

## UNECE STRATEGY FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT

### Guidance for reporting

Prepared by the Chairperson of the Expert Group on Indicators for ESD  
with the assistance of the secretariat

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## INTRODUCTION

1. This informal guidance contains a compilation of recommendations and remarks that are mostly available in various formal documents. This document is prepared to help National Focal Points (NFPs) to develop their respective reports on the progress in the implementation of the UNECE Strategy for Education for Sustainable Development. This guidance contains e.g. information on the methodology, suggestions for sources and data collecting, and on procedures relevant to the reporting. It aims at facilitating the completion of the reporting format provided in the document

ECE/CEP/AC.13/2006/5/Add.1. The reporting format was developed as a tool to facilitate the review of the implementation of the UNECE Strategy for Education for Sustainable Development (ESD).

2. The indicators for ESD were developed by a Group of Experts established following the decision by the High-level Meeting of Education and Environment Ministries (Vilnius, March 2005) with the mandate to develop indicators to measure the effectiveness of the implementation of the Strategy.

3. The following documents provide information relevant to the reporting:

- The UNECE Strategy for ESD (CEP/AC.13/2005/3/Rev.1)
- Vilnius framework for the implementation of the UNECE Strategy for ESD (CEP/AC.13/2005/4/Rev.1)
- Explanatory notes to the draft UNECE Strategy on ESD (CEP/AC.13/2004/8/Add.2)
- Draft Work Plan for the implementation of the UNECE Strategy on ESD (CEP/AC.13/2005/8)
- Report of the first meeting of the UNECE Steering Committee on ESD (CEP/AC.13/2005/7)
- First progress report of the Expert Group on Indicators for ESD (CEP/AC.13/2005/9)
- Second progress report of the Expert Group on Indicators for ESD (ECE/CEP/AC.13/2006/5)
- The reporting format (ECE/CEP/AC.13/2006/5/Add.1)

- International Standard Classification of Education, ISCED 1997 (UNESCO, November 1997)
4. These documents can be found on the UNECE website at the following addresses:
- <http://www.unece.org/env/esd/Strategy&Framework.htm>
  - <http://www.unece.org/env/esd/SC.Meet.htm>
  - <http://www.unece.org/env/esd/SC.EGI.htm>

## I. PROCEDURE

5. The reporting format is for use by the NFPs on ESD for preparing the National Implementation Reports (NIRs) on ESD. The reporting requirements are streamlined by UNESCO and UNECE. Thus, UNECE Member States would be able to submit a single report on the implementation of the UNECE Strategy that can also serve as a report on the implementation of the UN Decade of ESD.

6. The target groups for the NIRs are identified as follows: governments (e.g. for reporting to international bodies, for use for national purposes, and for self-evaluation); international organizations (e.g. for providing a comprehensive basis to governments and other stakeholders to assess progress in implementation and for development of other relevant indicators); non-governmental organizations and other stakeholders (e.g. for learning about performance in implementation of their respective countries and of the UNECE region as a whole). It is expected that other relevant forums might use the results of their work to evaluate implementation of ESD.

7. In order to ensure good quality of the NIRs, it is crucial that governments prepare reports in a participatory manner, involving relevant stakeholders at all stages of preparation, as appropriate, and particularly giving them a feasible and workable opportunity to comment on the draft report before its final submission to the UNECE.

### *Timeframe of reporting*

8. Progress over time in implementing ESD could be seen by assessing the progress following the reporting for each of the three implementation phases of the Strategy (2007, 2010 and 2015).

9. The NFPs on ESD are expected to prepare NIRs for the pilot voluntary reporting in phase I (2007), and for reporting in phase II (2010) and phase III (2015). The first formal call for reporting would take place in 2010. Thereafter, an updated version of the report would be prepared by the respective Member States for 2015. However, Member States are invited to start reporting voluntarily in 2007 to prepare reports for the Sixth Ministerial Conference “Environment for Europe” (Belgrade, 10–12 October 2007).

10. The main elements for the reporting procedure are as follows:
- UNECE Member States should prepare reports<sup>1</sup> through a transparent consultative process involving all relevant stakeholders at the national/state level.
  - Reports should be submitted to the secretariat electronically in Word format. The text should be in English. Member States are also encouraged to provide the text in their own national language,

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<sup>1</sup> Countries with a federal structure will submit one consolidated report based on subnational/state inputs.

and if feasible in the two other official languages of the UNECE, French and Russian. Reports will be made available in the languages in which they are received. No editing will be provided.

- UNECE will post the reports on its website. It will also ensure the distribution of hard copies to the UNECE Member States and key stakeholders. UNESCO will ensure access to the reports through its website and will use them for its work.
- The UNECE secretariat will prepare a first report on progress for the Belgrade Conference in 2007 (see para 9) and synthesis reports for 2010 and for 2015, highlighting the progress made, identifying challenges and drawing up recommendations.
- Key stakeholders are encouraged to provide the secretariat with their reports on programmes or activities that support the implementation of the Strategy.
- Deadlines for submission to the secretariat will take into account UN document management procedures and will be communicated by the secretariat in due course.
- Meetings of the Steering Committee will be a forum for considering reports. The “Environment for Europe” Ministerial Conferences will be informed of progress as appropriate and will be encouraged to hold joint environment/education sessions as needed.

11. Although the “yes/no” part of sub-indicators is required to be reported on in Phase I (by 2007) and the “descriptive” part in Phase II (by 2010), countries are encouraged to report on the full set of indicators at the end of each phase, to the extent possible, in line with a country’s progress in implementing the ESD. Those countries that volunteered to participate in a pilot reporting already in Phase I (by 2007) are advised to report on the full set to the extent possible. Other countries that are not ready for the pilot reporting are invited to complete only the “yes/no” part and, if feasible, also the “descriptive” part. This exercise would replace the initially foreseen questionnaire and its results will lay down the basis for preparing the first progress report on implementation of the Strategy for the Belgrade Conference.

## II. INDICATORS

### *Scope*

12. The indicators are determined by the objectives of the Strategy. They reflect both aspects: “the implementation” as a process, and “the effectiveness of the implementation”, as a qualitative feature of the process and of the outcome, including long-term effects of ESD. Thus, the set of indicators reflect input measures as well as output and outcome of the implementation. Therefore, the assessment cannot be made by using a single indicator, but can only be reflected after considering the set of indicators.

13. The indicators focus on ESD issues and not on sustainable development (SD) as such. In other words, they measure the effectiveness of the implementation of ESD (as set out in the Strategy), not the progress of SD (e.g. progress in biodiversity, climate change, etc.). Obviously, indicators are easier to find and track for formal education than for non-formal and informal education. Therefore, the indicators focus on the formal education, without, however, diminishing the importance of the other two forms of education, in particular their possible negative consequences (e.g. some TV and other advertisements counteract the promotion of SD).

14. The current set of indicators reflects the state of art and it is the best possible result in accordance with the UNECE Strategy itself, the mandate of the Expert Group, the availability of data and methodology, and the common understanding between different countries, educational systems, cultures and languages. Moreover, the current set of indicators would possibly require a revision following the

first reporting exercise and the feedback received from the countries on the workability and feasibility of the indicators and requested information for reporting.

15. Most of the indicators, as well as the methodology used for their development, could be adapted and used by other regions, and therefore could serve to governments and stakeholders as an efficient tool to assess the progress in ESD within the UN Decade on ESD.

#### *Nature*

16. No single indicator or sub-indicator should be seen as indicative of quality in its own right. Rather, it is the combination of answers that will indicate the state of progress in, and the effectiveness of, implementation of the UNECE Strategy for ESD.

17. The indicators and the reporting mechanism are meant not “to compare” but rather to enable countries of the region to “learn and develop” in the area of ESD, so that the region becomes a “learning region”.

18. An indicator points to an issue or condition. Its purpose is to show how well a system is working. Indicators should be based, as much as possible, on the available data. However, some proposals for a new data collection policy should be adopted due to the complexity and innovative nature of ESD. This last point is particularly important for the information on qualitative issues. Indicators are as varied as the types of systems they monitor. However, there are certain characteristics that effective indicators have in common: they should be relevant, easy to understand, representative, reliable, obtainable from governmental and other reliable sources and available against feasible costs. Indicators can be quantitative (absolute figures or ratios) and qualitative (description or rating), as appropriate<sup>2</sup>.

#### *Baseline data*

19. To monitor the progress of the implementation of the ESD Strategy made by each country, there is a need to describe the current situation per country. Baseline data shows the existing situation in relation to an issue at a certain point in time. Data for 1 January 2006 will be used as baseline data. The differences in starting points for different countries with respect to the implementation of the Strategy and, therefore, to the outcome of the evaluation based on the indicators, will be taken into account.

#### *Concept of use*

20. The Strategy addresses: (a) input measures, (b) a wide range of activities and (c) expected effects with regard to the implementation of ESD. It also illustrates the complex nature of ESD. Therefore, it is important to measure the effectiveness of the implementation of the Strategy throughout the whole implementation process, starting from the initial measures on governance up to the possible effects in society. In this respect, indicators are considered within a clearly defined evaluation model that would help countries to measure the implementation process in a comprehensive and realistic way (see Annex I). Four types of indicators are identified: “Checklist indicators”, “Input indicators”, “Output indicators” and “Outcome indicators”:

21. “Checklist indicators” provide information on initial policy, legislation, regulatory and governance measures taken by a government in order to implement the Strategy (e.g. whether a coordinating mechanism is in place, whether the Strategy is translated into national/state language(s)).

22. “Input indicators” provide information on a broader spectrum of activities taking place in terms of the implementation of the Strategy (e.g. amount of public authority money invested in the ESD materials, proportion of publicly supported research on ESD).
23. “Output indicators” provide information on the results of these activities (e.g. performance of trained teachers, number of businesses involved in ESD projects, ratio of educators who received training on ESD issues).
24. “Outcome indicators” provide information on the possible impact due to the implementation of the Strategy, in particular its qualitative aspect in terms of values, attitudes and choices in favour of SD (e.g. learning outcomes resulting from ESD partnerships, community-based projects and business involvement).

#### *Overview of indicators*

25. The set comprises 18 indicators with 48 sub-indicators structured according to the 6 issues for reporting, which follow the objectives of the Strategy. There are 45 *qualitative* sub-indicators and 8 *quantitative*, of which 5 are of a dual nature. The sub-indicators are of several *types*: 11 sub-indicators are “checklist”, 29 are “input” (of which 1 is of a dual type), 8 are “output” and 1 is “outcome”. The format of indicators/sub-indicators consists of two parts: a “yes/no<sup>3</sup>” part and a “descriptive” part.
26. The list of indicators (ECE/CEP/AC.13/2006/5, Annex 1) includes, in addition to specification of the type of indicator, information on *“means and sources of verification”*, and is meant as guidance to help NFPs find the information necessary to complete the indicators. In some countries the information might be available in sources relevant to “environmental education” or “development education”, which might not necessarily be viewed as ESD but which could nevertheless provide relevant information for populating the indicators on ESD.
27. Template tables are annexed to the set of indicators. This approach enables simplification while retaining the substance of the initial set of indicators to the greatest extent possible. It also provides countries with a user-friendly template requiring them to select predefined boxes as relevant.
28. The International Standard Classification of Education (ISCED), and in particular the classification of levels of education (see Annex 2), was used for developing the indicators for ESD. ISCED was designed by UNESCO in the early 1970’s to serve ‘as an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally’. It was approved by the International Conference on Education (Geneva, 1975), and was subsequently endorsed by UNESCO’s General Conference when it adopted the Revised Recommendation concerning the International Standardization of Educational Statistics at its twentieth session (Paris, 1978). The present classification, now known as ISCED 1997, was approved by the UNESCO General Conference at its 29th session in November 1997. It was prepared by a Task Force established by the Director-General to that effect and is the result of extensive consultations of worldwide representation. ISCED 1997 covers primarily two cross-classification variables: levels and fields of education.

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<sup>2</sup> Qualitative indicators might be presented: (a) in a form of description; (b) by using rating with the clear explanatory notes for each rate (e.g. 0 – SD concept not present in any of the subjects, 1 – SD concept integrated into 50% of the subjects etc.); (c) by using marks (e.g. +++ high; ++ medium; + low)

<sup>3</sup> A “no” answer should be selected also in the case of “not applicable”, and explanation provided on why it is not applicable.

29. The specific for higher education issues are addressed in the set of indicators through footnotes across all objectives in order to translate some of the currently used school system terminology into terminology appropriate for the higher education system.

#### *Assessment*

30. The assessment mechanism behind the indicators is based on the answers to the sub-indicators that would provide input into the indicator's assessment. It is not feasible to sum up the answers to the sub-indicator in a quantitative way to build sound data for the indicator as such. Therefore, the indicator has to be presented as a qualitative judgment of the sub-indicators. To evaluate the answers provided in the annexed templates-tables, and consequently assess the sub-indicators, an "assessment key" was developed. Following the "tailor-made" approach a variety of rankings is used, expressing numbers, percentage, amounts and state of a process. To ensure consistency across the indicator set, these are expressed as a six-category scale from A (minimum) to F (maximum).

31. Countries are encouraged to undertake a so-called self-assessment exercise, following the completion of the reporting format. This would imply for countries on voluntary basis to self-assess the status of the implementation of the respective indicator on the basis of the answers to the sub-indicators. The self-assessment exercise would be a valuable addition to the information provided in the Reporting Format and would help to minimise, to the extent possible, the subjectivity of the conclusions drawn by an independent expert when preparing a synthesis reports on progress in implementing the Strategy across the region. Moreover, the self-assessment would provide countries with the opportunity to reflect on the national progress in implementing the Strategy.

### **III. GLOSSARY**

32. Below are provided some explanations of the most often used terminology across the reporting format. Other explanatory notes can be found in the document CEP/AC.13/2004/8/Add.2.

*Education for Sustainable Development* is still developing as a broad and comprehensive concept, encompassing interrelated environmental, economic and social issues. It broadens the concept of environmental education (EE), which has increasingly addressed a wide range of development subjects. ESD also encompasses various elements of development and other targeted forms of education (for more information please see the Chapter III. of the UNECE Strategy for ESD, CEP/AC.13/2005/3/Rev.1).

*Key themes of Sustainable Development* include among other things poverty alleviation, citizenship, peace, ethics, responsibility in local and global contexts, democracy and governance, justice, security, human rights, health, gender equity, cultural diversity, rural and urban development, economy, production and consumption patterns, corporate responsibility, environmental protection, natural resource management and biological and landscape diversity<sup>4</sup>. Addressing such divers themes in ESD requires a holistic approach<sup>5</sup>.

*Education* is derived from the Latin *educare*, meaning to rear or foster and from *educere*, which means to draw out or develop. While this developmental and transformative meaning retains currency, it has largely been overshadowed by transmissive ideas relating to instruction and teaching. Education (as a verb) is commonly used to describe a process and also (as a noun) shorthand for the 'education system', which involves policies, institutions, curricula, actors, etc.

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<sup>4</sup> See also Framework for a draft implementation scheme for the Decade of Education for Sustainable Development, UNESCO, 2003.

<sup>5</sup> See also Statement on Education for Sustainable Development.

Learning is the process through which knowledge, values and skills are developed. The processing of information results in a relatively stable change in the behaviour of an individual or organization. Learning is absorbing information and integrating the information in and considerations in such a way that this leads to different choices, different behaviour. Information (consisting of data, basic information) is connected with our knowledge, our experience, our norms and values and the way we lead our lives (giving meaning to life).

Education for sustainable development reflects the parent term "sustainable development", defined as development "that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development Report, 1987). Sustainable development is a complex issue, encompassing economic, environmental and social dimensions. In other words, development is essential to satisfy human needs and improve the quality of human life. At the same time, development must be based on the efficient and responsible use of all of society's scarce resources - natural, human and economic.

Training in this context means the same as education, but includes practical application.

Continuing education/training covers activities aimed at updating, refreshing or extending knowledge and skills gained during basic education/training.

Educators are teachers, lecturers, trainers and voluntary education leaders.

Learners are pupils, students and participants of trainings.

Learning processes are often described at an individual level. However, it might be based on the learning citizen, at three levels:

- (a) As a learning person: individual skills, self-development, the individual position in society, leading to sustainable behaviour or not;
- (b) Within the learning organization: the organization tries to improve the quality of its own structure and performances. The qualification "learning organization" applies only if there are sufficient numbers of individuals who adopt a behavioural change leading to changes in the structure and performances;
- (c) Within the learning society: an addition of learning processes of different organizations and individuals with their own perspectives, but with a cumulative effect.

Formal learning takes place in education and training institutions, leading to recognized diplomas and qualifications.

Non-formal learning takes place outside and sometimes parallel to mainstream systems of education and training, and does not typically lead to formal certificates. Non-formal learning may be provided at the workplace and through the activities of civil society, organizations and groups (such as youth organizations, trade unions and political parties). It can also be provided through organizations or services that have been set up to complement formal systems (such as arts, music and sport classes or private tutoring to prepare for examinations).

Informal learning is a natural accompaniment to everyday life. Unlike formal and non-formal learning, informal learning is not necessarily intentional learning, and as such may not even be recognized by the individuals themselves as contributing to their knowledge and skills.

Action-oriented teaching and learning approaches emphasize that education for sustainable development (ESD) aims of contributing to sustainable changes in society and the environment. It is thus recommended that ESD should involve concrete environmental actions taken by students and other target groups as integrated parts of teaching and learning processes. An action is targeted at change: a change in a person's lifestyle, in the local society or in the global society.

And an action is intentional. The action-oriented approach has two main goals: to contribute to the development of students' own competences to take action and to facilitate sustainable changes in the short and the longrun.

Critical thinking in this context means that ESD should be ideologically aware and socially critical, thereby recognizing that no educational values are politically neutral. In general, critical thinking can be defined as how individuals consciously adapt information into their own understanding within their existing values, interests and knowledge. This general definition applies to critical thinking in learning processes, but it is important to emphasize willingness to take open-mind approaches by both learners and teachers, particularly to various cultural, economic, ecological, political and social issues. At best, critical thinking could lead to socio-cultural and intellectual flexibility with an understanding that, in addition to human capabilities, all information is principally related to place and time.

Integration needs to be seen at the opposite end of the spectrum from fragmentation/segregation/disintegration. Integration in this context is understood as integration of subjects, departments, educational institutions and their communities, and also of what has been called the five dimensions of an educational institution - its ethos, its curriculum (if there is any), its pedagogy, its organization and management, and its community. Integrative efforts aim at systemic change across all areas and dimensions reflecting sustainability rather than just 'piecemeal' change in one area. Integration also means more emphasis in educational activities on interdisciplinary and trans-disciplinary inquiry, reflecting that no subjects, factors or issues exist in isolation. Inter- and trans-disciplinary inquiry has the potential of breaking free of disciplinary perceptions and traditions to create new meaning, understandings and ways of working. Simply putting disciplines together, by contrast, is often no more than the sum of the parts.

Interdisciplinary approach The emphasis is on the interconnections between different perspectives. Interdisciplinary approach - courses studied at college or university involving two or more different subjects; cooperation within a common framework shared by the disciplines involved.

Multidisciplinary approach refers to looking at an issue from many knowledge or practical disciplinary perspectives but not integrating them. The multidisciplinary approach involves different subjects of study in one activity, without changes in disciplinary and theoretical structures.

Problem-oriented means that, instead of organizing the teaching around topics from one of the usual disciplines, the subject concerns with an issue or a problem.

Process-oriented in this context means widening the scope in planning, pedagogy, didactics, etc. in educational activities from narrow content focus to an awareness of learning and education as processes, thereby highlighting the activities, the dynamics, the actors, the phases and the relation between areas more than decontextualized contents of information.

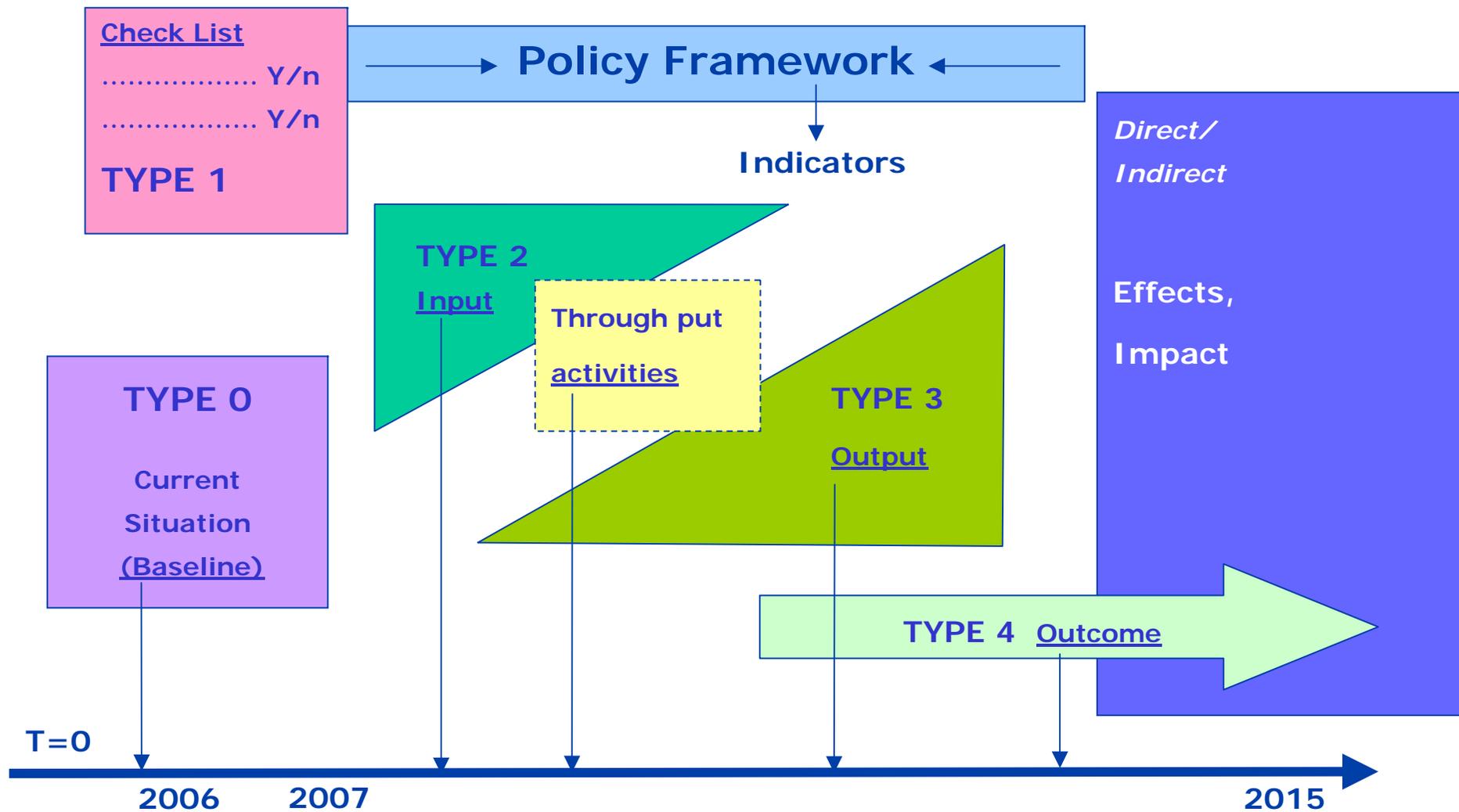
Problem-based learning is characterized by contextualized problem-setting and situations. The content of the course of study is introduced in the context of real-world problems. Problems or cases from the real world are used as a means to motivate and initiate students' learning processes, i.e. acquiring a predetermined content and at the same time developing transferable personal competencies (interpersonal skills, critical thinking, etc). The distinctions between problem-based learning and other forms of cooperative or active learning are often blurred because they share certain features.

Project work is characterized by problem orientation, product orientation, interdisciplinarity, coherence between theory and practice, and joint planning by teachers and students. The issue or problem in focus has to be found in the surrounding world (authenticity) and the relevant knowledge from subjects and disciplines has to be chosen according to the problem in focus. Project work is an individual and collective learning process based on scientific principles (action research) aiming at finding possible solutions/proposals for change (the product) – the answers are not given in advance.

*Knowledge management* is about bringing together demand and supply of knowledge. This knowledge is based on understanding and experiences: the best working methods, new ideas, creative 'solutions', breakthrough processes, skills, etc. It concerns knowledge with an added value that promotes wisdom and provides understanding. Therefore, knowledge management is not only about storing data. The premise of knowledge management is not so much that there is a lack of knowledge and understanding concerning learning processes with respect to sustainability, but that this knowledge is insufficiently available. This knowledge has to flow and be available in a wider circle wherever needed. Connecting knowledge and understanding with 'adjacent' sectors and policy areas is crucial.

Annex 1.

THE EVALUATION MODEL



Annex 2.

LEVELS OF EDUCATION AT A GLANCE (ISCED 1997)

How to determine the level of a programme				
Proxy criteria for contents		Name of the level	Code	Complementary dimensions
Main criteria	Subsidiary criteria			
Educational properties School or centre-based Minimum age Upper age limit	Staff qualification	Pre-primary education	0	None
Beginning of systematic apprenticeship of reading, writing and mathematics	Entry into the nationally designated primary institutions or programmes Start of compulsory education	Primary education First stage of basic education	1	None
Subject presentation Full implementation of basic skills and foundation for lifelong learning	Entry after some 6 years of primary education End of the cycle after 9 years since the beginning of primary education End of compulsory education Several teachers conduct classes in their field of specialization	Lower secondary education Second stage of basic education	2	Type of subsequent education or destination Programme orientation
Typical entrance qualification Minimum entrance requirement		(Upper) secondary education	3	Type of subsequent education or destination Programme orientation Cumulative duration since the beginning of ISCED level 3
Entrance requirement, Content, Age, Duration		Post-secondary non tertiary education	4	Type of subsequent education or destination Cumulative duration since the beginning of ISCED level 3 Programme orientation
Minimum entrance requirement, Type of certification obtained, Duration		First stage of tertiary education (not leading directly to an advanced research qualification)	5	Type of programmes Cumulative theoretical duration at tertiary National degree and qualification structure
Research oriented content, Submission of thesis or dissertation	Prepare graduates for faculty and research posts	Second stage of tertiary education (leading to an advanced research qualification)	6	None