

# Education in specific competencies in the field of sustainable development

## Indicator 01 Competencies in the field of sustainable development

### Objective defining the desired end state

Everyone has, during their school (and vocational) education, the possibility of acquiring competencies in the field of sustainable development.

### Underlying assumptions and considerations for the operationalization

For a universal education in competencies in the field of sustainable development, governmental requirements are necessary. These requirements are given, for example, by setting educational standards or by defining general learning objectives. These standards or learning objectives should refer to scientifically based models of incremental competence that are derived from the idea of sustainability and that reflect the requirements accompanying this idea. Such governmental requirements can also be given by defining lists of topics to be addressed and the like. As it has to be seen which aspects of sustainable development these topics explore and how the selection is justified, it has to be explained how these topics refer to sustainability.

Through lists of topics, timetables for subjects, description of competencies, learning objectives or educational standards, (national) curricula and the like define both explicitly and implicitly what takes place in a classroom and how the overall time allotted for teaching is divided among particular subjects and topics. This always expresses the relative importance of subjects, topics and competencies. The relative importance is seen in the proportion of teaching time spent on them (e.g. for all school years), even if this is not declared in the (national) curriculum.

Competencies in the field of sustainable development are given due importance in actual teaching when the acquisition of these competencies becomes part of the student's assessment.

### Function of ESD

Education in specific competencies

### In reference to the UNECE indicators

#### Theme of the indicator

2. Promote SD through formal, non-formal and informal learning

#### Indicators

2.1 SD key themes are addressed in formal education

### In analogy to the OECD indicators

#### Area

Competencies

#### Indicator

A5 What can 15-year-olds do in science?

### Criterion 1

Requirements concerning the acquisition of competencies in (national) curricula or in educational standards that are derived from the idea of sustainability.

Level: Primary, Secondary I+II    Location: Input    Characteristic: Qualitative / Quantitative

### Criterion 2

Requirements defining sustainability-relevant topics\* to be addressed in teaching or criteria for the selection of topics in (national) curricula or in educational standards that are derived from the idea of sustainability.

Level: Primary, Secondary I+II    Location: Input    Characteristic: Qualitative / Quantitative

Given the current state of development of models of incremental competence for education for sustainable development, only input criteria can be formulated. As a complement to the competence-related input criterion, an appropriate quantitative output criterion could be formulated if instruments for measuring competencies would be at hand and became part of established surveys. In the interim a binary evaluation of the following question could be useful: "Are there instruments for assessing competencies in the field of sustainable development at hand that refer to scientifically based models of incremental competence of education for sustainable development?"

\*The list of "key themes of SD" that is part of the UNECE indicator 2.1, sub-indicator 2.1.1, could be of use in identifying sustainability-relevant topics in applying the indicator. The list of key themes includes:

peace studies; ethics and philosophy; citizenship, democracy and governance; human rights; poverty alleviation; cultural diversity; biological and landscape diversity; environmental protection; ecological principles/ecosystem approach; natural resource management; climate change; personal and family health; environmental health; corporate social responsibility; production and/or consumption patterns; economics; rural/urban development