



## Education – a Factor of Sustainable Development

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### Abstract

Sustainable development of our world crucially depends on the capabilities of people to manage basic factors of sustainability.

There is proposed an unified approach to their management, namely – of ecologic, economic, energy supply and mental factors– and, correspondingly, are indicated some relevant directions how to develop the future education system related to the sustainability aims. Considering the global world as a cybernetic system, the basic methodology of the study will be the requisite variety principle stating: for successful development of a given system (e.g. human being(s)) in the external environment - its internal variety shall exceed the variety of its environment.

The environment is defined as a multitude of material, financial, socio-economic, entertainment benefits. In turn, the internal variety is treated as a wealth of the inner world of the individual/society, which primarily could be increased by appropriate education.

#### *Basic results*

Using the foregoing approach there have been deduced following basic conclusions:

*Socio-economic aspect* – for sustainable economic development the wealth of the individuals/society inner world shall exceed variety of external environment (material wealth) – therefore, the future education system and programmes should be developed by reevaluating the existing priorities and treating the material world as a derivative of the inner (cultural, ethical,...) world of the individual/society.

*Ecologic-energetic aspect* - As an efficient solution of ecological and energetic sustainability is proposed to increase the percentage of the nuclear power use. In the same time, the existing nuclear risks force to develop novel education, communication and decision making approaches in order to gain public confidence to find confident solutions of the forthcoming use of nuclear energy.

*Mental aspect* – there is derived a proposal to develop qualitatively novel values and realations centered on humanity as the dominant value - by reorganizing the education system towards development of system thinking, via: 1) adjustment of the requisite variety principle to the case foreseeing necessity to develop novel insight and apprehension of basic values, 2) recommendations for education optimization based on modern neuroscience.