well adapted to local themes and priorities and thus created a more interesting learning context for students (Europe, Sweden, United States). It appears that the increased curricular relevance associated with ESD is accompanied by increased student engagement and commitment in their studies (Canada, China, Europe, Germany, Japan, Peru, Scotland, Sweden, United States), self-confidence (Germany), and self-esteem (South Korea).”
3 - How can ESD guide students to have the knowledge, skills and values to solve the sustainable development issues that will arise?

“Researchers reported that ESD contributed to developing student’s abilities and confidence to adapt to evolving complex situations (Europe, Latvia, Mongolia, Sweden) and developing better systems thinking skills (Japan, Mongolia, United States), ....”
3 - How can ESD guide students to have the knowledge, skills and values to solve the sustainable development issues that will arise?

“….stating that ESD helped develop student’s competencies (facts and understanding, skills and attitudes) which are constantly interacting and evolving (Germany, Sweden),”
4 - How can ESD help strengthen the partnerships between schools and other stakeholders, including the community?

• “When children become engaged with community issues, the community feels more invested in the solution. Evidence of this was reported with respect to local communities, organisations, universities, local governments... (Canada, Europe, Germany, Japan, Latvia, Mongolia, Peru, Scotland, Sweden, Netherlands, United States).”
5 - How can ESD promote innovation in the teaching-learning conceptual framework?

“ESD also led to an increased use of information and communication technologies (Estonia, Japan, Latvia, Sweden). In some cases, the addition of ESD to education systems has led to the development and increased use of new educational materials, (Europe, Japan).”
WORLD CONFERENCE
Education for Sustainable Development

Aichi-Nagoya, Japan
10-12 November 2014
**Priority action areas**

1. Advancing policy
2. Transforming learning and training environments
3. Building capacities of educators and trainers
4. Empowering and mobilizing youth
5. Accelerating sustainable solutions at the local level
Conference objectives

1. Celebrating a Decade of Action
   “What have we achieved, what are the lessons learnt?”

2. Reorienting Education to Build a Better Future for All
   “How does ESD reinforce quality education?”

3. Accelerating Action for Sustainable Development
   “How are sustainability challenges addressed through ESD?”

4. Setting the Agenda for ESD beyond 2014
   “What are the strategies for our common future?”
Global Action Programme

Where do we stand?

"We resolve to promote education for sustainable development ... beyond the United Nations Decade of Education for Sustainable Development."

- Increased presence of ESD internationally and nationally.
- Major challenges:
  - from pilot to policy
  - from small scale to large scale
  - from margin to mainstream
- A Global Action Programme to scale up ESD.
Global coordination mechanism to be put in place, which may comprise:

- A regular forum for ‘Lead Partners’ and other interested stakeholders
- A coordination mechanism for UN agencies
- Support to national focal points
- A periodic global ESD report
- A clearinghouse of good practices from the implementation of the Programme
Implementation of the Programme

To successfully launch the Programme, identify ‘Lead Partners’ in each of the 5 priority action areas responsible for:

- Convening and advocacy
- Executing/implementing concrete projects
- Reporting
- Mobilizing resources

Secretariat by UNESCO (TBC)
GAP and LTN?

“Whither and Whence?”
New SDG Discussion Foci
**Step 1 - Individual Behaviour Change (IBC)**

$$IBC = A + M(m_1 + m_2 + m_3 + m_4 + m_5 + m_6 + m_7 + m_8) + K + O + Sk + R + E + C(c_1 + c_2 + c_3) + Gu$$

**Step 2 - Shifting Societies (SS)**

$$SS = IBC + Rew + Me + C^3 + Pw + G - + IC$$

**M - Motivation**

- m1 – commitment
- m2 – accountability
- m3 – relevance
- m4 – better, easier, etc.
- m5 – values alignment
- m6 – deemed helpful
- m7 – belief
- m8 – believed to be doable

**C - Cultural acceptance**

- c1 - societal
- c2 – institutional
- c3 – individual level

**K – knowledge**

**O – opportunity**

**A – awareness**

**R – resources**

**Sk – skills**

**Rew – rewards (perceived)**

**Me – meaningfulness**

**C2 – Cultural accept (squared)**

**Pw – Political will**

**G – Governance**

**Ic – International collaboration**

**E – ease**

**Gu – Guilt**

Charles Hopkins
Systemic Approach

- Governance
- Education for Sustainable Development
- Curriculum
- Teaching / Learning
- Partnerships
- Human Capacity Building
- Facilities Operations
A Sustainable Future As a Goal Of Ed.
Strengths Model: Starting Point for Formal ed.

• No single discipline/group/teacher/employee can do it all or own ESD

• Every discipline/group/teacher/employee can and should contribute

• Some individuals or sectors can take lead roles in initiating the reorientation discussion

• Leadership, coordination and resourcing “strengths” are key as a “whole institution” or systemic undertaking is embedded from policy to practice.
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<tr>
<th>Bloom’s Taxonomy and ESD</th>
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<th>1</th>
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<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>Knowledge</td>
<td>Comprehension</td>
<td>Application</td>
<td>Analysis</td>
<td>Synthesis</td>
<td>Evaluation Creating</td>
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<tr>
<td>Remember previously learned information</td>
<td>Demonstrate understanding of facts</td>
<td>Apply knowledge to actual situations</td>
<td>Break into simpler parts to find generalizations</td>
<td>Compile ideas into a new whole or alternative solution</td>
<td>Create a new approach or make and defend judgements</td>
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<tr>
<td>Define the principles inherent in sustainable development</td>
<td>Give example of an extreme unsustainable practice</td>
<td>Create a new more sustainable approach to an issue</td>
<td>Identify an emerging trend in unsustainable practice</td>
<td>Compile the total ecological footprint of your institution</td>
<td>Create and evaluate the impact of a sustainability issue solution</td>
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3 Co-dependent Aspects of ESD in HE

1/ Education & Research
Curriculum reorientation
Co-Curricular Education & Student Organizing
Events
Research

2/ Campus Operations
Climate
Energy
Waste

3/ Planning, Administration & Engagement
Assessments & Ratings
Coordination & Planning
Diversity & Inclusion
Funding
UBC Graduates Sustainability Attributes

STUDENT ATTRIBUTES

Holistic Systems Thinking
Everything is connected

Sustainability Knowledge
Understand the context, know the challenges

Awareness & Integration
Connect what I know with what you know

Acting for Positive Change
Contribute to co-creating a better future
Responsibility

The Sustainability Pledge

"I pledge to explore and take into account the social, economic and ecological consequences of my decisions. I pledge to use the knowledge I gain at UBC to improve the sustainability of the communities in which I live, learn and work."
Partnering

Learning from other disciplines
Presenting ESD

• Awareness
• Understandable
• A “must-have/do”, popular choice but ethical
• Seen as “Do-able”
• Exemplars from prestigious sources
• Cost saving or affordable or prestigious
• An opportunity verses a problem
• Digestible and manageable

Tony Piggott – CEO J.W. Thompson
Wicked Issue Dilemma Framework

Take Action

- Prepared
  - Save resources
  - Deeper understanding
  - No “collapse” (econ/envi/soc)
  - Reduced suffering
  - Saleable technology
  - Economic infusion

- Wasted $
  - Resources diverted
  - Other issues unaddressed
  - Research and understanding
  - Economic activity
  - Some economic recovery-tax
  - Some activity salvageable

Don’t Act

- Unprepared
  - Maximum damage/collapse
  - No understanding/expertise
  - More expensive to remedy
  - No transferable knowledge
  - Time-lag to begin
  - No equipment/infrastructure

- Saved $
  - Resources used elsewhere
  - Other knowledge gained?
  - No “collapses”
  - Save resources
  - Deeper understanding
  - No “collapse” (econ/envi/soc)
  - Reduced suffering
  - Saleable technology
  - Economic infusion
Enough, for all, Forever

African elder 2002
Well-being, For all, Forever

Finnish perspective
RESOURCES AND CAPABILITIES
- Income & wealth
- Knowledge & skills
- Physical & mental health
- Social capital
- Information
- Time
- Political power
- Natural resources

EVERYDAY ACTIVITIES AND ROLES
- Worker
- Consumer
- Family member
- Relative
- Friend
- Hobbyist
- Citizen

SENSE OF COHERENCE
- Comprehensibility of life
- Manageability of life
- Meaningfulness
  - Higher purpose
  - Serving others
  - Flow activities

MASLOWIAN NEEDS
- Self-actualization
- Self- and social-esteem
- Love and belonging
- Safety
- Physiological needs (thirst, hunger, ...)

ENVIRONMENT
- Natural environment
- Infrastructure
- Technologies
- Organizations
- Demographics
- Culture (values & norms, activities)
- Institutions (laws & regulations)
- Politics
- Economy
- Labor markets
- Media

FEEDBACK FROM NEEDS' SATISFACTION TO CULTURE, ECONOMY AND POLITICS

FEEDBACK FROM NEEDS' SATISFACTION TO INTERNAL CAPABILITIES

FEEDBACK FROM HAPPINESS & FLOURISHING

ACCUMULATING MICRO-EXTERNALITIES

SUBJECTIVE WELL-BEING

ACCUMULATING MICRO-EXTERNALITIES