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Supporting, evaluating and validating informal learning. A social approach

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ABSTRACT

Informal learning has been a global hot topic for the past several years. The growth of the internet and the pervasiveness of computers in everyday life means that a huge part of this informal learning is done through a computer. In the European Union, since the official recognition of informal learning in 1999 with the Bologna Treaty, a number of guidelines and proposals have been published providing techniques and recommendations for translating informal learning outcomes to formal competences. Most of these guidelines depend on an evaluator (internal or external) to oversee and certify the process. In our work, we propose the usage of a more social and dynamic framework for gathering, validating and promoting a learner's digital informal learning. This framework is based primarily on peer interaction and peer assessment instead of employing experts and provides mechanisms for personalized recommendations in order to introduce further informal learning opportunities to the learners. We propose an approach where a learner's evaluation happens organically while other learners adopt the same activities and evaluate them positively or negatively.

1. Introduction

The growth of the Internet during the past couple of decades has defined modern life more than any other recent technological advance. Thanks to the Internet, we enjoy access to global connectivity and all the information that comes as a result. The versatile nature of the Internet has proven to be the ideal conductor for all kinds of information exchange. It provides a dynamic framework that allows for all kinds of communication, whether unidirectional or bidirectional, synchronous or asynchronous, symmetric or asymmetric. Whether provided by specialized digital knowledge platforms or by custom Internet searches, the wealth of information that we have access to is not easily quantifiable. The simple act of aimlessly navigating the Internet can provide an important amount of information. All this information inevitably leads to knowledge, and given the amount of information we are exposed to constantly, this knowledge begins to gain important dimensions that cannot and should not be neglected when examining the competences of individuals.

A result of all this access to information and knowledge, is the emergence of what is called the modern Knowledge Society (Mansell & Wehn, 1998; Stehr, 1994). Knowledge has always been one of the primary motivators of human progress. The search for answers and the effort put into understanding our surroundings is responsible for the continuous evolution of our species. Today, whether in terms of quality, quantity, general availability and ease of access, knowledge is more present than ever in our everyday life and the Internet is undoubtedly one of the main facilitators of this situation.

This learning potential of the Internet regardless of age and social or financial background, has led to a rising interest in the concept of lifelong learning. A number of organizations, foundations and projects like the University of the Third Age (U3A) and the Lifelong Learning Programme of the European Community (E. Commission, 2007—2013), are centered in promoting and facilitating continuous learning for all kinds of social, ethnic and economic groups.

The concepts of formal, informal and non-formal learning are tied to that of lifelong learning. Formal learning refers to the education received from a recognized education center that leads to a certification. Everything else is considered either non-formal or informal learning. An example of non-formal learning would be

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taking private music lessons with a music teacher, while watching a tutorial video on how to cook a particular recipe would be informal learning. For the remainder of this article we will be using the term informal learning (IL) to refer to both informal and non-formal learning since in the context of our approach they present the same characteristics and challenges.

Since the Bologna treaty, the European Council, recognizing the importance of non-formal and informal learning, has been actively trying to define a set of guidelines for their validation, with a first set of guidelines being published in 2004 (E. C. for the Development of Vocational Training, 2009). The goal of the European Council is to quantify which skills are available in the European workforce in an effort to promote better matching between the demand and the availability of skills within Europe.

Furthermore, a lot of documentation exists on the active role of Information and Communication Technologies (ICTs) in lifelong learning initiatives. Punie, Zinnbauer, and Cabrera (2008) present a collection of evidence that modern education is heavily impacted by ICTs and come to the conclusion (Punie, Cabrera, Bogdanowicz, Zinnbauer, & Navajas, 2006) that non-formal, informal and adult learning are becoming important for the future of learning.

In many cases, the distinction among formal, non-formal and informal education is difficult to make as the lines that separate them become blurred in the sense that we end up participating in more than one of these types of learning at the same time. For this reason we consider it important to take into account the effort put into learning outside the formal structures and evaluate individuals accordingly. It would be shortsighted to continue evaluating individuals solely based on their formally attained degrees when we are exposed daily to so much information that we are essentially constantly taking part in informal learning activities.

This raises the following question: Can the knowledge obtained through non-formal and informal means be quantified and evaluated in order to be formalized and recognized within the competences of a curriculum?

While describing informal learning activities is a relatively simple process, it is much more complex to define a model that describes the actual knowledge we acquire with these activities. Concretely, the main difficulty inherent to the informal learning process is the validation and evaluation of the acquisition of this informal knowledge.

The TRAILER (Tagging, Recognition and Acknowledgement of Informal Learning Experiences) project that was funded by the Lifelong Learning Programme of the European Union (García-Peñalvo et al., 2013; Peñalvo et al., 2012; Viegas et al.) tried to tackle this issue. Its goal was to provide a methodology and a software platform that would facilitate communication of informal learning experiences between learners, employees and businesses.

In this work, we propose an approach for validating IL that is not based upon an unwieldy list of competences or solely upon a strict rule set. We are proposing a social-oriented framework that on top of a set of rules and predefined competences, uses social engineering and peer interaction to not only validate, but to also promote informal learning. To the best of our knowledge, there are no other works in the literature that take this approach.

The rest of this article is organized as follows: Section 2 presents a review of the state of the art centered on EU initiatives, tools that aid IL, the social aspect of IL and work done on competences. Section 3 presents a list of challenges that concern the informal learning validation process. Section 4 presents our proposal for a social approach to the issue of validation and evaluation. Section 5 analyzes the benefits we view to our approach. Section 6 provides an analysis of the perceived risks to implementing our proposal. Section 7 details our intended evaluation procedure. Finally, in Section 8 we present our conclusions.

2. State-of-the-art

2.1. European Union initiatives

The European Union has been actively investing in the subject of informal learning for a number of years. The Bologna treaty that was signed in 1999 (Area, 1999) recognized informal learning as a basic element of lifelong learning. Since then, there have been a number of European initiatives for validating informal and non-formal learning. The European Centre for the Development of Vocational Training (CEDEFOP), gathers experiences of informal learning from the different European countries and tries to define European qualifications through tools like the European Qualifications Framework (EQF) which is a common reference framework that aims to link the qualification systems of the different European countries.

In order to support informal learning, the European Union defined it as an important part of its Lifelong Learning Programme (E. Commission, 2007–2013). The program acknowledges that European countries are increasingly aware that an individual's knowledge and qualifications in terms of skills and competences are heavily defined by their informal and non-formal learning activities. For this reason there is an ongoing effort searching for solutions on the problem of validation of such learning experiences. In order to correctly validate them these experiences first need to be identified, documented and assessed. The Inventory project (Otero, McCoshan, & Junge, 2005) provides a concise list of the situation on validating informal learning in 30 EU countries. From all the documented experience, the authors distinguish eight use-cases that they consider to be good practice. The authors conclude that in general, the EU countries have taken steps towards validating informal learning, but the mechanisms employed by the different countries lack cohesion and coordination, complicating the communication of competences gained through informal learning among the different countries.

CEDEFOP published in 2009 a set of guidelines for validating non-formal and informal learning (E. C. for the Development of Vocational Training, 2009). This document is presented as a practical tool containing a framework of guidelines to be applied voluntarily. The authors believe that a common framework for validation will serve as a way to promote non-formal and informal learning among the European citizens, since it will benefit them with recognition of their efforts at a European level, instead of just a national one. Validation is considered on four different levels or perspectives: European, national, organizational and personal. All four are considered equally important and should be taken into account throughout the validation process. The authors argue that non-formal and informal learning can be validated using the same standards and benchmarks as formal learning. According to them, this is also a good way to increase the legitimacy of informal learning. Broad acceptance of the validation methodology is essential for it to have any chance of success.

2.2. Informal learning tools

The recognized importance of informal learning has inevitably led to the development of a number of tools that aim to aid and promote the concept and assist the learners with their activities.

Some of these tools are designed as platforms for promoting and facilitating informal learning. Examples of such platforms are FREE (Fostering Return to Employment through Entrepreneurship, Innovation and Creativity) and IBAK. FREE is an interactive tool aimed towards people working with the unemployed. Its aim is to help these people improve their hard and soft skills so that they may provide a better service to the unemployed. Similarly, IBAK is