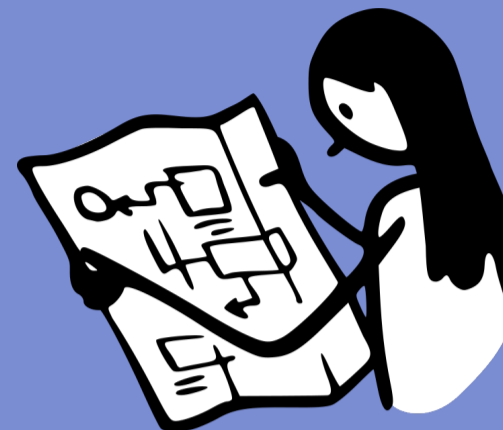


# ESD in Focus

... a Reflection Matrix for Teaching Materials



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These materials were developed as part of the "OERLe BNE" project. The aim of the project is to promote the participatory design of Open Educational Resources (OER) and Open Educational Practices (OEP) in the second phase of teacher training.

The focus is on Education for Sustainable Development (ESD), which is being established as an integral part of modern teacher training in Saxony-Anhalt. The materials are the result of close cooperation between the Geography Education Department at Martin Luther University Halle-Wittenberg (MLU) and the State Institute for School Quality and Teacher Training Saxony-Anhalt (LISA).

The materials were developed in cooperation with the seminar locations in Halle and Magdeburg and are based on practical, participatory approaches. These materials are intended as dynamic resources that are openly available for further use, adaptation and dissemination in line with the OER movement. When using them, please note the following licence information:



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Exceptions are the spider web diagram and the reflection questions on the ESD principles. These originate from the LENA network and must be cited as follows when used:



„BNE Lehre Konkret. Ressourcensammlung für Hochschullehrende: Gemeinsam für eine Bildung für nachhaltige Entwicklung.“ by Anne-Kathrin Lindau, Ingrid Hemmer, Stefan Baumann, Janna Enzmann, Sabina Eggert, Gesine Hellberg-Rode, Christoph Koch, Miriram Lutz Mühlethaler, Thomas Potthast, Franz Rauch, Verena Reinke & Regina Steiner published under licence CC-BY 4.0 at <https://netzwerk-lena.org/bne-lehre-konkret/grundlegende-informationen/methoden-und-medien-qualitatskriterien>



Bundesministerium  
für Forschung, Technologie  
und Raumfahrt

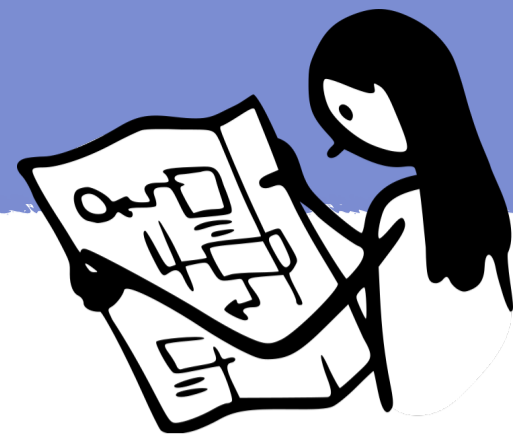


  
MARTIN-LUTHER-UNIVERSITÄT  
HALLE-WITTENBERG

 DIDAKTIK DER  
GEOGRAPHIE  
Martin-Luther-Universität Halle-Wittenberg

# ESD in Focus

... a Reflection Matrix for Teaching Materials



Objective: Participants will be able to classify materials in terms of ESD competencies, ESD content and ESD principles.



Contents: ESD competencies, ESD content, ESD principles



Materials required: ESD reflection matrix for participants (pp. 5–6), material from participants or researched material (p. 3), background information if necessary (pp. 3, 4)



Time: 70 minutes

## In summary

This matrix helps to view materials from an ESD perspective: it shows which ESD competencies are promoted, which topics are addressed and which principles are taken into account. This matrix serves less as an evaluation system and more as a guide to reflect on which priorities have been set, which gaps exist and where there is room for improvement. Fulfilment of all points in the matrix does not necessarily mean that it is “good ESD”, as the complexity and transformative dimension of ESD go beyond such a structure.

1

### Material Analysis

Participants analyse ESD materials in terms of competencies, content and principles. They enter their results in the matrix.



2

### Exploring new perspectives

Participants discuss what changes could help to integrate further areas of competence, content or ESD principles.



3

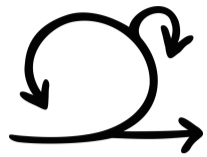
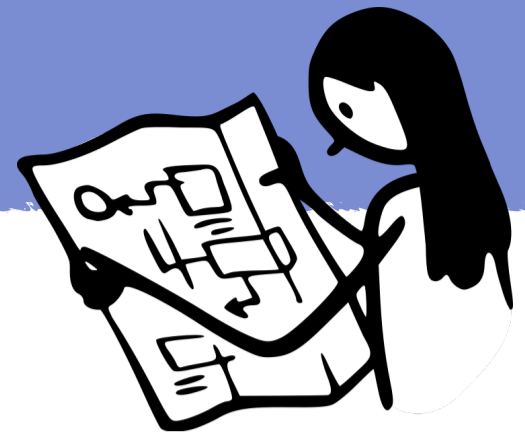
### Identify gaps and think ahead

The participants compare the results, identify gaps that occur particularly frequently, and formulate possibilities for expansion. This enables targeted reflection on what should be given special attention when selecting materials in the future and what adjustments can help to close existing gaps.



# ESD in Focus

... a Reflection Matrix for Teaching Materials



## Suggested procedure

1

### Material Analysis (Individual/Partner/Group Work)



Participants select a material and analyse it in terms of competencies, content and principles, then enter the results in the reflection matrix.

Task:

Analyse the ESD materials in terms of competencies, content and principles, and enter your results in the reflection matrix.

Have the participants not yet created their own materials? Then they can search for ESD materials on the following websites:

Global Learning  
Portal (*German*)



<https://www.globaleslernen.de/de/suche?combine=>

Curriculum Framework  
for Education for  
Sustainable  
Development



[https://www.globaleslernen.de/sites/default/files/files/link-elements/curriculum\\_framework\\_education\\_for\\_sustainable\\_development\\_barrierefrei.pdf](https://www.globaleslernen.de/sites/default/files/files/link-elements/curriculum_framework_education_for_sustainable_development_barrierefrei.pdf)

Materials from  
Engagement Global  
(*German*)



<https://ges.engagement-global.de/Unterrichtsbeispiele-und-materialien.html>

Background information on the reflection matrix:

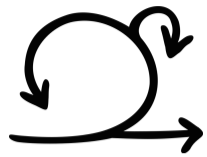
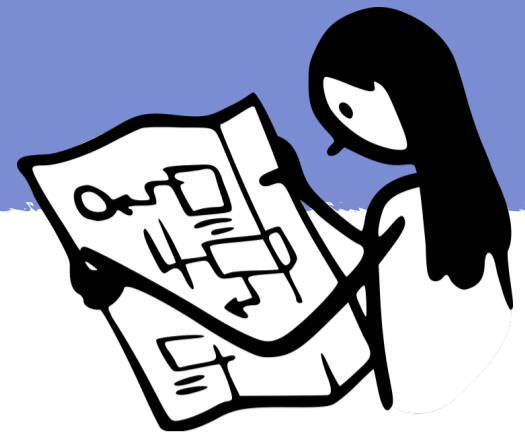
The ESD competencies and ESD content are based on the Curriculum Framework for Education for Sustainable Development ([https://www.globaleslernen.de/sites/default/files/files/link-elements/curriculum\\_framework\\_education\\_for\\_sustainable\\_development\\_barrierefrei.pdf](https://www.globaleslernen.de/sites/default/files/files/link-elements/curriculum_framework_education_for_sustainable_development_barrierefrei.pdf)).

The ESD principles were developed by the LENA network. The reflection questions on the ESD principles can be found on page 6 of this document and are also available online (*German*: <https://netzwerk-lena.org/bne-lehre-konkret/grundlegende-informationen/methoden-und-medien-qualitatskriterien/>).



# ESD in Focus

... a Reflection Matrix for Teaching Materials



## Suggested procedure

2

### Exploring new perspectives (individual, partner, group work)

Participants discuss what changes could help to integrate further areas of competences, content or ESD principles.

Possible task:

Discuss the extent to which adjustments to the selected materials can help to integrate further skills, content or ESD principles. Revise the material in a targeted manner by making specific changes that incorporate these aspects.



3

### Identifying gaps and thinking ahead (plenary session)

Participants compare the results, identify gaps that occur particularly frequently, and collect suggestions for change. This enables targeted reflection on what should be given special attention when selecting materials in the future and what adjustments can help to close existing gaps.

Possible task:

Compare the results of your analysis and identify gaps that occur particularly frequently. Collect suggestions for changes to close these gaps. Reflect on what should be given particular attention in future when selecting materials and what adjustments would enable a more in-depth ESD perspective.



## Background: Gaps

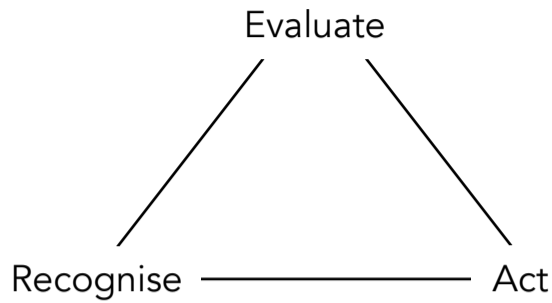
ESD is often reduced to ecological aspects, while social and political dimensions are neglected. Controversial perspectives and social negotiation processes are often given little space in materials, which means that the complexity of sustainable development is not adequately reflected. In addition, there is often a lack of reference to the learners' everyday lives, which means that personal relevance and concrete options for action are lost. Reflection as a key competence is often not sufficiently promoted – knowledge is provided, but critical discussions and changes of perspective are neglected. The competence area of “action” also tends to focus on individual behaviour, while collective and political options for action are neglected. This makes structural changes and community engagement appear less relevant.

# A Reflection Matrix for ESD Materials

## ESD competences

Which ESD competencies are promoted?

- Information gathering and processing
- Recognising diversity
- Analysis of global change
- Distinguishing between levels of action

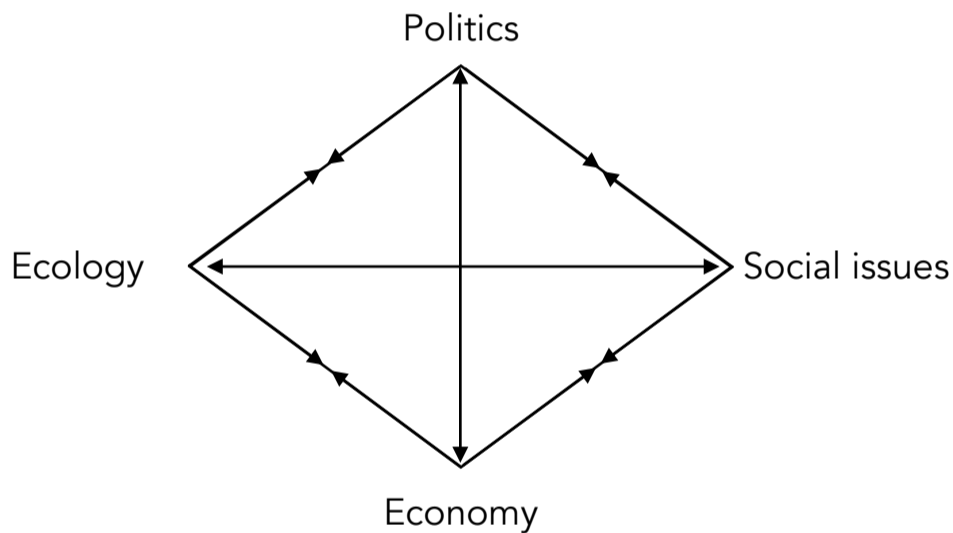


- Change of perspective and empathy
- Critical reflection and statement
- Assessment of development measures

- Solidarity and shared responsibility
- Understanding and conflict resolution
- Capacity to act in the face of global change
- Participation and co-creation

## ESD content – Dimensions & Conflicting Goals, Equity & Levels of Action

What ESD content is covered?



### Equity

- Global equity
- Intergenerational equity

### Levels of Action

- Micro level (individual, family, community)
- Meso level (region, state)
- Macro level (transnational entities, world)

## ESD principles

To what extent are ESD principles taken into account?

### Reflection on Values and Knowledge

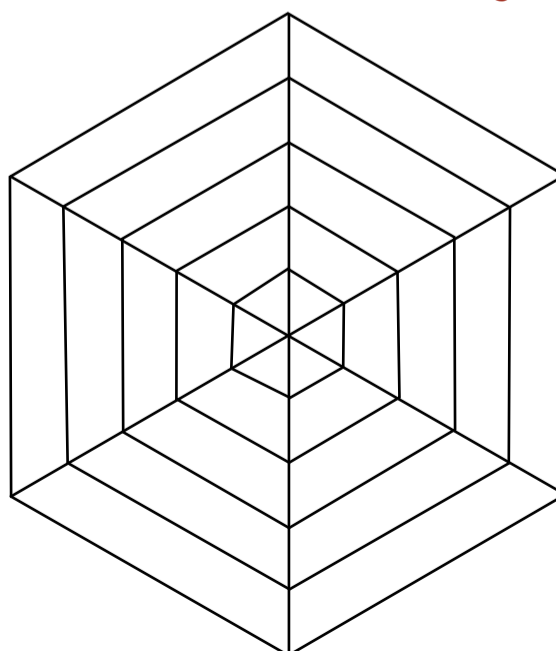
Critically questioning values and knowledge, incorporating emotions

### Options for Action and Participation

Develop and test options for action, reflect on the limits of individual capacity to act

### Cooperation and Communication

Learning together, entering into cooperation, dealing with conflicts constructively



### Multiperspectivity

Reflect on power relations, understand alternative ways of thinking and develop solidarity

### System Thinking and Networking

Understanding the world in all its complexity and interrelationships

### Future Orientation

Experiencing the future as something that can be shaped and developing one's own visions

### Reflection on Values and Knowledge

- Are personal and social values and guiding principles made explicit and discussed critically (in the context of ideas of sustainable development (SD))?
- Are cultural influences on one's own views and assessments made conscious and is a reflective examination of one's own identity encouraged?
- Is disciplinary, interdisciplinary and multi-perspective knowledge built up and critically questioned?
- Is the relevance and reliability of information critically examined?
- Are contradictions, conflicting goals (including those relating to SD and Sustainable Development Goals) and personal dilemmas addressed, and are emotions allowed?
- Is the formation of one's own opinion encouraged and the openness of the results of such learning accepted?
- ...

### Options for Action and Participation

- Are various courses of action considered based on the examination of questions relevant to sustainability?
- Are there opportunities for learners to take concrete action within the scope of their possibilities, to reflect on it and to take responsibility for it?
- Are learners encouraged to recognise the potential and limitations of individual courses of action and to identify where changes in social and economic structures would be necessary?
- Do learners examine the personal psychological and structural causes that prevent knowledge from leading to action?
- Are opportunities created to try out and reflect on social and political participation?
- ...

### Multiperspectivity

- Is a multi-perspective approach to the topic encouraged (different subject-specific approaches, ways of thinking, cultural concepts, global, spatial and temporal perspectives)?
- Are the interests and needs of different actors highlighted and discussed, thereby encouraging a change of perspective?
- Can learners develop solidarity and empathy through contact with other ways of life (personal exchange or through the media)?
- Are structural inequalities and the different levels of influence of the various actors in relation to local and global injustices highlighted?
- Are learners encouraged to engage with alternative ways of thinking and paths of development?
- ...

### Future Orientation

- Are questions selected that address the impact of historical and current developments on future generations?
- Are current circumstances (in relation to the environment, society, politics, economy) presented as malleable and changeable?
- Is consideration given, together with the learners, to what needs to change in order for the visions to become reality?
- Are learners given time to dream and develop personal and social visions?
- Are playful, creative methods used in the learning process and all senses addressed in order to develop and try out ideas for the future?
- Are contradictions between individual and social ideas for the future discussed?
- ...

### Cooperation and Communication

- Is there a growing awareness that complex issues relating to sustainability require cooperation between different actors and demand broad discourse?
- Are conflict resolution skills and the negotiation of possible solutions being promoted?
- Are learners' self-expression and discourse skills being strengthened?
- Are learners' individual strengths valued and utilised for joint activities/projects?
- Are learners supported in collaborating within and outside their own discipline and role?
- Does cooperative learning promote solidarity and a sense of togetherness?
- Are collaborations with external partners and initiatives facilitated in order to work on joint solutions?
- ...

### System Thinking and Networking

- Are complex topics explained in an understandable way without oversimplifying them?
- Are the various dimensions of sustainable development (ecological, social, economic, political, cultural, etc.) addressed and their interdependence highlighted?
- Is an understanding of the interrelationships of the world as a whole promoted? Are interactions highlighted?
- Is an understanding of the historical development of current conditions and problems promoted, thereby raising awareness of their changeability?
- Are learners encouraged to anticipate the short- and long-term consequences of measures, undesirable side effects and feedback?
- ...