

INOVAREA ÎN EDUCAȚIE ȘI FORMARE PROFESIONALĂ ÎN SOCIETATEA CUNOAȘTERII

INNOVATION IN EDUCATION AND TRAINING IN THE KNOWLEDGE SOCIETY

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Abstract: The word transdisciplinarity appeared for the first time in the papers of Jean Piaget, Edgar Morin, Eric Jantsch around 1970 and was invented to describe the need of transgression the borders between disciplines, in the field of education and training the need to overlap the multidisciplinary and interdisciplinary (Nicolescu, 1999; Nicolescu, 2002). In the knowledge based society transdisciplinary approaches are the basis to stimulate innovation and creativity in education, training and R&D activities. Taking into account the pillars of education in the 21st century the paper presents details related to the need to learn transdisciplinarity in order to design and manufacture the cyber-physical systems of the future, in the context of globalization. Details related on the concept of integral education are outlined too. Based on the trans-thematic identity of mechatronics (Berian, 2010), the mechatronic platforms are the basic infrastructure in the environment for transdisciplinarity learning.

Keywords: innovation, transdisciplinarity, mechatronics, complexity, integral education.