

Learning to Do

Education for Sustainable Living

Practices from around the world



Developing the ability to

- investigate
- apply
- adjust
- adapt
- facilitate



Partnership for Education and
Research about Responsible Living
www.livingresponsibly.org



Learning to Do: Education for sustainable living

The global Sustainable Development Goals (2015-2030) clearly state that, quality education is essential to achieving just, sustainable development for all. Peace and prosperity are dependent upon people everywhere acquiring new knowledge and skills that help them change their consumption patterns and become more creative, compassionate and active citizens.

Many initiatives are being taken all around the world to achieve more responsible ways of living in relation to our own lives, the lives of others and the natural environment. Our present challenge is to identify which policies and practices best facilitate education for sustainable living and what lessons can be learned from initiatives already being carried out in different countries.

This brochure is the fourth in a series that focuses on education for sustainable living in formal education systems as well as informal education and provides descriptions of three successful methodologies used around the world . These are:

1. Learning using values-based indicators
2. Active Learning using images and objects
3. Learning through social innovation, Looking for Likely Alternatives (LOLA)



Photo: Gunnar Lange-Nielsen

*“For the things we have to learn before we can do them, we learn by doing them.”
Aristotle, The Nicomachean Ethics*

Education for sustainable living is unavoidable

“The world is changing – education must also change...This means moving beyond literacy and numeracy, to focus on learning environments and on new approaches to learning for greater justice, social equity and global solidarity. Education must be about learning to live on a planet under pressure. It must be about cultural literacy, on the basis of respect and equal dignity, helping to weave together the social, economic and environmental dimensions of sustainable development.”

(Irina Bokova, Director-General of UNESCO, in Rethinking Education)

How does education for sustainable living differ from existing educational programs?

Education for sustainable living (ESL) involves rethinking definitions of human needs and desires. It includes learning about the principles of moderation and sufficiency as means of curbing social, economic and environmental imbalances. Education for sustainable living consists of the acquisition of knowledge, attitudes and skills necessary for functioning in today's society. As an important dimension of education for sustainable development, ESL is responsibility learning, which aims to contribute to the individual's ability to manage his or her own life while also participating in the stewardship of the global society's collective life.

Sustainable living encompasses aspects of life such as values, well-being, health, food, clothing, transport, energy usage, time usage and many more.



The life skills which are needed include the ability to:

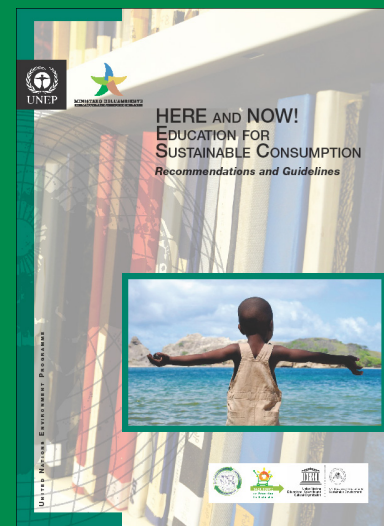
- **investigate** one's own values and actions as well as those of one's community and the world at large;
- **apply** new knowledge and understanding to one's daily choices;
- **adjust** previous attitudes and behaviour;
- **adapt** to new conditions and opportunities;
- **facilitate** constructive change in one's neighbourhood and with those one has contact with.

The U.N. Global Action Programme on Education for Sustainable Development (GAP) (2014-2019), continues the efforts begun during the U.N. Decade on Education for Sustainable Development (2005-2014) and endeavors to integrate the principles, values and practices of sustainable development into all levels and types of education and learning. The GAP has five Priority Action Areas: 1) Advancing policy; 2) Transforming learning and training environments; 3) Building capacities of educators and trainers; 4) Empowering and mobilizing youth; and 5) Accelerating sustainable solutions at local level.

To promote sustainable patterns of consumption and production (SCP) a global 10-Year Framework of Programs on SCP was adopted by the international community in 2012. One of these programs is entitled “Program for Sustainable Lifestyles and Education” and aims to foster the uptake of sustainable lifestyles as the common norm, with the objective of ensuring their positive contribution to addressing global challenges, such as resource efficiency and biodiversity conservation, climate change mitigation and adaptation, poverty eradication and social well-being.

Education for Sustainable Consumption (ESC) aims at providing knowledge, values and skills to enable individuals and social groups to become actors of change towards more sustainable consumption behaviours. The objective is to ensure that the basic needs of the global community are met, quality of life for all is improved, and inefficient use of resources and environmental degradation are avoided. ESC is therefore about providing citizens with the appropriate information and knowledge on the environmental and social impacts of their daily choices, as well as workable solutions and alternatives. ESC integrates fundamental rights and freedoms including consumers’ rights, and aims at empowering citizens for them to participate in the public debate and economy in an informed and ethical way.

Here and Now! Education for Sustainable Consumption,
UNEP 2010, p.11
http://unep.org/pdf/Here_and_Now_English.pdf



How can PERL/UNITWIN assist?

PERL/UNITWIN (The Partnership for Education and Research about Responsible Living) is an international network of experts, researchers, teachers and policy-makers that develop curricula, learning methods and materials about responsible, sustainable living. PERL/UNITWIN contributes to building the capacity of educators and sharing information about relevant initiatives from around the world that help us all build a world of unity in diversity. PERL/UNITWIN is, coordinating the education part of the 10-Year Framework of Programs on Sustainable Lifestyles.

Knowing what other regions are doing often stimulates ideas about how to initiate or further develop policies and practices in one’s own country. PERL can offer advice based on over 20 years of experience. PERL can also assist with adapting approaches, methods and materials to local conditions. PERL can provide information, about organisations and institutions that can assist in capacity building in countries around the world.

For more information visit: www.livingresponsibly.org



What policies and practices are being used?

Countries have undertaken a variety of approaches to implement education for sustainable living. The examples shown in this brochure have been selected to cover different regions of the world. The following categories have been used to show policies and practices:

- **Setting examples**
- **Strengthening connections**
- **Mobilizing one's peers**
- **Engaging in community service**

What can be learned from current experiences?

The examples presented in this brochure show that there are many ways to start implementing education for sustainable living. Lessons can be learned from what has worked, but it is just as important to learn from what has not worked. Experience shows that four factors are particularly important:

1. Cultural and historical context: What works in one country or location may not work in another. It is important to look at the factors that have shaped the educational situation that exists in a given place, and to look for strengths to help implement educational initiatives.

2. Collaboration between civil society, the educational sector and government: Various initiatives may have different leaders, but collaboration between stakeholder groups is essential to ensure that progress is made.

3. Encouraging creativity: Learning to recognize, develop and implement creative solutions is essential for stimulating innovation.

4. Monitoring of initiatives: Periodic monitoring is necessary so that essential themes are not missed, to track implementation progress and to identify weaknesses that need to be addressed.



Learning using values-based indicators

Aligning what we value and what we do



Photo: Tiina Jaatinen

To what extent do our actions actually reflect our aspirations to achieve more sustainable lifestyles? How can what we do be better aligned with what we want? Learning using values-based indicators is a problem-centered approach to learning that links values vocabulary to real-world behavior. The aim of this approach is to close the so-called “value-action gaps” and help individuals and groups identify and do what is truly important to them. Values-based indicators provide an “inside-out” approach as opposed to “top-down” performance indicators created by policy makers on national or regional levels.

Relevant reflection and self-evaluation

Values, which often seem intangible and unmeasurable, are reflected in actions that make them visible. By helping to clarify and communicate shared values, the indicators can motivate learners to adopt behaviors that genuinely reflect values – rather than behaviors driven by habit, imitation of others, commercial persuasion or the desire for wealth or social recognition. Values can be consciously cultivated and schools can become more “values-driven”. During the learning process, values shift from being merely espoused to being clearly ‘in use’, and thus value-action gaps are reduced.

Self-selected indicators

This learning methodology does not impose any particular set of predetermined sustainability values, but helps a learner or group select themselves the indicators most relevant to their own environmental, social, economic and cultural context. They assist schools in evaluating their curriculum and offer groups guidance in monitoring their intentions as reflected in their initiatives. The indicators do not provide a basis for being judged by outsiders, or trying to meet criteria that have been set by other people. Instead, it is a learning journey where teachers and students work together to take stock of what has already been achieved – in terms of those intangible, values-related ‘achievements’ often missed by national exams and inspections – and what is still needed.



Photo: PERL

Transformational learning

Deep learning processes that trigger significant shifts in people’s attitudes and practice are often referred to as “transformational learning processes”. Such learning involves the expansion of cognitive awareness as well emotional and social experiences which spark imagination and lead to empowerment. Learning by using values-based indicators aims to inspire people to understand “achievement” and “success” in new ways - not just in terms of exam grades or potential salaries but in terms of what is needed in order to thrive and to take meaningful action in the modern world.

For students, teachers, schools, homes and civil society organizations

Learning using values-based indicators toolkits were initially made for use by civil society organisations who wanted to be able to make visible the 'invisible' outcomes of their work not captured by traditional indicators. Subsequently, the toolkits were modified for use in secondary schools by teachers, students and by the whole school as an organisation to assess values-related processes and outcomes. Because of the flexibility of the methodology, it has proven useful for a wide variety of target groups including local communities and households.

How it works

Learning using values-based indicators involves the following basic steps in which the participants:

- » **reflect** on what they find meaningful, valuable and worthwhile, individually and collectively – not only at the level of abstract values words like 'respect' or 'empowerment', but in terms of specific behaviours and practices;
- » **relate** these 'values-in-action' statements to Sustainable Living principles;
- » **consider** changes that they would like to make as individuals or groups, in the spirit of enacting what they already have agreed is meaningful;
- » **create** customised assessment frameworks for assessing learning and action, at the individual or group level, and/or for the whole institution.

The indicators function best when used over a set period of time but they can also be used in single classroom sessions. The basic workflow suggested is:

- *Select and adapt the most useful and relevant indicators*
- *Decide how to measure:* Participating schools/groups have full control as to which activities and indicators to choose
- *Plan and carry out the first measurements:* These can be, for example: surveys designed by students or teachers, using questionnaires or creative methods; a co-enquiry group of teachers, support staff and students who meet in a lunch break or after school, e.g. discussing one question per week in depth; art clubs or classes that respond to the questions, e.g. through painting, sculpture, graffiti art, photography, participatory drama, dance, music, or digital arts; observation of teaching and learning by "critical friends" of the school (e.g. members of the Board of Governors or the Parent-Teachers Association).
- *Link indicators with value* – an "indicator" is anything that shows us (indicates to us) what is happening in a certain situation. These values-based indicators provide starting points and step-by-step guidance to help assess values-based things that are important to your educational activities. For example, how effectively students work together in groups; how they relate emotionally to local and global environments; the extent to which they feel empowered to effect positive change.
- *Discuss and initiate changes* that participants feel may improve how they connect their actions to their values. The processes of assessment/reflection/initiating changes can be repeated at intervals as long as desired. In some cases this reflective process using values-based indicators as assessment tools becomes normal procedure.



A few examples of values-based indicators:

- We want to bring about change in our school and the wider community.
- We have a sense of power that we can effect change in our school and in the wider community.
- We understand mistakes as opportunities to learn and improve.
- We explore issues that are slightly uncomfortable for us.
- We participate actively in discussions about issues that affect our lifestyles.

Learning outcomes



Many learning assessment frameworks focus on cognitive, socio-emotional and behavioural learning outcomes. While Learning Using Values-based Indicators lead, in many cases, to concrete outcomes that fall into each of these three categories, the main objective is to learn to connect basic human values to knowledge, attitudes and skills and to become adept at reflecting upon and improving these connections. For example, when considering what “good life quality” is in the context of sustainable lifestyles, it is key to be able to identify the values one bases one’s definition upon.

“Here and Now: Education for Sustainable Consumption” (2010 UNEP) lists 14 generic learning competences and 18 subject specific competencies directly related to sustainable lifestyles. Discovering and working with the values underlying each of these competencies is the goal of the values-based learning methodology.

Fitting into the curricula

Not merely a topic for classes on ethics, learning using values-based indicators can be used independently as a project, in relation to specific subjects, or when dealing with crosscutting thematic issues. It can help students and teachers reflect on aspects of sustainability across the school curriculum and in relation to some or all of the school’s subjects and activities. The toolkits can contribute to transforming problematic social situations into preferred future situations by highlighting what is valued by teachers and students (Burford, et. al., 2015).

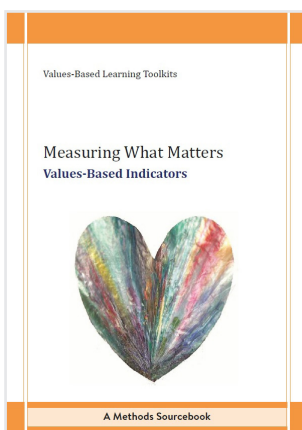
Giving values visibility

The values-based indicators toolkits evolved from the results of the ESDinds European Union Framework 7 project (2009-2011) and the subsequent WeValue initiative coordinated by the University of Brighton. The WeValue toolkit was initially made for use by civil society organisations, however the toolkits can be adjusted to relate to business-, and workgroups in addition to being relevant for households and community groups. Although the toolkit was

initially developed as a project evaluation system, it has two distinct functions that are closely intertwined, namely evaluation and transformational learning. After extensive testing of the WeValue toolkit in real evaluation contexts, results revealed that the toolkit had the potential to contribute to the identification and closure of value-action gaps in secondary schools as well. Thus, a workgroup supported by the PERL European Union Project designed a modified version of the toolkits for use in schools.

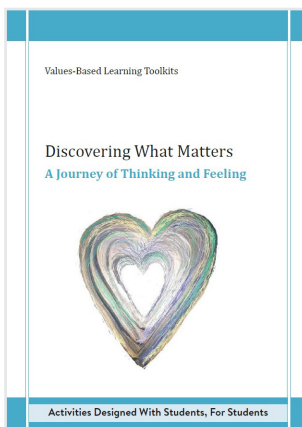
The tools

There are three toolkits that are complementary in their uses:



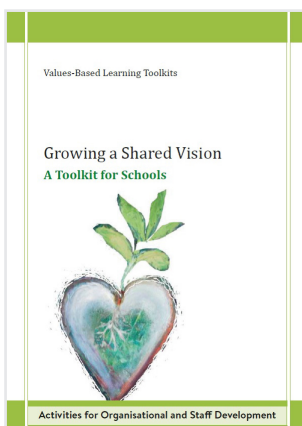
#1. Measuring What Matters - Values-Based Indicators

This toolkit provides an introduction to values-based learning as revealed through the design and use of values-based indicators and related activities. The toolkit is particularly useful for those who want to understand the approaches behind values-based learning, and who want to design their own indicators and activities to respond to a specific need. Examples of indicators are provided and the learning process is described.



#2. Discovering What Matters - A journey of thinking and feeling

This is a toolkit designed with students for students. It helps identify existing values that students may have and assists them in clarifying what attitudes and qualities they recognize as important for the future. The toolkit contains suggestions of diverse activities that can be used to stimulate the reflection on values. They include: non-verbal activities, role plays, creative artwork, scenarios, etc.



#3. Building a Shared Vision - A toolkit for schools

This toolkit provides tools to assess whether the educational environment facilitates acquiring responsible values and behaviour. Participating teachers and/or administrators work together to choose a few useful and relevant indicators. The wording of the indicators can be changed if necessary, and suitable measurement methods are then identified.

★ Learning using values-based indicators in Finland



Photo: Tiina Jaatinen

A Steiner school in Oulu, Finland tested learning using values-based indicators to help students reflect on ethics and religion. Students involved were in 8th and 9th grade. The students started by playing the “Silent Catch” activity as an ice-breaker, to help students become more comfortable with silence by throwing a ball back and forth between each other while standing in a circle and thus reducing awkwardness. After, they played the “First thing you think of when I say....” activity. During this activity students were asked to write down the first thing that came into their minds when the facilitator mentioned certain words, i.e. “our school”, “my social network”, “participation”, “hopes” and “sustainable development”. The elicited words were written on post-it notes

and then organized on large pieces of card, clustering by theme. During the “Yes, and...”-game the students were encouraged to create a ‘collective story’ about the type of future they would like to see for their school, in which each new participant had to acknowledge the preceding contribution by saying “Yes, and...” (C.f. Sabo Flores, 2008 p.56). When the elicitation activities were finished, the facilitator introduced the reference list of “skills for sustainable and responsible living” (SRL skills/values-based indicators), reading through the list and discussing each skill very briefly. Facilitators drew out some individual statements from the “First thing you think of” and “Yes, and” games story as new “SRL skills”, which were added to the reference list. The students were then asked to reflect on the relative importance of the skills to them, first individually and then collectively.



Photo: Tiina Jaatinen

The activities were found to be engaging for the students and generated meaningful and productive conversations, and elicited several new skills which students had not necessarily articulated before or had not identified as being related to sustainability. The different SRL skill statements (values-based indicators) helped the students to understand the statements at a deeper level and build a richer concept of “sustainability”.

★ Learning using values-based indicators in Sierra Leone



Photo: Ismael Velasco

As a part of the ESDinds and WeValue projects the Sierra Leone Red Cross also used the methodology. The stakeholders wanted to understand how well their own Youth Empowerment Project: Youth as Agents of Behavioural Change (YABC) was working at a local level, namely the extent to which the project had been successful in creating an environment of inclusiveness and non-discrimination and in contributing to the empowerment of marginalized youth. These local evaluations focused on values-related outcomes: empowerment, inclusiveness and non-discrimination.

Initially, a selection of indicators was chosen from the reference list. The chosen indicators focused on what was most useful for evaluating the success of YABC as a global initiative. Later ten youth workers contributed to the selection of ten indicators which they felt were useful for them in the

field. An “expert group” then localized the wording and chose the methodology. It was planned to combine five methods for the evaluation, namely (i) spatial/corporal survey; (ii) a secret ballot survey; (iii) focus groups, with and without role play; (iv) structured and semi-structured non-participant observation; and (v) informal interviews.

An assessment of the effectiveness of the workshop and project was achieved, as hoped, but also insights into the reasons for its success and how it might be further approved was gained.

Abu Bakar, the National Youth Coordinator used the indicators in a YABC workshop. He stated: *“It really raised awareness of where they should be, what they should be doing in their communities as young people who are actually changing their mindsets, especially with the principles and values of the Red Cross...making a difference within their own communities with their own actions. They seem more mature”* (Burford et. al., 2013).

★ Learning using values-based indicators in Mexico

The Environmental Institutional Programme of Guanajuato University (PIMAUG) in Mexico assessed the extent to which Earth Charter workshops contributed to an increased sense of empowerment amongst participants and if these values transformed into action. The work of PIMAUG is heavily informed by the Earth Charter Initiative, a founding partner of the ESDinds Project Consortium, which created WeValue. Through PIMAUG, students train to deliver workshops inspired by Earth Charter.



The same selection process was used as in Sierra Leone. A selection of customized indicators were agreed upon and assessment tools were developed that were congruent with the pre-defined workshop programme. Results indicate that the workshop is very effective in increasing participant’s sense of empowerment. The assessment also provided insight into the concept of measuring values-based indicators. This was considered highly relevant for their work as merely the act of reflecting on the indicators elicited new connections between current activities, potential new areas of work that could be developed, and strategic decisions that they would like to take. Other outcomes were that the results provided important insights into how motivation can be translated into effective action (Burford, et. al., 2013, 2015; MAC meeting report).



The indicators in each case were selected by and adapted to the situation: semi-quantitative or qualitative, expressed in interviews, observations, gestures or word associations, for example. These field projects show the diversity of situations in which values can be measured at the organization and community level as well as in secondary education.

Active Learning Using Images and Objects

Discovering the stories behind pictures and things

Active Learning Using Images and Objects methodology focuses on “the use of visual stimuli and incorporated sets of images with supporting activities to provide a ‘quick start’ for teachers in both formal and informal educational settings who wish to integrate aspects of education for sustainable development in their teaching environments” (Maguire, et. al., 2013). “Active learning methodologies encourage students to question the way they think, the values they hold and the decisions they make in the context of sustainable development. A willingness to source correct information, appreciate the perspectives of others, reflect on the outcomes and impact of our actions, and embrace change is required in order for us to modify our way of living and reflect a responsible approach to everyday life decisions that foster sustainability. The ultimate goal is for students to be open to change, to act co-operatively, to think, discuss and draw conclusions about different every day activities in a holistic, critical and creative way” (O’Donoghue & Cusack, 2008).



Photo: Miriam O'Donoghue

“Sustainable consumption is about issues that go beyond us as individuals when we shop for goods and services and includes both the ecological impact of what we buy, such as climate change and resource usage, as well as the equity, human rights and political dimensions of sustainability in the production and consumption process.”

(Personal Consumption and Climate Change, Active Learning Toolkit #2)

For primary and secondary school teachers, and educational facilitators

The Images and Objects toolkits are designed for facilitators and teachers with students primarily from 12 years and onward and who are interested in education for sustainable development. However, the methodology is easily adapted for use with younger or older students.



Photo: PERL



Photo: PERL

How it works

Because what we can see and touch triggers emotional as well as cognitive reactions, the form of experiential learning used in these Active Learning toolkits goes beyond traditional transmissive teaching methods. They are transformative methodologies that can be used in relation to many diverse ESD themes. Transformative teaching approaches provide rich opportunities for interaction between educators and learners, and between learners themselves. They help students actively construct their own understanding, meaning and values (O'Donoghue & Cusack, 2008).

	TRANSMISSIVE TEACHING	TRANSFORMATIVE TEACHING
	From passive ...	To active ...
Role of Teacher/ Lecturer	<ul style="list-style-type: none"> Teaching is the main focus Teacher asks most of the questions Teacher transmits knowledge Teacher sets rules Subject-specific approach taken 	<ul style="list-style-type: none"> Learning is the main focus Teacher encourages student questioning Teacher facilitates knowledge creation Teacher provides guidelines Holistic approach taken
Role of Students	<ul style="list-style-type: none"> Students are passive learners Students are mainly asked to answer questions Students learn from the teacher alone Students fear mistakes Students compete with each other 	<ul style="list-style-type: none"> Students are active learners Students are both asking and answering questions Students learn from each other Students learn from their mistakes Students work collaboratively together
Role of Environment	<ul style="list-style-type: none"> Set layout classroom Competitive environment Teacher-centred classroom Formal environment 	<ul style="list-style-type: none"> Informal/flexible layout classroom Collaborative environment Learner-centred classroom High energy active environment

Each toolkit highlights different, though closely related, learning theories and means of applying them. The toolkits are designed for convenient use, in specifically planned classroom activities, and contain a limited number of pages, short clarifications of terminology, precise lesson plan suggestions, references to relevant literature, and samples of images and objects that can be used.

Among the activities presented in the toolkits are: taking photos, creating cartoons and short silent video clips, to discuss and improve students understanding of issues related to sustainable and responsible living. Images and Objects toolkits #3, #5 and #6 also include card games which can facilitate familiarization with new terms and concepts, as well as promote critical and complex thinking, weighing of evidence, goals seeking and solution seeking. In conclusion, the students are asked to identify, verbalize, or write about their new learning. They may also be asked to reconsider their attitudes, or opinions regarding an issue, or to practice applying new knowledge to fictitious situations or to their own life.

Within the activities presented in the toolkits there is a strong emphasis on questioning to support critical thinking and taking action. Critical thinking is an attempt to see and understand from multiple perspectives. Through the different activities in the described toolkits, students can discover that others see the world differently and that there may be many issues that are interlinked.



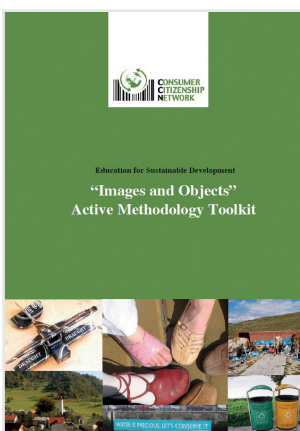
Photo: Obraz

Students from all over the world have contributed images and other materials presented in the toolkits through PERL's annual media competitions (from 2009-2015). PERL's media competitions have had "New ways of living responsibly" as their main theme.

Tools

As of June 2016 there are six toolkits in the series dealing with a variety of themes and promoting diverse learning activities within the framework of using images and objects. All six toolkits are in English however some of the toolkits have been translated into the following languages: **Norwegian** (all six toolkits), **Spanish** (toolkit 2 and 3), **Portuguese** (toolkit 1), **French** (toolkit 1), **Dutch** (toolkit 5), **Icelandic** (toolkit 3), **Estonian** (toolkit 3) and **Russian** (toolkit 1 and 3). A Training Manual for teacher training seminars is also available. The Training Manual builds on practical experience from a number of different countries and is intended as an aid to other teacher educators.

Training sessions for teachers and teacher trainers have been held and can be arranged by contacting perl@hihm.no

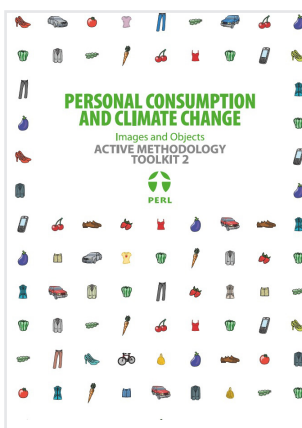


#1. Active Learning toolkit: Images and Objects

The toolkit “Education for Sustainable Development” is the first in the Active Methodology Images and Objects series and builds on already well documented use of images and photographs in education. This toolkit offers examples of how to use images and objects to evoke and facilitate discussions and activities related to sustainable development. Ordinary everyday images of routine activities, settings or objects are often the most effective. A sample set of photographs are included in the toolkit.

When selecting an image or object the teacher should consider among other things the following:

- Will the image or object evoke a discussion around attitudes, values, beliefs, assumptions, perceptions, stereotypes etc. related to ESD themes?
- What is it saying or not saying about sustainable development?
- Is the image or object positive, neutral or negative or a combination of these?
- What makes the image or object interesting?
- What is happening in the background?
- What might be happening outside the frame of the image?
- What emotions are contained within the image?
- What questions are left unanswered by the image or object?

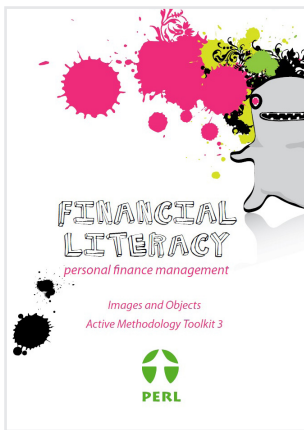


#2. Personal consumption and climate change

This toolkit is the second in the Active Methodology Images and Objects series and focuses in particular on using photographs and a range of active teaching and learning approaches and strategies to explore the themes of: personal consumption, climate change and responsible living. By taking up the issues of personal consumption and climate change, this toolkit seeks to encourage learners to be open to change and to act co-operatively. Focusing on the development of critical thinking and action, this toolkit stimulates relevant “what, why, and how” questions about the individual learners personal consumption and climate change.

Active Teaching and Learning Activities

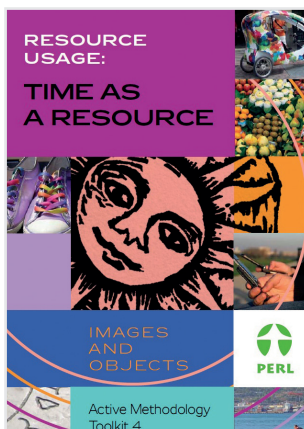
- #1 Meet in the middle
- #2 Visual carousel
- #3 What's in your wardrobe?
- #4 Take a stand on global warming and climate change
- #5 Take action—Do your part to reduce, reuse and recycle
- #6 Case study – Before and after



#3. Financial literacy: Personal finance management

This toolkit aims to help learners gain knowledge and understanding of the concepts of personal finance and the various terms related to the theme. Included in the toolkit is an original card game that can be used in various ways. Building on the theories concerning creative gaming, this toolkit deals with: focusing on a dilemma, creative thinking and acting, giving and obtaining feedback and reflecting on the feedback.

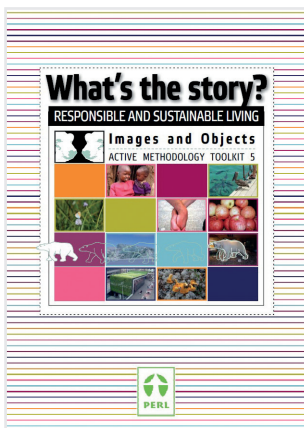
Today's consumers must be able to differentiate among a wide range of products and services in order to identify those that best meet their needs and goals and thus engage their personal finances successfully. Financial difficulties can have a major impact on individual and family well-being and on current and future financial security.



#4. Time as a Resource

This toolkit focuses on time as a resource and developing the ability to investigate, envision, set goals, plan, make decisions, act and reflect upon one's actions. It offers a selection of practical teaching and learning activities dealing with time and travel, time and food, time and choices, time and fashion, and time and technology. Not only does the toolkit encourage reflection on how time is used, but also emphasizes the importance of time for reflection on what one has learned.

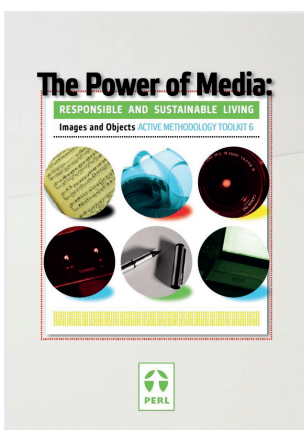
«Time is too slow for those who wait
 Too swift for those who fear
 Too long for those who grieve
 Too short for those who rejoice
 But for those who love, time is Eternity.”
 (Henry Van Dyke 1852-1933)



#5. What's the Story?

The toolkit is the fifth in the Active Methodology Images and Objects series and focuses on STORYTELLING as a key teaching and learning strategy. The toolkit includes background information on education for responsible and sustainable living and the Millennium and Development Goals (MDG's). Storytelling is used because it is entertaining and enlightening, can be used with students of all ages, can be supported with images and objects, and helps to create connections and collaborative learning. The toolkit contains detailed lesson plans, prompt cards, role cards, symbol cards, linking cards, and a bank of photographs.

“Storytelling is the transmission of events into words...Storytelling takes a broad range of forms such as fairytales, folktales and legends. It has extended itself to represent history, personal narrative, political commentary, and evolving cultural norms.”



#6. The Power of Media

This toolkit is the sixth in the Active Methodology Images and Objects series and focuses on the use of different media as a key teaching and learning strategy to explore themes related to responsible living and sustainable development. The toolkit presents background information on education for responsible and sustainable living and about the theory of multiple intelligence. It includes winning texts and photos from the PERL international student media competitions.

The toolkit provides activities that deal with:

- different forms and styles of expression
- lyrics of songs
- different points of view
- creating cartoons
- keywords in films/videos

Learning outcomes

- **Problem solving:** Students learn not only to identify problems but also to seek innovative solutions.
- **Critical thinking and action:** Students learn how to explore their world through critical analysis of taken-for-granted assumptions and perceptions. Students also learn how to move beyond the thought processes to planning and action—individually and collectively.
- **Collaborative learning:** Through close interaction with the educators and other learners, students develop the ability to search, reflect and find answers in unison.
- **Increased awareness of the importance of environmental stewardship and social justice:** By practicing the art of investigating the causes and consequences of actions, students learn to recognize the interrelatedness of systems and processes, particularly as they relate to sustainable development.
- **Increased self evaluation and reflection:** The toolkits motivate students to construct their own learning by identifying and evaluating their understanding, values, beliefs and behaviours and taking action accordingly. This deepening of knowledge helps students reflect on their thinking and re-examine their choices in a variety of areas.

Fitting into curricula

The Active Learning Using Images and Objects toolkits can be used in most subject areas but also function well as cross-curricular projects. Below is a list of subjects in which the individual toolkits are particularly relevant.

#1. Education for Sustainable Development	Social, Personal and Health Education; English (language studies); Natural Sciences; Social sciences; Home Economics
#2. Personal Consumption and Climate Change	Social, Personal and Health Education; Social sciences; Natural sciences; Geography; English (language studies); Home Economics
#3. Financial Literacy: personal finance management	Economics; Mathematics; Social, Personal and Health Education; Home economics
#4. Resource Usage: Time as a Resource	Social Sciences; Natural Sciences; English (language studies)
#5. What's the story? Responsible and Sustainable Living	Religion/Ethics; Social Sciences; Natural sciences; English (language studies); Home Economics
#6. The Power of Media: Responsible and Sustainable Living	Social Sciences; Natural Sciences: English (language studies); Media; Home Economics

Giving education for sustainable development visibility

Created over a ten-year period, the toolkits have been compiled by participants of the PERL network (Partnership for Education and Research about Responsible Living) under the leadership of Miriam O'Donoghue of the CDETB Curriculum Development Unit, Dublin, Ireland and Gregor Torkar of the University of Ljubljana, Slovenia.

While some of the Active Learning Using Images and Objects toolkits refer to the themes central to the Millennium Development Goals (2000-2015), the topics the toolkits are concerned with are all also central issues for the 2030 Agenda's Sustainable Development Goals (2015-2030) (SDG's).

★ Active learning using images and objects in Singapore

At several international conferences organized by the IFHE (International Federation for Home Economics) and their regional associations practical workshops on Education for Sustainable and Responsible Living have been facilitated for teachers. During the Asia Region Association of Home Economics (ARAHE) Congress a workshop was held to assist participants to explore some of the themes, tools and resources in the toolkits in a fun and interactive way. Participants engaged in the basic “Images and Objects” activity, following step 2 and 4 from toolkit #1. Participants were first asked to walk around and examine the images spread on the floor. During step 4, participants were asked to join together forming a group of four to prioritize one image which represents what the group was most interested in and to share the image with everyone in the room. The group had to explain why the image was selected; the process that took place to agree on the selected image; the value of the activity in facilitating discussions related to sustainable development; and key issues that arose in the group related to the discussion on sustainable development.



Photo: Miriam O'Donoghue

★ Active Learning Using Images and Objects in Norway

The Active Learning toolkits have become very popular in Norway. PERL has used the services of SubjectAid, which is a web-based service that provides free teaching resources to schools in Norway.

PERL has used the services of SubjectAid since the end of 2013. Once teachers discovered the use of the Active Learning methodologies, the toolkits have been in high demand by teachers all over Norway. All six toolkits are now available on the SubjectAid website and SubjectAid promotes the toolkits through an advertising brochure at the beginning of the school year in August and for the beginning of the new semester in January.

Toolkit #2 and #3 are particularly popular in Norway, indicating a high need for teaching materials that support the subjects of Climate Change and Financial Literacy. Financial Literacy has been of particular focus in Norway in recent years and this is reflected in a similar demand for the toolkit.



Photo: Kirsten Paaby

Since 2013 SubjectAid has helped PERL disseminate more than 7000 copies of the series of Images and Objects toolkits. Teachers have given positive feedback about the use of the toolkits in class and find them a valuable addition to their other teaching materials.

★ Active Learning Using Images and Objects in Ireland and Columbia

The Active Learning toolkits were initiated by PERL's partners at City of Dublin VEC, Curriculum Development Unit in Ireland. These partners experienced, through their work, that there was a need for teaching materials that emphasized active experiential learning and the use of real-world problems. Other PERL partners also documented the lack of good teaching materials that focused on active learning. Together they decided to create a series of Active Learning Methodology toolkits which could be translated and adapted to different languages and cultures. The first toolkit was ready for use in 2008 and through the years, 5 more toolkits have been developed. Toolkits # 1 and 3 have been translated into Spanish and adapted for use in Latin America and the Caribbean. The Methodology was presented at a workshop held in Bogota, Columbia where participants from 11 different countries attended.

★ Active Learning Using Images and Objects in Kakemega, Kenya

The Youth Education Network (YEN), an NGO whose mission is to empower youth and children through information, education and vocational training, is a partner of the Action 2015 National Coalition- Kenya, working with Organizations, Government Agencies, the Private Sector, Media, Academia other Development partners and the Citizens in general, to facilitate transformational change. Active Learning Using Images and Objects toolkits were presented at the Kakamega Cultural Week- "Action Mashinani!" The week focused on community service, launching the SDG's regionally, holding a conference for youth as well as a talent show, and sponsoring a "Global Day of Action".



★ Active Learning Using Images and Objects in Slovenia

Teacher education workshops have been held in Slovenia to educate and encourage primary school teachers to integrate the concepts of sustainable development into teaching practices. The workshops began with an introduction to ESD and the importance of their teaching practices and learning approaches. The participants then explored some of the activities in the different toolkits. Amongst others, they engaged in "green bingo" and the "paper airplane" activities from the toolkits. After the participants carried out some of the activities from the toolkits, they were asked to evaluate the activities presented by giving feedback on what they had learned, identified if they would use the activities in their own teaching and giving suggestions for improvements. Overall results indicate that the participants found the activities interesting because they promote group cooperation, problem solving and questioning. The fact that the toolkits promote the use of images was a new holistic approach which the participants also found beneficial in their teaching as images can be interpreted differently by each student and can be discussed in many different ways. Most participants present during the workshop stated that they would use the Images and Objects toolkits for their teaching.

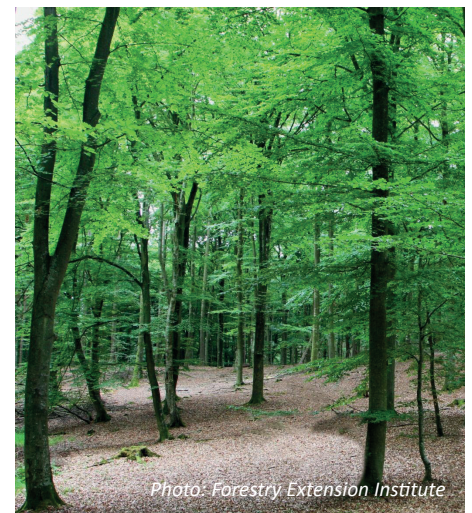
Active Learning Using Images and Objects in Iceland

The Active Learning Using Images and Objects methodology was introduced and used in Iceland and the toolkit on financial literacy was translated into Icelandic. Workshops for teachers, in particular teachers of courses related to Core Life Skills, were held. These workshops provided experiential learning about how to use the toolkits to explore the themes of: sustainable development, personal consumption, climate change, responsible living, resource usage and personal finances.



Collaborating with other organisations on active learning

Active Learning using Images and Objects have been created in such a way that they are easily adapted and translated. One particular organisation that recognized the potential in Images and Objects was the Forestry Extension Institute in Norway. This organisation provides education and training in the forestry sector and in forestry related fields, as well as working to heighten public awareness to the importance of forestry throughout Norway. This is accomplished by educational materials, conferences and consulting services. They adapted Images and Objects to suit their educational program for schools to highlight three topics within forestry; CO₂ - a global issue, Why are trees a part of the solution?, and Wood as a material. The adaptation was successful and the materials are in use.



Another outstanding learning resource that uses images is the

GLOBAL ONENESS PROJECT

The project offers sets of professional films and easily used lesson plans free of charge online. www.globalonenessproject.org

Learning through social innovation (LOLA: Looking for Likely Alternatives)

Investigating grass-root approaches to sustainable lifestyles

LOLA is a learning methodology whose goal is to help teachers and learners search for, come in contact with, and give visibility to new approaches to sustainable lifestyles in their local community. Based on the conviction that radical change does not only come from top-down policies, LOLA helps learners look for promising sustainable initiatives at a walking distance from the school. LOLA is a learning process that allows the learner to contribute to structuring their own learning process.

It is also an investigative process based on interviews. Coming face to face with friends and neighbors who are actively involved in efforts to create more sustainable lifestyles, affects not only the knowledge base of students, but influences attitudes and behavior. LOLA also encourages the learners to share their knowledge and experiences with their school-community and beyond, thereby helping to spread awareness of concrete cases of social innovation.

The inquiry-based learning that is the basis for LOLA consists of exploration of the immediate community where the pupils live; the encountering, at times, of contradictory explanations in the interviews; and the challenge of how to share what they have learned with others. LOLA has proven to trigger learner's curiosity and motivate them to acquire additional knowledge about issues related to living in more environmentally and socially sustainable ways.



For secondary and tertiary school teachers, students, headmasters and teacher trainers

LOLA is designed for use by teachers and students in secondary and tertiary schools, headmasters, and teacher trainers. It has also been adapted and used for lower secondary students and can be used in informal learning situations such as youth clubs and organizations. Students and teachers can use the toolkit to explore new and more sustainable ways of living by looking for initiatives in the neighbourhoods of their school and investigating more theoretical questions about sustainability. Headmasters and teacher trainers can use the toolkit to present the methodology to their staff to stimulate programs about sustainable lifestyles. They can use LOLA to launch a transversal project in their school ending in the setting up an exhibition for the parents or community.

How it works

Learners search for examples of sustainable ways of living as exhibited in daily life activities that reduce ecological footprints and increase life quality.

1. Organize the didactic process with the class...



2. Pupils build their own the reporter book...



3. Search for promising initiatives around...



LOLA Teaching Pack...

The LOLA pilot project has been developing a **Teaching Pack** based on a set of Step-by-step Cards to help teachers in organizing the activity in the class; and a Students **Reporter Books** supports the collection of cases by the students.

Each class decide its own combination between the steps of the project for pupils to investigate their own neighbourhood, interview people experiencing more sustainable ways of living and come back with a critical view challenging their own living patterns...



5. Share and discuss investigation results...



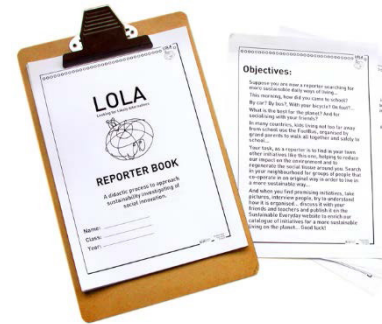
4. Carry out interviews of the social innovators...

Examples of cases which students have found are: production activities based on local resources and skills; healthy, natural forms of nutrition; self-managed services for the care of children and the elderly; new forms of exchange; alternative mobility systems; socialising initiatives to bring cities to life; networks linking consumers directly with producers. The complete LOLA process from searching and selecting initiatives to performing investigations and sharing the results is estimated to take about 6- 8 weeks for a class dedicating a 2 hours session a week. However, the toolkit can be adjusted to fit project periods that last either longer or shorter. A number of schools that have used the LOLA methodology have used the internet both to help them find relevant cases and to share the results of their investigations.

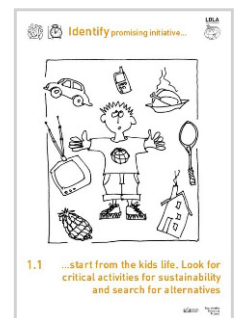
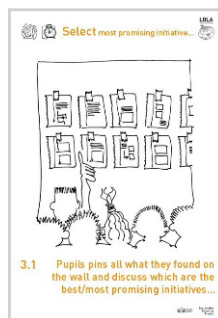
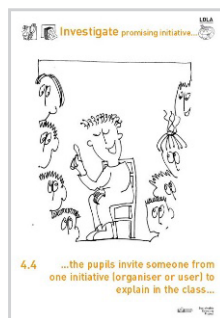
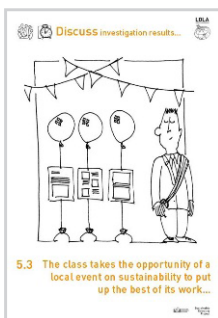
Tools

The LOLA toolkit is composed of a set of delightfully illustrated step-by-step cards, a reporter book, an exhibition guide and feedback forms. The LOLA toolkit enables teachers and students to create significant learning processes together using the step-by-step cards that describe the different stages for searching for a promising initiative, getting in touch with those responsible for the initiative, documenting what they do and reporting in a highly communicative way. The reporter's book is the main investigating tool for the students and it helps learners organize their interviews. It contains

interview question guides, photo checklists, reporting formats to organize information and images, personal comments and disclosure agreements. An introductory brochure to the LOLA toolkit is also available and gives an overview of the genesis, intentions and goals of the project. It is an introduction to stimulate involvement in the project among teachers, teachers' trainers and education policy makers and open access to detailed presentations and material download which are available on the LOLA web platform



www.sustainable-everyday-project.net/lola

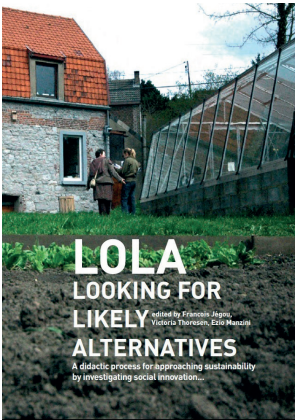


Learning outcomes

This learning process offers specific support to achieving the following competences; becoming an active citizen, learning how to think and act sustainably; making ethical decisions and developing personal values. LOLA also provides a link between the theoretical and practical approach, by putting students in touch with what happens in the real world, in their own neighborhoods which, prior to that, they had not noticed. The LOLA process brings the students into direct face-to-face contact with groups of people (the "creative communities") already implementing sustainable solutions in their daily life and thereby increases the learning potential of working with cases. LOLA can also connect the work of teachers at several schools in a collective search for examples of social innovation of universal value in local communities.

These conversations about social innovations for sustainability from an extended context to a more near and personal one will stimulate changes in students (and teachers) personal attitudes and views about the way they can live everyday life. Concrete observations are likely to increase student's motivation to learn about sustainability on one hand and, on the other hand, the same students will discover diffused knowledge on sustainability in the community they are living.

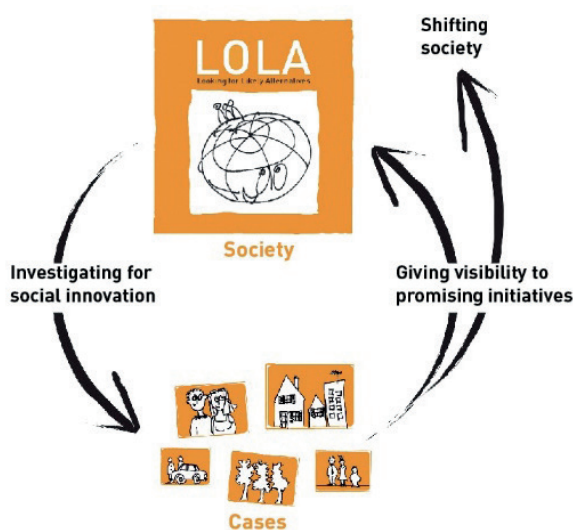
Fitting into curricula



LOLA is designed in such a way that teachers can organize the LOLA project to fit the purpose and context of their teaching. LOLA promotes the idea that the school may gain efficiency by opening up more to the outside world. Thus, the LOLA learning methodology can both be a cross-curricular activity and/or help meet the goals of various curricula such as those of social science, natural science, English (language—interview techniques, exhibition preparations and reporting), personal health and life skills and computer skills.

Giving visibility to social innovation

The LOLA process is a follow-up of the EMUDE research project. EMUDE (Emerging User Demand in sustainable solutions 2004-2006) was a EU funded Specific Support Action involving design schools at university level in 8 European countries for researching, documenting and discussing local initiatives of social innovation. LOLA has been developed by the PERL EU project and lead by Francois Jegou of Strategic Design Scenario.



Social innovation involves recombining what already exists without waiting for a general change in the system (in the economy, institutions, infrastructures). Social innovation for sustainable development identifies people who invent, enhance and manage innovation and come together in creative communities.

LOLA is of particular benefit when exploring the wide ranging concepts related to ESD at the local level. By focusing on what is happening in the local context, looking for social innovation in the school's neighborhood, arranging interviews, asking questions, comparing answers and sharing reflections, learners search for examples of

sustainable ways of living as exhibited in daily life activities that reduce ecological footprints and increase the quality of the social fabric. These conversations about social innovations for sustainability from an extended context to a more near and personal one will stimulate changes in students (and teachers) personal attitudes and views about the way they can live everyday life.



Critical reflection

LOLA was developed during a time where social innovation was not yet recognised by public policies and others as a strategy for successfully addressing the social, economic, political and environmental challenges of today. Since its completion much has changed and social innovation is today a globally recognized strategy with enhanced roles of citizens, communities, nonprofits and other actors previously not prominent in the innovation process.

The enhanced roles of other actors have led to social innovation becoming undefined and confusing to people as it describes a number of activities. More research is needed to provide a clearer link between social innovation and social change. LOLA encourages teachers together with students to also reflect critically on social innovation.

★ Looking for Likely Alternatives in Lithuania

In 2013 LOLA met with the Lithuanian Ministry of Education and Science to discuss implementation of LOLA into the National Curriculum of Social Sciences. The concept of sustainability was not an integral part of the national curriculum in Lithuania and thus both teachers and students had the potential to benefit from LOLA. Additionally, the Lithuanian national curriculum is based on constructivism (encouraging students to use active techniques (experiments, real-world problem solving) to gain knowledge, discuss and reflect), which is supported by the LOLA methodology.



A teacher training seminar was held and teachers were taught how to use and implement LOLA in their classes. Participants viewed LOLA as a valuable tool in helping students develop their social competences such as, competencies of social cognitions and investigation, competencies of establishing and developing social relations, competencies of change and social participations.

The teachers that were trained in the seminar implemented LOLA in their classes (around 20 students per class) and experienced how LOLA helped students gain awareness about social sustainability, sustainable development and responsible consumption. This was a first step towards implementation of LOLA into the National Curriculum of Social Sciences.

★ Looking for Likely Alternatives in Brazil

In 2008 the LOLA methodology was introduced to a course of the Eco-design program at the Federal University of Santa Catarina in Brazil. The goal was for LOLA to be a starting point into the investigations of social innovation cases in the area of Florianópolis. Through their course programme students were familiar with the Eco-design theory, which focuses environmental aspects to the development of a product. The idea of life cycle assessment is in line with the principle of sustainability, thus, in line with LOLA's approach. Over the course of an eight week period the students were able to evaluate the methodology behind LOLA, to map their neighborhoods with social innovation examples, to organize the Step-by-Step cards and the criteria for the more relevant investigations, and reported on their design intervention proposals and debated their first experience with LOLA. Results were remarkable. Four cases of sustainable social innovation were detected in the area of Florianópolis: an initiative conducted by the Community Council of Pantanal (CCPan), an association of local residents that organizes social activities for the community; "Forest Park of Córrego Grande", an organization that promotes environmental education courses, as well as to the particular aspects of the local communities.

★ Looking for Likely Alternatives in Japan

LOLA was translated for use in the “Consumer Education Festival” organized by the Ministry of Education, Culture, Sports, Science and Technology in Japan. The festival is visited by supervisors in local governments, researchers and teachers of consumer education. The Japan Federation of Bar Associations (JFBA) exhibited the Japanese translation of LOLA during the Festival where over 200 participants attended. Ambassador for LOLA in Japan, is hoping that LOLA will be implemented in Japanese curriculum and found that participating in the Consumer Education Festival gave LOLA the visibility to make this important first step.

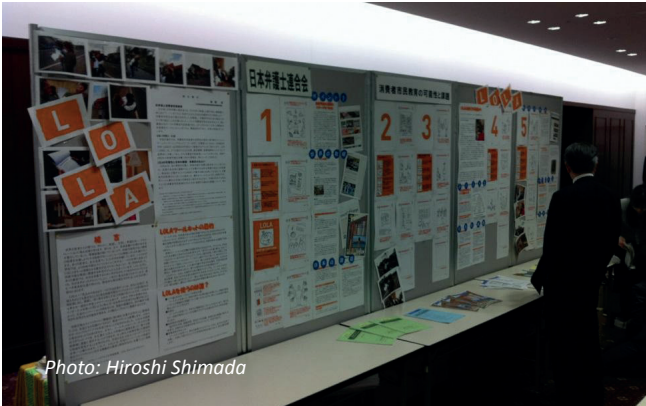


Photo: Hiroshi Shimada

★ Looking for Likely Alternatives in Ireland

LOLA was adapted for Ireland so that it could be used in the subject specific area: Civic Social and Political Education. This work was carried out by PERL partner; City of Dublin VEC, Curriculum Development Unit under the leadership of Miriam O’Donoghue and Mella Cusack. The Irish LOLA toolkit promotes active teaching and learning. The process requires that students engage in a series of steps to locate, critique and raise awareness of good local case studies about sustainable living and stewardship of the environment. Good sustainable living and stewardship case studies provide examples of how people can live in a way that meets present day needs, while caring for the environment and without compromising the ability of future generations to meet their own needs.



Photo: PERL

This toolkit offers specific support to achieve the following statements of learning:

- value what it means to be an active citizen, with rights and responsibilities in local and wider contexts.
- learn how to think and act sustainably.
- develop moral, ethical and responsible decision making and a sense of personal values.

Another outstanding learning resource that resembles LOLA in some aspect is:

THE GOALS

The goals is a free global education and learning portal on sustainable development solutions.

www.thegoals.org

“Everywhere, skills transform lives, generate prosperity and promote social inclusion. Ensuring that all people have a solid foundation of knowledge and skills...is most critically about making sure that individuals acquire a solid foundation of knowledge in key disciplines, that they develop creative, critical thinking and collaborative skills, and that they build character attributes, such as mindfulness, curiosity, courage and resilience.”

(Andreas Schleicher, Director for Education and Skills, OECD; Qian Tang, Assistant Director-General, UNESCO in “Universal Basic Skills”)



Photo: Gunnar Lange-Nielsen



Photo: Gunnar Lange-Nielsen

The way forward

There are three levels of action that are important to further implement education for sustainable living:

1. Locally: Discussions about education for sustainable living can be stimulated and local projects and initiatives supported.

2. Nationally: Countries can initiate national roundtables to bring stakeholders together to discuss education for sustainable living, to agree on recommendations and to form implementation plans. With the support of the Italian Ministry of Environment, Land and Sea, PERL has helped UNEP coordinate a project that researched education for sustainable living, held national roundtables and created strategies for implementation in Indonesia, Chile and Tanzania.

3. Internationally: Three major campaigns all emphasize the importance of education for sustainable living. Overarching, is that of the global Sustainable Development Goals. Education for sustainable living is a part of education for sustainable development and therefore, a vital element of UNESCO's Global Action Program. It is also a distinct part of the 10-Year Framework of Programmes on Sustainable Consumption and Production.

All the materials described in this booklet are available free of charge. They can be downloaded from www.livingresponsibly.org or hardcopies ordered from perl@hihm.no



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Authors:

Sacha Irene de Raaf, PERL-UNITWIN, Hedmark University of Applied Sciences, Norway

Victoria W. Thoresen, PERL-UNITWIN, Hedmark University of Applied Sciences, Norway

Gemma Burford, University of Brighton, U.K.

Helen Maguire, St. Angela's College, Ireland

Miriam O'Donoghue, City of Dublin VEC, Curriculum Development Unit, Ireland

Francois Jegou, Strategic Design Scenarios, Belgium

Arthur Dahl, International Environment Forum, Switzerland

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Colourbox



How to achieve education for sustainable living

Here and Now! Education for Sustainable Consumption is a set of guidelines and recommendations published by UNEP which contains the following roadmap for achieving education for sustainable consumption.

1. **Ensure education institutions** reflect in their daily management the priorities given to sustainable development
2. **Include themes, topics, modules, courses and degrees** about education for sustainable consumption in established curriculum
3. **Encourage research** in education for sustainable consumption-related areas
4. **Strengthen connections** between researchers, lecturers, teacher trainers and socio-economic actors and stakeholders
5. **Enhance cooperation** between professionals from diverse disciplines in order to develop integrated approaches to education for sustainable consumption
6. **Facilitate teaching and teacher-training** which strengthens global, future-oriented, constructive perspectives within education for sustainable consumption
7. **Reward creative, critical, innovative thinking** related to education for sustainable consumption
8. **Ensure** that education for sustainable consumption respects the importance of **indigenous knowledge** and recognizes **alternative lifestyles**
9. **Foster intergenerational learning** as an integrated aspect of education for sustainable consumption
10. **Provide opportunities for practical application** of theoretical study through social involvement and community service.



Partnership for Education and
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www.livingresponsibly.org

For more information contact PERL at perl@hihm.no
Hedmark University of Applied Sciences, Hamar, Norway