



United Nations Economic Commission for Europe Steering Committee on Education for Sustainable Development

8th meeting, 21 March 2013

Information Paper 3

Empowering educators for a sustainable future *UNECE draft publication*¹

¹ Please note that this paper presents the publication text but not the final format and design.

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

Empowering educators for a sustainable future

Tools for policy and practice workshops on
competences in education for sustainable development



UNITED NATIONS
Geneva, 2013

Note

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Acknowledgements

The contents of this publication, which has been prepared in the framework of the United Nations Economic Commission for Europe (ECE) Strategy for Education for Sustainable development, was developed by the ECE Expert Group on Competences in Education for Sustainable Development. The Group held six meetings between 2009 and 2012 to develop competences in education for sustainable development (ESD) and recommendations for policymakers, as well as tools for policy and practice workshops on those competences. The Group's meetings were generously hosted by the Government of Sweden together with the University of Lund; the University of Limerick; the Government of the Netherlands, which hosted three meetings; and by the ECE secretariat for ESD.

The secretariat would like to specifically thank the members of the Expert Group — the two co-Chairs, Mr. Michael Scoullos (Greece) and Mr. Roland Tormey (Ireland), as well as the expert members from the following countries and organizations: Ms. Aline Bory Adams (United Nations Educational, Scientific and Cultural Organization); Ms. Inka Bormann (Germany); Ms. Katalin Czippán (Hungary); Ms. Zinaida Fadeeva (United Nations University); Ms. Laima Glakute (Lithuania); Mr. Antoine Heideveld (Netherlands); Ms. Anna Maria Hoffmann (United Nations Children's Fund); Mr. Yuri Mazurov (Russian Federation); Ms. Manana Ratiani (Georgia); Mr. Léonard P. Rivard (Canada); Ms. Tatiana Shakirova (Central Asian Working Group on Education for Sustainable Development); Mr. Willy Sleurs (Belgium); Ms. Daniella Tilbury (United Kingdom of Great Britain and Northern Ireland); Mr. Roel van Raaij (Netherlands); and Mr. Paul Vare (European ECO Forum).

Mr. Roland Tormey and Ms. Simone Hofner from the ECE secretariat prepared the materials for publication, which was edited by Amy Edgar.

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Part I

The workshop strategy

1.1 Introduction: Envisioning change and achieving transformation

“Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence.” – Helen Keller

Education is central to efforts to develop and promote sustainable solutions for the development needs of both people and the planet. Education can enable people to understand the nature and scope of sustainable development challenges; it can develop the questioning, innovation and creativity required to come up with new and better solutions to the world’s shared problems; it can enable people to recognize the powerful forces that drive unsustainable living practices; and it can help people develop the self-confidence, organizational skills and optimism that will enable them to work individually and collectively to promote sustainable futures. However, education can also play the opposite role: deadening curiosity and innovation; encouraging acceptance of unsustainable living as being normal; and teaching learners to passively wait for others to take action. From a sustainable development perspective, then, education is both a great hope and a great danger.

This recognition led, in the past decade, to the declaration by the United Nations General Assembly that 2005 to 2014 would be the Decade of Education for Sustainable Development. In the European region, a Strategy for Education for Sustainable Development was developed and agreed through the United Nations Economic Commission for Europe (ECE). Among other things, the Strategy highlighted the need to build the competences of educators in relation to education for sustainable development (ESD). This in turn led the ECE Steering Committee on Education for Sustainable Development to ask how the latter might be accomplished. In order to address the question, a group of experts from across the ECE region were brought together to develop advice on: (a) what competences educators needed in relation to sustainable development; and (b) what policy approaches and strategies were needed to help educators develop those competences. The experts, drawn from across Europe, North America, the Caucasus and Central Asia, came from governmental agencies, teacher education colleges, educational research, sustainable development non governmental organizations and United Nations organizations. The group worked from 2009 to 2011 and produced a report called Learning for the Future: Competences in Education for Sustainable Development (ECE/CEP/AC.13/2011/6).¹

At the heart of the report was a new framework of educator competences for ESD. It argued that the story of ESD should be seen as one of adapting a holistic approach to envisioning change and thereby achieving transformation; each of these three elements was regarded as important and in need of being addressed. The report also argued that this required educators to have particular knowledge and pedagogical skills. However, it also went beyond knowledge and skills and, seeing both education and sustainable development as involving working with other people, it highlighted the need for particular abilities in working with and relating to others. Furthermore, it highlighted that ESD can be seen not just in the activity which an educator “does”, but also in their identity and dispositions — in what sort of person they are.

¹ Competences (when written with a capital C) specifically refers to the framework of core competences in ESD for educators set out in the aforementioned document.

Crucially, the report argued that no set of competences which were general enough to be relevant across a vast geographical area could at the same be specific enough to speak to any given educator about their own life and work. Therefore, it proposed that a starting point for engaging with the Competences would be for people to translate them, not just into their own language, but into words and examples that made sense in their own circumstances. In that way, it was seen that the Competences were not intended to be a definitive statement on the capabilities required for educators, but instead were thought of as a contribution to a conversation and a debate that would take on a life of its own.

The Learning for the Future report was well received in many countries when it was released. It was translated into a number of different languages, became a point of reference for discussions on initial teacher education and on teacher accreditation, and provided the basis for international workshops and training events with policy makers and ESD advocates. At the same time, because it was written with policymakers as its principal audience, some argued that it was hard for to bring the Competences “to life” and that some guidance in that regard would be welcome. That further guidance is the subject this document aims to address.

Box 1

ECE Strategy for ESD: Vision statement

Adopted at the Highly-level Meeting of Environment and Education Ministries in Vilnius, 2005 (CEP/AC.13/2005/3/Rev.1)

Our vision for the future is of a region that embraces common values of solidarity, equality and mutual respect between people, countries and generations. It is a region characterized by sustainable development, including economic vitality, justice, social cohesion, environmental protection and the sustainable management of natural resources, so as to meet the needs of the present generation without compromising the ability of future generations to meet their needs. Education, in addition to being a human right, is a prerequisite for achieving sustainable development and an essential tool for good governance, informed decision-making and the promotion of democracy. Therefore, education for sustainable development can help translate our vision into reality. Education for sustainable development develops and strengthens the capacity of individuals, groups, communities, organizations and countries to make judgements and choices in favour of sustainable development. It can promote a shift in people’s mindsets and in so doing enable them to make our world safer, healthier and more prosperous, thereby improving the quality of life. Education for sustainable development can provide critical reflection and greater awareness and empowerment so that new visions and concepts can be explored and new methods and tools developed.

Empowering educators for a sustainable future, the present document, describes how someone might go about organizing a workshop which uses the Learning for the Future Competences framework to enable policymakers and ESD practitioners to explore how educator competences can be developed. Central to the argument of this resource is that learning about the Competences should not be an end in its own right: instead engagement with the Competences should be seen to be part of a process through which policy and practices are changed. The second half of this document does have a focus on what activities can be used when people are at a workshop in order to allow them come to grips with the Competences and what they mean for them. The first half, however, contains a wider focus on how to see the workshop as part of a broader change process, which involves inviting and attracting the participants, engaging with them in an ongoing way, using the workshop as a lever for change and following up after the workshop to support the continuing process of change.

Empowering educators for a sustainable future takes the idea of organizing a two-day international workshop on educator competences as its framework, and provides support on how to organize and run such an event. However, it is envisaged that the ideas which underpin the approach described here would be equally relevant and useful for those who are organizing a workshop at the national, local or even institutional level.

1.2 Facilitating change: workshops as a catalyst for the change process

Sustainable development requires that education change. This change can be supported through a process of engagement designed to give key decision makers and other stakeholders of education systems an opportunity to reflect on the knowledge, skills and attitudes required of educators whose task it is to prepare learners, young and old, for a fulfilling, productive and environmentally sustainable life in the twenty-first century. In this document we describe how a workshop on Learning for the Future: Competences in Education for Sustainable Development can be used to encourage such a process of engagement. The workshop itself — what these decision makers do when they get together — is obviously important. But, when the workshop is seen as a part of a long-term engagement, this can assist organizers in thinking of different ways to approach the planning, facilitation and follow-up.

The next section describes some workshop activities that can be used. However, in this section we describe the various stages of embedding that workshop in a change process as follows:

1. Engagement with stakeholders.
2. Running the workshop(s).
3. Follow-up.

This change process itself is underpinned by a number of important principles that reflect the ethos of the Competences in education for sustainable development. These are:

- ✓ Start with where the stakeholders are: identify what motivates them and, as far as possible, ensure that their concerns are addressed.
- ✓ Understand and build on the context: respect and utilize existing structures and make use of ongoing processes/initiatives.
- ✓ Distribute responsibility throughout the process — this will create a sense of ownership and enhance learning among participants, which ensures continuity of the process.
- ✓ Use pioneering examples that can demonstrate the feasibility and potential impact of adopting the Competences; if possible, find these examples among groups that are respected and seen as role models for the persons and groups that they are intended to inspire.
- ✓ Ensure effective project planning throughout the process — remain focused on the long-term goals while attending to current priorities.
- ✓ Exemplify the Competences through this process (walk the talk) — look at what the Competences are calling for and be sure these qualities are demonstrated in the way the process is conducted.
- ✓ Spread resources appropriately across the change process — it is suggested 50 per cent of the time and effort go to the preparatory stage, 20 per cent on the workshop itself and 30 per cent on follow-up after the workshop.

1.3 The first stage — the process of engagement

Although the first stage in the process is defined as the process of engagement, in reality engaging and working with those who participate in the process and/or support it is an iterative process; sometimes the tasks can take place simultaneously or the sequence given here may be reversed and/or repeated. Still, whatever order the different tasks take, this process can be thought of as having two components:

1. Defining goals.
2. Strategic positioning.

Defining goals

It is important to formulate realistic goals and priorities for the process and to review the extent to which it is possible to negotiate these in order to align them with the priorities of major stakeholders (a stakeholder is any person or organization that has or might have an interest in or influence on a given issue). There may in fact be different goals relating to the policy process and the Competences themselves. Should a particular policy or practice that could be changed be targeted? Are there others interested in changing that practice (or indeed, in keeping it unchanged)? Who should be consulted before it is possible to set down a clear goal for the workshop that others can agree to?

Strategic positioning

In order to fully define the goals, it is also necessary to identify other strategic processes and the priorities and motivations of major stakeholders. Analysis of the stakeholders and potential stakeholder engagement (box 3) is a part of the strategic positioning process. Essentially, the aim is to find out what potential participants want or would be able to support. This is not to suggest that ESD will always align neatly with other policy developments (if it did there would not be much need for a change process). However, building a coalition of different groups and people who are made aware of their common interests makes the chances of achieving the workshop goals much greater. The overall goal at this stage of the process is to negotiate the specific outcomes of the workshop with key stakeholders so that the process can accommodate their priorities as well as achieving those of the organizers.

Central to doing the foregoing will be to identify:

- The changes in policies or practices that are planned or are happening now.
- The unmet hopes or goals of those involved.

This information will help to:

- Focus the goals and strategies of the workshop so that it has a reasonable chance of being consistent with other policies and practices that are under development.
- Engage individuals so that they buy in to the process and possibly assist in its design and implementation.
- Secure continuity of the process beyond the workshop.
- Achieve coherence with other processes.
- Build partnerships for the efficient use of resources (including material and moral support).

Box 2

Example

A current of reform in higher education would merit engagement with the responsible ministries, quality assessment bodies or leading universities. If, on the other hand, the goal of the process was to address technical education, then a strong emphasis on vocational training schools, qualification bodies, industry bodies and ministries responsible for industry or innovation would be the focus of attention.

Identify the levers of change within the different education systems in the area. This will involve investigating the way in which learning outcomes such as competences are defined for different levels of education (i.e., the terminology used to describe learning outcomes will vary between primary, secondary, technical and vocational education and higher education).

Box 3

Example

In Russia, the responsibility for curriculum development in higher education mostly resides with central Government agencies, so it would be critical that they are invited to the workshop. In Sweden, in contrast, these responsibilities are devolved to individual educators and programme leaders within institutions. In that case, the organizers should be sure to invite those responsible for the professional development of educators within universities.

At this point it may be decided to run the workshop back to back with another event, or to link it to another process in the area. Such piggy-backing may allow for a more effective use of available resources and a wider engagement on the change process.

Some key things to remember include:

- The stakeholders in this process may fall into two broad categories: those for whom the policy recommendations are most important and those with a particular interest in the practical implementation of the Competences for ESD educators and their adaptation to serve the international, national and local needs.
- In addition to talking to people, strategic documents should be consulted in order to understand the development priorities, social and environmental issues, educational developments and industrial trends.
- It may not be possible to engage with every group; it is therefore important to identify the groups that are most strategically significant. Stakeholder analysis can be used to identify concerns and priorities from different perspectives, ideally engaging in stakeholder dialogue if resources allow (see box 3 for a short description of stakeholder analysis and stakeholder dialogue). Ongoing dialogue can be important in all the stages of the change process and will enable the identification of issues, threats and opportunities as they emerge. For example, stakeholders can be engaged at the stage of refining the goal of the process and associated issues, defining the main leveraging processes, identifying major stakeholders and formulating follow-

up actions. Alternatively, there could be a consultation process at the initial stage rather than as an ongoing feature.

- A crucial element of the workshop preparation is to achieve engagement in the workshop process. In the light of the learning gained through the stakeholder analysis, individual, customized invitations can be extended to key participants reflecting their interest in the process, and these can be followed up as appropriate by phone, e-mail, etc.
- Participants can be asked to take on specific tasks according to the analysis carried out as a way of deepening their engagement and sense of ownership in the process.

Box 4

Stakeholder analysis and stakeholder dialogue

The process of stakeholder analysis will involve identifying and categorizing stakeholder groups. This involves identifying potential stakeholder groups and exploring how each group is actually or potentially related to the change process. One way of doing this would be to categorize the stakeholders according to the following qualities:

- Responsibility* — Those stakeholders that have legal, strategic, operational and financial responsibility for defining/developing learning outcomes;
- Representation* — Not just political leaders but those who represent a constituency such as networks and other multipliers who represent those who will be implementing the competence framework;
- Influence* — Those with actual or potential influence on decision makers and/or the structures and processes that support the implementation of the competence framework (e.g., experts, non-governmental organizations, corporations, media and lobby groups);
- Dependency* — Those who are directly and indirectly impacted by the Competences framework (e.g., learners, teachers, employers);
- Empowerment* — Those who could be positively impacted if included in the process.

Prioritizing

Identify primary and secondary stakeholder groups according to who would be most important to involve in the process — this may be adjusted at any time in the light of the following steps.

1. Mapping concerns

Talk to stakeholders in person, by telephone or using web-based social media. Identify and record the concerns of different stakeholders.

<i>Type of stakeholder</i>	<i>Stakeholders</i>	<i>Primary/secondary</i>	<i>Concerns</i>
Responsibility			
Representation			
Influence			
Dependency			
Empowerment			

2. Review concerns

Review and prioritize these concerns in relation to their relevance to the workshop goals. Respond to each stakeholder appropriately, e.g., the workshop could be adjusted to accommodate their concerns or a note could be sent to thank them for their input.

1.4 The second stage — running the workshop

The nature of the workshop(s) will depend upon the goals, the participants and at which point the workshop is positioned in the change process. The workshop may, for example, involve participants from a similar background or involve a more mixed group. An outline and some tools which can be used in creating opportunities for learning in a workshop are provided in the annex. The activities presented here are designed for use as part of a two-day workshop which would bring together people from different countries in a region to explore how the Competences might be integrated into their national education systems. At the same time, many of these activities might be equally useful in a workshop with a different length and a different — perhaps more specific or narrowly defined — set of goals.

Some key ideas to keep in mind when setting up the timetable for the workshop include:

- Allow time early on for people to build relationships — these are likely to be key to successful outcomes.
- There should be lots of opportunities for people to talk about their own experiences in relation to the Competences — one key goal for the workshop should be to allow people to make sense of or translate the Competences into their own terms and into examples which make sense in their own situation.
- The Competences describe an active and participatory educational process rather than one which is didactic or lecture-based — try to model the Competences in the design of the workshop.
- Since the workshop is intended to be part of a process of changing people's activities, remember to allow time for people to decide what actions they will take arising from their participation in the workshop — this will help them to mentally adjust to the idea that the workshop is not just an isolated event but is part of a change in what they do.

Box 5

Working backwards from goals to activities

It is useful to think of workshop planning as involving a process of thinking backwards from a desired future to the current situation and looking at ways of getting from the point of departure to the objective. This involves:

- Envisioning a desirable outcome;
- Looking at the present situation and analysing the gap between current reality and the objective;
- Working backwards, considering the steps that would be needed in order to achieve the desired outcome;

In planning a two-day international workshop the process set out below can serve as a model.

Goal: National level decision makers in the region are working with the ESD Competencies because:

The relevant national and subregional development processes have been identified as a result of interactions during the subregional workshop, as well as in the follow-up and preparatory processes around this event.

The workshop participants were inspired by the workshop because:

It enabled them to make the link between their own situation and the potential of the ESD Competencies to address their concerns. It also gave them the opportunity to develop and/or revise their own action plans.

The workshop was well-attended by relevant participants because:

The preparatory process engaged the relevant individual decision makers, educators and key networks through a thorough stakeholder analysis and consultations with many of them. This included aligning the goals of the workshop process with other relevant processes such as the Green Bridge Initiative in Kazakhstan.

The relevant stakeholders were identified because:

The organizers drew on their knowledge of the subregional context and made enquiries among known actors across the subregion for further suggestions on whom to engage.

1.5 The third stage — follow up

Straight after the workshop, each participant should be sent a message of thanks and a brief summary of the key outcomes. A similar positive message should be sent to all key decision makers that did not attend the workshop. A fuller report should be sent to all participants and other key stakeholders within two weeks of the workshop.

Linking stakeholders to other people and processes after the workshop will broaden the impact of the event. Depending on the capacity of the organizers, information about related national and subregional events, funding and other capacity development opportunities should be shared with participants and other stakeholders. It may be that further capacity-building or follow-up workshops can be organized by the stakeholders themselves in cooperation with local and subregional partners.

This is another point where a webinar among key stakeholders would be useful so that next steps can be agreed.

1.6 The Competences table

	<i>Holistic approach</i> <i>Integrative thinking and practice</i>	<i>Envisioning change</i> <i>Past, present and future</i>	<i>Achieving transformation</i> <i>People, pedagogy and education systems</i>
<p>Learning to know</p> <p><i>The educator understands....</i></p>	<ul style="list-style-type: none"> • The basics of systems thinking • Ways in which natural, social and economic systems function and how they may be interrelated • The interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature • Their personal world-view and cultural assumptions and seek to understand those of others • The connection between sustainable futures and the way people think, live and work • Their own thinking and action in relation to sustainable development 	<ul style="list-style-type: none"> • The root causes of unsustainable development • That sustainable development is an evolving concept • The urgent need for change from unsustainable practices towards an advancing quality of life, equity, solidarity and environmental sustainability • The importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change • The importance of preparedness for the unforeseen and a precautionary approach • The importance of scientific evidence in supporting sustainable development 	<ul style="list-style-type: none"> • Why there is a need to transform the education systems that support learning • Why there is a need to transform the way we educate/learn • Why it is important to prepare learners to meet new challenges • The importance of building on the experience of learners as a basis for transformation • How engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice
<p>Learning to do</p> <p><i>The educator is able to....</i></p>	<ul style="list-style-type: none"> • Create opportunities for sharing ideas and experiences from different disciplines/places/ cultures/generations without prejudice and preconceptions • Work with different perspectives on dilemmas, issues, tensions and conflicts • Connect the learner to their local and global spheres of influence 	<ul style="list-style-type: none"> • Critically assess processes of change in society and envision sustainable 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 	<ul style="list-style-type: none"> • Facilitate participatory and learner-centred education that develops critical thinking and active citizenship • Assess learning outcomes in terms of changes and achievements in relation to sustainable development

	<i>Holistic approach</i> <i>Integrative thinking and practice</i>	<i>Envisioning change</i> <i>Past, present and future</i>	<i>Achieving transformation</i> <i>People, pedagogy and education systems</i>
Learning to live together <i>The educator works with others in ways that...</i>	<ul style="list-style-type: none"> Actively engage different groups across generations, cultures, places and disciplines 	<ul style="list-style-type: none"> Facilitate the emergence of new world-views that address sustainable development Encourage negotiation of alternative futures 	<ul style="list-style-type: none"> Challenge unsustainable practices across educational systems, including at the institutional level Help learners clarify their own and others world-views through dialogue, and recognize that alternative frameworks exist
Learning to be <i>The educator is someone who...</i>	<ul style="list-style-type: none"> Is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and world-views 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Is willing to challenge assumptions underlying unsustainable practice Is a facilitator and participant in the learning process Is a critically reflective practitioner Inspires creativity and innovation Engages with learners in ways that build positive relationships

Part II

A sample workshop

This chapter provides an example of workshop activities on educator competences for ESD. It contains a workshop structure and sample activities, which can serve as a basis for developing workshops and trainings adapted to particular contexts and circumstances.

The workshop as described here is a two-day international workshop which aims to draw together a diverse group of policymakers, educators and non-governmental organization activists in order to explore how the Competences might be integrated into each of their education systems. As such, it has a focus on allowing participants to discuss and share their diverse settings. However, even if this is quite different to the context in which a different workshop would be planned, some of the key ideas and activities as outlined here could be used.

When developing an educator competences workshop, it is important to remember to:

- Understand the workshop as part of a long-term engagement.
- Start with where the stakeholders are.
- Understand and build on the context.
- Distribute responsibility throughout the process.
- Use pioneering examples.
- Ensure effective project planning throughout the process.
- Walk the talk by exemplifying the Competences through the process.
- Spread resources appropriately across the change process.

Box 6

The goals of this sample workshop are to:

- ✓ Introduce stakeholders as well as their expectations;
- ✓ Clarify the role of ESD and the Competences for transforming societies;
- ✓ Reflect and envision a future perspective by strategically positioning ESD in the national education system and identify a potential space for the Competences;
- ✓ Identify drivers of and barriers to the promotion of the Competences within the professional field through a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis and discussion of the national context based on the analysis;
- ✓ Plan the future.

Box 7

The workshop agenda

Day 1

Session 1: Introducing stakeholders and their expectations

Participants will form groups, e.g., there will a group of policymakers and a group of practitioners. Participants will introduce themselves and their expectations in the group and present a summary to the plenary.

Session 2: Clarification of the role of ESD and the Competences for societal transformation

The participants will discuss and clarify their understandings of core concepts, i.e., sustainable development (SD), ESD and educator competences. Moreover, the group will explore the role of ESD for societal transformation and the set of SD competences for learners in particular. Finally, the differences and interrelationships between SD competences for learners and competences for educators will be identified.

Day 2

Session 3: Strategic positioning of ESD in the national education system

After engaging with the underlying concepts of the Competences, the participants will carry out a gap analysis, comparing the actual and desired situations concerning the implementation of the Competences. Moreover, the workshop group will be invited to look at the relevance of the individual competences in the context that the participants work in.

Session 4: Identification of drivers and barriers in promoting the Competences

This session will focus on identifying strengths and opportunities as well as weaknesses and threats to promoting the Competences.

Session 5: Planning for the future

The findings of the SWOT analysis carried out in session 4 will serve as a basis for drawing up a plan for future steps in promoting the Competences for ESD.

2.1 Sample sessions

Session 1: Introduction of stakeholders and their expectations

The objectives of this session are:

- To provide space for self-introduction of participants as well as encourage participants to reflect on their motives and expectations.
- Since individual self-introduction is usually time-consuming, an alternative approach is to do self-introduction in the interest groups (e.g., policymakers, practitioners) or in national groups. The main characteristics or a summary of each of the groups could then be presented to the plenary.

Session 2: Clarification of the role of ESD and the Competences for societal transformation

The objectives of session 2 are to:

- Clarify/achieve common understanding on basic concepts: SD, ESD and the Competences for educators.
- Discuss to what extent ongoing strategic processes are relevant to SD
- Explore the role of ESD for societal transformation and the set of SD competences for learners in particular.
- Identify differences and interrelationships between SD competences for learners and the ESD Competences for educators.

Session 3: Strategic positioning of ESD in the national education system

The objectives of session 3 are to:

- Clarify what the position of ESD is/could be in the existing legislation (education strategies, regulatory frameworks, curricula, etc.).
- Identify an entry point for the Competences within the existing legislation.
- Discuss potential policy measures and other preconditions in order to strengthen ESD and implement the Competences.

Session 4: Identification of drivers and barriers in promotion of the Competences

The objective of session 4 is to identify drivers and barriers (SWOT analysis) in promoting the Competences in the following areas:

- Within professional field of the policymakers of different levels.
- In the existing educational practices.

Session 5: Planning for the future

The objectives of session 5 are to:

- Discuss the potential of the Competences within professional field, including long-term and short-term objectives.
- Decide on priority measures, the timescale and individual responsibilities;
- Plan further collaboration/networking among stakeholders.

2.2 Activity templates for session two

Aims of the activity	At the end of this session the participants will be able to: <ul style="list-style-type: none"> • Define core concepts, i.e., SD, ESD, and competences. • Define SD competences and ESD competences (differences and interrelationships) 	
Method	<ul style="list-style-type: none"> • A game on SD awareness • An activity on policy and practice (“what would you do”?) • Brief lecture • Discussion 	
Procedure	Facilitator’s activities	Participants’ activities
	<ol style="list-style-type: none"> 1. The facilitator provides an overview of the aims of this session and of the activities that will be used and introduces the “Tragedy of the Commons Game” as the first activity. Facilitate the game as per the instructions for facilitators (Template 2.2.A), and facilitate the discussion. 2. 	<ol style="list-style-type: none"> 1. Participants play the Tragedy of the Commons Game in groups of four to six, and participate in the discussion afterwards.
	<ol style="list-style-type: none"> 2. The facilitator briefly recaps the idea that education has an important role to play in sustainable development and therefore educator skill or competences are vital. The facilitator introduces a role play which invites participants to make explicit their own ideas about what kind of competences are necessary. Please note that it is intended that this is a brief activity (no more than five minutes) to generate initial ideas which can be discussed in more detail during activity 4 below. After the role play the facilitator hosts a discussion and seeks to summarize the initial conclusions of the participants (this can be done using a flip chart/ whiteboard, etc.). Again, this is intended to be a brief activity. 	<ol style="list-style-type: none"> 2. Participants work in groups of two to three. They are each provided with the worksheet which explains their role and task. They have five minutes to make recommendations. After five minutes the facilitator calls the group back together and each group (or a sample of groups if number of participants is too great) has an opportunity to present on (a) their recommendations and (b) how difficult or easy they found the task.

	3. The facilitator presents a short lecture. The slides provided can be used/edited/localized for this purpose (please note that the slides provided will take much longer than 20 minutes and so will require shortening as appropriate for the context of the workshop).	
	4. The facilitator invites participants to raise questions about the presentation or to make comments on it. The facilitator encourages participants to note how their own recommendations relate to or differ from those of the Expert Group.	4. Participants raise questions about the work of the Expert Group, and relate the conclusions of the Expert Group to their own ideas.
Description / Comments	<p><i>Length: two hours</i></p> <p>Session contains an introduction (10 minutes) and four activities:</p> <ol style="list-style-type: none"> 1. Raising awareness of and sensitivity to sustainable development as an issue. This gives participants a reason/ motivation to engage with the discussion and debates. This is done through the use of the the Tragedy of the Commons Game (other games could be used, a list of alternatives is provided in the resources section, below). This will take up to 45 minutes 2. Generating their own prior knowledge and ideas about competences and policymaking and developing an understanding of the mandate/ role of the Expert Group on Competences. This is be done through an activity in which participants role play the Expert Group, with a mandate to advise on educator competences and policy recommendations. A worksheet for this activity is attached. This will take 20 minutes. 3. Providing an overview of “Learning for the Future — Competences in Education for Sustainable Development”. This is done through a short lecture on “Learning for the Future”, highlighting the background to the work, the mandate of the expert group to advise on (a) Educator Competences and (b) policy recommendations, an overview of the output of the expert group. This will take 20 minutes. 4. Relating the Competences to their prior knowledge and ideas. This is done through a facilitated discussion, in which participants have an opportunity to ask questions about the “Learning for the Future” document and to discuss how it relates to their own ideas. This will take 25 minutes. 	
Resources	<p>2.2. The Tragedy of the Commons Game</p> <p>2.2.B Role play activity: Policy and Practice — What would you do?</p>	

2.2. A Tragedy of the Commons Game

The “tragedy of the commons” is a concept from legal economics and games theory. It describes how complete individual freedom regarding the common use of goods leads to total underutilization or overexploitation of these goods when each individual seeks to maximize their own use while the costs that yield a greater individual benefit are distributed among all users of the goods. This game introduces participants to the tragedy of the commons concept.

Instruction:

1. Form at least two groups of 4 to 6 participants.
2. In the starting situation, every group has a lake with 20 fish in it (20 tokens).
3. You are fishermen and women. You go out fishing in your lake twice a year. In every round, you can choose whether you catch 0, 1, 2 or 3 fish. You take the fish out of the lake and put them in front of you. It is your own choice how many fish you catch. The fish in the lake will reproduce after every year (= two rounds), just like in nature. If there are only few fish left in the lake or, conversely, if there are a lot of fish in the lake, they will reproduce at a slower rate (see reproduction table and chart below). You cannot talk while you are fishing.
4. There is no particular order as to who fishes first, but once everyone has had a turn, the second round of fishing starts.
5. Completion of the second round marks the end of year one, and the games master will replenish the number of fish.
6. You then fish for another year (2 rounds) and the fish are replenished again. Then a third year follows. If the lake is empty in between, the group is finished. You still cannot talk to each other.
7. After the third year, the scores are tallied. How many fish are in each lake? Who caught the most fish? Compare the two groups!

Now play one or more of the alternative versions of the game:

Team members are allowed to talk during the game, consult each other, negotiate, etc. Play another three years, starting with 20 fish.

Play a version where the number of fish is not known (use a box) and individuals don't know how many fish others catch. Take 0, 1, 2 or 3 fish from the box without the others seeing it.

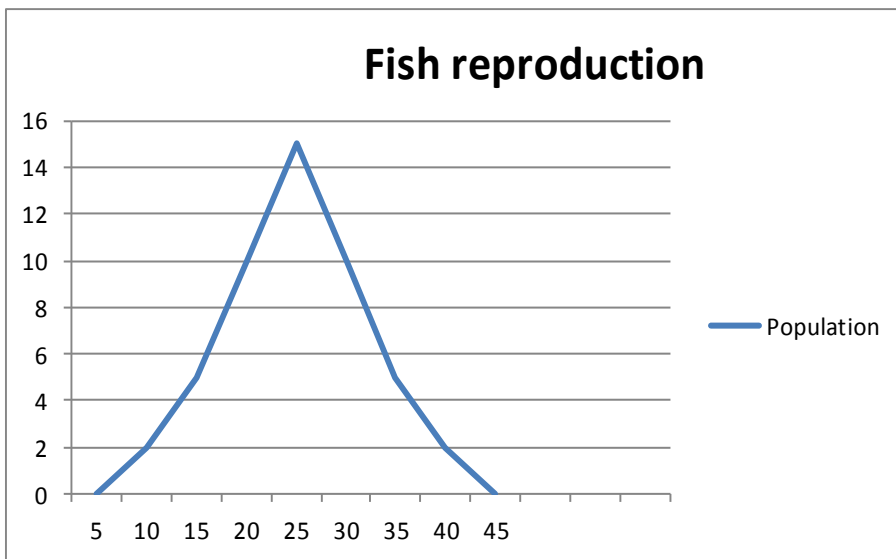
Put the two groups together and increase the number of fish in the lake to 30. Team members are allowed to talk.

Discussion

- What happened during the game, how did you feel? Did any of the team members overfish the lake? How does that feel? How do others feel about it?
- What happened when the two groups were put together?
- This game is about “common” fish; what other commons can we think of? Are there any differences between the different types of commons (renewable, not renewable)? In addition to physical commons (raw materials, resources, space,

food), can you think of social commons? (happiness, peace, love, division of wealth, health)?

Fish population	Number of reproduced fish
1-5	0
6-10	2
11-15	5
16-20	10
21-25	15
26-30	10
31-35	5
36-40	2
41-45	0



2.2.B Role play activity: Policy and Practice — What would you do?

You are a member of the United Nations Expert Group appointed to advise on:

- (a) The competences that educators need if they are to contribute to ESD;
- (b) How educational policies should change to ensure that educators have these competences.

What would you advise?

Please work in groups of two to three and make recommendations. You have five minutes.

1. What competences do educators need if they are to contribute to ESD?

2. How should educational policies change to ensure educators have these competences?

2.3 Activity templates for session three

Clarifying the relevance of the Competences for the professional activities of participants

After completing this activity, participants will have worked on interpreting the Competences in terms of the role they play in the current situation and will lay the foundation for developing future steps in the promotion of Competences later in session 5 of the workshop.

Aims of the activity	At the end of this session the participants will be able to: <ul style="list-style-type: none"> • Relate the Competences to their professional activities. • Identify the actual and desired situations with regard to implementation of the Competences. 	
Method	<i>Gap analysis</i> where individuals compare the actual and desired situations concerning the implementation of the Competences. Participants will then rank those Competences that have not yet been implemented according to their importance to establish implementation priorities. Participants will also contextualize their assessments.	
Procedure	Facilitator's activities	Participants' activities
	1. The facilitator asks participants to briefly describe their professional activities in education or ESD (approximate duration: 10–15 minutes).	1. Participants describe their professional background.
	2. The facilitator briefly presents the Competences document to the plenary and explains the activity, which provides an opportunity to analyse the Competences, and distributes the tally sheets (see template 2.3.A below) to the participants (approximate duration: 10 minutes).	2. Participants first analyse each of the Competences in terms of those that are: (a) already being met (actual); (b) not already being met but very important and should be met as soon as possible (desired); and (c) are not being met but are less important and could be met later on (see template 2.3.B below). The tally sheets are completed by each participant, working by themselves.

	<p>3. Assigns the participants to different groups. The groups can either be homogeneous or heterogeneous, depending on the objectives of the particular workshop. A homogenous group would include similar stakeholders, e.g., teacher educators or policymakers or participants from the same country. A heterogeneous group would encompass different stakeholders. The composition of the groups may have a significant impact on discussion dynamics and outcomes.</p>	<p>3. Split into small groups (four to eight individuals). In the groups, participants first identify a spokesperson and a note-taker and then share and bring together their individual assessments of the Competences.</p>
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	<p>4. For a discussion of Competences assessment, the facilitator:</p> <ul style="list-style-type: none"> • Collects the group summary table from each of the groups and inputs it into a single table containing the data from all groups (see template 2.3.C below). • Invites the spokesperson from each group to summarize the collective data from their group during the plenary session, highlighting those Competences that are already being met, those that are not yet met, but very important, and those that are less important or could be met later on in the implementation phase. • Summarizes the findings for the entire plenary and invites participants to rank the Competences that have not been addressed according to their importance (see template C below). • Might ask participants if, in their view, certain competences have been omitted and if participants find the Competences framework useful for defining a professional development programme (if not, how might it be framed differently to more effectively communicate these needs?). • If there are several representatives from different member States, they might be asked to jointly develop a national profile with regard to the Competences. These national profiles could be compared during workshops that are regional in scope. • Could also ask participants to situate each of the Competences according to grade-level appropriateness. For instance, are there Competences that are essential for educators at the secondary level, but not essential for those at the primary level? 	<p>4. For a discussion of Competences assessment participants:</p> <ul style="list-style-type: none"> • Are invited to discuss their individual assessments and to consider how their particular context (professional or national, etc.) might explain differences in viewpoints. • Group spokespersons are invited to present the results from their groups.
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Description / Comments	<p>This activity will allow participants to recognize those Competences that are already implemented and those that are not. Participants will also rank the Competences in order of importance, both individually and collectively. This gap analysis will allow participants to later develop an action plan for implementing Competences in their region/country and to establish priorities.</p> <p>The prioritization activity could be accomplished in small groups or in the plenary (depending on context and size of group). A similar activity could also be used with the recommendations for policymakers in the Competences document.</p>
Resources	<p>Template 2.A: Individual Analysis of Competences Template 2.B: Group Summary Template 2.C: Plenary Summary</p>

Template 2.3.A: Individual Analysis of Competences

	ESD Competences	addressed	Not addressed, but very important	Not addressed, but less important
1	The educator understands the basics of systems thinking			
2	The educator understands ways in which natural, social and economic systems function and how they may be interrelated			
3	The educator understands the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature			
4	The educator understands their personal world-view and cultural assumptions and seek to understand those of others			
5	The educator understands the connection between sustainable futures and the way we think, live and work			
6	The educator understands their own thinking and action in relation to sustainable development			
7	The educator understands the root causes of unsustainable development			
8	The educator understands that sustainable development is an evolving concept			
9	The educator understands the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity and environmental sustainability			
10	The educator understands the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change			
11	The educator understands the importance of preparedness for the unforeseen and a precautionary approach			
12	The educator understands the importance of scientific evidence in supporting sustainable development			
13	The educator understands why there is a need to transform the education systems that support learning			
14	The educator understands why there is a need to transform the way we educate/learn			
15	The educator understands why it is important to prepare learners to meet new challenges			
16	The educator understands the importance of building on the experience of learners as a basis for transformation			
17	The educator understands how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice			
18	The educator is able to create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions			
19	The educator is able to work with different perspectives on dilemmas, issues, tensions and			

	conflicts			
20	The educator is able to connect the learner to their local and global spheres of influence			
21	The educator is able to critically assess processes of change in society and envision sustainable futures			
22	The educator is able to communicate a sense of urgency for change and inspire hope			
23	The educator is able to facilitate the evaluation of potential consequences of different decisions and actions			
24	The educator is able to use the natural, social and built environment, including their own institution, as a context and source of learning			
25	The educator is able to facilitate participatory and learner-centred education that develops critical thinking and active citizenship			
26	The educator is able to assess learning outcomes in terms of changes and achievements in relation to sustainable development			
27	The educator works with others in ways that actively engage different groups across generations, cultures, places and disciplines			
28	The educator works with others in ways that facilitate the emergence of new world-views that address sustainable development			
29	The educator works with others in ways that encourage negotiation of alternative futures			
30	The educator works with others in ways that challenge unsustainable practices across educational systems, including at the institutional level			
31	The educator works with others in ways that help learners clarify their own world-views and those of others through dialogue, and recognizes that alternative frameworks exist			
32	The educator is someone who is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and world-views			
33	The educator is someone who is motivated to make a positive contribution to other people and their social and natural environment, locally and globally			
34	The educator is someone who is willing to take considered action even in situations of uncertainty			
35	The educator is someone who is willing to challenge assumptions underlying unsustainable practice			
36	The educator is someone who is a facilitator and participant in the learning process			
37	The educator is someone who is a critically reflective practitioner			
38	The educator is someone who inspires creativity and innovation			
39	The educator is someone who engages with learners in ways that build positive relationships			

Template 2.3.B: Group Summary

		Number of people in the group, who indicated that...		
ESD Competences		Already addressed	Not addressed, but very important	Not addressed, but less important
<i>Example (Group of five participants)</i> <i>The educator understands the basics of systems thinking</i>		<i>3</i>	<i>1</i>	<i>1</i>
1	The educator understands the basics of systems thinking			
2	The educator understands ways in which natural, social and economic systems function and how they may be interrelated			
3	The educator understands the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature			
4	The educator understands their personal world-view and cultural assumptions and seeks to understand those of others			
5	The educator understands the connection between sustainable futures and the way we think, live and work			
6	The educator understands their own thinking and action in relation to sustainable development			
7	The educator understands the root causes of unsustainable development			
8	The educator understands that sustainable development is an evolving concept			
9	The educator understands the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability			
10	The educator understands the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change			
11	The educator understands the importance of preparedness for the unforeseen and a precautionary approach			
12	The educator understands the importance of scientific evidence in supporting sustainable development			
13	The educator understands why there is a need to transform the education systems that support learning			
14	The educator understands why there is a need to transform the way we educate/learn			
15	The educator understands why it is important to prepare learners to meet new challenges			
16	The educator understands the importance of building on the experience of learners as a basis for transformation			
17	The educator understands how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice			
18	The educator is able to create opportunities for sharing ideas and experiences from different			

	disciplines/places/cultures/generations without prejudice and preconceptions			
19	The educator is able to work with different perspectives on dilemmas, issues, tensions and conflicts			
20	The educator is able to connect the learner to their local and global spheres of influence			
21	The educator is able to critically assess processes of change in society and envision sustainable futures			
22	The educator is able to communicate a sense of urgency for change and inspire hope			
23	The educator is able to facilitate the evaluation of potential consequences of different decisions and actions			
24	The educator is able to use the natural, social and built environment, including their own institution, as a context and source of learning			
25	The educator is able to facilitate participatory and learner-centred education that develops critical thinking and active citizenship			
26	The educator is able to assess learning outcomes in terms of changes and achievements in relation to sustainable development			
27	The educator works with others in ways that actively engage different groups across generations, cultures, places and disciplines			
28	The educator works with others in ways that facilitate the emergence of new world-views that address sustainable development			
29	The educator works with others in ways that encourage negotiation of alternative futures			
30	The educator works with others in ways that challenge unsustainable practices across educational systems, including at the institutional level			
31	The educator works with others in ways that help learners clarify their own world-views and those of others through dialogue, and recognizes that alternative frameworks exist			
32	The educator is someone who is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and world-views			
33	The educator is someone who is motivated to make a positive contribution to other people and their social and natural environment, locally and globally			
34	The educator is someone who is willing to take considered action even in situations of uncertainty			
35	The educator is someone who is willing to challenge assumptions underlying unsustainable practice			
36	The educator is someone who is a facilitator and participant in the learning process			
37	The educator is someone who is a critically reflective practitioner			
38	The educator is someone who inspires creativity and innovation			
39	The educator is someone who engages with learners in ways that build positive relationships			

Template 2.3.C: Plenary Summary

		Number of people in the plenary, who indicated that...		
ESD Competences		Already addressed	Not addressed, but very important	Not addressed, but less important
<i>Example (Plenary of 40 participants)</i> <i>The educator understands the basics of systems thinking</i>		<i>22</i>	<i>12</i>	<i>6</i>
1	The educator understands the basics of systems thinking			
2	The educator understands ways in which natural, social and economic systems function and how they may be interrelated			
3	The educator understands the interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature			
4	The educator understands their personal world-view and cultural assumptions and seeks to understand those of others			
5	The educator understands the connection between sustainable futures and the way we think, live and work			
6	The educator understands their own thinking and action in relation to sustainable development			
7	The educator understands the root causes of unsustainable development			
8	The educator understands that sustainable development is an evolving concept			
9	The educator understands the urgent need for change from unsustainable practices towards advancing quality of life, equity, solidarity, and environmental sustainability			
10	The educator understands the importance of problem setting, critical reflection, visioning and creative thinking in planning the future and effecting change			
11	The educator understands the importance of preparedness for the unforeseen and a precautionary approach			
12	The educator understands the importance of scientific evidence in supporting sustainable development			
13	The educator understands why there is a need to transform the education systems that support learning			
14	The educator understands why there is a need to transform the way we educate/learn			
15	The educator understands why it is important to prepare learners to meet new challenges			
16	The educator understands the importance of building on the experience of learners as a basis for transformation			
17	The educator understands how engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice			
18	The educator is able to create opportunities for sharing ideas and experiences from different			

	disciplines/places/cultures/generations without prejudice and preconceptions			
19	The educator is able to work with different perspectives on dilemmas, issues, tensions and conflicts			
20	The educator is able to connect the learner to their local and global spheres of influence			
21	The educator is able to critically assess processes of change in society and envision sustainable futures			
22	The educator is able to communicate a sense of urgency for change and inspire hope			
23	The educator is able to facilitate the evaluation of potential consequences of different decisions and actions			
24	The educator is able to use the natural, social and built environment, including their own institution, as a context and source of learning			
25	The educator is able to facilitate participatory and learner-centred education that develops critical thinking and active citizenship			
26	The educator is able to assess learning outcomes in terms of changes and achievements in relation to sustainable development			
27	The educator works with others in ways that actively engage different groups across generations, cultures, places and disciplines			
28	The educator works with others in ways that facilitate the emergence of new world-views that address sustainable development			
29	The educator works with others in ways that encourage negotiation of alternative futures			
30	The educator works with others in ways that challenge unsustainable practices across educational systems, including at the institutional level			
31	The educator works with others in ways that help learners clarify their own worldviews and those of others through dialogue, and recognizes that alternative frameworks exist			
32	The educator is someone who is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and world-views			
33	The educator is someone who is motivated to make a positive contribution to other people and their social and natural environment, locally and globally			
34	The educator is someone who is willing to take considered action even in situations of uncertainty			
35	The educator is someone who is willing to challenge assumptions underlying unsustainable practice			
36	The educator is someone who is a facilitator and participant in the learning process			
37	The educator is someone who is a critically reflective practitioner			
38	The educator is someone who inspires creativity and innovation			
39	The educator is someone who engages with learners in ways that build positive relationships			

2.4 Activity templates for session four

Identification of drivers and barriers to implementation of the Competences within professional fields of work

Aims of the activity	At the end of this session the participants will be able to: <ul style="list-style-type: none"> Identify drivers (strengths and opportunities) and barriers (weaknesses and threats) Prioritize drivers and barriers Complete an analysis of strengths, weaknesses, opportunities and threats (SWOT) 	
Method	SWOT analysis, discussion, think and share, brainstorming, affinity analysis, visioning	
Procedure	Facilitator's activities	Participants' activities
	<i>First step of the activity: completing the SWOT analysis (template 2.4)</i>	
	<ol style="list-style-type: none"> The facilitator explains the nature of SWOT analysis and assigns individuals to four groups by having them count off 1, 2, 3, 4, and repeat until all participants are assigned to different groups. <p><i>Four flip charts are distributed around the room, each with one of the following headings: "Strengths", "Weaknesses", "Opportunities", and "Threats". To begin the activity, each group begins at one of the flip charts according to their assigned number, then rotates through the remaining flip charts at five-minute intervals.</i></p>	<ol style="list-style-type: none"> Participants in each group are given five minutes to identify as many points as possible on a given flip chart. After the time has elapsed, the groups move to the next flip chart to identify other relevant points that have not been previously listed. The groups rotate through all four flip charts to collectively identify strengths, weaknesses, opportunities, and threats (SWOT).
	<ol style="list-style-type: none"> The facilitator reviews the points that have been suggested in the SWOT analysis, after the groups have rotated through all four flip charts and opens the floor for discussion. <p><i>Total time for first step: 25–30 minutes.</i></p>	<ol style="list-style-type: none"> Participants engage in a general discussion on the outcomes of the SWOT analysis.
	<i>Second step of the activity: revealing visions</i>	
	<ol style="list-style-type: none"> The facilitator asks participants to imagine that they are skimming through a newspaper three or four years into the future. A headline catches 	<ol style="list-style-type: none"> Individually, participants write as many headlines as possible on the cards in the allotted time.

	<p>their eye because it is very positive with regard to sustainable living. The facilitator then gives each participant a stack of index cards (5–10) and asks them to write as many positive headlines as possible in a five-minute period, one headline per card. These headlines reflect the vision of participants.</p> <p><i>Workshop assistants pick up these cards as they are completed and give them to the facilitator who sorts them into different categories while participants are working on this visioning task. These categories, or themes, are the result of an affinity analysis based on the visioning activity. The facilitator reviews the themes that emerge from the analysis. For instance, one theme might be “the greater engagement of students in the community”.</i></p>	
	<p>4. The facilitator opens the floor for discussion</p> <p><i>Total time for the second step: 20–25 minutes.</i></p>	<p>4. Together, participants engage in a general discussion on the vision of the participants</p>
<p><i>Third step of the activity: creating a wall of ideas</i></p>		
	<p>5. The facilitator reassigns participants to a small number of groups so that they now engage with different participants from the SWOT activity earlier on. For this brainstorming activity, the groups are to assemble at different flip charts to propose ideas, either general or quite specific, for moving forward with the ESD Competences agenda in their jurisdiction. No evaluation or critique is allowed during this stage of the activity. The facilitator could also limit each group to a maximum number of ideas, for instance 5 or 10 depending on the number of participants and groups.</p>	<p>5. Each group appoints a scribe and a spokesperson. The scribes write down ideas proposed by their group members on the flip charts. Participants can ask questions for clarification or propose changes to build on the ideas presented, but without evaluating their relevance. A group discussion is then held to evaluate and finalize the contributions. After each group completes their presentation, their chart papers are taped to the wall. The ideas developed by each group now constitute an “idea wall” which will be used in the next activity.</p>

	<p>6. The facilitator opens the floor for presentations and discussion</p> <p><i>Total time for the third step: 5–10 minutes.</i></p>	<p>6. The spokespersons briefly present the ideas developed.</p>
<i>Fourth step of the activity: prioritizing ideas and strategies</i>		
	<p><i>Each participant is now given 12 dot stickers, each sticker being a vote for an idea that, in their opinion, makes sense strategically.</i></p> <p>7. The facilitator reviews the results of the vote, highlighting those ideas that make the most sense strategically according to participants.</p>	<p>7. The participants study all of the ideas presented during the plenary and place a sticker next to an idea in order to vote for it. Participants can place a maximum of three stickers for any one idea, but are encouraged to distribute them across the idea wall. Participants can also challenge one other regarding their choice and can influence the outcome of the vote.</p>
	<p>8. The facilitator opens the floor for discussion</p> <p><i>Total time for step four: 10–20 minutes.</i></p>	<p>8. The participants engage in a discussion about the outcomes of the vote.</p>
Description/ Comments	<p>Total time for the activity: One and a half to two hours. If there are too many participants in the session, the facilitator might wish to create more groups. The ideal situation would be to have four to six participants in each group to ensure effective discussion.</p>	
Resources	<ul style="list-style-type: none"> • Template 2.4.: SWOT Matrix 	

Template 2.4 :SWOT Matrix

Summary
Strengths
Weaknesses
Opportunities
Threats
Possible Actions

2.5 Activity templates for session five

Aims of the activity	<p>The overall aim is to draw up an action plan for the future.</p> <p>The session will draw together the insight gained and ideas developed in sessions 3 and 4. The “wall of ideas”, the SWOT analysis and the prioritizing of the Competences will be used as the basis for setting priority measures for reaching short- and long-term objectives in advancing the ESD Competences Agenda. The outcome will be an action plan, which sets a specific time frame as well as defines individual responsibilities.</p> <p>The specific aims of the activity are:</p> <ul style="list-style-type: none"> • To discuss short- and long-term objectives for promoting the Competences. • To decide on priority measures, the time frame and individual responsibilities. • To plan further collaboration/networking among the stakeholders. 	
Method	Group work and plenary discussion	
Procedure	Facilitator’s activities	Participants’ activities
	<ol style="list-style-type: none"> 1. The facilitator summarizes the outcomes of activities 3 and 4, highlighting: <ol style="list-style-type: none"> (a) The Competences that have been rated by most participants as “very important” but “not addressed”; (b) The ideas, developed in session 4 and prioritized on the “wall of ideas”, that should/can be included in the action plan; (c) The strengths and weaknesses that should be addressed or taken into consideration when drawing up the action plan. 	
	<ol style="list-style-type: none"> 2. The facilitator invites participants to form several groups depending on their affinity: teacher educators, policymakers, teachers, non-formal educators, etc. Another possibility would be asking participants to assemble in homogenous groups based on their national affinity. This would allow ECE member States to define possible actions for moving the ESD Competences agenda forward 	<ol style="list-style-type: none"> 2. Form groups according to their affinity and/or based on their national affinity.

	<p>3. The facilitator asks the participants to develop a number of concrete actions for moving the ESD Competences agenda forward in their context, taking into account short- and long-term objectives.</p> <p><i>The facilitator makes sure that the outcomes of the gap analysis of session 3, as well as the “wall of ideas” and the outcomes of the SWOT analysis, are visibly displayed during the group work.</i></p>	<p>3. Participants work in groups to spell out the action plan. A template that offers orientation for the structure of the action plan is provided (template 2.5 below).</p>
	<p>4. The facilitator invites the groups to present their action plans.</p>	<p>4. Participants present their action plans.</p>
	<p>5. The facilitator invites the participants to participate in a final general discussion encouraging participants to address:</p> <ul style="list-style-type: none"> - How the action plan and the identified follow ups ensure that the workshop contributes most effectively to the change process. - Further collaboration/networking among the stakeholders. 	<p>5. The participants engage in a final discussion on future actions and collaborations.</p>
Description/ Comments	<p>At the end of this activity participants will have developed high-level priorities for advancing the ESD Competences agenda in the short and in the long term. Moreover, they will have developed an action that includes a time frame as well as defines individual responsibilities.</p>	
Resources	<p>Template 2.5: Action Plan</p>	

Template 2.5 : Action Plan

<p>ESD Competences not addressed but very important (as identified in session3)</p> <p>- or -</p> <p>Recommendations for policy makers not addressed but found to be very important in the local/regional context</p>	<p>Measures</p> <ul style="list-style-type: none"> - possibly drawing on the wall of ideas - taking into consideration the strengths and weaknesses 	<p>Tasks to implement measures</p>	<p>Activities I will undertake are:</p>	<p>Time-frame</p>	<p>How to follow up on implementation?</p>

Learning for the future: Competences in Education for Sustainable Development

Report by the ECE Expert Group on Competences in ESD

1. Introduction

Context

There is now widespread concern that the model of development that is evident across the globe is unsustainable. We are faced with the urgent need to recast our ways of living, away from ones that rely on the unsustainable consumption of resources, the degradation of ecosystems and the exploitation of people, towards a model that strives to enhance the well-being of all human beings within the limits of our planet.

Sustainable development is described by the United Nations Economic Commission for Europe (ECE) Strategy for Education for Sustainable Development as being underpinned by an ethic of solidarity, equality and mutual respect among people, countries, cultures and generations; it is development in harmony with nature, meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.²

While the need for sustainable development is clear, the ways to approach it may differ and will evolve. It is widely held that the development of sustainable societies is a continuous learning process and one in which issues and dilemmas are commonplace and appropriate answers and solutions may not be definitive.

Education should play an important role in enabling people to live together in ways that contribute to sustainable development. However, at present, education often contributes to unsustainable living. This can happen through a lack of opportunity for learners to question their own lifestyles and the systems and structures that promote those lifestyles. It also happens through reproducing unsustainable models and practices. The recasting of development, therefore, calls for the reorientation of education towards sustainable development.

Even as education for sustainable development (ESD) raises awareness of the complexity and dynamism of issues, it also plays a key role in making sustainable development understood and that it is applied in a concrete way. ESD helps to develop the capacity for critical reflection and systemic and futures thinking, as well as to motivate actions that promote sustainable development.

The development of a sustainable society should be seen as a continuous process of learning and change, involving a variety of actors providing guidance and leadership in

² This definition of sustainable development is consistent with both the United Nations Declaration on the Right to Development, as set out in General Assembly resolution 41/128 of 4 December 1986, and the Rio Declaration on Environment and Development (United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992).

formal, non-formal and informal learning. This requires a corresponding enhancement in the competences of educators, leaders and decision makers at all levels of education.

The competences in ESD described in this document are those of educators and not of learners, although both are intricately related. They go beyond the competences that individual educators would have in order to provide a good quality education in their discipline.

This set of competences is not a “minimum standard” to be met by all educators, but rather a goal to which all educators should aspire. It is not intended to prescribe behavioural outcomes; it provides a framework for the professional development of educators and is of particular importance to individuals, groups and institutions that have a multiplier effect, such as educators of educators.

Mandate

The ECE Strategy for ESD aims to equip people with knowledge, skills, understanding, attitude and values compatible with sustainable development. To this end it calls specifically for the development of educators’ competences in order for them to engage in ESD. The Joint Ministerial Session on ESD held at the Belgrade “Environment for Europe” Ministerial Conference in 2007 recognized the competence of educators as a frequent bottleneck in achieving ESD and agreed that one priority for future implementation of the ECE Strategy should be developing competences in ESD.

In response to this concern, the ECE Steering Committee on Education for Sustainable Development, at its meeting on 19 and 20 February 2009, established the Expert Group on Competences in Education for Sustainable Development with the mandate to prepare:

(a) General recommendations for policymakers, so as to provide them with a tool to integrate ESD into relevant policy documents with a view to creating an enabling environment for the development of competences across all sectors of education, with particular emphasis on formal education;

(b) A range of core competences in ESD for educators, including defining these, as feasible, to serve as a tool to facilitate the integration of ESD into all educational programmes at all levels, as well as guidelines for the development of these competences among educators.

The Expert Group comprised representatives appointed by member States and partners from across the ECE region. They included academics, Government officials and experts from international and non-governmental organizations (see annex I).

The Expert Group took into account diverse local, national and regional circumstances, as well as the global context, and sought to ensure that recommendations were framed in ways that reflected the diversity of the ECE region.

The ECE Strategy for ESD makes it clear that ESD takes place in formal, non-formal and informal settings. While the document emphasizes formal education, the competences identify the knowledge and abilities of all educators, including, but not limited to, teachers. Education happens not only through formal learning and teaching, but also through facilitation and support of non-formal educators who operate in informal and social contexts. Many educators do not carry the title of “teacher”.

The structure of the document

In line with the forgoing mandate this document:

(a) Makes recommendations to policymakers with respect to the development of competences across all sectors of education. These refer to professional development in education, governing and managing of institutions, curriculum development and monitoring and assessment;

(b) Identifies a framework of core competences in ESD for educators. This is intended as a guide to what educators should know, what they should be able to do, how they should live and work with others, and how they should be if they are to contribute to ESD. The competences are clustered around three essential characteristics of ESD — a holistic approach; envisioning change; and achieving transformation.

2. Recommendations for policymakers

A. Scope

The policy recommendations are to be addressed at five levels: international, regional, national, subnational and organizational. These recommendations for policymakers highlight the key points for action, namely professional development in education, governing and managing of institutions, curriculum development and monitoring and assessment. They outline the features that will enable the development and practice of the ESD competences described in chapter III (hereafter “the Competences”). The extent of policy change and the specific tools required by these recommendations will depend on existing local conditions and policy frameworks.

Although these recommendations address Competences for educators across formal and non-formal education, as well as informal learning, they pay particular attention to formal education, in line with the mandate. These recommendations address all key aspects of education systems, but only insofar as they may have a direct impact on the Competences.

The development and the practice of educator competences are dependent upon a process of empowering educators. These recommendations are intended to focus attention on how educators can be supported to recognize their full potential and to fulfil that potential through the development and practice of the Competences.

These recommendations address not only Governments and regulators, but all decision makers and leaders who could have a role in providing frameworks, conditions and means for promoting the development of educator competences. These decision makers could, for example, be in the private sector, with responsibility for work-based education and training; in the media, with capacity for promoting informal learning; or be an NGO involved in creating learning experiences.

While not every individual educator needs to have all of the Competences presented in this document, it is important that education is underpinned by the Competences if member States are to contribute effectively to ESD. Within formal education systems these recommendations are addressed to policymakers, but they have implications for actors at all levels, including managers, administrators and educators. All actors within education should take responsibility for the development of the Competences.

There is a need for these actors to take ownership of the Competences. To this end the Expert Group recommends that policymakers adopt policy recommendations to the extent possible in light of national priorities and processes. This should include providing actors with opportunities to discuss and adapt the Competences to their local contexts. The Expert Group also recommends a wide distribution of this document to all educators and other major stakeholders.

B. Recommendations

(i) Professional development in education

Empowering educators must be central to any professional development initiative. Educators are important agents for change within education systems. Effective educational transformation is dependent upon educators being motivated to bring about change, as well as being capable of and supported in doing so.

Provide training and education in ESD for those in management and leadership positions in educational institutions. Leadership and management are key determinants of success in educational transformation at the institutional level.

Initial teacher education institutions should consider the Competences and identify where they might best be integrated into their programmes. As many educators form their views about what it means to be an educator during initial teacher education, this is a critical area for action.

Continuing professional development for educators underpinned by the Competences should be provided. Practicing educators also need an opportunity to develop the Competences if the system is to be transformed, such as through critically reflective practice.

Criteria for allocating resources to capacity-building of formal, non-formal and informal education should refer to these Competences. This is a key mechanism for building ESD into the professional development of educators, including those working in NGOs, the media and broader vocational education.

Particular attention should be paid to developing the Competences among educators who work in higher education. Institutions of higher education play a crucial role in preparing future leaders and specialists in a variety of fields, including education. While respecting the contribution of academic freedom to knowledge generation, educators at this level should consider and seek to develop the Competences.

Where procedures for professional accreditation of teachers and other educators exist, they should be reviewed in light of the Competences. Many educational systems have procedures for professional accreditation of teachers and other educators. These are often based upon competences that educators are expected to have in order to be accredited. The Competences should be reflected within such requirements.

Partnerships and networks should be established and supported as an important strategy for developing and practicing the Competences. These could be at the local, national, regional and international levels. Collaboration among the many actors involved in education will help to ensure that the system embraces ESD.

(ii) Governing and managing institutions

Synergies among international, subregional, national and subnational processes should be identified and developed in order to facilitate the implementation of these recommendations. These will include synergies with existing processes, such as the Bologna process, Education for All and Life-long Learning, among others.

Models of leadership that promote the enhancement of Competences should be developed and supported. Leadership is a key determinant of success in educational transformation at the institutional level; ESD requires the distribution of power across institutions in order to facilitate educational change.

Institutions and organizations that are involved in supporting learning should be encouraged to operate in ways and to maintain a culture that facilitates the

development and practice of the Competences. This will include the way in which the organization distributes its own decision-making, manages its resources and conducts its relationship with the wider community.

A whole-institution approach should be adopted for the continuing professional development of educators in their workplace. Educators will best develop the Competences when the culture and management of the entire organization is supportive of sustainable development. This approach also applies to organizations such as businesses and NGOs where learning also takes place.

Governance should ensure transparency and accountability. This will ensure legitimacy of ESD practices, as well as improve and further develop the Competences.

Management should use evaluation as an important learning tool that plays an integral part in strategic planning. It should be seen as a reflection by all partners on ESD processes and results.

(iii) Curriculum development

The Competences should be a basis for the review of curriculum documents. While the Competences are those of educators, they also suggest approaches to educational practice. In order for educators to practice the Competences they should be supported by a curriculum which reflects such educational approaches.

Textbooks and other educational materials should be reviewed to determine whether they reflect educational approaches suggested by the Competences. Materials may need to be developed to further support ESD.

(iv) Monitoring and assessment

Audit and assessment as well as monitoring systems for educational institutions should be adapted or developed in order to assess the institution's contribution to sustainable development. Educational institutions should operate according to sustainable development principles as a contribution to ESD and create an enabling environment for the development and practice of the Competences.

Academic quality assurance instruments (e.g., school inspection, institutional and departmental reviews, external evaluations) should be underpinned by the Competences. This will mean that new and existing programmes and educational strategies should be informed by the Competences.

3. The Competences

This section describes the core competences in ESD for educators as required by the mandate of the Expert Group. The language of competences is widely used in educational documents, including the report to the United Nations Educational, Scientific and Cultural Organization (UNESCO) of the International Commission on Education for the Twenty-first Century³ and the European Union recommendation on key competences for lifelong learning. There are different interpretations of the term “competences”; the following paragraphs identify the defining features of the way in which we use the term.

The Competences in this document relate specifically to ESD rather than to education more generally.

³ UNESCO, *Learning: the Treasure Within* (Paris, 1996). Available from http://portal.unesco.org/education/en/ev.php-URL_ID=19162&URL_DO=DO_TOPIC&URL_SECTION=201.html.

The Competences are presented in this document in a table followed by more detailed explanations. The column headings represent essential characteristics of ESD, namely:

- (a) *A holistic approach*, which seeks integrative thinking and practice;
- (b) *Envisioning change*, which explores alternative futures, learns from the past and inspires engagement in the present; and
- (c) *Achieving transformation*, which serves to change in the way people learn and in the systems that support learning.

The clustering of competences in the table rows is inspired by the report of the International Commission on Education to UNESCO. The following framework was chosen as it is comprehensive and presents a meaningful set of categories that reflect a wide range of learning experiences:

- (a) Learning to know refers to understanding the challenges facing society both locally and globally and the potential role of educators and learners (*The educator understands...*);
- (b) Learning to do refers to developing practical skills and action competence in relation to education for sustainable development (*The educator is able to...*);
- (c) Learning to live together contributes to the development of partnerships and an appreciation of interdependence, pluralism, mutual understanding and peace (*The educator works with others in ways that...*);
- (d) Learning to be addresses the development of one's personal attributes and ability to act with greater autonomy, judgement and personal responsibility in relation to sustainable development (*The educator is someone who...*).

A. Holistic approach

The *holistic approach* includes three interrelated components:

- (a) Integrative thinking;
- (b) Inclusivity;
- (c) Dealing with complexities.

Integrative thinking responds to the challenges of sustainable development that are simultaneously global and local and require an awareness of how change in one part of the world can impact upon other parts, as well as an awareness of how choices today can impact tomorrow's world. These challenges are complex and require inputs from a range of disciplines to address them, including perspectives on natural, social and economic systems. Different cultures and world-views can provide valuable insights; at its most fundamental, sustainable development connects individuals and groups to other people, locally and globally, and to their natural environment. Integrative thinking implies ways of thinking and acting that reflect these interrelationships and the creative possibilities that they engender. Systems thinking is a valuable tool in achieving such an integrative approach.

Inclusivity refers to a willingness to incorporate a range of perspectives critical to negotiating a sustainable future. Sustainable development issues are often characterized by contradictions and dilemmas; different perspectives can both underpin and provide solutions to these issues. While embracing different perspectives, it is important for educators to be open about their own world-views so that these are not hidden from learners nor imposed upon them.

Dealing with complexities enables educators for ESD to provide opportunities to learners for engaging with and creating bridges across a range of concepts and ideas. While it would be impractical to list the entire knowledge base of ESD, the ECE Strategy for ESD and the UNESCO International Implementation Scheme for the United Nations Decade for Education for Sustainable Development (2005–2014) suggest a broad range of concepts and topics that can serve as entry points, including: peace studies; ethics and philosophy; citizenship, democracy and governance; human rights; poverty alleviation; cultural diversity; biological and landscape diversity; environmental protection; ecological principles and an ecosystem approach; natural resource management; climate change; personal and family health (e.g., HIV/AIDS, drug abuse); environmental health (e.g., food; water quality; pollution); corporate social responsibility; indigenous knowledge; production and/or consumption patterns; economics; rural/urban development, environmental technology; and sustainability assessment. Connections can be supported through engaging learners in active citizenship projects.

B. Envisioning change: past, present and future

Envisioning change covers competences relating to three dimensions:

- (a) Learning from the past;
- (b) Inspiring engagement in the present;
- (c) Exploring alternative futures.

Learning from the past includes critical analysis and thorough understanding of past developments, including the root causes of those developments. It draws lessons through understanding both successes and failures in cultural, social, economic and environmental spheres.

Active engagement in the present is crucial because of the urgency of the contemporary issues that face us. For example, our world is characterized by massive inequality, with millions living in poverty while others engage in unsustainable use of the planet's resources exceeding the carrying capacity of natural systems and hence compromising their regenerative capacities. ESD should address the needs of all people in the present as well as those of future generations.

Exploring alternative futures leads to the identification of new pathways as an important step towards sustainable development. This process draws upon scientific evidence, uncovers current beliefs and assumptions that underlie our choices and encourages creative thinking about a wide range of possibilities. Involving learners in creating visions for the future will highlight ways in which actions taken today contribute to or detract from preferred futures. This offers ownership, creativity, direction and energy that can motivate people to make more sustainable choices in the present. ESD should emphasize approaches that are intended to lead to positive futures for people and nature, rather than those that simply do less harm.

C. Achieving transformation: people, pedagogy and education systems

Achieving transformation covers competences that operate at three levels:

- (a) Transformation of what it means to be an educator;
- (b) Transformation of pedagogy, i.e., transformative approaches to teaching and learning;
- (c) Transformation of the education system as a whole.

Transformation of what it means to be an educator is necessary because education systems are composed of the people who work within them and a key to changing these systems will be educators who are able to change their own practice as critical reflective practitioners. The building of positive relationships between educators and learners is essential. This will require educators to present themselves as fallible human beings rather than people with all the answers. It also requires the ability to empathize with the views and situations of those they educate.

Transformative pedagogy draws on the experience of learners and creates opportunities for participation and for the development of creativity, innovation and the capacity to imagine alternative ways of living. It encourages learners to reflect on the impact of their everyday choices in terms of sustainable development.

Transformation of education systems is essential because our current systems have not supported sustainable models of development. While the role of formal education is clearly valued by society, change is needed to ensure that the system provides education that predisposes learners to consider sustainability across their life choices. Such change cannot be achieved by educators, schools, Governments or others working alone. Educators are well placed to contribute to transforming the systems within which they work, but they will need critical competences such as understanding the need for transformation, an openness to change and a range of collaborative skills.