VIRTUAL LEARNING ENVIRONMENT
AS PART OF LIFELONG LEARNING

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ABSTRACT

As part of the European Union, Romania has established strategic goals for the transition to a high quality educational system. In this respect, the efforts to align with standards requested by the European Community became more pregnant. Romanian integration strategy 2007-2013 stipulates, through specific objectives, the requirement, that the education should be based on the development of a set of key competences. At the same time, we assume that the development of key competences needs an optimal correlation between the formal and informal learning. The individual performances in the personal and professional field start in the formal environment and can continue by virtual learning environment, as a part of lifelong learning. For creating the environment that helps learners to prepare for their career or to assess learner’s progress, along with the standards from formal learning, we need content standards and skill standards for informal learning too. They measure the individual performances and help learners to assess their competences in relation with performance and occupational standards from business environment.

Keywords: Virtual learning environment, lifelong learning, high quality educational system.

GENERAL CONSIDERATIONS

The key competences, endorsed at the European level, are: communication in the mother tongue, communication in foreign languages, mathematical calculation skills and basic competences in science and technology, digital competences, learning to learn, social and civic competence, initiative taking and entrepreneurship, and cultural awareness and expression [11].

Development of key competences assumes an optimal correlation between the three forms of learning: formal learning, non-formal learning and informal learning. If until now the interest of researchers was concentrated on the analysis of formal and non-formal learning, it is now detected a change of emphasis towards a reconsideration of the importance and weight of informal learning, together with the other forms of learning. Informal learning, by its “multidisciplinary” and “spontaneous” character, as well as its accessibility, ensures a vast development of individual personality best correlated with his needs, increases the odds of the individual to best and efficiently adapt to the demands of the environment. Along with the development of the science computer, the informal learning is presented taking into account the environment that is much more than ‘school’ or ‘not school’.
For example, Trinder [6] argues that the nature of the environment is the factor which differentiates between formal and informal learning and Lucas and Moreira [5] argue that Web 2.0 technologies have transformed the web into a social platform with a sharing, participating and collaborative focus where users have their 'say' as opposed to just being 'told'. Well connected to Web 2.0 technologies, a virtual learning environment (VLE), can be defined as an education system based on the web [13]. Including computers and the Internet in the learning process, virtual learning environment uses a set of learning tools designed to enhance a student's learning experience, breaks curriculum into sections that can be assigned and assessed, offers on-line support and electronic communication for both teacher and student [7].

In this way, the individual performances in the personal and professional field are significantly connected to the educational influences determined more and more by different informal learning environments, one of them being the "inter-connection", mainly achieved through the global network Internet. Furthermore, the use of Web2.0 which involves on-line resources, virtual libraries and on-line communication, have implications in the society we live in, stimulating and developing multiple cognitive potential of those involved in the educational process. Depending on the computer technology, on the profile of those involved in the educational process and on the intended purpose, there are different types of virtual learning environment, which all work slightly differently but ultimately perform the same function [8]. We have students in a science economics field, so, we are interested in development of key competence requested by the business environment. In this context, we will name virtual learning environment the learning environment based on Internet technology, proper to development of key competences requested by the business environment.

Considering virtual learning environment as part of informal learning and the informal learning as part of lifelong learning, it is necessary to stress on the collaboration between formal and informal learning in the intention to have a unitary system of education. But, to have a unitary system of education, we need to develop each component, to highlight their interdependence, to establish uniform criteria for assessment and standards for both formal and informal learning.

As the quality of educational process presumes the achievement of performance standards, it is even more challenging to identify the connections between learning system and the performances achieved at the individual level, both on personal and social-professional field. We consider that a unique system of standards established in formal and informal learning from university, and developed in a business environment, helps students to adopt the changes from the real world and to adapt in a continuously evolving business environment, includes students into a lifelong learning process. As a premise of this paper, we focus on the idea that virtual learning environment has a major contribution towards the development of judicious sets of competences subordinated to key competences.

As part of informal learning, virtual learning environment is a social space where students and teachers can interact, where students can learn from other students, where students and specialists can share their researches. In this way, they are part of a lifelong learning process that needs correlation in content, standard skills required in acquisition of information and performance standards to achieve their goals in work.
The basic reason in choosing such a theme is offered by the fact that the digital world becomes a more “real” component in an education system based on knowledge where individual find unlimited resources, favorable to develop his own personality. Another reason is the fact that the digital world becomes a more present partner for the challenged person involved in the business environment.

ABOUT INFORMAL LEARNING AND ITS ADVANTAGES

Throughout the years, informal learning has been subject in many theoretical studies. At first, informal learning was delimited only from formal school learning [2]. In 1999, M Dale, J Bell, defined informal learning as learning which takes place in the work context, relates to an individual’s performance of their job and/or their employability, and which is not formally organized into a program or curriculum by the employer. It may be recognized by the different parties involved, and may or may not be specifically encouraged [1].

A large number of advocators of the adult education and lifelong learning field have shown an interest in informal learning. Coffield F., in “The Necessity of Informal Learning” said: “Informal learning should no longer be regarded as an inferior form of learning whose main purpose is to act as the precursor of formal learning; it needs to be seen as fundamental, necessary and valuable in its own right” [3].

Including informal learning in a complementary learning environment, Heather Weiss, Director of Harvard Family Research Project refers to the idea that school and life success requires an array of learning supports and said: “To be most effective, these supports should complement one another, and working together to create an integrated, accessible set of community-wide resources that support learning and development” [10].

In recent years, the informal learning becomes an outstanding factor in the development of human personality. Specialists from different fields recognize that the use of Internet, on-line resources, virtual libraries, on-line communication, have implications in the society we live in, stimulating and developing multiple cognitive potential of those involved in the educational process. Besides theoretical studies, there are experiences indicating some advantages of informal learning, like:

- learners feel less intimidated or more comfortable than they do in a formal classroom;
- at least 80 percent of how people learn their job is informal and the 75 percent of learning happens as the learner creatively adopts and adapts to ever changing circumstances [13];
- almost all real learning for performance is informal, and the people from whom we learn informally are usually present in real time In terms of learning in the workplace, everything is focused on performance and performance is everything [4].

Consequently, formal classroom and companies have to accept informal moments of knowledge transfer and should add informal learning into their management/activities. Furthermore, “any discussion of informal learning must move beyond a simple focus on context or setting, and looks to the process of learning and the personal experiences involved in it” [11].
ISSUES IN THE PROCESS OF STANDARDIZATION IN INFORMAL LEARNING

Both formal and informal learning settings offer different strengths to the learning process, serve learners, may be useful to parents at home with their kids or to adult learners who are looking to expand their knowledge, either for their own enrichment or to increase their career options. In addition, the success in an informal setting can lead to greater confidence in the formal classroom. In order to define informal learning standards, a few characteristics of informal learning that make difficult the process of standardization should be taken into account:

- informal learning takes place after school and:
- programs are often drop-in, so attendance is inconsistent;
- programs need to complete each day an activity, because a different group of person could be in attendance tomorrow;
- programs offer a different kind of environment programs offer a different kind of environment, where a rich different audience can be reached.
- Informal learning process:
- does not take place in special educational establishments;
- is not formally organized and is not financed by institutions;
- it has no curriculum and is not professionally organized;
- it is not pedagogically planned in a conscious way, systematically according to subjects and tests; it is oriented towards auto-didactic and self-directed learning and places.
  - informal learning providers have various experience and knowledge of teaching techniques, content expertise, and group management.
  - there are different ways of definition the learning process by the learner.
  - informal learning is influenced by the personal context (what the learner brings to a situation, such as prior knowledge, interests, and expectations), the socio-cultural context (the influence of people, including family, teachers and culture), and the physical context (setting, design) [5].

On the other hand,

- **Educators** refer to standards for creating the environment that helps learners to prepare for their career or to assess learners’ progress;
- **Learners** need standards regarding the development of key competences in correlation with performance and occupational standards from business environment;
- **Producers of educational software** need to pay attention to educational standards when designing educational media. Just because an activity is fun or engaging is not enough to justify precious learning time. Taking into account educational standards, educational software not only has positive academic impacts, but can also reduce risky behaviors.

For all these reasons, educational standards have to be established in accordance with university graduate students, parents, associations, corporations, government departments and agencies. Based on an analysis of the major trends of standardization process in formal learning, in defining standards for informal learning we propose to approach the standards from individual, decision maker and the assessor’s point of view:
there is no difference between teachers and students, parents and children, researchers and business persons; there are only persons who learn today for tomorrow, here for anywhere. We propose standards for individuals who are prepared for the global community they will live in.

decision makers need standards because they prepare environment for development of the research-discovery learning, for the individuals who gain competences in an informal learning context and get their performances on the activities carried out in the professional business environment.

assessment of informal learning process is made in and outside of class and according to the way a person acts in business environment. We propose correlation between educational standards, performance standards and occupational ones.

In the investigations regarding the transfer of informal knowledge, we have noticed that the standards applied for informal learning have to take into consideration that their reflection will be seen at the level of occupational standards. That is why we propose students, teachers, university staff and the whole community, who should work together to create an integrated and accessible set of resources that support learning, to define standards for success in informal learning. All of them have to identify multi-disciplinary education features, have to evaluate the cultural identity in the context of globalization, in order to have unique standards that include the contextual (essential) features of the participants.

STANDARDS FOR CONTENT, SKILLS AND PERFORMANCE IN VIRTUAL LEARNING ENVIRONMENT

In informal learning we learn from one another. Perhaps the most significant aspect here is the need to approach people as both learners and educators. This means moving away from seeing learners as consumers of different packages and opportunities, into viewing them as creators and constructors of learning. In this way, we need skills for learners and educators, too:

- for learners these skills include: forming, expressing, justifying, defending an opinion; supporting opinions of others; challenging others’ opinions; questioning others; seeking clarification; representing others’ opinions; building on others’ opinions.
- for educators these skills include: facilitator skills; active listening skills; feedback skills; intervention skills; evaluation skills.

In virtual learning environment, we think of learning as an individual experience, as the capability to act responsibly towards others, to take initiative and to work creatively. As we said, in this paper we consider virtual learning environment as an environment that help students to have key competences requested by the business environment. These competences are closely related with the knowledge in the economics and informatics field, with skills required for reflection, in acquisition of information and in sorting fact from opinion, with skills providing feedback. To achieve and assess these competences, we need:

- content standards specifying what content is to be studied by learners. They are absolutely necessary in formal learning, but it is difficult to define them for informal learning. In our particular case, students have to
- reach the basic level in information and communication technology, using the digital library which provides documentation;
- understand data security, ethical issues and how important cooperation is;
- understand the network of knowledge and design data bases of knowledge.

- skill standards describing what learners "are able to do", to be successful in a given field, or in work environment. Skill standards are not organized and presented by grade or learning environment. It does not matter when or where an individual develops his skills and knowledge that he needs to be successful at work;
- performance standards explaining how the job is to be done, plus the results that are expected for satisfactory job performance. They are derived from performance indicators and their purpose is to communicate expectations; they are necessary for both formal and informal learning.

The last two standards are in correlation with occupational standards from business environment and have to take into account the fact that:

- learners apply knowledge on business or management issues, with a view to improve their decision-making ability at work;
- learners need the acquisition of learning skills that will help them operate in a continuously evolving business environment and prepare them to undertake progressively the professional duties required in the real world;
- learners have to understand how organizations use information to create knowledge and make decisions and to analyze the effect of computer technology on business, to integrate computer technology in strategic business plans;
- learners need to have competencies in ICT.

CONCLUSIONS AND RECOMMENDATIONS

This paper has wished to challenge the specialists in the field to approach informal learning, especially virtual learning environment, and to establish strategic principles of developing national programs which should maximize the evaluation of informal learning.

The double significance of informal learning, as a process of learning but as well as a personal experience, offers the conceptual framework for the elaboration of a set of standards regarding the development of skills in informal learning and also in virtual learning environment. In this way, those who learn in the virtual learning environment can easier acquire business environment specific competences, which are needed to achieve professional performances.

The need to recognize the full range of an individual’s knowledge, skills and competences, those acquired not only at school, university or other education and training institutions, but also outside the formal system is being stressed more and more by European countries. This implies new approaches to validate such learning experiences making them usable for further studies or advancement in work. Helping people in this way could also make a contribution to smart, sustainable and inclusive growth.
Therefore, the Commission has made a proposal for a Council Recommendation inviting EU governments to establish validation systems by 2015, linked to the European Qualifications Framework, including the possibility to obtain a full or partial qualification on the basis of non-formal or informal learning [9].

All European countries should recognize informal learning and provide certification schemes that have the capacity to validate acquired skills, even if these are acquired through informal learning communities. Learning should be made explicit in these communities without negatively affecting the attractiveness of these communities. They all have to ensure that online communities are equally accessible by the entire population, especially when dealing with interaction. This can be done through actions on the provision of general ICT infrastructure to ensure e-access, greater emphasis on issues of e-accessibility and usability aspects, the building of individual capacity or e-skills, e-content and e-services development and the promotion of e-participation, e-democracy and active citizenship.

We hope that the generous issue of informal learning will raise a major interest among the specialists and will bring together valuable individual efforts and experiences. At the same time, we would like to be joined by specialists from different fields and geographical areas of the world, in order to build up a unitary vision, coherently connected to the informal education, as a relevant factor in the development of human personality and also to identify harmonization principles and criteria of possible standards for informal learning.

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