Knowledge Co-Creation Process Based on Informal Learning Competences Tagging and Recognition

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ABSTRACT

The present paper deals with the problem of tagging, acknowledge and recognize of informal learning activities. It describes TRAILER project, a solution based on a methodology and a technology framework that facilitates learners/employees and institutions the co-creation of knowledge from informal learning instances. The TRAILER architecture has been implemented as a proof of concept and it is initially validated through some expert testing, from which is possible appreciate the integration difficulties of the co-creation processes.

Keywords: Co-Creation, Competences, Competence Recognition, Competence Tagging, Enterprise Dialogue, Informal Learning

1. INTRODUCTION

In contrast to expert-led, institutionally-driven formal education, the “co-creation of knowledge” is a term that has gained popularity in recent years as an educational approach which privileges peer-based support and communication, educational facilitation (rather than teaching) and learner self-efficacy. Technology plays a central role in these conceptions of co-creation by providing a medium for communication, transparency of engagement, empowering of learner self-organization and integration of disparate fragments of experience. Unsurprisingly, enthusiasts for technology have argued for its potential to break down barriers between personal and professional life and between learning episodes within institutions and within

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workplaces (García-Peñalvo, Colomo-Palacios, & Lytras, 2012). However, the challenges for realizing these ambitions range from the need to establish new patterns of personal practice (and overcome existing normative behavior) to transforming institutional practices within both the workplace and within educational establishments.

Arguments in favor of approaches to ‘informal learning’ have had political, sociological, educational and technological motivation. Politically, arguments around the personalization of learning and transformation of institutions, for example (Illich, 1971), has given ‘informal learning’ specific recognition within the Bologna process in the European Union (1999). This political recognition acknowledges the broader sociological concern for the nature of the knowledge economy, and the increased need for reflexivity in a post-industrial society (Giddens, 1986; Beck, 1992). Educationally, such initiatives are framed by long-established discourse on the social and experiential nature of learning in pedagogical theories going back to Dewey (1938) and Knowles (1950). Technologically, the Internet and the rise of social software have been seen to provide a vehicle for social learning and personal organization which has widely been seen as at least a complementary (if not a competing) medium for educational development (Attwell, 2007; Ajjan & Hartshorne, 2008; Casquero, Portillo, Ovelar, Benito, & Romo, 2010; Fielding, 2000). The political, educational, and technological discussion has typically been brought together in the subject of the ‘Personal Learning Environment’ (PLE). However, for all the rhetoric of the PLE, the integration of formal educational processes dominated by curriculum and expertise with the real competence requirements of professional life presents significant organizational challenges.

The relationship between the workplace and education has traditionally been structured around institutional certification of competency where certification is gained through formal learning. For specific competencies relating to a business’s requirements, specific training opportunities are usually provided. The raising of specific competencies is both the product and a fundamental element in the internal reflexive operations of the business: in order to remain viable, businesses must ask themselves questions about their operations in order to identify their competence requirements and devise means to acquire them. However, socialization within the workplace and appreciation of individual strengths, interests and enthusiasms of the workers also play an important role in the internal reflexivity of an organization (Dale & Bell, 1999; Halliday-Wynes & Beddie, 2009). Richer communications and deeper interpersonal knowledge can provide an important means of kick-started reflexive and creative organizational processes, which further increase the business’s viability.

Recognizing potential benefit to learners, employers and the organization of education, national and international guidelines have sought to create a framework whereby individual activities not leading to formal educational certification might be recognized, and how this recognition may be exploited through the internal reflexive processes within businesses. For example, the CEDEFOP (2009) “European Guidelines for validating informal and non-formal learning”; the ECOTEC Inventory of validation of non-formal and informal learning (Otero, McCoshan, & Junge, 2005); or the OECD Recognition of informal learning (Werquin, 2010). There are also several initiatives relating to competence recognition in the European Union, such as National Qualification Systems and EQF (European Qualifications Framework) (Bjornavold & Coles, 2008).

Social computer technology affords communicative transparency, capacity for self-organization and rich data analytic potential all of which may be value in attempting to bridge the gap between formal certification processes and richer reflexive communications amongst individuals working in different contexts, and within businesses seeking to maximize the efficacy of their own internal organizational processes. Given the significance of social software both for individuals and for institutions, the hope
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