

ICT - based Approaches for Entrepreneurship Education

Ileana Hamburg, Sascha Bucksch
Institut Arbeit und Technik, Westfälische Hochschule
Gelsenkirchen, Germany
hamburg@iat.eu

Emma O'Brien
University of Limerick
Limerick, Ireland
emma.obrien@ul.ie

Abstract – Businesses are organised or operated by an entrepreneur. It implies creativity, innovation, risk taking and the competence to plan and manage projects in order to achieve objectives. The role of entrepreneurship education is to offer students the tools to be creative, to solve problems efficiently, to analyse a business idea objectively, and to communicate, cooperate, lead, develop and evaluate projects. Approaches like mentoring and Information and Communication Technologies (ICT) supported forms of learning like Problem Based Learning (PBL), could be used in entrepreneurship education. Mentoring supports professional development and increases the mentees opportunities. PBL is suitable for entrepreneurship education i.e., by presenting properly real problems like “starting a business” and creates motivation in the students. ICT could improve the efficiency of PBL, but this aspect was not taken into consideration until now. Mentoring, ICT and PBL are used in the on-going European project Erasmus+ “Supporting PBL in entrepreneurial education and in Small and Medium sized Enterprises (SMEs) through ICT facilitated mentoring – Archimedes”. The authors developed an ICT platform in frame of this project to support PBL, which has been tested with SMEs and is shortly described in this paper.

Keywords: *ICT; Entrepreneur; Entrepreneurship education; Mentor; Problem Based Learning; Platforms; TikiWiki.*

I. ENTREPRENEURSHIP EDUCATION

Entrepreneur usually means an individual who organises or operates businesses. Entrepreneurship is the art of being entrepreneur, so to be able to turn ideas into action. This implies creativity, innovation and risk taking, and the competence to plan and manage projects in order to achieve objectives [1] [2].

Some of the qualities of entrepreneurs
(<http://under30ceo.com/10-qualities-of-a-successful->

Entrepreneurship education programmes should offer students the tools to be creative, to solve problems efficiently, to analyse a business idea objectively, and to communicate, cooperate, lead, develop and evaluate projects. Students can learn to set up their own businesses if they can test their ideas in an educational, supportive environment. Many European countries included entrepreneurship in the national curricula for vocational education training (VET) programmes and they are very different. Reports show that there are some gaps in most of these programmes [3] i.e., teaching methods are ineffective, student participation is limited, teachers are not fully competent, business people are not involved, the practical element is missing, entrepreneurship is not linked to specific training subjects or professions, education is not linked with labour market demands. It is important that entrepreneurship education takes these gaps into consideration.

Mentoring within entrepreneurship education can address some of these gaps as it brings in expertise from business; it is practical and can assist in linking the training to particular professions and labour market demands [4].

Mentoring is a human resource development approach and a vital aspect of knowledge management which needs to be looked by all organizations and education institutions wishing to improve their efficiency [5]. Educators and practitioners have noted the importance of mentorship in promoting leader development and career opportunities [6].

According to Kram's mentor role theory [5], mentors provide career development in order to integrate and prosper within the organization, and social advancement, contributing to the mentee personal growth and their