Addressing the Effectiveness of [ESD] Learning Performance

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Current UNESCO and RCE Vision documents emphasize capacity building, learning and competence development.

Evaluation of the progress made on ESD implementation is also emphasized as important objective.

To develop an assessment tool like indicators for M&E of ESD, it is important to know for e.g.:

- how educational inputs and throughputs impact the context and processes of learning
- and, how to achieve improvements in learning performance (& ESD outputs)
Challenge of assessment/learning performance (LP)

Addressing learning performance using standardized methods of assessment (i.e., performance-based testing) has been difficult largely because:

- The pedagogical objectives ...... have a narrow focus;
- Curriculum is compartmentalized;
- The individual is assessed ...... independent of motivation and one’s environment;
- Teachers mainly concentrate on helping students pass the tests;
- Only the measurable aspects/“tangibles” (e.g. knowledge) get measured; values-based testing overlooked.
Challenge of assessment/learning performance

The literature is clear that our present educational system needs a complete overhaul to provide learners with skills to meet (current and future real-world) challenges.

Furthermore, UNESCO is clear about the need for assessment that not only pays attention to knowledge competency but also values, skills, perception and behaviours.

- “Traditionally, literacy, numeracy, and disciplinary knowledge are assessed using standardized tests.......... however, these do not measure many aspects of quality education. Missing are assessment and evaluation of life skills, perceptions, behaviours and values, which are part of quality education.............”

LEARNING PERFORMANCE (LP) EVALUATION

In trying to understand what constitutes effective ESD LP, we have attempted to:

- Identify what we call Elements of ESD LP by investigating the characteristics/aspects of effective ESD learning that are
  - Grounded in several educational theories & learning methods (Reflection);
  - Validation using the RCE practice cases (Action).
The overall framework of our Understanding and World-view and Perspective

Capacities needed to be able to contribute to SD, i.e., knowledge, skills and values traditionally referred to when discussing the content of ESD

The Educational Theories and Learning-Teaching Methods that are used to ground the entire instruction and teaching of ESD

Incorporation of Multi-stakeholder, Social Learning, Networking & Partnerships processes that ESD engages with

Educational Contents

Sustainability Competencies

Learning Processes

Cooperative Learning Relationships

Framework of Understanding & World-View

Progressive Pedagogies

4 ELEMENTS OF ESD LEARNING PERFORMANCE
Learning Processes 1: Elemental Aspects/Characteristics

- Student-centred, active learning
- Action/experience–oriented learning
- Critical reflection and problem solving
- Knowledge production through iterative interaction
- Life-long learning
- Cyclical process of collective inquiry

Progressive Pedagogies

Educational Theories & Learning-Teaching Methods
Learning Processes 2: Elemental Aspects/Characteristics

- Inclusion & network structure for interaction
- Participation and power sharing (shared ownership /commonality)
- Clear definition of roles and responsibilities
- Accountability of individual/groups
- Group processing: managing the different knowledge systems to make sense of the available information
- Opportunities for reflexivity and discourse
- Positive interdependence and building of trust
Learning Content 1: Elemental Aspects/Characteristics

KNOWLEDGE
- Climate Change
- Disaster Risk Reduction
- Sustainable Consumption and Production/Education for Sustainable Consumption
- Indigenous Knowledge
- Well-being, Development & Environmental Quality
- Resilience and Socio-ecological Systems

SKILLS
- Critical thinking, systems thinking, complex thinking, real-world problem-solving,
- Seeking alternative solutions
- Adapting to change & advocating for change
- Future-mindedness
- Social action, collaboration and cooperation,
- Conflict resolution, negotiation
- Creativity, imagination

VALUES
- Respect
- Care-empathy, Charity
- Citizenship
- Stewardship
- Motivation
- Social and economic justice
- Empowerment
- Commitment, cooperation, compassion
- Self-determination, and self-reliance
Learning Content 2: Elemental Aspects/Characteristics

- Holism & Integration
- Systems thinking
- Interdisciplinarity and Cross-Boundary
- Cultural relativism and social constructivism
- Pattern recognition, system design from patterns to details (synergy)
Integrative & pluralistic system for knowledge generation and codification

Educational Theories & Learning-Teaching Methods

Social Learning, Networking & Partnerships

Sustainable Competencies

Progressive Pedagogies

Cooperative Learning Relationships

Values

Framework of Understanding & World-View

Skills

Knowledge Skills & Values

Educational Contents

4 ELEMENTS OF ESD LEARNING PERFORMANCE

Learning Processes

Educational Contents

Knowledge Skills & Values

Integrative & pluralistic system for knowledge generation and codification
The overall goal is to bring together these elements into an actionable framework to drive social change, which means the educational/learning processes and content that seek to advance sustainability should exhibit these and other related characteristics.

Now we are trying to apply these elemental characteristics to the RCE practice cases in order to identify those aspects/learning processes and content that could improve ESD learning performance.

‘Not everything that counts can be measured. Not everything that can be measured counts.’ (Albert Einstein).

THANK YOU
1. The second activity is on learning performance and how to evaluate the quality of learning performance for ESD in a way that helps start to move backwards from outputs to link up with system inputs (for developing indicators around). 2. Basically we have divided the main factors of ESD learning performance into 4 elements, which are:

1) Progressive Pedagogies: the types of educational theories and learning-teaching methods that are used,

2) Cooperative Learning Relationships: the inclusion of social learning, networking and partnerships as an important educational component of ESD,

3) Framework of Understanding and World-view: this is the integrative and pluralistic system for knowledge generation and codification promoted in SD and ESD (this may seem the trickiest to get, but it is attached to the idea of paradigm change often discussed with ESD topics), and

4) Sustainability Competencies: these are the knowledge, skills and values traditionally referred to when discussing the contents of ESD.

For the group activity, the second document has the format we will be working with. This is based on the division of the four elements, with an extra division under competencies to separate knowledge, skills, and values.

Then for each category there are two questions to think about.

1) The learning objective/goal -- identify a key learning objective for this element of ESD learning.

2) Educational Achievement - Identify what would be a visible outcome that would demonstrate achievement of this goal/objectives. Ideally, we would have three: Goal, then Strategy to reach goal, then visible Achievement; but for sake of time we have gone with just the two questions
<table>
<thead>
<tr>
<th>Elements</th>
<th>Learning Objective/Goal</th>
<th>Educational Achievement</th>
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<tbody>
<tr>
<td>Progressive Pedagogies</td>
<td>Please identify a key learning objective for this element of ESD learning?</td>
<td>Please identify what would be a visible outcome that would demonstrate achievement of this goal or objective?</td>
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<td>Educational Theories &amp; Learning Methods</td>
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<td>Cooperative Learning Relationships</td>
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<tr>
<td>Social Learning, Networking &amp; Partnerships</td>
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<td>Sustainability Competencies</td>
<td>Knowledge</td>
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<td>Linking Knowledge, Skills &amp; Values to Action</td>
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Now we are trying to apply these elemental characteristics to the RCE practice case studies in order to identify those aspects/learning processes that could improve ESD learning performance.

- When you are standing on the edge of a cliff, a step forward is not progress ---Anonymous
- The world is coming to an end and you tell us to change our light bulbs? --- A little girl in a sustainability class
Cooperative Learning Relationships
Progressive Pedagogies
Sustainability Competencies
Framework of Understanding & World-View
Learning Processes
Educational Contents

4 ELEMENTS OF ESD LEARNING PERFORMANCE