How to Integrate Sustainability into General Education

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How to Integrate Sustainability into General Education

• Key Point 1: Whole Institutional Approach vs Stand-alone Projects on Sustainability
• Key Point 2: Concept of Whole Institutional Approach
• Key Point 3: Case Study – Integrating Sustainability Calendar in School Curriculum
5 main pillars of whole-institutional approach

Robert Steele, “Compass Education, whole-school strategies and approaches to ESD”, AtKisson Group
Institutions often begin with one sustainability activity, which then leads to others. Step by step the SD principles are embedded in all activity areas.
National Teacher Prize Top 10 Finalists, 2018
<table>
<thead>
<tr>
<th>Sustainable Development Goals</th>
<th>International Days</th>
<th>Date</th>
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<tbody>
<tr>
<td>End poverty in all its forms everywhere</td>
<td>International Day of Poverty Eradication</td>
<td>October 17</td>
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<td>End hunger, achieve food security and improved nutrition and promote sustainable agriculture</td>
<td>World Food Day</td>
<td>October 16</td>
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<td>Ensure healthy lives and promote well-being for all at all ages</td>
<td>World Health Day</td>
<td>October 7</td>
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<td>Ensure inclusive and quality education for all and promote lifelong learning</td>
<td>World Teachers’ Day</td>
<td>October 5</td>
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<td>Achieve gender equality and empower all women and girls</td>
<td>International Day for the Elimination of Violence against Women</td>
<td>November 25</td>
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<td>Ensure access to water and sanitation for all</td>
<td>World Water Day</td>
<td>March 22</td>
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<td>Ensure access to affordable, reliable, sustainable and modern energy for all</td>
<td>International Day of Energy Saving</td>
<td>November 11</td>
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<td>Promote inclusive and sustainable economic growth, employment and decent work for all</td>
<td>World Day of Safety and Health at Work</td>
<td>April 28</td>
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<td>Build resilient infrastructure, promote sustainable industrialization and foster innovation</td>
<td>World Creativity and Innovation Day</td>
<td>April 21</td>
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<td>Reduce inequality within and among countries</td>
<td>Zero Discrimination Day</td>
<td>March 1</td>
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<td>Make cities inclusive, safe, resilient and sustainable</td>
<td>International Women’s Day</td>
<td>March 8</td>
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<td>Ensure sustainable consumption and production patterns</td>
<td>Green Consumer Day</td>
<td>September 28</td>
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<td>Take urgent action to combat climate change and its impacts</td>
<td>World Climate Change Day</td>
<td>May 15</td>
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<tr>
<td>Conserve and sustainably use the oceans, seas and marine resources</td>
<td>World Oceans Day</td>
<td>June 8</td>
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<tr>
<td>Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss</td>
<td>International Day of Biological Diversity</td>
<td>May 22</td>
</tr>
<tr>
<td>Promote just, peaceful and inclusive societies</td>
<td>International Day of Peace</td>
<td>September 21</td>
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<tr>
<td>Revitalize the global partnership for sustainable development</td>
<td>International Human Solidarity Day</td>
<td>December 20</td>
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• Key Point 1: Teacher's roles in Promoting Sustainability through Education
• Key Point 2: How to integrate topics via sustainability compass?
Teacher's roles in Promoting Sustainability through Education

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” - Brundtland report

To create an environmentally robust, socially equitable and economically fair world we have to have:

- A good legislation
- A good governance, and overcome corruption
- Our economic incentives and educational system should lead to promote environmentally and socially responsible business
- Environmental protection that is not only a responsibility of environmentalists, but of policy makers and citizens, who should participate in advocacy and protection
- Human rights should be secured
- Infrastructure and technologies should be innovative and preserve more resources
- And transformation in education
Integrative, critical envisioning and transformative Dimensions in ESD competences (UNECE, 2011)

The Competences for educators in education for sustainable development

Learning to know
The educator is knowledgeable...

- Past, present and future
- The basic causes of unsustainable development
- Sustainable development as an evolving concept
- The urgent need for change from unsustainable practices
- Towards achieving quality of life, equity, sustainability, and environmental sustainability
- The importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effective change
- The importance of preparedness, the unforeseen and a precautionary approach
- The importance of scientific evidence in supporting sustainable development

Learning to do
The educator is able to...

- Past, present and future
- Critically assess processes of change in society and envision worthwhile futures
- Communicate a sense of urgency for change and inspire hope
- Facilitate the evaluation of potential consequences of different decisions and actions
- Use the natural, social and built environment, including their own institution, as a context and source of learning

Learning to be
The educator is someone who...

- Past, present and future
- Is motivated to make a positive contribution to other people and their social and natural environment, locally and globally
- Is willing to take considered action even in situations of uncertainty

Achieve transformation
- People, pedagogy and educational systems
- Inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews
- Is motivated to make a positive contribution to other people and their social and natural environment, locally and globally
- Is willing to take considered action even in situations of uncertainty

Achieve transformation
- People, pedagogy and educational systems
- Is motivated to make a positive contribution to other people and their social and natural environment, locally and globally
- Is willing to take considered action even in situations of uncertainty

Holistic approach
- Intuitive thinking and practice
- Create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudices and preconceptions
- Work with different perspectives on dilemmas, issues, tensions and conflicts
- Connect the learner to their local and global spheres of influence

Envisioning change
- Past, present and future
- Critically assess processes of change in society and envision worthwhile futures
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- Facilitate the evaluation of potential consequences of different decisions and actions
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Learning to live together
The educator works with others in ways that...

- Past, present and future
- Facilitate the emergence of new worldviews that address sustainable development
- Enhance negotiation of possible futures

Learning for the Future, Competences in Education for Sustainable Development, UNECE, 2012
Competences for ESD

The holistic approach includes three interrelated components:
- Integrative thinking;
- Inclusivity;
- Dealing with complexities.

Envisioning change covers competences relating to three dimensions:
- Learning from the past;
- Inspiring engagement in the present;
- Exploring alternative futures.

Achieving transformation covers competences that operate at three levels:
- Transformation of what it means to be an educator;
- Transformation of pedagogy, i.e., transformative approaches to teaching and learning;
- Transformation of the education system as a whole.
Competences for Sustainability

- Systems thinking
- Futures thinking
- Values thinking
- Strategic thinking
- Collaboration competence
- Critical thinking
- Personal competence
- Creative thinking
- Integrated problem-solving competence

Future of Jobs Report, World Economic Forum
The Sustainability Compass

The Compass is an easy to understand tool for orienting people to sustainability. The Compass was created by AtKisson group “to better translate other sustainability frameworks into something more in line with the systemic, multi-perspective, and non-linear”. All four dimensions of the Sustainability Compass are interconnected in a web of cause-and-effect relationships.

- **N = Nature =**
  Environmental impact, resource use, waste, ecosystems and habitat, water, energy, climate change

- **E = Economy =**
  Production, consumption, employment and work, money, investment, debt, business, innovation

- **S = Society =**
  Governance, equity, transparency, security, culture, institutional management, levels of trust

- **W = Wellbeing =**
  Health, education, self-expression, happiness, relationships, family, creativity, quality of life
1. No Poverty
2. Zero Hunger
3. Health & Wellbeing
4. Quality Education
5. Gender Equality
6. Clean Water & Sanitation
7. Affordable & Clean Energy
8. Decent Work & Economic Growth
9. Industry, Innovation & Infrastructure
10. Reduced Inequalities
11. Sustainable Cities & Communities
12. Responsible Consumption & Production
13. Climate Action
14. Life below Water
15. Life on Land
16. Peace & Justice, Strong Institutions
17. Partnership for the goals

The Sustainability Compass and SDGs

The Sustainability Compass and SDGs

The Sustainability Compass and SDGs
Migration

Causes:
- How the nature degradation could become a driver for migration
- Natural Disaster that is push factor for ecological migration
- Scarcity of the resources

Consequences:
- Extra pressure on nature
- Over-exploitation of natural resources
- Resource scarcity

Causes:
- Economical crises
- Unemployment
- Lack of employment safety
- Low GDP and underemployment

Consequences:
- High supply of work force, High competition,
- Criminal rate growth due to unemployment
- Increase number of taxpayers

Causes:
- Low level of education
- Low level of health care
- Lack of democracy
- Poverty

Consequences:
- Demand on education
- Demand on health care
- Poverty eradication

Causes:
- Gender inequality
- Corruptive governance
- Dictatorship
- Rural/urban gaps

Consequences:
- Changes in age-sex structure
- Cultural diversity/crisis
- Coordination and cooperation

Causes:
- Low level of education
- Low level of health care
- Lack of democracy
- Poverty
1. Breiting, Mayer, Mogensen. “Quality Criteria for ESD-Schools”, Guideline to enhance the quality of education for sustainable development, 2005
8. Robert Steele, “Compass Education, whole-school strategies and approaches to ESD”, AtKisson Group