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Final Report

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Project Information

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Executive Summary

Internet has by now become an everyday part of the 21st century life. Everyone and everything is getting online. The rapidly changing technological background, the new social media are all providing new platforms for online education.

Many innovative ideas have been materialized with the support of the Lifelong Learning Programme (LLP) from different areas of the Vocational Educational Training (VET) system. The scope of this project was to collect, categorize and evaluate best LLP-VET e-learning practices and disseminate them among VET stakeholders throughout Europe.

The fundamental bases of the E-Solve evaluation system was ECBCheck. The ECBCheck criteria system is comprehensively elaborated. It bases on experience of several acknowledged experts, education practitioners. The results were accepted and used by many educational institutes. However, the partners of the E-SOLVE project found that at some points additions may improve the criteria system, particularly with respect of new pedagogical aspects as collaborative learning and support the learners can expect from the providers and the system.

The evaluation and nomination of best practice examples have been done in a two stage procedure. First, based on a VET solutions database that EDEN developed and populated based on the criteria described in the E-SOLVE work plan, we carried out a preselection procedure based on a small subset of criteria. Our primary selection criteria was excellence in conjunction with online accountability for the evaluation process. As a result we gained a shortlist of solutions consisting of 112 candidates to be nominated as good practices. At the end of the preselection phase the results have been tested by Reliability Analysis. Sectorial practices were compared by Multivariate Analysis of Variance.

The developed new criteria system for the evaluation phase two, consists of 8 dimensions and several criteria and sub criteria within the defined dimensions. The maturity level was calculated for every candidate E-learning solution. The good practices were selected, and sectorial best practices were compared.

During the second stage the full criteria system was used to evaluate the solutions and rank them accordingly by using the developed 8 dimensional Evaluation System. Sectorial good practices were compared, and sectorial rankings for E-learning solutions were calculated.

More than 50 good practices were published on the E-SOLVE homepage: <http://esolve.gtk-uni-pannon.hu>. The best 50 practices were published in a printed booklet. The results of the evaluation were disseminated at conferences, workshops and the E-SOLVE Summer Camp. The outcomes like booklets, brochures and the E-SOLVE criteria system are free of charge for every further developer to fill the developed self-assessment, and compare their results to the best 50 practices.

Content

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1 Project Objectives

E-SOLVE addressed the following general and specific objectives of the Lifelong Learning Programme:

- "to contribute through lifelong learning to the development of the European Union as an advanced knowledge-based society"
- "to support the development of innovative ICT-based content, services, pedagogies and practices for lifelong learning";
- "to encourage the best use of results, innovative products and processes and to exchange good practice in the fields covered by the Lifelong Learning Programme, in order to improve the quality of education and training."

In order to contribute to achieving the above general and specific objectives, the partnership set the following goals to achieve in the course of the project implementation:

- (i) to provide the opportunity for white collar e-learning providers of getting acquainted with the latest innovative ICT based contents, services, pedagogies and practices,
- (ii) to provide ground for IT developers to benchmark their solutions thus motivating them for more innovative solutions,
- (iii) and indirectly, to provide information to policy makers on the future perspectives of e-learning.

E-learning offered the possibility of training and educating people independently from time and place. The large number of existing solutions challenged training providers in offering the best and most appropriate, innovative solutions to their "customers". Since the solutions might have in some cases only slight differences, therefore the available e-learning solutions should be classified. With the selection of white-collar e-learning solutions, and then investigating them through several aspects, the project provided a "living" database according to the revealed needs of the "white-collar" sector, and allowed the best practices to be exploited.

Based on the classification of existed e-learning solutions, we supported training providers with the update and innovative solutions available to their stakeholders - and thus enhancing their needs to apply other methods, techniques, etc. For developers, the classified database provided the opportunity of benchmarking their solution, thus creating a healthy competition among them. By establishing the ground for "demands" to meet "supply", the project significantly contributed to the development of new innovative solutions.

By implementing project E-SOLVE, those participating in e-learning vocational education (either training providers or adult learners) had a more "conscious" idea on proper training in their limited free time. Since IT developers would have "first-hand information" on the needs of wider range of audience, they would have been able to develop and offer plenty of interactivity in e-learning solutions in order to better support adults who needed to apply their newly acquired knowledge and skills in their working life.

2 Project Approach

The Internet has by now become an everyday part of 21st century life. Everyone and everything is connected. The field of vocational education cannot be left behind. In the last 5 years, hundreds of Leonardo da Vinci projects have dealt with e-learning solutions in vocational education and training. “E-learning” has become one of the trendiest buzzwords in education. The rapidly changing technical background and the use of social media for learning purposes are all providing new platforms for online education. Many innovative ideas have been realised with the support of the Lifelong Learning Programme from different areas of the VET system, which are worth sharing with a broader audience of VET stakeholders, including training providers and developers of e-learning programmes.

E-learning solutions are becoming increasingly popular worldwide, especially for adult learners who are usually busy working people. Virtual learning interfaces allow participation for all, regardless of how far away they are geographically from the education provider. By now it has become essential to develop a system that can provide guidance on the most appropriate techniques and solutions for those who wish to apply e-learning methods.

The E-SOLVE project aims to distil knowledge from Leonardo da Vinci projects dealing with e-learning, categorizing them according to several aspects, selecting sectorial good-practices and disseminating them among VET stakeholders throughout Europe. Our focus was on solutions that could be utilised in white-collar education and training.

The evaluation system used by the E-SOLVE project is based on the assessment system called ECBCheck. ECBCheck is a quality improvement scheme for E-Learning programmes. It supports organisations to measure how successful their e-learning programmes are and allows for continuous improvement through peer collaboration and bench learning. ECBCheck forms a participative quality environment which allows its members to benefit in a variety of ways by having access to tools and guidelines for their own practice on the one hand, and being able to obtain a community based label on the other.

The ECBCheck criteria system is very elaborate. It is based on the experience of several acknowledged experts and education practitioners. The results are accepted and used by many educational institutions.

The evaluation and nomination of best practice examples have been done in a two stage procedure. At first, EDEN carried out a preselection of EU funded projects from the past few years, searching systematically the A.D.A.M. and EVE databases, focusing on a small subset of criteria. Our primary selection criteria was excellence in conjunction with online accountability for the evaluation process. The initiatives also had to have a working website and a person to contact. As a result we gained a shortlist of solutions consisting of 112 candidates to be nominated as good practices. During the second stage the full criteria system was used to evaluate the solutions and rank them accordingly. During our evaluation we followed the ECBCheck guidelines as closely as possible. It is clear that contrary to the self-evaluation, our evaluation was limited to the documentation and online material open for all our registered users.

3 Project Outcomes & Results

E-SOLVE project had a one year long lifetime. During the 12 months of work many achievements have been reached. The main goals of the project were composed to meet the needs of white-collar training providers developing their e-learning solutions in vocational education and training (VET). The large number of existing solutions provided a challenge for training providers in offering the best and most appropriate innovative solutions to their customers. Based on the classification of existing e-learning solutions E-SOLVE partnership accepted the mission to support training providers with developing a classification system and providing the opportunity to benchmark their e-learning solutions and create a healthy competition among them.

- Throughout managing the project several guidelines were created. In order to support the staff of the partnership Administration Guideline was put together with compiled templates that were used during the project implementation (presentation, reporting, correspondence, etc.) Online documentation system was created using free of charge Internet-based collaborative tools together with more traditional administrative tools and technics to ensure that the project outcome was properly documented.
- Partners developed the Communication Guideline and the Communication Strategy. The guideline contained the necessary templates of the visual identity tools of the project, among them the logo of the project. Website <http://esolve.gtk.uni-pannon.hu> and Facebook surface <https://www.facebook.com/esolveproject> was created and frequently updated. All deliverables of the project were available on the website. The project was available in English. There were links to partners' websites for country-specific information (in the partners' language). The strategy contained the dissemination plans and the way the partners were expected to communicate to the stakeholders and wider audience.
- A project Quality Assurance Plan was created. The document was served as a guide for the evaluation of the processes and products of the partnership. Three evaluation reports were created during the project lifetime.
- Special vocabulary and glossary of key expressions were compiled to support common understanding, since the partnership was multinational and the stakeholders were identified from different EU countries possibly having different understanding of expressions.
- The aim of this project was to develop the best and most appropriate methodology to evaluate the ongoing and finished projects financed by the Leonardo. In order to do so the partners had to develop the e-learning solutions classification system. Based on the evaluation methodology of EFQUEL, the consortium developed an 8-point criteria system, containing elements such as quality of content, review methods, technology used, access of information, etc.
- Partners organised online working group meetings defining the characteristics of the potential stakeholders. The working groups provided inputs for the classification system. Meetings were held on determining the evaluation criteria of solutions based on the agreements of the working groups in Maribor on 05-06th June 2014. During the workshop all necessary inputs were defined to draft the classification methodology.
- Partners developed a checklist that was used during the searches for database entries. The checklist served internal project purposes and was developed for internal use only. It was uploaded into the project's internal documentation system. The checklist covered yes/no questions regarding e-learning solutions categorisation and characteristic of the stakeholders.

- After developing the classification system to provide a comprehensive evaluation of the ongoing and finished Leonardo da Vinci projects the partners had to compile the selection of good practises in a dedicated database. Partners developed the templates for the database entries that were used during setting up the e-learning solutions database. Several templates were produced. There are several hundreds of projects providing e-learning solutions for vocational education. Grounded investigation was needed to find “white collar” type solutions and then good practises. Partners investigated existing databases of finished and ongoing projects (i.e. ADAM) based on the database templates and characteristics checklists.

After investigating existing databases, working groups prepared their rankings according to the methodology. The database in IT terms was created and the functions were tested

After testing, the database was available for the potential stakeholders. The database also supported the dissemination and exploitation activities, since it was linked to the project website.

The aim of setting up the database was to gain a comprehensive list of potential stakeholders with their different needs. It allowed us to communicate and disseminate custom-tailored solutions or options for the stakeholders.

The database served the basis of the exploitation and dissemination activities besides of course the collection of good practises.

- Partners developed a questionnaire to be sent to potential stakeholders in order to identify their needs in the field of the selected "white-collar" type e-learning solutions.

- A "helpdesk" application was set up and uploaded to the project website with the purpose of consulting with stakeholders who required further information or had enquiries. Partners studied and analysed the fill-in questionnaires of the stakeholders using the evaluation criteria. Partners fine-tuned the stakeholders' list and frequently updated the database on the basis of partners' feedbacks. Partners also added their own list of potential stakeholders to have a more comprehensive list.

- Based on the evaluated and selected good practises as well as the created stakeholders' database the awareness raising activities must have been custom-tailored and well communicated. Partners developed the awareness raising campaign.

- Partners also compiled the list of events with relevance to the current project and created an event calendar which was uploaded to the project website to be available for the partners and the public as well.

- A 4-day summer camp was organised at Lake Balaton, Hungary on 25-28th August 2014 and was attended by all the partners and invited visitors. The visitors were representatives of potential stakeholders of the project. The main objective of the summer camp was to share results of the project, generate professional debates on future distance learning and e-learning solutions versus traditional learning methods. 41 people attended the event. Extending the stay in the summer camp with 1 day, partners composed messages for the final conference, identified possible further initiations and evaluated the outcomes of the summer camp.

- Partners promoted E-SOLVE at other relevant projects' public events, consequently recruiting new good practices for the database.

- Partners organised personal stakeholder meetings to disseminate results of E-Solve project and to discuss further cooperation as well. Visit cards were created which were used for documentation of the meetings.

- Partners also organised workshops for stakeholders. The aim of the workshops was to present the project, the methodology and the presentation of some of the best practices and also introducing the created classified database and the best practices.

- A 2-day project closing conference was held in Budapest on 24-25th November 2014. The conference was open to project partners, stakeholders, policy makers - selected from the potential stakeholders' database. The conference summed up the results of the project and an intensive debate was held among participants on the future of distance learning issues.
- With the aim of establishing new contacts 4 direct mails were sent to stakeholders. These mails contained general information on the project aims, proposed milestones, first results and next steps, information on the summer camp. Direct mails were composed in English but partners translated them into their languages. (Hungarian, Slovenian, French)
- Three leaflets were released during the project implementation phase with the aim of more comprehensive communication. The leaflets were composed in English and were translated to the partners' language as well. The first leaflet provided general information on the project objectives, partners and the programme and was spread by the partners on common and individual events. The second was a call to the summer camp and communicated the first results and experiences of the project. The final results were published in the 3rd leaflet.
- 4 roll-ups were designed as offline dissemination tools. Roll-ups were used in public events. Every partner country had one roll-up in its own language. 4 press conferences were organised regarding the project progress. On the press conferences the main topic was the general introduction of the project, methodology, database, information on forthcoming events, the best practises booklet release and later the results of the project.
- Press releases were sent to various magazines to deliver message to a wider audience. 12 online press releases were published. The texts and resources of the press releases are both uploaded to the project website in the pressroom section.
- 3 short films (shots) were produced. Shots were uploaded to the project website, Youtube and Facebook as well.
- Partners made a selection of stakeholders separated by sectors.
- The main objective of E-SOLVE project works was the 110 pages booklet in English on the ranked e-learning solutions. The booklet was translated into Hungarian and Slovenian and was printed in 150-150 copies and the English version in 500 copies. The booklet was uploaded to the website too (in downloadable version). The booklet was spread on the common events, conferences and was sent to stakeholders.

4 Partnership

One of the greatest values of setting up a consortium for an international project work is the knowledge and experience sharing. The partnerships that develop during the project lifetime are some of the most rewarding results of the project, even if it is not in the deliverables. Our partners represent different sectors of the e-learning field playing different roles in the Lifelong Learning Programme. University of Pannonia as the initiator of the project invited organisations into the partnership according to the criteria of sectorial balance, proficiency in the field of e-learning and disseminations, exploitation and multiplication capacity. The subject of our project made it essential to involve partners from the research sector and major disseminators as well. The partnership counted on partners with different profiles and competences in order to give professional answers the outlined questions during the research period. All partners had extended networks in the field of e-learning. They were either members of other networks or had their own member organisations. The consortium was composed of four members with different tasks in the project implementation. In regard to the very short lifetime of our project, partners had to provide professional and efficient expertise in the common work. Both of the partners in E-SOLVE Project had strong skills to meet the challenges of the intense works.

- *University of Pannonia* provided and shared research knowledge and their significant experience gained in European projects. The University as a regional intellectual centre has an impact on regional and national education-related decision-making. It developed strategic partnership with enterprises, corporations and other educational institutions, training and service providers. The University itself served as a training provider for corporations and the service sector in the field of management sciences.

The University of Pannonia was responsible for project management, quality assurance and dissemination activities. They had an active role in work package basing and supporting research with methodological expertise. As an education hub it also took part in dissemination and result exploitation.

- *DOBA Faculty* as a modern business school is dedicated to the development of innovative individuals and e-learning. They gained excellent research and development experience in several successful international projects. DOBA Faculty conducted the classification system development activities in E-SOLVE Project which was the basic of the main research and the activities followed. The organisation led the development and creation of the classified database of e-learning solutions. That database contained the set of good practises which were disseminated in the course of the project and in the booklet on good practises as the final outcome of our common work.

- The *European Distance and E-learning Network (EDEN)* was the main disseminator of E-SOLVE Project. The organisation having 184 institutional and 1200 individual members covering all Europe was responsible for compiling the potential stakeholder database. EDEN also organised, implemented and supervised the exploitation activities on the project level and looked for the possibility for recruiting new stakeholders of our project in their wide-spread network, having membership in other ongoing projects and events, conferences on e-learning. EDEN was the organiser of E-SOLVE summer camp and final international conference as well.

- The *European Federation for Quality in e-Learning (EFQUEL)* utilised and based upon its contacts gained through evaluating several e-learning projects from quality aspects.

EFQUEL offered to the partnership its support and capacity in dissemination and exploitation among the quality revision support.

The partnership joined for the project had significant expertise in the two core activities, research and dissemination. The main goals of the project were fulfilled thanks to the strong sense of responsibility and hard commitment of the partners. The strong internal partnership among consortium members ensured the successful delivery of all project deliverables. The unexpected result of the project was in partnership with having opportunity to obtain an insight into the culture of other institutions, working methods and share experience in the field of their researches.

5 Plans for the future

Project E-Solve itself is a dissemination and exploitation tool of spreading knowledge on the best e-learning practices methodologies and techniques. All activities carried out in the lifetime of the project support dissemination and exploitation. The core activity of the project partners was developing the classification methodology and compiling the database. Partners have developed in E-Solve project a high level evaluation system which is appropriate for further evaluation of e-learning solutions.

The project website will be maintained at least for 5 more years by P1, performing yearly updates and registration is still working. <http://esolve.gtk.uni-pannon.hu/db> All information collected, all results gathered through the researches, all experiences learnt are uploaded in public pages of the website. The restricted areas contain confidential information that is only accessible for the partners and EU project reviewers but for further dissemination all the information of public nature will be maintained and kept available.

The questionnaire is available for newcomers to fill in. Whenever a training provider would like to evaluate their e-learning programme, experts of P1 will evaluate and consult via e-mail.

Based on their traditional activities, partners will continue dissemination of e-learning solution and possibility of evaluation by E-Solve methodology.

P1 and P2 as organisations involved in higher education in the white collar sector promote E-Solve project and its outputs in their traditional set of courses thus supporting the lifelong learning idea and ICT based e-learning solutions.

P3 as the network of e-learning institutions will continue the discussions on best practises, new innovative solutions among its members.

The current good practises are available on the website.

The main tangible outcome of Project E-Solve is the 110 pages booklet on best practises. This is a unique publication in the field of e-learning. The Booklet on Good Practices of E-learning Solutions is available and freely downloadable from the project website. <http://esolve.gtk.uni-pannon.hu/booklet/>

The remaining copies will be distributed on-demand.

Partners offered their wide range of international co-operations and collaborations and their well-known, popular annual conferences and one-off professional events to reach the project target groups. Most partners are still active participants in various aspects of e-learning and will have active roles in exploitation even after the end of the project works. Result of the project E-Solve will be built in further e-learning works and partners will strive to sustain and exploit the outcomes in their future EU project activities.

The main goal of the project was to undercover education solutions used in adult training across Europe. Another objective is to upgrade a grade system which can be used to evaluation of the solutions and compiling a database of the 50 best solutions. It will be available to the interested public.

Future goals:

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- The main advantage of the E-solve project is that the contact and the scientific discourse continues after the official end of the project.
- Uninterrupted by the end of contract, after the official E-solve project closing the received suggestions are continuously classified.
- Future online workshops will be organized periodically as demanded by connected VET stakeholders.

6 Contribution to EU policies

Each EU country is responsible for its education and training system, so EU policy is designed to support national action and common challenges as well. The EU offers a forum to exchange best practises, gathering and dissemination of information.

Adult learning is a vital component of the European Commission's lifelong learning policy. It is essential to competitiveness and employability, social inclusion, active citizenship and person development across Europe. The challenge is to provide learning opportunities for all. It comprises formal, non-formal and informal learning for improving basic skills or obtaining new qualifications. The demand for adult learning is increasing and the Commission is committed to helping all EU countries create adult learning characterised by flexibility, high quality, excellent teaching and an enhanced role for local authorities, employers, social partners, civil society and cultural organisations. The priority areas are making lifelong learning and mobility a reality, Improving the quality and efficiency of the adult learning system, enhancing the creativity and innovation of adults and their learning environments and improving and monitoring the knowledge base.

As part of the Education and Training 2020 (ET2020) Open Method of Coordination the Commission and Member States decided to cooperate in the form of Working Groups. The primary focus of the Working Groups of the Member States is to benefit the Member States in the work of the furthering policy development through mutual learning and the identification of good practises. Following their mandate WGs must deliver outputs directly linked to the objectives of ET 2020 and to contribute Europe 2020. The ET 2020 WGs rely on their work conducted by eleven Thematic Working Groups. These groups concerned among others in Adult Learning and Vocational Education and Training (VET). The aim of the VET WG is to support effective implementation of national VET reforms. The main focus of VET WG is on VET trainers and developing policy guidance as regards vocational trainers' competencies and continuing professional development. The guiding principles are a contribution of the European Commission, Cedefop and the thematic working group on professional development of trainers in VET to the objective set in Bruges communiqué of collecting good practice and developing guiding principles on the changing roles, competences and professional developments of VET trainers. Work of the WGs started in the beginning of 2014.

In the last 5 years hundreds of Leonardo da Vinci projects dealt with e-learning solutions in VET contributing to above mentioned EU policy. E-Solve aims at distilling knowledge on Leonardo da Vinci projects dealing with e-learning, categorizing them according to several aspects, selecting sectorial good-practises and disseminating them among VET stakeholders throughout Europe. The focus was mostly on the solutions that could be utilised in white-collar education and training. In order to meet the changing needs vocational education and training providers needs to get acquainted with the latest ICT based contents, services and practices. Hundreds of good solutions were funded with the financial contribution of the Lifelong Learning Programme.

E-Solve project with its main goals and objectives is completely in line with the development strategies of Lifelong Learning Programme and also Education and Training 2020. The projects was called to gather former or running VET programs and was ready to develop a well elaborated and professional classification system for categorizing the implemented

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projects, selecting sectorial good-practices and to evaluate VET courses, training providers. The main objective of E-Solve project is a booklet on 50 good practices but the classification system is remaining and ready to be utilised in further evaluation of projects and that way connects to EU policy.