Practice Firms, E-learning and Web 2.0 Technologies as a Bases of SELPRAF Training Programme for Unemployed

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***Abstract*—**Within the lifelong learning strategy implementation a set of documents such as The Bruges Communiqué on enhanced European Cooperation in VET, A New Impetus for European cooperation in VET to support the Europe 2020 strategy and Key competences for lifelong learning are being launched by European Commission. All the documents have been prepared with the intention to additionally support and enhance Europe to become smarter, more sustainable and inclusive. It stimulates innovations adapted to individual learners, which consequently support the process of self-employment. As a concrete response to the deficiencies identified above, the general aim of the SELPRAF project is to encourage people's interest for entrepreneurship through an innovative SELPRAF Training Programme for the acquisition of the four key competences: communication in the mother tongue, communication in foreign languages, digital competence, and sense of initiative and entrepreneurship. In the paper special attention is given to the presentation of the concept of practice firms, e-learning and web 2.0 technologies as a bases of SELPRAF Training Programme for unemployed. Furthermore, some ideas and existing initiatives are presented and the expected impact on the Vocational Education and Training System in Slovenia and Croatia is introduced.

***Keywords*—**competences, e-learning, e-learning environment, practice firm, unemployed, Vocational Education and Training (VET), Web 2.0. technologies.

I. Introduction

The project titled *'Self-employment with e-Leaning based Practice Firms'* or in short 'SELPRAF' (www.selpraf.eu) was launched within the call for proposals for the Leonardo da Vinci – Transfer of Innovation – Lifelong Learning Programme in the autumn of 2011.

Findings of the national research studies and Employment Service of Slovenia [1], [2] have pointed out that unemployment rate is one of the most important indicators that describe the state of economy. Nowadays, unemployment rates are high. The September 2010 figures for the EU 27 Member States indicated a general unemployment rate of 9.6%, in Slovenia 11.1% and 18.8% in Croatia [1]. This rate greatly increased in the beginning of 2011. At the end of December 2010 the Ljubljana Employment Service registered 26.700 unemployed, representing 24.3% of the total unemployed persons in Slovenia. Compared with December 2009, the number of unemployed in Ljubljana increased by 26.3%, while the unemployment rate in Slovenia increased by 13.8%.

Within the lifelong learning strategy implementation a set of documents such as the *Bruges Communiqué on Enhanced European Cooperation in VET* [3], *A New Impetus for European Cooperation in VET* [4] to support the *Europe 2020 strategy* and *Key Competences for Lifelong Learning* [5] were launched by the European Commission. All these documents were prepared with the intention to additionally support and enhance Europe to become smarter, more sustainable and inclusive. To achieve this goal, we need more flexible, high quality training systems responding systematically to the needs of today and tomorrow. Among the main 'leading initiatives' laid down in the Europe 2020 document is also the *Agenda for New Skills and Jobs* [6], which includes an enhanced promotion of innovations adopted to the learning potentials of individuals, which consequently supports the process of **self-employment**. Since both Slovenia's and Croatia's unemployment rates are above the EU average, all forms of alternative employment should be systematically promoted. A major opportunity is represented by a wide spectrum of self-employment possibilities. The analyses' results have shown that due to their shortcomings in terms of education, lack of competences, and consequently fears and uncertainties, the unemployed rarely opt for self-employment.

The main stakeholders on the labour market are employers, active population, employment services and educational institutions. The lack of systematic exchange of information among these institutions results in the insufficient support to the unemployed, who need complex information shaped to individual's particular interests, needs and already acquired competences. Although self-employment has been an alternative option for quite a long time, the unemployed, due to the lack of self-confidence, competence and consequently

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the fear of failure only rarely decide for this option. A more stimulating environment and stronger interest for entrepreneurship are the goals we can achieve already in the medium term perspective with the innovative training model, based on knowledge and transfer of practical experience.

As a concrete response to the deficiencies identified above, the general aim of the SELPRAF project is – in the framework of a comprehensive approach to improve the penetration of the unemployed into the labour market – to develop people's enthusiasm for entrepreneurship using an efficient and innovative model for the transfer of knowledge and experience and to develop and promote the **SELPRAF Training Programme** for the acquisition of the four key competences: communication in the mother tongue, communication in foreign languages, digital competence, and a sense of initiative and entrepreneurship for the main target group (unemployed with at least 4th level of education), to promote individual educational pathways beyond VET, to improve permeability in the educational system, and to facilitate the transition phases (from VET into the labour market or reintegration into the labour market after a period of unemployment).

The **concrete objectives** of the project are: (1) to establish the SELPRAF Training Programme (development of adapted training curriculum, which consists of two parts: theoretical part for the acquisition of the four key competences and practical work within the practice firms); (2) to develop e-learning materials for the acquisition of the four key competences and working in practice firms, (3) to train 48 unemployed in practice firms (32 in Slovenia and 16 in Croatia), (4) to ensure the quality and sustainability of project outcomes by the implementation of the SELPRAF Training Programme into the national system and the training programmes of the Employment Service of Slovenia.

The project **partnership structure** is based on partners ensuring: (1) high technology e-learning infrastructure achievements (company B2, Slovenia, Jožef Stefan Institute, Slovenia), (2) didactical achievements in the acquisition of key competences (Šentvid High School, Slovenia), (3) working in practice firms (Secondary school of Economics, Slovenia), (4) the network of recipients of innovations (Employment service of Slovenia, High school Mate Blazine, Croatia), (5) pilot training and on-going valorization (Secondary school of Economics, Employment service of Slovenia) and (6) evaluation and dissemination (Jožef Stefan Institute). Institutional partner (Institute of the Republic of Slovenia for Vocational Education and Training) is responsible together with the Employment Service of Slovenia for the identification of the needs and needs analysis, as well as the provision of definitions of the key competences. The quality of project's outcomes can only be assessed by partners who have been working in this field for a sufficient period of time. University of Leicester, England is responsible for a qualified evaluation of the project results and presentation of results' contents at the European level in an adequate and expert manner.

The main expected impacts of the project are an improved penetration of the unemployed into the labour market, enhanced attractiveness of VET, improved capacity of VET to respond to the changing requirements of the labour market and to encourage the provision of appropriate funding, e.g. support tools and establishment of practice firms by learners.

II. Importance of Competences on the Labour Market

Due to unfavourable demographic trends – declining birth rates, aging population and high emigration rates – the number of inhabitants in Slovenia has been decreasing in general, and in particular its working-age population has been shrinking. Shortage of skilled labour is becoming one of Slovenia's major problems hindering its economic development. A European Commission's report [7] predicted that the birth rate in all countries will remain under the level required to maintain the demographic balance. The report also projected that between 2010 and 2050 the older population will increase dramatically. The aim of this report was to address the fundamental economic problems – weak economic growth, high unemployment rates and social exclusion. The existence of a single EU labour market area will inevitably cause the countries to draw up adequate qualifications for their workforce. For this reason, we can observe an increased emphasis on vocational training (VET), which is perceived as a major progress, employment and economic growth factor. We are also witnessing states investing effort into helping the unemployed maximize trade opportunities and deal with different problems related to the lack of skills and labour market integration. States often provide training opportunities for the unemployed to acquire new competences to better compete on the labour market. It is also important to assess how the acquired skills meet the labour market requirements. Qualification is essentially a person's ability to match specific job requirements. It is difficult to talk about qualifications in the absence of visual activity, without task examination and performance indicators. Acquisition of qualifications and improvement of working conditions are the steps going in the right direction [5].

Business globalization and ever more fierce competition are increasing the importance of highly developed skills and competences. Organizations are working hard to meet customer and community expectations, and in order to do so, they have to be flexible and quickly respond to the new possibilities and opportunities offered by the state-of-the-art technological breakthroughs [5].

We should try to better balance our labour markets in order to accommodate the inactive and vulnerable groups of people, such as the unemployed. Integration of unemployed persons in the labour market is a complex and controversial issue affected many factors: economic development of a state, labour supply and demand ratio, employers' approach to the unemployed, the unemployed people's job-motivation, their ability to learn, and their self-confidence. To successfully integrate the unemployed into the labour market, it is important to give enough attention to the assessment of their individual

circumstances and opportunities. In particular, we should examine their position on the labour market, which is also determined by factors such as education and vocational training relevant to the modern labour market needs, key competences, knowledge and abilities, as well as language skills [5].

The knowledge, skills and aptitudes of the European workforce are major factors impacting the EU's innovation, productivity and competitiveness [5]. Growing internationalization, the rapid pace of change, and the continuous roll-out of new technologies mean that Europeans must not only keep their specific job-related skills up-to-date, but also possess the generic competences that will enable them to adapt to change. People's competences also contribute to their motivation and job satisfaction, thereby affecting the quality of their work [5].

It is against this back-drop that the Council and the European Parliament adopted, at the end of 2006, a European Framework for Key Competences for Lifelong Learning [5]. The Framework identifies and defines, for the first time at the European level, the key competences that citizens require for their personal fulfillment, social inclusion, active citizenship and employability in our knowledge-based society.

Competences are defined as a combination of knowledge, skills and attitudes appropriate to the context. Key competences are those which all individuals need for personal fulfillment and development, active citizenship, social inclusion and employment. The Reference Framework sets out eight key competences [5]: *(1) Communication in the mother tongue; (2) Communication in foreign languages; (3) Mathematical competence and basic competences in science and technology; (4) Digital competence; (5) Learning to learn; (6) Social and civic competences; (7) Sense of initiative and entrepreneurship; (8) Cultural awareness and expression.*

Below we present four competencies which will be part of our SELPRAF Training Programme in more detail.

A. Communication in the mother tongue

Communication in the mother tongue is the ability to express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts; in education and training, work, home and leisure [5]. Communicative competence results from the acquisition of the mother tongue, which is intrinsically linked to the development of an individual's cognitive ability to interpret the world and relate to others. Communication in the mother tongue requires an individual to have knowledge of vocabulary, functional grammar and the functions of language. It includes an awareness of the main types of verbal interaction, a range of literary and non-literary texts, the main features of different styles and registers of language, and the variability of language and communication in different contexts [5].

B. Communication in foreign languages

Communication in foreign languages broadly shares the main skill dimensions of communication in the mother tongue: it is based on the ability to understand, express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing) in an appropriate range of societal and cultural contexts (in education and training, work, home and leisure) according to one's wants or needs. Communication in foreign languages also calls for skills such as mediation and intercultural understanding. An individual's level of proficiency will vary between the four dimensions (listening, speaking, reading and writing) and between the different languages, and according to that individual's social and cultural background, environment, needs and/or interests [5].

Competence in foreign languages requires knowledge of vocabulary and functional grammar and an awareness of the main types of verbal interaction and registers of language. Knowledge of societal conventions, and the cultural aspect and variability of languages is important [5].

In German language four skills will be developed: writing, speaking (spoken interaction and speech production), listening and reading. In accordance with the Common European Framework of Reference for Languages: Learning, Teaching, Assessment – CEFR, the project will tackle the four skills for German language: speaking, listening, reading and communication (spoken and written). Topics and vocabulary will refer to all fields of life.

C. Digital competence

Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet [5].

Digital competence requires a sound understanding and knowledge of the nature, role and opportunities of IST in everyday contexts: in personal and social life as well as at work. This includes main computer applications such as word processing, spreadsheets, databases, information storage and management, and an understanding of the opportunities and potential risks of the Internet and communication via electronic media (email, network tools) for work, leisure, information sharing and collaborative networking, learning and research. Individuals should also understand how IST can support creativity and innovation, and be aware of issues around the validity and reliability of information available and of the legal and ethical principles involved in the interactive use of IST [5].

Digital competence will be covered both directly in the learning contents (e.g. safe and critical use of ICT for work and communication purposes, use of computers for search, evaluation, saving, production, presentation and exchange of information, as well as communication and cooperation within on-line groups, etc.), and indirectly, through the training in an

e-learning environment.

D. Sense of initiative and entrepreneurship

Sense of initiative and entrepreneurship will be the prevailing competence. It refers to an individual's ability to turn ideas into action [5]. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. In the project the knowledge includes the ability to identify available opportunities for personal, professional and/or business activities, including the 'big picture' issues that provide the context in which people live and work, such as a broad understanding of the workings of the economy, and the opportunities and challenges facing an employer or organization.

Necessary knowledge includes the ability to identify available opportunities for personal, professional and/or business activities, including 'bigger picture' issues that provide the context in which people live and work, such as a broad understanding of the workings of the economy, and the opportunities and challenges facing an employer or organization. Individuals should also be aware of the ethical position of enterprises, and how they can be a force for good, for example through fair trade or through social enterprise.

III. A PRACTICE FIRM

A **practice firm** (also known as a practice enterprise, training firm, or virtual business) offers an effective learning environment, which simulates all the administrative functions of a real business. The practice firm resembles an actual company in its form, organization and function. There are currently over 5800 practice firms worldwide. Participants of a practice firm work in real departments of a simulated business environment. Catalogues of products and services are marketed to other practice firms, which buy and sell from each other and earn virtual profits. Everything is identical to a real business, except there is no actual product or exchange of real funds. Practice firms help unemployed individuals gain meaningful employment by providing them with the opportunity to apply and update their skills and knowledge.

In Slovenia, practice firms are already running in Vocational Education Schools. Implementation of practice firms for unemployed in Slovenia and Croatia therefore means the transfer of practice firms in two perspectives: firstly, practice firms already running in Vocational Education Schools in Slovenia will be adopted and implemented for the unemployed in Slovenia, and secondly, practice firms will be implemented in Croatia (geographical perspective). This process includes the identification and needs analysis of the unemployed, and selection of innovative e-learning contents to meet the needs. The first phase of the SELPRAF project will focus on innovative e-learning content development. The content will match the needs and socio-cultural circumstances of target groups, and it will then be gradually integrated into the national, regional, and sectoral VET.

The importance of this transfer is not related just to the implementation of practice firms as a tool used within the education sector transferred to the labour market, but also vice versa – using the experience from the labour market to develop practice firms in the VET system. Simultaneous transfer and development in different countries will pull together wider range of experience from different environments. This will further contribute to the quality of results.

Slovene Centre for Training Companies has created the methodology of work in the practice firms which is based on the curriculum or the curricula of vocational modules. It will be possible to use the textbook and the materials directly for the target groups. However it will have to be partly modified especially for the Croatia where we have to take into account national legislation concerning practice firms such as business companies, business functions in companies, tax system, labour legislation health and social insurance. Experts from Croatia will have to be included in those modifications.

IV. E-LEARNING AND WEB 2.0 TECHNOLOGIES AS A BASE OF SELPRAF TRAINING PROGRAMME

E-learning is a term, introduced along with the introduction of information and communication technology for educational purposes [15]. Definitions of e-learning are various, diverse and lack unity, consequently, it is of outmost importance to provide precise definitions of and the related notions. Hereby we are referring to the process of studying and teaching as e-learning when it includes information and communication technology, regardless of the mode or the scope of its use [16].

Kirschner and Paas [17] defined e-learning as a learning process in which internet plays the key role in the presentation, support, management and assessment of learning. Rosenberg [18] defines e-learning as a learning process in which information technology partially or fully undertakes the role of a mediator between different stakeholders involved in the learning process. We refer to the process of studying and teaching as e-learning when it includes information and communication technology, regardless of the mode or the scope of its use [16], [19]. E-learning extends the company out to ever-widening circles of impact. The companies are participating in a radical redefinition of industries, markets and of the global economy itself. Today, organizations are making great efforts to properly adjust to the changing business environment to enhance their competitiveness. In step with the development of information technology and the Internet, many businesses are replacing traditional vocational training with e-learning to better manage their workforce. However, it is questionable whether training programs actually change employee behaviour after implementation. In the case of US companies, only 10–15 % of training is applied to work [20].

When we are talking about e-learning we cannot overlook the impact that Web 2.0 technologies brings to the process of e-learning [27]. Web 2.0 technologies are changing the way messages spread across the Web. A number of online tools and platforms are now defining how people share their perspectives, opinions, thoughts and experiences. Web 2.0 tools such as instant messaging systems, blogs, RSS, video

casting, social bookmarking, social networking, podcasts and picture sharing sites are becoming more and more popular. One major advantage of Web 2.0 tools is that the majority of them are free. There is a large number of Web 2.0 tools, some of the more popular ones are: Instant messaging systems, Blogs, Video-Wiki and Xo-Wiki, Doodle, Podcasting, RSS.

A. Instant Messaging Systems (IMS)

The need for communication tools in the learning process is often underestimated by educators, especially those who feel comfortable with the traditional, instructive way of teaching. However, even with their 'traditional' approach learners need to communicate with each other when working together. At the beginning of the 90s, digital communication tools were rather limited: apart from direct face-to-face meetings, the main way to communicate was using the plain old telephone. Sharing course materials was possible only by using a copier or a fax machine. However, these devices were quite rare in ordinary households [21]. The only barriers to communication that exist today are the lack of skills needed to operate new technologies. This barrier is not even noticed by most younger people, who have grown up as digital 'natives', rarely pulling themselves away from their computers (even in the street they have mobile phones in their pockets), but it definitely still is a serious obstacle for many educators. However, the new technologies are inevitably filtering down into the daily practice and in 2009, it is probably not necessary to explain what the purpose of instant messaging is. The top 10 instant messaging systems number of users in the world according to statistics from Wikipedia (2008) is counted in hundreds of millions of users e.g. QQ 783 million total, 317.9 million active 40.3 million peak online (mostly in China), MSN 294 million active, Yahoo 248 million active, Skype 309 million total, 12 million speak online etc. The most important decisive factor for an ordinary user when choosing an instant messaging system is the recommendation of a friend (most people start out using the same system that the majority of their friends are already using). The IMS are used for any kind of information exchange including communication between employees, students regarding their study or learning environment. For that reason this practice is included in the technology that contributes to the personalized learning environment.

B. Blogs

A blog is a type of web site in which entries are made as in a journal or diary and are displayed in reverse chronological order [22]. Basically, an individual maintains his or her own weblog and it functions as a sort of personal online diary. Regular entries such as comments, descriptions of events, or other types of materials combined with text, images, and links to other weblogs and web sites are the typical ingredients of weblogs. Blogs have gained a lot of attention in educational circles, where they are experienced as tools that support several pedagogical aims and scenarios, ranging from individual knowledge management and competence development to group-based learning activities. Therefore, blogs have become an important educational tool in recent years, providing an opportunity for both facilitators and employees to publish their ideas, essays or simply as a space to reflect upon their particular learning process and reading material. In the context of teaching and learning, blogs can do much more than just deliver instructions or course news items to employees. They can be an interesting collaboration tool for employees who can join relevant community and find people to collaborate with, and give feedback to management and others. The most frequent use of blogs in a learning environment is the publishing and sharing content with others. Blog technology can be improved by plug-ins such as FeedBack tool used to track and integrate the content of other authors within one blog. FeedBack is a standard plug-in piece of code developed within the framework of the iCamp project (www.icamp-project.eu). In a simple way it is used to enable blog users to subscribe to each other's' blogs. Blogging technology, in combination with innovations such as the FeedBack specification, has definitely high potential to be considered as a powerful tool for learning with others [22].

C. Video-Wiki and Xo-Wiki

Publishing or presenting someone's thoughts online usually means writing some text and illustrating it with pictures [23]. Still, the most natural form of communication for humans is face to face and for most people the majority of information is presented orally, where facing directly the presenter and his or her non-verbal information is often even more important than their actual words. Video could serve as a replacement for face-to-face presentation, since it is able to convey visible behaviour and important non-verbal information. In the past, recording a video and getting it to the target audience was quite a big challenge. Depending on the number of intended users, TV broadcasts or video tapes could be used. Employees, taking part in an e-learning course work in groups are suggested to form groups by getting to know each other and by discovering some common topic. The mentor/tutor usually gets use of VideoWiki to record some short self-introduction videos in which employees are presenting their background, explaining what their expectations are regarding some specific topic for the group assignment. VideoWiki is based on the Red5 open-source Flash server, written in Java and Flash. It allows video recording, searching and playback through the main system web page or via standard URL links. VideoWiki also provides RSS feeds for each NameSpace or Author and videos can be embedded on any web page using special code snippets [23]. Collaborative creation and maintenance of knowledge artefacts is one of the emerging phenomena of online internet communities, as prominent examples such as Wikipedia.org, MediaWiki.org, LyricWiki.org, Microformats.org and Wikitravel.org. Besides, a collection of web pages (a so-called wiki) can be very useful for teaching and learning purposes, for instance if learners need to collaborate to work on certain topics or if facilitators wish to develop and share their learning content with others. Consequently, a contemporary approach to e-learning requires

tools which can enable learners to work on artefacts collaboratively, either by allowing them to publish small posts which can be reused and combined with others (see the blog-based solution presented in the previous section) or by providing real wiki functionality. XoWiki is one such wiki implementation, realized as a component of OpenACS (Open Architecture Community System), a framework for building scalable, community-oriented web applications. XoWiki includes a rich text editor for easily creating and editing wiki pages and provides features for structuring, commenting, tagging and visualizing wiki-based content [23].

D. Doodle

When people are working on a project together they need to divide tasks among the members of a group and monitor the progress of the project. This requires the people to engage in collaboration, discussion and decision making processes. In the context of bringing different cultures, educational systems, levels of teaching, languages and technology skills into a common virtual learning space, planning a series of meetings several weeks in advanced may very simply not work. Taking this into account, people must adopt a simple solution to meet their needs. There are plenty of solutions which can help to make project to run smoothly. One of them is Doodle. Doodle can be described simply as a web-based tool for finding suitable dates for appointments with other people. Doodle allows people (learners) to plan their meetings with e.g. partners, suppliers and other employees. In addition to time management, it can be used to vote for any other issue that arises as part of the distance learning process: for example, the literature that needs to be selected and analyzed in order to complete a particular task.

V. SELPRAF Training Programme

SELPRAF Training Programme is the optimum instrument to enable the implementation of e-learning for the acquisition of four, mutually interlinked key competences: communication in the mother tongue, communication in foreign languages, digital competence, and sense of initiative and entrepreneurship and thus enable the specific target group of unemployed to take part in training within practice firms.

The SELPRAF Training Programme will be divided in two parts. First part of the SELPRAF Training Programme will be delivered in the form of blended learning aimed at the acquisition of knowledge and competences required to qualify to join a practice firm with the support of a modern e-learning management system eCampus®, which meets the requirements related to employee education independent in time and space. Data needed for the e-training evaluation will be acquired through the questionnaires and results of interim tests and the final examination. Second part of the training will be conducted F2F in practice firms. The training will be performed in Ljubljana, Celje and Labin.

The **e-learning environment** provides an environment which enables social learning experience [24]. We will use the eCampus® Learning Management System (LMS) as a learning environment which facilitates the production of multimedia and interactive e-learning content, use of Web 2.0 tools, participants' management, and an integrated e-learning, e-testing and communication support. Fig. 1 presents an example of an e-course in eCampus® learning environment.

Fig. 1: An example of an e-course in eCampus® learning environment

This platform has already proven outstanding in Leonardo da Vinci project "MeRLab", mostly due to many capabilities while maintaining high usability level among all types of users (students, mentors, authors, editors and administrators).

eCampus® is developed and designed to offer students excellent learning experience, to enable authors using advanced features to create multimedia and interactive content, to support mentor activities with powerful built-in virtual classroom, and to offer administrators segmented controlling tools to manage e-learning content, users, user groups and other entities. During the project eCampus® will be used to create e-learning content and to support the blended learning type of training (i.e. partly face to face, partly remote using internet), both in Slovene and Croatian languages. Added value of this project to the LMS eCampus® are some newly developed features, such as an upgraded virtual classroom (it will support the blended learning type of training) and several accessibility tools.

One of the main project objectives is to develop learning content. On the basis of the report from WP1 – Needs Analysis Report for Slovenia and Croatia we will choose relevant topics in the field of four selected competences and form modules, that will be rearranged into modern interactive-multimedia e-contents using state-of-the-art information-communication technology. E-contents will meet the requirements of the SCORM (Shareable Content Object Reference Model) standards, guaranteeing their interoperability and enabling their further application in all e-learning management systems, which support this standard, both for open-code and commercial versions. E-materials will cover a 60-hour course. For the development of e-learning content, we will use the

internal project methodology for the production of e-learning content, which represents the "know-how" acquired through an expert approach and abundant experience. We will use numerous computer tools, such as MS Office, Macromedia Studio, Macromedia Captivate, Corel Graphic Suite, Articulate Studio, Hot Potatoes, TechSmith Snagit, and similar. System adaptation will also be implemented with the project approach of development and implementation of software.

The SELPRAF Training Programme will combine the most effective traditional teaching methods with new information technologies. E-learning model will be based on blended learning methodology, which allows the building of the efficient combinations of traditional and new methods of learning and training. The major principles of e-learning model which will be used in the 'SELPRAF' project are [8], [9], [26]:

- combination self-learning and interactive learning (active role of unemployed);
- combination of face-to-face learning and e-learning (6 face-to-face sessions in a course);
- course (60-hours) is built by module system and uniform structural model;
- full learning and instructional support.

To organize the learning process, the e-learning environment will be developed. The model of e-learning environment is presented on Fig. 2. For the high effectiveness of educational process, the e-learning environment is taking into account both pedagogical principles and ICT possibilities [13], [14]. E-learning environment could change the process of learning from a passive to an active one, encouraging regular communication between learners and with tutors [10]. It takes the synchronous and asynchronous collaboration capabilities of the Internet and integrates them within tools that mirror the instructional process.

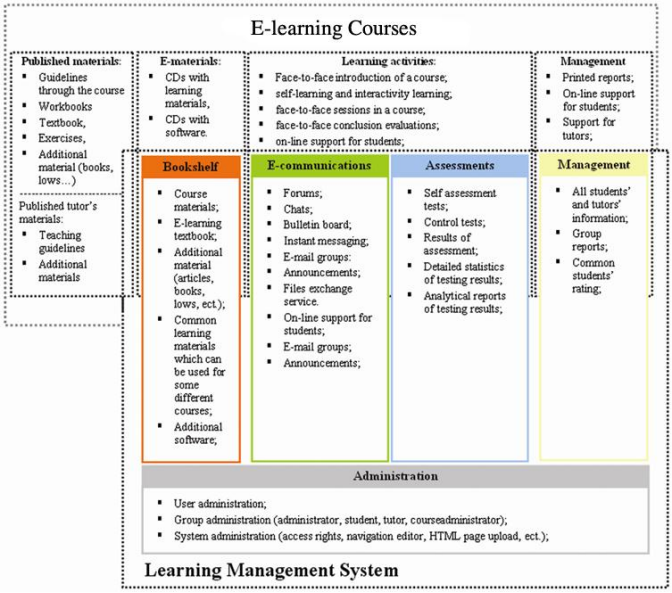

Fig. 2: The 'e4VET' e-learning environment [11]

To create an effective and appropriate online learning environment for our define target group, we consider a few practical and pedagogical issues, including the recognition of prior learning, self-assessment, diagnostic tests, the online roles of tutor and unemployed/student, the best type of support technology tools to use, and the process of collaboration. It is also important to consider how e-learning materials will be distributed to the unemployed/students, how unemployed/students will be assessed, and how specialized software will be incorporated into the learning environment. These practical and pedagogical aspects are presented in more detail below [25].

- **Reception**. Unemployed/students have different backgrounds and different needs. At the beginning of the course the unemployed/students need to establish goals, become aware of their own needs and grasp the objectives of each course [11].
- **Roles**. The tutor must accept the role of facilitator (as opposed to leader) in the learning process. This change requires moving from the 'chalk-and-talk' role to a 'guide-on-the-side' role. It is also important that tutors realize that e-learning requires high motivation on the part of the unemployed/students [11].
- **Support technology**. The unemployed/students must have access to a standard web browser, Internet connection and username and password of the e-learning environment [11].
- **Collaboration tools**. Effective collaboration between the tutor and the unemployed/students is crucial. Tutors must be familiar with the many Internet technologies that support effective communication and collaboration, including e-mail, group discussion lists, text-based chat facilities, and even videoconferencing [11].
- **Material distribution**. Developed e-learning environment provides a platform for delivering not only the text materials, but also the multimedia requirements as well, including audio and video streams of tutors lectures. Tutors must be familiar with the strengths and weaknesses of current technologies [11].
- **Methodology**. Flexible learning is not a question of telling the unemployed/students to do whatever they want, whenever they want to, as some teachers fear. Flexible learning is about providing individual students with the kind of material, tutoring and guidance that suits them best [12].
- **Student assessment**. Computer-based testing can provide instant feedback on student comprehension of the course materials. But this type of managed testing cannot work unless tutors accept assignments and provide feedback to students electronically [11].
- **Specialized software**. In some cases, course content might dictate that specialized tools be used to improve course comprehension and communication. For example, collaborative tools are now available that support shared workspaces along with application-sharing capabilities across the Internet [11].

VI. Expected impact on the VET system in Slovenia and Croatia

Implementation of practice firms for the unemployed in Slovenia and Croatia will have a direct impact on the VET systems in both countries. The needs analysis and a preliminary training for the unemployed involved in project will provide us with the information regarding possible loopholes in the existing VET systems regarding the acquisition of competences. The experience obtained in the process of the adaptation of training materials, and the practical use of the e-training contents by the unemployed will provide us with the information needed to improve the existing materials used by the VET schools. Practice firms will open new doors to the participants who are already out of the education system and maybe have some work experience. It will certainly impact the development of practice firms as very useful tools in the initial stages of the VET training as well as in the lifelong learning process.

VII. Conclusion

Among the five priority aims launched by the *Europe 2020 strategy*, employment and education are the two outstanding ones. They have been recognized as the main field of action, demanding high level of cooperation and responsibility shared by different sectors (economy, employment, education). Implementation of the *Europe 2020 strategy* should activate above all, an efficient adoption of different, individual learning 'pathways' to employment, concentrated on individual's potentials and capacities, and strengthening the role of ICT and e-learning.

The project offers concrete answers to the priorities mentioned above: the SELPRAF Training Programme (acquisition of four key competences and working in practice firms) for a group of unemployed people, backed-up by the existing and experienced national network of practice firms. The SELPRAF will assist the unemployed in the procedures of self-employment, will have them better adapt to the labour market demands, achieve independence, and gain self-confidence and sensitiveness for lifelong learning. High mastering of key competences promote individual's carrier pathways beyond VET, improve permeability in the educational system and facilitate transition phases in one's career.

The additional strong point is the participation of Croatia, the neighbouring country, with which Slovenia has traditional exchange of best practices in the field of VET. Due to our common history and language, Slovenia can also provide good assistance to Croatia to facilitate quicker implementation of the actual EU strategies.

Practice firms help the unemployed gain meaningful employment by providing them with opportunities to apply and update their skills and knowledge. The importance of the SELPRAF transfer of innovation does not relate merely to the implementation of practice firms as tools enabling the transition from school to work, but vice versa – using the the labour market experience to improve the quality of work and the role of practice firms within the VET system. The practice of transfer "from school to work and vice versa" will simultaneously happen in all participating countries, and thus pull together a wider spectrum of experience from different environments. This will further contribute to the quality of results.

The SELPRAF project offers direct individual-based tools to the most vulnerable group of young unemployed persons in concrete identified regions within the EU and in one candidate country. It also enables further wider implementation of the product either through the European Social Fund or Leonardo da Vinci projects on the national or international level

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