

Social Networks, Web and Mentoring Approaches in SME Continuing Vocational Education and Training

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Abstract

Continuing vocational education and training (CVET) strategies of many companies, particularly for small and medium-sized enterprises (SMEs), fail to adequately support many life-long-learners i.e. learners with special needs. eLearning based on Web 2.0 and 3.0 applications and techniques, social networking and mentoring, which are proved useful in many academic context, could enhance knowledge sharing and the efficiency of CVET in SMEs and also to gather people with special needs willing to work. However, there is evidence in neither continuous learning of the application of (formal) eLearning, or use of ICT adopted by individuals in (informal) learning in most SMEs, nor mentoring for social integration. The main goal of the work described in this paper is to present approaches, such as mentoring and networking which contribute to the improvement of CVET, support and motivate the integration of disadvantaged groups. Some characteristics of CVET and the vocational training scene in SMEs are summarized at first, and then the features of Web 2.0 and 3.0 are outlined that could improve this situation. Thirdly, the advantages of the development of social networks and mentoring approaches are presented, and last but not least, examples are listed.

Keywords

Small and Medium-Sized Enterprises (SMEs); eLearning; Web 2.0; Continuing Vocation Education and Training (CVET); Social Networks; Mentoring

Introduction

Worldwide economic and financial problems, the all-pervasive spread of ICT and the increasing adoption of new technologies in the workplace have, over recent years, contributed to unemployment and instability, particularly in routine activities. As a consequence, there is a need for workers to learn continuously throughout their working life, to continually update their skills. This life-long-learning approach is oriented towards employability and is rarely directly

supported by employers.

Previously, the leading role in the continuing vocational training of staff was the employer; however, today (also due to financial and survival problems) many companies no longer take the responsibility and so individuals must be responsible for updating their own competences in order to maintain their employability and to work efficiently. The training strategy of many companies, particularly small ones, fails to support life-long-learners, or available solutions offered by existing vocational education systems are inadequate. Some employers lack knowledge on the learning needs of their employees (particularly those with special needs) and available training opportunities as well as the funding support (Emma O'Brien at al., 2008). But the most critical problem is to convince managers of the potential of these groups of people and of the risks for society if they are not integrated. In a recent report (2012) the Confederation of German Trade Unions shows that staff from disadvantaged groups (migrants, people with disabilities, seniors) is at risk of falling into poverty.

It is difficult to present a detailed picture of different forms of continuing vocational education and training, CVET, offered in Europe, due to not only the inconsistent and incomplete data, but also the lack of consensual definition of CVET (Sandra Bohlinger, 2004). We consider that all kinds of general and job-related education and training for the employed and the unemployed and others at risk of elimination from the labor market are included.

The challenge is to provide more opportunities for individuals to participate in vocational training, to improve the routes through which learners can use ICT for learning, and to use approaches such as mentoring in order to achieve needed competence and

skill enhancements.

SMEs have retained their position as the backbone of the European economy, with 20.7 million firms accounting for more than 98% of all enterprises (*EU SMEs in 2012: at the crossroads*, 2012). In 2014 it is estimated that SMEs will account for 67% of total employment and 58% of gross value added (GVA). However, the stagnant economic environment continues to pose severe challenges.

SMEs with specific organizational needs and characteristics are frequently bounded by the pressure of day-to-day management and tight resources. Results of studies and European projects (e.g. ARIEL www.ariel-eu.net, SIMPEL www.simpel-net.eu, and ReadISME www.readisme.com) show that many European SMEs are not ready for significant large-scale social and economic changes such as globalization, market competition, and technological innovation. The results show that less than 25% of SME staff participates in vocational training courses and (for example in Germany) less than 60% of employers provide any type of training for their staff (BMW, 2004). To enhance their employability, individuals often pay for training courses by themselves.

Additionally, much existing CVET fails to take full advantage of new ICT capabilities to share and create knowledge and to development (update) of innovative skills. eLearning, due to its flexibility and facility of access, is seen as an enabler of life-long-learning, with the potential to transform how and when employees learn to satisfy their work and life needs and as a catalyst for change and integration.

eLearning by using Web 2.0 and Web 3.0 applications and techniques, could enhance knowledge sharing, cultural interchange, and networking in SMEs. The term Web 2.0 having become notable after the first O'Reilly Media Web 2.0 conference in 2004 is rather than to refer to an update to any technical specifications, but to changes in the ways software developers and end-users utilize the Web. According to Tim O'Reilly (2005): "Web 2.0 is the business revolution in the computer industry caused by the move to the Web as a platform, and an attempt to understand the rules for success on that new platform". Web 3.0 – the intelligent Web – refers to a third generation of Internet-based services such as those using semantic Web, micro formats, natural language search, data-mining, machine learning, recommendation agents, and artificial intelligence

technologies (Fig 1) which emphasize machine-facilitated understanding of information in order to provide a more productive and intuitive user experience. But one of the most potentially useful components of the Web 3.0 for SME staff and particularly for disadvantaged groups is "the mobile Web". Users access and interact with the Web seamlessly on their smart-phones, iPads, PDAs or other mobile devices with minimal disruptions at any time and place. However, there is little evidence in the CVET provision in SMEs, of the application of (formal) eLearning and Web 2.0, or the use of ICT by individuals in (informal) learning; in addition, learning and work activities are most often separated (Sinnead Averill and Timothy Hall, 2005; Doris Beer et al. 2008). One of the most critical and important aspects to be considered in this context is an evaluation of eLearning readiness. Many companies that have to make the decisions associated with the integration of eLearning into their vocational strategy do not know if the company, the staff, or their infrastructures are "ready".

Another aspect is that at present most European SMEs act alone in coping with their training problems. For future development, it is necessary to strengthen cooperation with other SMEs, with large enterprises, with training providers and public institutions (e.g. Chambers of Commerce). In this context, one suitable solution for SMEs is to build social networks i.e. in form of communities of practice (CoP) (Etienne Wenger et al., 2002) to share knowledge, to apply best practices in CVET and to develop common resources. Such forms of co-operation would stimulate new experiments, actions and directions for learning. It is not easy to develop CoPs as the members of a CoP need to share mutual trust before they are willing to share their experiences and to collaborate on the development of a learning resource. Media based on Web 2.0 and 3.0, i.e. media for social interaction, offer the promise for fast knowledge acquisition particularly in CoPs and will support transforming learning into a continuous "lifelong process".

The main goal of the work described in this paper is to present approaches that contribute to the improvement of CVET and support and motivate the integration of disadvantaged groups. So we first summarize some overall functions and objectives of CVET and current vocational training in SMEs, then outline features of Web 2.0 and 3.0 and of mentoring that could improve this situation and help also the integration of disadvantaged staff. Thirdly, the

advantages of CoPs as social networks have been shown by using social media along with examples.

CVET: Continuing Vocational Education and Training

In this part, we give overall functions and objectives of CVET for all (employed, unemployed and those at risk of labor market exclusion) referring particularly to the situation of SMEs.

TABLE 1 OVERALL FUNCTIONS AND OBJECTIVES OF CVET –
SOURCE, SANDRA BOHLINGER, 2004

Functions	Objectives
<i>Adaptation</i> to the changing challenges of labor markets, e.g., new technologies	To <i>promote personal development</i> , self-confidence, identification and self-realization
<i>Innovation</i> through upgrading skills by means of CVET, mostly enterprises activities	To <i>raise economic efficiency</i> , productivity and profitability, individual earnings, and national income
<i>Promotion</i> by upgrading skills for vocational career, mostly for qualified and employed people	To <i>prevent the obsolescence of skills</i>
<i>Catching up</i> in the case of inadequate qualifications; mainly measures for special target groups or to provide basic qualifications	To <i>alleviate specific problems</i> of high-risk groups such as the poorly educated, women, older employees, workers in precarious jobs, school leavers
<i>Curative or compensatory function</i> aimed at a re-orientation of skills or the provision of missing qualifications within the context of social and labor market policies	To <i>meet the demands of social and democratic development</i> within European societies
<i>Preventive or cumulative function</i> for individuals who want to acquire skills to stay employed or to upgrade their vocational position	To enhance cultural participation and social competence

Many factors force changes on the structure of the European labor market with a consequential change in employee skill needs. Two examples are the adoption of new technologies that can change the skills needed to perform certain tasks and shifting production to

low-wage countries where both low and highly skilled work is cheaper. Such labor market changes imply a need for CVET to ensure appropriate skills that are acquired, including intercultural competence. In SMEs the potential of eLearning to satisfy these needs is missed because of a lack of experience of its application. The Internet is used in SMEs predominantly for advertising of their products (particularly through Web sites) and only 7% for human resources purposes. Their most common use of digital media (CD-ROMs, the Internet and Intranets) is to access technical manuals and other informative tasks; but learning takes place only if information is applied in such a way that new mental models and schemas are developed which are made explicit and shared. CD-ROMs, the Web, etc., are useful and convenient ways to store and retrieve information but if this information is not transformed and context applied, it can be seen neither as learning nor knowledge development.

The causes of poor adoption of eLearning in CVET by SMEs are i.e. (BMWA, 2004):

- Training culture within the SMEs is heavy dependent on trainer and conventional training methods; skills needed for a more independent approach and the use of new media for learning are missing.
- SMEs managers without adequate knowledge are not convinced of the effectiveness of eLearning.
- There is a lack of “long-term” vocational strategies for the staff based on further analysis of their qualification needs. The most used learning strategies in SMEs are “learning by doing” and other informal methods.
- Appropriate software and content for SMEs are missing. The major part of commercial eLearning software is modeled on the requirements of big enterprises or higher education; in addition, it is unaffordable for SMEs to pay for tailor-made solutions. The existing training to support specific business needs of SMEs is often inadequate and unattractive.
- A continuous cooperation between eLearning-developers,-providers (eLearning market) and SMEs that could improve this situation is missing.

The project ReadisME (www.readisme.com) analyzed

the readiness of SMEs to use eLearning and cooperation in 5 European countries. Previous studies, e.g. Ariel and SIMPEL, examined barriers to training issues in SMEs. These projects show that SMEs fail to apply eLearning or utilize the Web for effective CVET because of:

- A reactive approach to learning
- A lack of electronic content which can be found easily
- A lack of time to explore relevant training options to achieve the competitive strategy
- A lack of relevant ICT applications
- A lack of staff motivation
- A lack of understanding of all the advantages of e-Learning particularly by managers and person responsible for further education in companies.

Web 2.0 and 3.0

The concept of Web 2.0 (O'Reilly, 2005) facilitates a new level of interaction that makes it easier to collaborate and share information. eLearning by means of the Web with its clear focus on community, which is ideal for SMEs, supports natural informal learning by simplifying tasks involved in working and learning in groups. For example: writing in public blogs encourages the writer to think about the issues in question. In communities, an individual will receive help from a network of peers, so unnecessary searching activity and time can be saved. Best practices and experience of other practitioners from the community can help individuals to learn how to solve problems. eLearning also impacts formal learning settings especially useful for alternative pedagogical approaches such as, collaborative learning and problem and enquiry based learning (PEBL).

Web 3.0 has led to simplification of software development; whose applications that are relatively small, and duo to the data in the cloud, can be operated on any device PC, tablet, smart-phone; this means rapidity, easy customization and well distribution (particularly by social networks).

The Web is moving beyond Web 2.0 and 3.0 but many SMEs still struggling Web 1.0 do not make the most of what Web 2.0 and 3.0 offer. Figure 1 shows different Web versions.

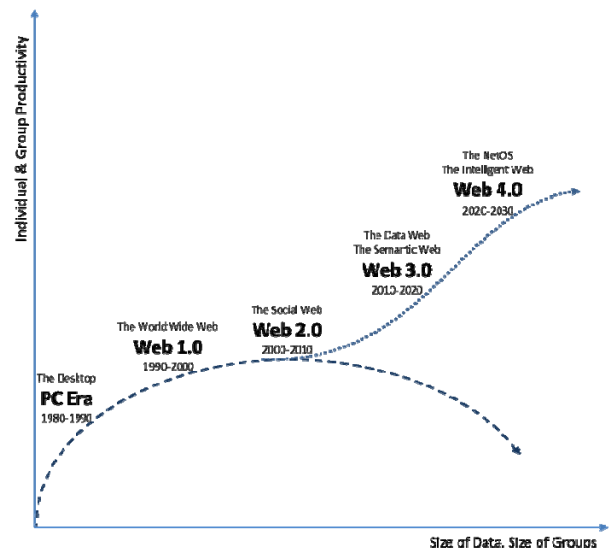


FIG. 1 SOURCE: RADAR NETWORKS & NOVA SPIVACK, 2007 – WWW.RADARNETWORKS.COM

In general, a suitable learning concept for SMEs should be based on delivery of content interactively in small pieces over time as part of a larger process, which corresponds to the needs of SME staff for faster learning in the context of their work and company business (Ileana Hamburg and Steffi Engert, 2007; Ileana Hamburg, 2011, 2012). This implies that personalization of learning makes it more useful and attractive to the learners. In this respect, the traditional existing Learning Management Systems (LMS) and Virtual Learning Environments (VLE) should integrate with Web 2.0 to form Personal Learning Environments (PLE) with a shift from institutionalized vocational learning to a more personal engagement with learners, using approaches that enable individuals to develop their full potential and to support knowledge development and creativity by the engagement of individuals within social networks. The communication tools of Web 2.0 enable learners to provide evaluation of courses, to exchange ideas and content, so the improvement of the quality of learning materials and products can be achieved, meanwhile, the vocational education process can be transformed into a social one. One of the main tasks of the SIMPEL project discussed in the example below is to provide appropriate Guidelines (Beer et al., 2008). Web 2.0 can be effectively used in SMEs for management (planning and formulating for strategies by using actual information, examples from competitors through professional Blogs with RSS Feeds, etc.), marketing (i.e. by using social networks like XING, new clients can be found), production (i.e. to describe new products/services and to discuss their content by using wikis or blogs) and purchase (Michael Kerres, 2006).

Mentoring

Mentoring used in Europe for a long time, involves not just guidance and suggestion, but also the development of autonomous skills, judgments, personal and professional mastery, expertise, trust and the development of self-confidence over the time (Kathy Kram, 1985; Vera Richert, 2006; Ileana Hamburg, 2012). Mentoring can be applied within CVET particularly on the job, where mentors are also company employees, which is advantageous because they know the work processes, the company knowledge resources and the knowledge needed for job efficiency. Such mentors are familiar with the working environment and can avoid hazards and situations that could challenge mentees. A further advantage is the development of a situation of mutual trust between colleagues, necessary for a successful working environment. For a mentor, social, professional and operating competences are required. Experience and expertise is necessary in the mentoring as well as being moderately extraverted. In the relation to the mentee, motivation and response are required. The mentee needs to be ready for professional development, open to learn and accept feedback. Time and initiative are necessary too. The company can benefit from mentoring by a quick introduction of the mentee into formal and informal company structures and demands, facilitating a deliberate, systematic and smooth transfer of technical or internal knowledge, opportunities to shape the workforce of the future in an international, deliberate way to meet company strategic goals and objectives, training of social competence of the mentee and the mentor.

Mentees have the opportunity to cooperate with a trusted person to enter into a work place quickly and to cope with initial problems to discuss and resolve emerging job problems of genuine nature and in relation to the individual needs, to set and achieve realistic goals, to acquire new skills and enhance their skills and thus their future career opportunities and prospects in the future through the knowledge transfer from the mentor. Mentee can build relationships or interactions, allowing them to secure, maintain and advance in the job choosing a way that corresponds to the work routines and social actions of other employees.

There is a broad range of mentoring relationships which can be used in CVET, ranging from informal or spontaneous mentoring to highly structured and planned mentoring. Informal mentoring is created

informally by special interest shared by mentee and mentor when i.e. the mentee has identified as potential employee, which is particularly suitable for people with special needs.

Formal mentoring is when the relationship is supported by the organization so that more participants can benefit.

The goal of mentoring staff from SMEs within CVET is to improve job performance by increasing employee's capability to manage their own performance especially on trust, experience, and supervision, to facilitate performance in the organization, to support retention and leadership development. The mentoring approach in the project IBB2 has been tested on people with disabilities (and www.ibb2.com) and due to desirable results this approach will be applied to other projects (see Examples) for integration of disadvantaged people in CVET and work.

Social Networks – Communities of Practice

The most frequently used learning theories in the development of educational environments are behaviorism, cognitivism and constructivism, each of which has some subsets e.g. social cognitivism, social constructivism. All these theories are built on epistemological traditions and attempt to address what means that a person learns.

Margaret Gredler (2004) expressed behaviorism as being composed of several theories making the assumptions that observable behavior is more important than understanding internal activities, thus behavior should be focused on simple elements and learning is about behavior change.

Cognitivists have a structured view of learning that even encompasses the model of a computer (input, encoding, storage, and outcome), a staged process of development, and schematic views of knowledge, with learning being the act of classifying or categorizing new knowledge and experiences.

Constructivists hold learning to be a process of active construction on the part of the learner. The roots of constructivism can be found in the epistemological orientation of rationalism, where knowledge representations do not need to correspond with external reality.

The development of technologies like Web 2.0 and the networked world we live make necessary a new approach – connectivity – which requires that trainers

and trainees have the capacity to deal with knowledge on a network and to acquire continually new information. Georg Siemens (2005) recognized the importance of connectivity and pointed out that the learning theories like behaviorism, cognitivism and constructivism do not explore the impact of networks on learning. Constructivism acknowledges that real-life learning is complex and that classrooms can be more effective in preparing learners, but the ability to synthesize and recognize connections and patterns is weak.

Georg Siemens (2005) proposed a further learning theory: connectivism that integrates principles of chaos, network, complexity and self-organization and moves learning theories into a digital age. Connectivism also addresses challenges that many companies confront in knowledge management activities. Here connectivism is not convinced as described by Siemens, an independent learning theory but as an important approach to explore ICT and Web 2.0 and 3.0 in a learning context.

A mechanism to encourage "connection" is a social network such as a community of practice (CoP) (Etienne Wenger et al., 2002).

CoPs consisting of voluntary members who share knowledge, ideas and interests, mentoring each other; they offer new opportunities for knowledge management and learning processes by using new forms of interaction between team works and loose contact between the actors; in addition, they show differences to theme-specific cooperation and/or temporary networks and last for a longer period, whose members are ready to share knowledge and to create new one together and to deal with strategic fields of knowledge in business. Botha et al (2008) summarized the key factors regarding communities of practice (www.knowledge-management-tools.net/communities-of-practice.html) as follows i.e. learning is a social phenomenon, while knowledge is integrated into the culture, values, and language of the community (and so its management is easier), members learn by doing and therefore, learning, knowledge acquisition and practice are inseparable.

Empowerment is key to learning: The best learning environments are created when there are real consequences to the individual and his community of practice.

A growing number of associations are seeking such ways to focus on learning through reflection on prac-

tice because they need to offer high-value learning activities. Practical applications of CoPs are in business, organizational design, government, education, social sector, and international projects. Interesting research on this last aspect has been carried out in the field of organizational learning, in attempts to explain how personal knowledge and skills become shared in communities of practice or organizations, and how new knowledge is developed.

Sometimes a transition takes place from a face-to-face to a virtual CoP, in order to reach more continuous levels of information sharing. In this case, it is important to choose adequate software to support the VCoP.

The current generation of web-based technology (Web 2.0), which is not mainly a technical revolution but first of all a social one, has a vast potential to create prospering environments for emerging communities of practice. Social media, i.e. media for social interaction, supports the idea of connectivism developed by Siemens (2005) where information is constantly changing, learning takes place in distributed networks of people based on diversity of opinions; content and services are adaptable and responsive for example to specific needs and goals of SMEs.

Social media based on Web 2.0 and 3.0 offer the premises for a fast knowledge acquisition and support also within the communities.

Andreas Kaplan and Michael Heinlein (2009) created a classification scheme for different social media types in their Business Horizons article,, based on which there are six different types of social media: collaborative projects, blogs and micro blogs, content communities, social networking sites, virtual game worlds, and virtual communities. Technologies include blogs, picture-sharing, wall-postings, email, instant messaging, music-sharing, crowd sourcing, and voice over IP, and so on. Many of these social media services can be integrated via social network aggregation platforms.

The technical skills needed to use social media are easily acquired. Another important characteristic of such applications and "spaces" is the decreasing differences such as the one between teachers and learners, between formal and informal learning processes, between education and knowledge acquisition/management.

The use of social media with Web services and eLearning in CoPs improves the ability of members to

socially interact within the technology (communication facilitated by technology) and of learning with it. Social media tools like Internet forums, weblogs, social blogs, micro blogging, wikis, podcasts, photographs or pictures, video, rating and social bookmarking are easy to use and can help to create a more dynamic community and provide an on-going conversation benefiting the members.

Examples

The above ideas are applied to the activities of the EU project SIMPEL (SIMPEL-SME: Improving Practice in eLearning) involving SMEs and eLearning experts in a community of practice to share knowledge and to develop continuous vocational education strategies based on eLearning leading towards the creation of dynamic PLEs. The community has active member from three universities, two research institutions, some providers of eLearning and vocational training and representatives of SMEs. The objective of this community is also to promote models of good practice in CVET and in the use of the Web and to attract staff engaged in support, training, and design/development, to use Web services. In looking for a suitable platform to foster the building of our community of practice and to facilitate the processes of scenario- and model-building, the SIMPEL consortium selected Moodle.

Comparative analysis of the results of other projects undertaken by the SIMPEL partners, and results of SIMPEL CoP meetings show aspects necessary in developing a continuous vocational training strategy by means of eLearning in SMEs that are described in our guidelines. In the SIMPEL CoP, an "optimal vocational training model" has been developed; best practices of vocational training programs using the Web have been collected as well as the utilization guidelines have been proposed.

The following aspects have been determined as necessities in developing a vocational training strategy by using eLearning, if it is sustainable (Doris Beer et al., 2008):

- Identification of needs and objectives of training:
- Engaging employees: The literature suggests that there are many barriers to employees undertaking e-Learning i.e. eLearning is not linked very closely to day-to-day tasks.
- Time factors and form of training used: SMEs staffs are often burdened by the daily business

pressure and devote little time to learning activities. So they prefer informal forms of learning to take place, often on the job, through sharing experience with colleagues about the job tasks.

- Courses/Learning Content: The most important topic for training courses in SMEs being the "core business" of the company refers to the competencies the staff needed for their work tasks. Other themes should be norms and procedures helping SMEs to survive/integration into the market. Besides, management skills, accounting and language skills are important to be learned.
- Tutor support for eLearning and integration of it with more traditional forms of learning: The evidence suggests that the learning experience within traditional forms is helpful for users and that the completion rates are greater as there is tutor support in the way of face to face, on-line or over the telephone.
- Learning infrastructures: space, time, climate, etc. to support eLearning.
- Organizational perspective, transfer of knowledge: Communities of practice, teaching groups, partnerships supported by learning platforms and special connections have to be developed in order to strengthen dialogical transfer.
- Economical aspects: a business part of the model should represent economical aspects of the eLearning strategy (costs, needed human resources etc.).
- Quality and (self) evaluation criteria: Quality criteria have to be established. Evaluation tools for efficiency and results of the training efforts should be developed that can be easily handled because SMEs lack staff and know-how and do rarely some evaluation.

Another project aimed at using informal learning, Web 2.0 and networking in SME CVET is Net Knowing 2.0 (www.netknowing.eu). The work in progress about the community developed within this project by using social media tool TikiWiki (<http://cop.netknowing.eu>) for an ICT supporting platform of it, will be briefly described. TikiWiki CMS Groupware is a free and open source wiki-based content management system written primarily in PHP and distributed under the GNU Lesser General Public License (LGPL) license. The decision to use TikiWiki was made after an

analysis of some open source tools. The users of the platform can get information about the project and about Web 2.0 and informal learning. If they register on the CoP, they can use community services like discussion forum, file gallery and particularly the community directory with addresses, competences and interests of social network (community) members.

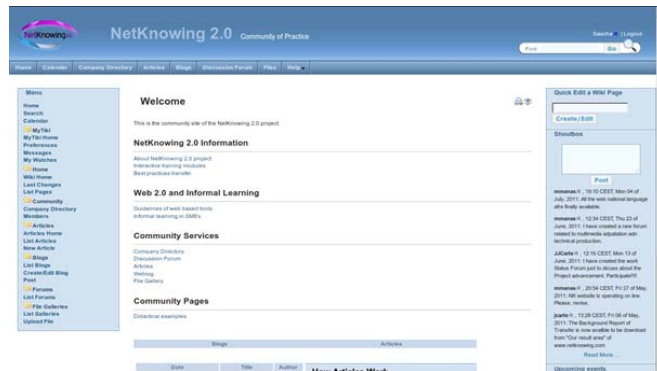


FIG. 2 COP OF THE PROJECT NET KNOWING 2.0.

Source IAT: <http://cop.netknowing.eu>

Two main CVET products of Net Knowing 2.0 are a self-learning basic course focused on benefits of informal learning for SMEs and how to learn using Web 2.0, social networks and net collaborative practices and an eLearning advanced course focused on the implementation of Web 2.0 based informal learning, networking strategies and mentoring in SMEs and other organizations.

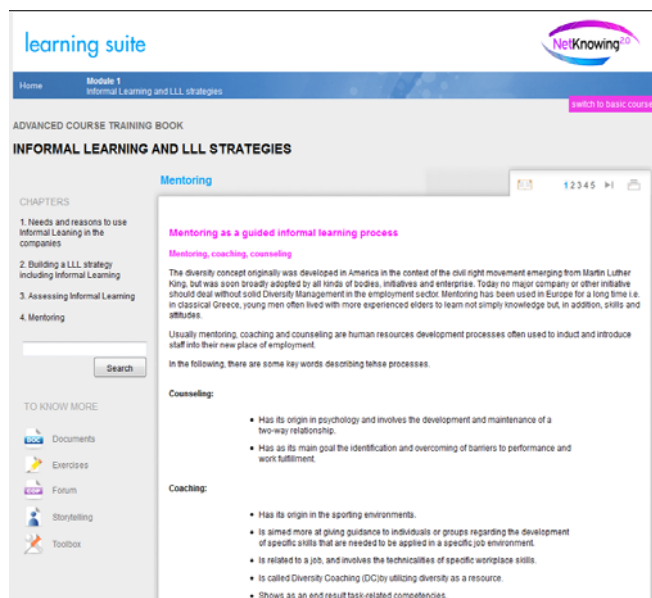


FIG. 3 SCREENSHOT OF THE NET KNOWING 2.0 LEARNING SUITE

source: <http://cop.netknowing.eu>

Within the Net Knowing project, workshops with SMEs have been organized in partner countries to discuss with representatives of SMEs some tactics for

implementation of a mentoring program in their CVET. For a successful deployment of a mentoring program within the specific context of a SME environment, some factors have to be considered such as transformation of the specific working environment into context, research on the role played by the organizational culture or “climate” in the development, maintenance and success of the SME, determination of knowledge gaps which can be reduced by a mentoring system and qualification which the staff needs. SME managers have to be convinced that a mentoring intervention has great benefits to CVET. Before the mentoring process starts, barriers to effective mentoring/coaching issues have to be removed. Figure 3 presents a screenshot from the learning suite within Net Knowing 2.0 including a mentoring part (Ileana Hamburg and Marius Marian, 2012).

An on-going European project coordinated by one of the authors is DIMENSAAI: Diversity and Mentoring Approaches to Support Active Ageing and Integration (www.dimensaai.eu).

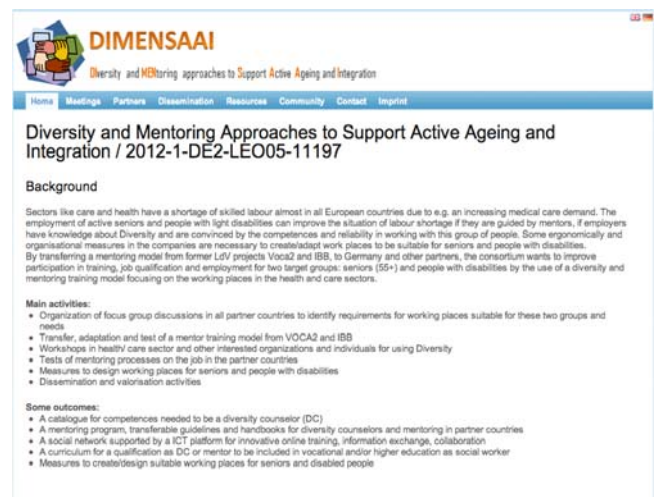


FIG. 4 SCREENSHOT OF THE DIMENSAAI WEB-SITE

Source: <http://dimensaai.eu>

By transferring a mentoring model from former European projects like IBB to Germany and other partners, the consortium intends to improve participation in CVET and employment particularly for disadvantaged groups like seniors and people with disabilities by means of a social innovative diversity and mentoring training model focusing on the working places in the health and care sector. Focus Group Discussions with social actors for improving CVET referring to seniors and people with disabilities and developing suitable work places for them have been organized. A social network supported by an ICT platform for innovative online training, information exchange, collaboration is

in the development (Fig 5). In 2014 it is planned to test the Mobile Web (3.0) within training of mentors if the future developments make this possible.



FIG. 5 SCREENSHOT OF THE DIMENSAAI PLATFORM

Source: www.platform.dimensaai.eu

Conclusions

Through our projects, and based on the experience of other academic colleagues as shown in this paper, we advocate the utilization of the existing services of Web 2.0 and 3.0 by SME CVET.

Approaches such as mentoring can contribute not only to the improvement of CVET but also help to integrate people with special needs.

Though social networks such as My Space and Facebook spreading to global phenomena are widely used for business activities, the benefits of Web 2.0 for SMEs are not as well known.

Social networks are useful to improve the CVET strategies, to cooperate, to keep experts and clients in touch and improve informal learning, but work and business oriented content and suitable learning platforms are needed. It is recognized, however, that technology can never be a panacea for all face-to-face activity for SMEs.

CVET technologies need to be re-engineered to be accessible for all and also to support the integration of people with special needs. CVET should include approaches that enable individuals to develop their full potential and support knowledge development and creativity through their engagement within social and cultural networks; in addition, experience from academic context can support this process.

These new innovations will change the way staff learn, how they interact with learning content and how they communicate with peers. It is important to help SME

staff to have an open and adaptable spirit to new tools that can be exploited in the learning process. Situations, environments, projects have to be created to develop critical thinking skills of the staff and make them effective in a global and competitive society.

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