

MORPHOLOGICAL BOX FOR EDUCATION ON SUSTAINABLE DEVELOPMENT – APPROACH AND EXAMPLES AT THE MUNICH UNIVERSITY OF APPLIED SCIENCES

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Abstract:

The various opportunities of how to implement academic higher education for sustainable development (ESD) into universities' curricula and into students' day life are arranged to a comprehensive system: the morphological box. The methodology applied to develop the comprehensive system for ESD at university level is the so-called morphological approach (Zwicky, 1966). The morphological approach provides a powerful heuristic tool for creative problem solving, particularly used to investigate the totality of realizations of multi-dimensional, non-quantifiable phenomena, like ESD implementation. The morphological approach is based on a holistic process model. A comprehensive pool of assessment methods and tools for sustainability implementation at universities (Disterheft et al., 2012; Grindsted, 2011) is used to build the morphological box. The corresponding source documents have all been reviewed to extract attributes and realizations. As a result, the morphological box provides a systematic overview, covering all possible ways with hundreds of different options and various opportunities on how ESD could be realized in the light of relevant attributes in the field of ESD. To give a tangible example and describe ease of use of the morphological box, the full range of opportunities to make ESD actually work is illustrated by the Munich University of Applied Sciences. Its approach to ESD is highlighted and described along four different organizational levels: (i) courses provided in co-operation between different universities, (ii) university-wide courses offered by the faculty of general and interdisciplinary studies, (iii) joint courses across certain faculties, and (iv) specialized courses provided by certain faculties.

Keywords: education for sustainable development (ESD), morphological box, Munich University of Applied Sciences