



Key Competencies for Sustainable Development: What Competencies Should Be Developed in Education For Sustainable Development?

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Rationale

- *Assumption:* Education for Sustainable Development (ESD) should promote the development of such key competencies which enable individuals to contribute to sustainable development (cf. Barth et al., 2007; UNESCO, 2004; Hopkins/McKeown, 2002)
- *Different national and international approaches for the definition and selection of key competencies crucial for sustainable development:* e.g. shaping competence (de Haan, 2006), sustainability literacy (Dawe et al., 2005; Parkin et al., 2004), sustainability skills (Higher Education Academy, 2006; McKeown 2002), Professional Competences for Sustainable Development“ (Martens et al. 2010), OECD’s DeSeCo key competencies (Rychen/Salganik, 2001, 2003)
- *But: no international agreement about the most important key competencies*



Research Question and Methodology

- *Research question:* Which individual key competencies are crucial for understanding central challenges facing the world society and for facilitating its development towards a more sustainable future?
- *Objective:* Development of an interculturally acceptable framework of key competencies relevant for global thinking and acting in the world society
- *Methodology:* Delphi study (cf. Landeta, 2006; Loo, 2002; Okoli and Pawlowski, 2004) with 70 ESD experts from Europe (Germany, United Kingdom) and Latin America (Ecuador, Chile, Mexico)





Findings

Twelve key competencies crucial for sustainable development:

- Competency for systemic thinking and handling of complexity
- Competency for anticipatory thinking
- Competency for critical thinking
- Competency for acting fairly and ecologically
- Competency for cooperation in (heterogeneous) groups
- Competency for participation
- Competency for empathy and change of perspective
- Competency for interdisciplinary work
- Competency for communication and use of media
- Competency for planning and realising innovative projects
- Competency for evaluation
- Competency for ambiguity and frustration tolerance





Findings

- *The most relevant key competencies are:* systemic thinking, anticipatory thinking, critical thinking
- However, the competency for empathy and change of perspective has a relatively higher importance in the opinion of the European experts, and the competencies for cooperation in (heterogeneous) groups and participation have a relatively higher importance in the opinion of the Latin-American experts
- Complexity, uncertainty, risks and the high velocity of societal (global) change as *challenges* which make necessary and relevant the indicated key competencies





Conclusion

- Results show a common ground for the definition and selection of SD key competencies, but also regional/cultural differences;
- Conceptual basis for the elaboration and implementation of curricula which are oriented to the acquisition of key competencies critical for SD;
- Further research is needed on the question how the identified key competencies can be developed through teaching and learning and how their development can be assessed.





Questions for Discussion

- Do you agree that the identified key competencies are important for sustainable development?
- What other approaches of sustainability competencies/skills do you know and work with?
- Which learning settings and approaches do you use to foster the development of sustainability competencies/skills?

