

TOI TOI Guidelines



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TOI TOI Guidelines

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Department for Continuing Education Research

and Educational Management

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INTRODUCTION

In 2014, European programs- Lifelong Learning, Youth in Action and other five international programs like Erasmus Mundus were restructured under the umbrella of Erasmus+. Until 2020 the unification of all these former programs in one integrated program, Erasmus+, will be completed and this will make Erasmus+ the main European funding framework for youth, education and sports (Lebenslangeslernen Website, 2016).

In the old framework between 2007 and 2013, the Lifelong Learning Programme was the European Commission's main funding instrument in the field of education and training and it "[...] was designed to enable people, at any stage of their life, to take part in stimulating learning experiences, as well as developing education and training across Europe" (European Commission, Education Website, 2016). The program was structured in several different sub-programs and activities concerning different levels and fields of education such as Erasmus Programme for higher education or Comenius for K-12 education. Among these programmes, Leonardo da Vinci was the main funding program for vocational education and training and all actions and activities were planned to reach the European Strategy for Education and Training.

As it was disclosed in several documents like the German handbook "Projektergebnisse der Strategischen Partnerschaften erfolgreich verbreiten und nutzen [Project results of strategic partnerships' successful dissemination and use]" (NABIB, 2015), the focus of Erasmus+ is on impact oriented project management and dissemination fostering the sustainability of project outcomes. The Austrian Erasmus+ conference that took place on 10th of May 2016 in Vienna presented the European strategy for the dissemination and the use of program-outcomes and in this conference concrete suggestions were made by several study-groups for the European Commission in the fields of education and youth (OeAD Website, 2016).

Implemented between October 2014 and September 2016, the Erasmus+ Strategic Partnership "Tools fOr Impact³ - TOI TOI TOI" (www.toitoitoi.eu) aimed at fostering all these recommendations for impact oriented project management and project outcomes by developing web-based evaluation tools for organizations that plan to participate in future Erasmus+ projects. Partners from Germany, Hungary, the Republic of Macedonia and Austria analysed the former Leonardo da Vinci – Transfer of Innovation (LdV/ToI) projects through quantitative and qualitative research methods to detect certain criteria that will foster the impact and the sustainability of European projects in the field of education.



Findings from the research were appropriated to design and program web-based evaluation tools which can be mainly used by future project coordinators for checking their possible partners in terms of basic competences for impact oriented work in European education projects. This "TOI TOI TOI Guidelines" aims at summarizing the basic structure of the project TOI TOI TOI and its scientific design. Furthermore, it explains the structure and the use of the evaluation tool and interpreting its results. Finally, the guidelines identify some simple but effective advices for establishing project consortia in an impact oriented way which are combined with some examples of former LdV/ToI projects.

Rainer Schabereiter Krems, August 2016



1. THE PROJECT

Rainer Schabereiter / Danube University Krems

1.1 Facts

Name: TOI TOI TOI - Tools fOr Impact3 - Development of web-based evaluation-

tools fostering impact-oriented project-consortia for ERASMUS+

2014-1-AT01-KA202-000956

Acronym: TOI TOI TOI

Funding Programme: Erasmus+ Key Action 2 – Strategic Partnerships in vocational education and

training

Duration: 1st of October 2014 – 30th of September 2016

Coordinator: Danube University Krems – Department for Continuing Education Research

and Educational Management

National agency: National Agency Erasmus+ Education; OeAD GmbH (Austria)

The acronym "TOI TOI" of the strategic partnership in the field of vocational education and training was intended as homage to the former so called "TOI-Projects" (Leonardo da Vinci- Transfer of Innovation-ToI) which were in the focus of the project's activities. Most of the activities aimed at analysing the consortia and the impact and sustainability of former Transfer of Innovation (ToI) projects in the partner countries Austria, Germany and Hungary to detect certain criteria fostering the impact and sustainability of European education projects at an organisational level.

Findings of the first level research activities of the project were used to develop online, survey based two-stage evaluation tools which can be used by organisations and future project coordinators. The first part of the tools allows each organisation to do a free self-evaluation without any registration. The second part is designed to check possible partners and to plan project consortia. It can be used by future project coordinators to invite possible partners using automatically generated emails which



guide them to the TOI TOI TOI evaluation. As a result, the tools present a graphical rating scale and basic information for each single partner and a rating of the whole consortium. So, on the one hand, organisations can improve their competences in European cooperation and on the other hand, coordinators can decide how to create a project consortium and they get important information on organizations before starting a European cooperation in Erasmus+.

1.2 The project team

The consortium of TOI TOI TOI consisted of six partners which represent a broad spectrum of organization actively working in education and training in Europe. Four partners acted as development partners in analysing Leonardo da Vinci projects and developing and programming the evaluation tools. Furthermore, specialists from Austria and Portugal supported the project team in dissemination and evaluation by using their experience and know-how in planning and coordinating European education projects in the former Lifelong Learning Programme.

Donau-Universität Krems / Danube-University Krems (Austria)



The University for Continuing Education (Danube University Krems) is one of the pioneering institutions in Europe in the field of university-based advanced education, and a specialized institution in the sector of lifelong learning. In teaching and research the University focuses on social as well as organizational and technical challenges of current times, and develops innovative, market- and client-oriented courses on an ongoing basis. The University for Continuing Education is specifically focused on interdisciplinary cross-linking and future-oriented special sectors: it offers courses that combine medicine and management, education and new media, or law and social sciences.

The university was founded in 1994 and provides education in courses specifically oriented toward the needs of working professionals. The University offers exclusive master's and certificate programs in five areas of study. Serving more than 8,000 students and with 16,000 graduates from 90 countries, it is one of the leading providers of post-graduate education in Europe and combines many years of



experience in postgraduate university education with innovation and the highest quality standards in research and teaching.

The Department for Continuing Education Research and Educational Management combines applied research with practice-orientated continuing education, and acting as a platform, wants to contribute to the creation of a network for continuing education research in Austria. A key task is to advise educational institutions and those working in the field of education policy. Department has two centres: Professional Development of Competences and Organizations; and Educational Management and Higher Education Development which offer several certificate and Master programs such as professional teaching and training, educational guidance, and educational management. It also includes a research unit -Interdisciplinary Continuing Education Planning and Research Unit-which design, plan and pilot interdisciplinary training programmes, and research.

Main research activities in the department are concerned with designing and conducting interdisciplinary and international research, planning and implementing structural development, and reform projects at national, regional and local level in the areas of vocational, professional and lifelong learning, and higher education. Specific areas of research are higher education management and the European higher education policy; scientific, professional and operational training, including the corporate and organizational learning with a focus on education management; organizational development and quality, and career-related skills development in the field of counselling.

The Department for Continuing Education Research and Educational Management coordinated the project TOI TOI TOI and was responsible especially for conducting and the managing the different steps of the research which were required for developing the evaluation tools.



Forschungsinstitut Betriebliche Bildung / Research Institute for Vocational Education and Training (Germany)

The Forschungsinstitut Betriebliche Bildung gGmbH (f-bb) is one of the biggest research institutes in vocational education and training in Germany. It was founded in 2003 and currently runs several offices in Nuremberg, Munich and Berlin. Its business activities include the realization of model tests, development and transfer of projects, the scientific guidance of funding programs and model tests as



well as the development of case studies, empiric analysis investigations and evaluations. In terms of contents f-bb is focused on vocational education and training, vocational integration, certification and evaluation, educational consulting, demography, media-learning, scientific qualification and Europeanization of vocational education and training. All relevant processes in human resources, finances, project organization and management are regulated and the Forschungsinstitut Betriebliche Bildung is DIN EN ISO 9001:2008 certified.

Since many years f-bb permanently runs evaluations of education programs and networks and supports many different projects and network partners by using its scientific-technical know-how and the expertise in sustainable and impact oriented project management. These are the main reasons why f-bb was responsible for many scientific parts in analysing the European Leonardo da Vinci projects, especially planning, conducting and evaluation of semi standardized interviews during the first phase of the project TOI TOI TOI. Together with the Macedonian partner, f-bb analysed the high number of German Transfer of Innovation (ToI) projects from 2007 to 2012 and was a leading partner in all scientific tasks.

Széchenyi István Egyetem / Széchenyi István University (Hungary)



The Széchenyi István University is a public university in the old Western Hungarian city of Györ. It was founded in 1968 as a technical college for logistics and telecommunication, and in 2002 it was named as a university. It consists of three different faculties (economic sciences, engineering and jurisprudence and political sciences) and two separate institutes (health and social sciences, music). The university offers three doctorate programmes in jurisprudence and political sciences, regional and economic sciences and interdisciplinary engineering. More than 11.000 students study in the 56 different bachelor and master programmes and use many other services offered by the university.

All employees of Széchenyi István University actively work in different scientific fields on national and European level for many years. Especially in developing computer-based tools the university has gained experiences in the past decades. In the project TOI TOI TOI, the university analysed Hungarian Leonardo da Vinci projects, but was mainly responsible for developing, programming and pre-testing the web-based evaluation tools which are the main outcome of the whole project.





Универзитет "Гоце Делчев" Штип / "Goce Delchev" University Stip (Macedonia)

The University "Goce Delchev" is located in the city of Stip and describes itself as a young and lively institution of higher education in Macedonia which aims at combining actual international trends with the interests of young people in the fields of technics, industry and economy. It consists of 13 faculties which are located in three different campuses. The lectures, seminars etc. are held in own education-centres and all degrees of "Goce Delchev" University are internally accredited. So the university is very important for the internationalization of the Republic of Macedonia.

All scientific, educational and organizational work at the university is permanently evaluated and improved by an internal evaluation office which analyses and plans scientific and educational activities in order to foster the quality of higher education. It defines monitoring-strategies and guidelines and monitoring tools like canvassing, questionnaires, self-evaluations, online-based tools for e-learning and many others. So in the past years "Goce Delchev" University could improve the structures and contents of curricula (ECTS) and many other internal services.

The Faculty for Education Sciences is one of the university's main units and has grown from a training centre for teachers to a pedagogic academy and finally to a science and education body at the university level. It aims at qualifying professional teachers. It is familiar with international standards in evaluation of pedagogic work and the critical view on educational programs. In the TOI TOI TOI project, it was responsible for forming the final scientific reports of all analysis tasks ("TOI TOI Reports") and cooperated with the German partner to analyse the high number of German Leonardo da Vinci projects. Finally, "Goce Delchev" University helped the team improve project ideas and actions by using its external view on the Leonardo da Vinci program.

Sociedade Portuguesa de Inovação / Portuguese Society of Innovation (Portugal)



Sociedade Portuguesa de Inovação (SPI) is a private consulting company which is an active part of national and international networks for SMEs and the innovation sector since 1997. Since the start SPI supports partnerships between private companies, R&D-institutions and national or international



public bodies. SPI is especially focused on projects in the fields of developing and strengthening regional, national and international structures in entrepreneurship, innovation and knowledge management and establishing strategic partnerships. With its 65 full-time employees it operates worldwide in Portugal (Porto, Coimbra, Lisbon, Azores), Spain (Santiago de Compostela), China (Peking and Macao), USA (California and Washington) and in Singapore. Furthermore, SPI runs an office in Brussels within the European Business & Innovation Centre Network (EBN). SPI runs several trainings related to innovative pedagogic issues for an effective culture in education and training and can be described as a "missing link" between education and the labour market.

So SPI has strong international networks in multi-sectoral and interdisciplinary partnerships which were used for disseminating the project TOI TOI. Especially SPI's design and multimedia team planned, organized and developed all marketing and dissemination products of the project. Besides creating all brochures, newsletter etc., it runs the project website, www.toitoitoi.eu, which presents all relevant information on the project, intellectual outputs and finally the evaluation tools.

Brainplus (Austria)



The small Austrian company Brainplus is an experienced actor in the field of European education projects and coordinated and evaluated many Leonardo da Vinci projects as a sub-contractor for big organizations in Austria and many other European countries. The company currently has three basic fields of competences: developing and finding of new ideas in the innovation process, consultancy in the field of regional, national and European funding programs, managing of industrial clusters and networks.

The company is a certified evaluator in the EBN (European Business Network) which is a strong and reliable partnership of companies, organizations and other public and private bodies in Europe. Furthermore, it has been acting as an external evaluator in European project for many years. So in the project TOI TOI TOI, Brainplus was responsible for the evaluation and permanently guided the whole project to ensure a maximum level of sustainability and quality of all processes and outcomes. Finally Brainplus developed a post-project strategy for using the evaluation tools in the future.



1.3 The basic structure of the project

The overall structure of the project TOI TOI TOI consisted of three constitutive basic steps which were separated into several intellectual outputs and activities (see Figure 1). Project management, dissemination and permanent evaluation and quality management are the processes in which all other activities are embedded. As shown in the scheme the project team intensively worked on analysis tasks for about 20 months. This means that for about 80% of the duration of the project (24 months) the consortium worked on quantitative and qualitative research concerning the collection, preparation, verification, evaluation and interpretation of consortia from former Leonardo da Vinci / Transfer of Innovation (ToI) projects. This huge scientific effort and the different analysis steps will be presented in the following chapters of this document. Scientific analysis was done by four development partners: Donau Universität Krems, Forschungsinstitut Betriebliche Bildung, Széchenyi István Egyetem and "Goce Delchev" University Stip.

Analysis Development Testing PM, dissemination, evaluation Erasmus+

Figure 1: Overview on the basic structure of the project TOI TOI



The results of research activities were summarized in four "National TOI TOI TOI Reports" and in "European TOI TOI TOI Report" and finally used for identifying certain criteria which are important for project partners to increase the impact and the sustainability of European education projects. Based on the research results, the project team identified four basic competences and created a multi-stage survey to inquire these competences.

Széchenyi István Egyetem Györ as the responsible partner for all technical aspects used this survey for developing and programming two online evaluation tools, which were internally pre-tested, evaluated and adapted by the staff of the university first. These pre-tests were primarily used for checking the technical aspects and detecting possible problems or bugs of the software behind the evaluation tools. These evaluation tools can be freely used by any organization that desires to cooperate in European education projects in future. Moreover, evaluation tools are simple, useful but effective for future coordinators to check the competences of possible partners to ensure a maximum impact of project outcomes.

Finally, the two-stage evaluation tools were tested by each partner in the consortium for ten times. Brainplus from Austria as the responsible evaluation partner evaluated all the tests and the results were used by the programmers of Széchenyi University for improving the tools and correcting some minor errors. Furthermore, Brainplus guided the whole project in terms of quality management and supported the lead partner Danube University Krems through writing periodic evaluation reports. Finally Brainplus developed a post-project strategy which aimed at defining possible further uses of the evaluation tools on national and European level.

The project marketing and the permanent dissemination of TOI TOI were organized and guided by Sociedade Portuguesa de Inovação from Porto. It planned and produced all dissemination materials, and hosted the project website www.toitoitoi.eu. Moreover, it permanently oversaw the partners´ dissemination activities to ensure a maximum impact of the project itself.

To sum it up, the multidisciplinary team of TOI TOI TOI used all its various competences and strengths to conduct, evaluate and disseminate the results of detailed scientific research for developing online-based tools which can be seen as the project's main "product".



2. SCIENTIFIC DESIGN¹

Rainer Schabereiter / Danube University Krems

2.1 Facts

Duration of all analysis: 20 months

Partners involved: Danube University Krems

Forschungsinstitut Betriebliche Bildung

Széchenyi István Egyetem

Goce Delchev University

Object of Research: Leonardo da Vinci / Transfer of Innovation Projects 2007-2012 in

Austria, Germany and Hungary (N=237)

Scientific Design: Pre-Analysis

Quantitative Network-Analysis/Clustering

Qualitative Semi-Standardized Interviews

Concluding Reports: 4 "National TOI TOI TOI Reports" (AT, 2 x DE, HU)

1 "European TOI TOI TOI Report" All reports are uploaded on:

www.toitoitoi.eu

As it was mentioned before the scientific design of the project was divided into several constitutive analytical steps (see Figure 2) which were directed to identify the criteria fostering the impact and the sustainability of EU-projects at the partner level. As the first step, the development partners

¹ All information with regards to contents in this chapter refer to the project's Intellectual Output 8: "European TOI TOI Report":

http://www.toitoitoi.eu/sites/all/themes/education/education/images/downloads/analysis/IO8_EUROPEAN%20TOI %20TOI%20TOI%20TOI%20TEPORT.pdf (19th of July 2016)



conducted research to identify basic competences that partners in European education projects should possess to ensure a maximum impact of the project outcomes after the duration of the project. These competences were used for structuring and designing the survey in order to develop evaluation tools. To ensure a particular level of manageability for the coordinator during the long duration of analysis of European Leonardo da Vinci projects, each analytical step was concluded with a short summary (all reports can be downloaded from the project's website: www.toitoitoi.eu).

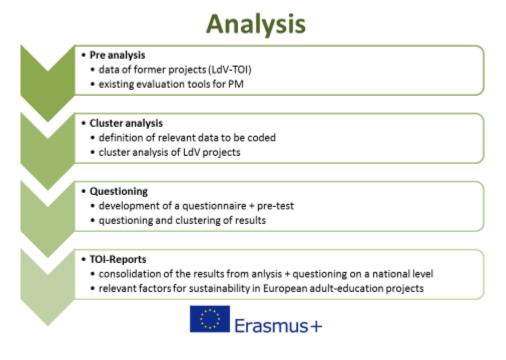


Figure 2: Overview on all analytical steps in the project TOI TOI TOI

2.2 Pre-Analysis

First parts of the pre-analysis were conducted during the preparation of the proposal and the main tasks were conducted during the first weeks of the project TOI TOI TOI itself to collect and analyse basic data for planning further steps. This first step aimed at identifying the field of research and the state of art. At the end of the process, four "Pre-Analysis Reports" for Austria, Germany, Hungary and Macedonia were produced.



The first part of the "Pre-Analysis Report" presents general information and data on the situation of EU funded education projects, especially in the program Leonardo da Vinci/Transfer of Innovation (LdV/ToI), in Austria, Germany, Hungary and Macedonia from 2007 to 2013. During the process it was decided not to analyse the projects which started in 2013 as some of the projects were still running at the time of the data collection, thus it was not possible to ask for the sustainability of running projects. So the final number of projects analysed from 2007 to 2012 was 237. See Table 1 for distribution of the projects per country and Figure 3 for the distribution of projects per year for each country.

Number of analysed LdV/Tol Projects 2007-2012		
Country	Number of projects	
Austria	56	
Germany	180	
Hungary	37	
Total:	237	

Table 1: Number of analysed LdV/TOI projects

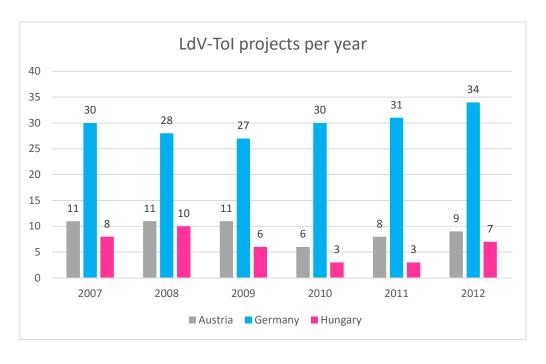


Figure 3: Number of LdV/ToI projects in AT/DE/HU (<u>www.adam-europe.eu</u> 1st of December 2014)



As it was seen from the Figure 3, LdV/ToI projects in the partner countries distributed disproportionately. Germany has the highest number of projects in comparison to other countries where as Macedonia did not have any LdV/ToI projects. Based on this result, it was decided to divide the German projects between the German partner f-bb and the University of Stip from the Republic of Macedonia. Through this distribution, each project team could work on almost equal number of LdV/ToI projects for further analysis.

The research design aimed at using proposal documents from LdV/ToI projects for defining the criteria for fostering the impact and the sustainability of projects. Thus, the second chapter of the "Pre-Analysis Report" focused on data privacy as a relevant factor for scientific work. During this step, a data privacy contract based on a template covering European data privacy guidelines was prepared.

The last chapter focused on the quality management and presentation of existing evaluation tools which could be used for generating ideas for the development of the evaluation tools. Especially in Germany and Austria national agencies had implemented several activities fostering quality management and sustainability of European projects.

2.3 Network analysis and clustering

As it was mentioned above, proposals from LdV/Tol projects were used as the main data for quantitative and qualitative analyses of the scientific design of the project. These documents include all relevant information on the structure of the consortium, the partner-organizations as well as the proposed outcomes or products. Unfortunately, the Austrian national agency denied access to these documents, thus the team had to use the European project database- ADAM (www.adam-europe.eu). The data from this database were used for network analysis and clustering which was based on the size of consortia and the geographic distribution of partners.

After retrieving data from ADAM, all entries were validated through comparison of the ADAM entries with documents or products from each project with web research. In most cases, however, the project websites were not active and even after detailed web research it was not possible to verify the size of the consortium and the partner countries, especially in Austria. So in some cases researchers had to



contact the former project coordinators or partners via phone or email, because the entries in ADAM were incomplete or even wrong for some cases.

The first part of the network and cluster analysis defined the average size of project consortia in LdV-ToI projects from 2007 to 2012 (see Figure 4). The results showed interesting numbers and tendencies like the fact that Hungarian LdV/ToI project consortia were significantly smaller than Austrian or German cases. Tendency analysis yielded that from 2007 until 2012, project consortia in Austria and Germany became smaller, though it was not very significant. But this fact has to be taken into account for further network analysis.

Figure 4: Average size of LdV/ToI consortia in AT/DE/HU

Possible reasons for these characteristics were identified as (a) different habits in project management; (b) different aims / types of projects (e.g. many schools as test-partners); and (c) possible recommendations of the national agencies or economic reasons (smaller consortia means more money for each partner).

The second part of the quantitative research focused on analysing the geographic distribution of chosen partners in LdV/ToI projects in Austria (see Figure 5), Germany (see Figure 6) and Hungary (see Figure 7) from 2007 to 2012 to combine these results with the different sizes of consortia in the



respective countries. Only core partners were included in to analysis and all other groups such as beneficiaries, strategic partners and silent partners were not taken into account.

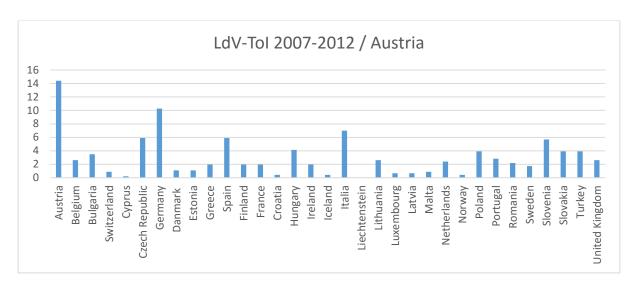


Figure 5: Network analysis of Austrian projects in percent

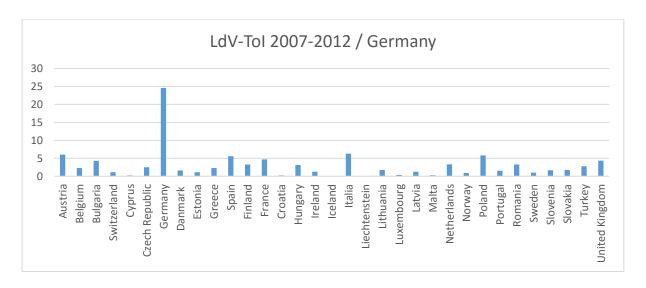


Figure 6: Network analysis of German projects in percent



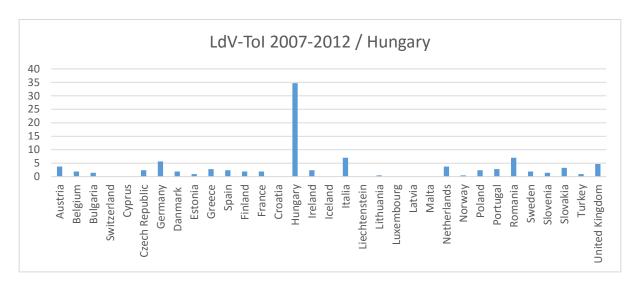


Figure 7: Network analysis of Hungarian projects in percent

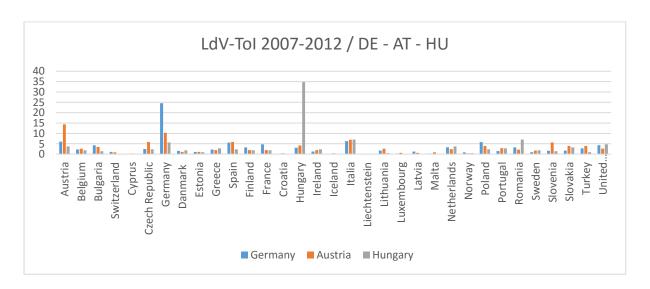


Figure 8: Overview of network analysis

The comparison of all national results (see Figure 8) generated some significant tendencies which were taken into account for planning the qualitative part of research. The most important finding was the above average number of domestic institutions as project partners. Especially in Hungary the



number of domestic partners was very high (max. 45%). So it was important to have a closer look at this finding (see Figure 9). In Austria, the number of domestic core partners decreased along the years, but in Hungary, it was fixed around 40%. The main factor for these changes in Austria could have been intensive elucidation and awareness rising conducted by the Austrian national agency. Thus, Austrian LdV/Tol projects could achieve this very important European dimension in transfer projects at a European level through cooperation with foreign partners.

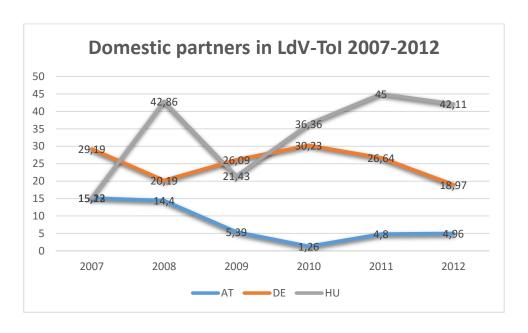


Figure 9: Percentage of domestic partners in LdV/ToI projects in AT/DE/HU

A further analysis on the general geographical distribution of the core partners yielded several "Hot-Spots" in choosing the countries for cooperation within LdV/ToI projects (see Figure 10). The main result of network analysis was the fact that contractors from Austria, Germany and Hungary preferred partners mostly from neighbouring countries as Germany, Italy, Slovenia or the Czech Republic. By the years, the geographic distribution of partners in the respective projects did not change significantly.





Figure 10: "Hot-Spots" in European cooperation in LdV/Tol projects (AT/DE/HU)

To sum it up, Austrian LdV/Tol consortia increased in size along the years but the number of domestic partners decreased massively. Hence the project consortia could actually reflect the important European dimension of EU-projects. The case of Germany was similar to Austria both in size and geographical distribution. Analysis of Hungarian projects yielded totally different results. Especially in the last three years of the Lifelong Learning Program both the size of the consortia and the number of domestic partners in the consortia increased significantly. Furthermore, coordinators from all countries preferred partners from neighbouring countries, thus Scandinavia or the Baltic Sea countries were underrepresented.



Clustering:

The final step of quantitative analysis was defining two different clusters of project consortia for each country which were the basic cases to be asked in semi standardised interviews. As applied in network analysis two characteristics were used for defining them, the size of the project team and the chosen partner countries. Finally, two clusters were identified:

a) "Conservative" consortia:

This first cluster consists of typical project consortia which fit to the results of network analysis at the national level. These consortia essentially accord with the detected average number of partners per consortium and the chosen partner countries.

b) "Innovative" consortia:

These project teams are much smaller or bigger than the defined range and they partly consist of partners from European countries which are underrepresented in the network analysis' results.

2.4 Semi standardised interviews

After identifying and naming two mentioned clusters the project team decided to conduct two interviews per cluster for each country. So four semi standardised or rather semi structured interviews for Austria and Hungary and eight for Germany were planned. As the Macedonian partner cooperated with the German partner, they shared the interviews in order to provide a more equal distribution considering the high number of LdV/Tol projects in Germany.

At the end of the data collection process, development partners conducted 17 interviews with randomly chosen decision-makers (project coordinators or employees of the coordinating institution) of these projects (see Table 2). The aim of the interviews was twofold: to verify the detected cluster-cases in European LdV/ToI projects from 2007 to 2012; and to ask for certain factors fostering sustainability of project outcomes. The second part of the interview was used as a foundation stone in developing the evaluation tools.



Number of interviews per country		
Country	Number of interviews	
Austria	4	
Germany	9 (5 f-bb, 4 UGD)	
Hungary	4	
Total:	17	

Table 2: Number of conducted interviews

Before conducting the interviews, national research teams re-checked the Austrian, German and Hungarian LdV/Tol projects to define certain "boarders" for separating the two clusters of "conservative" and "innovative" projects. It was not easy to clarify the distinctions between the clusters, because in some cases project consortia had a "conservative" size but they consisted of "innovative" partners or vice versa. Before conducting the randomly chosen interviews the interview partners were contacted and informed about the aims and objectives of the interviews and the whole project. Therefore, Forschungsinstitut Betriebliche Bildung (f-bb) prepared some documents which aimed at informing the interviewees on these basic facts.

Each interview started with a detailed web-based preparation by the interviewer. Each interviewer checked the chosen project, its products, the partners etc. by online-based research. So the interviews could be planned as professional as possible and the interviewer could have enough information on the respective project before conducting the interview. All interviews were transcribed and analysed at the national level by the four development partners. For this reason, the German partner f-bb developed a template for filling in the main findings. The respective documents can be found in the four "National TOI TOI TOI Reports" (see: www.toitoitoi.eu).

Meta-analysis of all semi standardised interviews at the European level was done by Danube University Krems and presented in the "European TOI TOI TOI Report" (see: www.toitoitoi.eu). Data analysis was conducted with software for qualitative analysis named MAQDA 11® (see Figure 11). All coding was done using MAQDA®. In order to develop and define a code-system, Danube University team used the main findings of the "National TOI TOI TOI Reports" and differences and frequencies within the answers. This step of the coding was the most important and time-consuming part and can



be described as a dynamic process in which each interview was read and coded several times. In some cases, some codes and even the whole code-system had to be adapted or re-arranged.

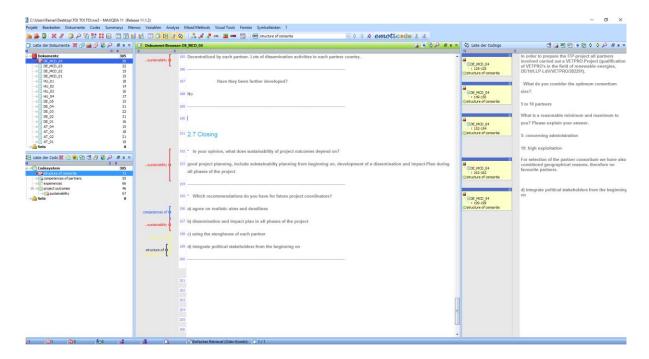


Figure 11: Simplified presentation of working with MAXQDA 11®

Analysis of the relations within the coding system (see Figure 12) showed that there was a strong relation between the structure of the consortia and the competences of partners in LdV/ToI projects which meant that establishing a project team mainly correlated with the competences of the partners. So the competences of organizations turned out to be the main factors for cooperation in European LdV/ToI projects. Therefore, characterizing the results mainly focused on summarizing frequencies in the answers concerning the structure of consortia and named basic competences of partners taking part in European projects.





Figure 12: Code relation diagram of the basic coding (MAXQDA®)

The European meta-analysis of all 17 semi standardised interviews generated interesting results which were used for planning the TOI TOI TOI evaluation tools. The first main result was that the interviews could not entirely confirm the quantitative results regarding the clusters of "conservative" and "innovative" project consortia in Austria, Germany and Hungary. In some areas such as the size of the consortia, especially Hungarian interviewees verified the results of quantitative analysis but in terms of the geographic distribution it was not possible to find frequencies within the answers to separate the two clusters in a valid way.

Analysis of the essential competences for partners in European education projects showed that the structure of LdV/ToI project consortia mainly based on networking and the experience of organizations in managing European projects. So "project-experience" was the one of the main competences which confirmed the significant code-relation between the structure of projects and skills on partner level (see Figure 12). Most of the partners had known each other from former projects or other national, European or international cooperation and this was one of the main results at the European level. Coordinators preferred partners they had already known. Personal contacts and former cooperation were very important and in terms of the number of codes even more important than professional skills.

Furthermore, administrative skills and competences in teaching and training were important issues for planning a project consortium. Naming some soft skills like reliability often correlated with the factor of project experience. So these soft skills were not taken into account for planning the evaluation tools. Finally, the sustainability of project outcomes mainly depended on defining concrete products, marketing skills and marketing strategies.

The interviews showed that most of the coordinators used structured strategies in planning and establishing project consortia. In terms of certain competences the answers could be finally clustered.



These fields of competences were used for establishing the basic structure of the tools and developing the questions of the TOI TOI TOI evaluation tools. Competence areas are:

- experience in European projects (competences in project management)
- professional competences in basic fields of the project
- educational competences
- international contacts / networks (dissemination/marketing)

To sum it up, the scientific design of the project TOI TOI TOI with many different steps and interimreports may seem "overloaded" to the readers, but all these analyses were required to generate useful and scientific results. The use of ADAM for quantitative research made the research process more difficult and did not yield results in the same scientific quality as presented in the project proposal. By "difficult," we mean that it was hard to find a link in terms of contents between quantitative and qualitative research without changing the basic design of the whole project.

So the team had to zoom in on qualitative research which generated very useful and scientific results in terms of concrete criteria fostering the impact and the sustainability of European education projects. These outcomes were used for designing the online TOI TOI TOI evaluation tools and the basic survey.



3. TOI TOI TOI EVALUATION TOOLS

Mihály Mészáros / Széchenyi István University Györ Tibor Trencsényi / Széchenyi István University Györ Rainer Schabereiter / Danube University Krems

3.1 General information

Technical Data		
Backend:	 PHP server-side code for dynamic pages (database connection and calculations) MySQL database for storing PHPMailer: PHP library for sending automatic e-mails 	
Frontend:	 HTML 5: user interface, forms (different types of fields in the survey) jQuery; JavaScript library to enable/disable fields in the forms Highcharts: JavaScript library to create graphs diagrams 	
Development Tools:	 NetBeans 8.1: integrated development environment with PHP/HTML5 support (creating and uploading files) Firebug: pre testing of modifications Web Developer Toolbar: designing databases, tables and queries; checking inserted values phpMyAdmin: designing database tables queries; checking inserted values MySQL Workbench: designing and visualising database tables 	
Web-Link:	- <u>www.toitoitoi.eu/eval</u>	

Table 3: Technical data of the TOI TOI TOI evaluation tools (Mihály Mészáros)

The web-based evaluation tools are the final "product" of the project TOI TOI and they are designed for being used by two main target groups. The first one is all institutions who want to act as partner in future European education projects. The structure of the survey-based tools was shaped according to the results of quantitative and qualitative research and it investigates the needed



competences in these projects. The tools consist of a free self-evaluation for institutions and teamevaluation for whole project consortia. In this regard each organisation can do a free self-evaluation to see its competences on a graphic rating scale. The second target group is the coordinators of future education projects. They can use the evaluation tools for checking possible future partners and strategic planning of project consortia to ensure maximum impact of European education projects.

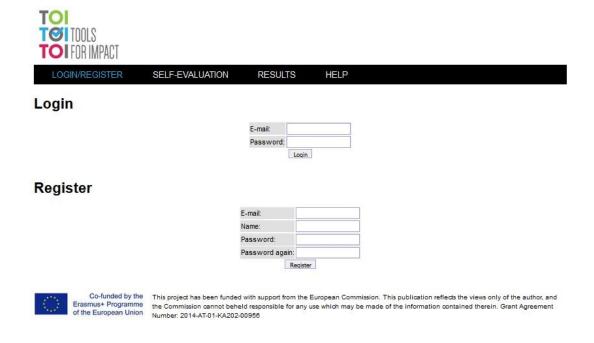


Figure 13: Homepage of the evaulation tools www.toitoitoi.eu/eval

As mentioned before the contents of the tools base on detailed scientific analysis done by the four development partners Danube University Krems, Forschungsinstitut Betriebliche Bildung, Széchenyi István University and "Goce Delchev" University. In terms of the technical development and programming all parts of the tools, Mihály Mészáros was the responsible IT-developer from Széchenyi István University Györ in Hungary. Programming was done by the Hungarian partner in close partnership with Danube University Krems.

During a transnational project meeting the team decided that the evaluation tools should be fully webbased and not programmed as an application. The tools are hosted by the server at the dissemination partner SPI in Portugal which meets all requirements: Apache2 web server, PHP interpreter and



MySQL database. The project website <u>www.toitoitoi.eu</u> is hosted at SPI too, so the developer could use many synergetic effects.

During the lifetime of the project the tools were tested and evaluated several times. As the first step, after finishing the development, ten internal pre-tests at Széchenyi University were ran to check all the technical functions like the usability of the survey, the e-mail based invitation system or the display of the results. During this phase some changes were done to modify the tools. The second step was pilot-tests conducted by all partners of the TOI TOI TOI project team. In this regard each project partner contacted ten institutions which conducted self-evaluations and team-evaluations with further organisations in whole Europe. To ensure a measurable documentation of the use of the evaluation tools, the programmer installed a counter function that quantifies the pre-tests. All tests were documented and evaluated and finally, feedback from the evaluations was used to optimize the usability and the quality of the TOI TOI TOI evaluation tools.

3.2 User manual

The user manual was written by Mihály Mészáros from Széchenyi István University and is a part of the evaluation tools: http://toitoitoi.eu/eval/help.php

Login/Register:

To use all functions of the Evaluation Tool, it is recommended to register. After registration and login one can create new projects, invite others and can accept invitations. Without registration <u>Self-Evaluation</u> can be used only anonymously.

To register, click the <u>Login/Register</u> link in the menu and in the Register block, complete the form and click the Register button. After a successful registration one can go back to the <u>Login/Register</u> page and can login by entering registered e-mail address and password.



Self-Evaluation:

<u>Self-Evaluation</u> tool can be used anonymously (without logging in with a registered e-mail address and password), or as a registered user (with login). After filling out the form and clicking on the Send button, it redirects to the Results page. In both cases the answers will be saved in the database.

Results:

When one takes the Self-Evaluation as a registered user, s/he has to login to the page, click the Results link and then results of answers as a diagram will appear in the 'My results' block. If there are different created Projects, one can see also a diagram for each project.

When there are no other members in the created project, the project's diagram will be the same as the individual institution, but when others joined the project and they also complete the Self-Evaluation, their results will be added to the project's diagram. When the Self-Evaluation is done anonymously, it creates a unique web address. If the participant wants to see the results later, this web address can be used.

Managing the projects:

After logging in to the page with individual e-mail address and password, clicking the My Projects link will bring data saved before. New projects can be created by clicking the Create new project link. A form has to be filled in and afterwards clicking the Create Project button will start a new project. The new project will be shown in the 'Project owned by me' block, where it can be edited. One can delete the project or invite others as well.

For the invitation, one should use the 'Invite' link in the project's row. The recipient's name and e-mail address have to be filled in. By clicking the 'Invite' button, an e-mail will be sent to the given address with the instructions of how to join the project.



Joining and leaving projects:

When one gets an invitation code via e-mail, login has to be with the registered e-mail address and password. (Registered e-mail address can be different from the address from where one gets their code.)

After clicking on the <u>Join project</u> link, and entering the code that is sent, the "Join" button has to be clicked. On success system will be redirected to the <u>My Projects</u> page, where one can see the project in the 'Projects, where I am a member' block. Click the Leave link in the project's row, will lead to exit.

3.3 Estimation of the generated results

One main point concerning the use of the TOI TOI TOI evaluation tools is how to estimate the generated results. Especially the team-evaluation is a very useful and informative tool for future project coordinators and should be used for checking possible future partners in terms of needed basic competences ensuring and fostering the impact of European education projects. Therefore, the presentation of the results consists of two different parts, a diagram with different graphs for each partner and a text with useful basic information regarding institutions (see Figure 14).

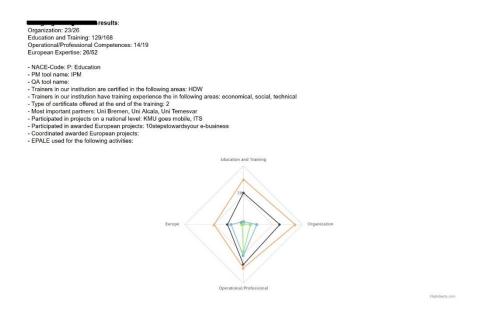


Figure 14: Presentation of a team-evaluation's results



The spider diagram is a graphic based overview of basic competences for conducting European education projects which correlate to the results of scientific analysis. This graphic based presentation is combined with a numeral rating of reached points (e.g. 90/168) for each competence area. This calculation was adapted several times during the development process to reach a maximum level of objectivity. Especially the part "Education and Training" is very important because this graph stands for all needed educational infrastructure which should be a must for long-term use of the project results

Besides close ended questions, the survey consists of several open ended questions as well. These questions aim at retrieving information on organisational and professional aspects, project experience and many other basic competences and information. Answers to these open ended questions are presented in text boxes. So these questions involve relevant information for future project coordinators which has to be taken into account during strategic planning of a project consortium for all kinds of European education projects.

To sum it up, the TOI TOI TOI evaluation tools are simple but very useful tools supporting project coordinators in planning a project in an impact oriented way. They are based on detailed scientific analysis and they support institutions in improving their competences for conducting European education projects by presenting results in a combination of graphic and text based elements.



4. GUIDELINES FOR IMPACT ORIENTED PROJECTS

Rainer Schabereiter / Danube University Krems

Besides the two stage evaluation tools the project's final outcome was identified to be simple but useful guidelines for impact oriented and therefore "sustainable" strategic planning of project consortia in European education projects. Interviews conducted with different decision makers from the previous coordinators yielded that projects should reflect a European dimension through the involvement of partners from different European countries to ensure a high level of variety in cultural and professional aspects. Different fields of competences such as project management, educational competences or certain professional skills are required for conducting successful projects. Thus, planning a project and creating its consortium are crucial procedures for successful project management.

During the lifetime of the Lifelong Learning Program several projects which aimed at fostering the quality and the impact of project outcomes and results (see ADAM Database) were conducted. And now Erasmus+ demands increased sustainability and impact of European projects. The first years of Erasmus+ have shown that this program is more focussed on dissemination, impact and the sustainability of its projects.

Describing the sustainability of a project in detail in a short publication as this one is not possible and is beyond the scope of this publication, but the impact of a project is the main factor for describing its success and it the basic step on the way to sustainability. Besides many others the German national agency "Nationale Agentur Bildung für Europa beim Bundesinstitut für Berufsbildung (NA beim BIBB)" which is the responsible body for conducting the Lifelong Learning Program and the Erasmus+ program in Germany has permanently analysed and fostered the impact of both programs.

One main publication analysing Transfer of Innovation (ToI) projects within Leonardo da Vinci is the German study "Wirkungen nationaler Innovationsprojekte (ITP) im Programm für lebenslanges Lernen (PLL)" [Impact of national Transfer of Innovation projects in the Lifelong Learning Program] which was written by Markus Körbel, an external expert, and published in 2011. (Körbel, 2011).



As a first step Körbel, (2011) analysed project proposals, final reports and the products to identify a set of indicators for detecting the dissemination activities, the reach of dissemination and the impact of the projects on national VET-systems. These indicators were used to develop standardised questionnaires which analysed 26 LdV/ToI projects in Germany by asking the responsible coordinators. Furthermore, Körbel used a standardised survey to investigate the projects products. In close cooperation with the national agency he finally described eleven projects as case studies (Körbel, 2011, p. 10).

The results of the study indicated that although the projects were described as best practices from the first years of the Lifelong Learning Program, the planned results of each project weren't fully implemented after their end. Furthermore, he detected missing "technical requirements" (Körbel 2011, p. 38) as a main factor for reducing the impact factor of a project.

Finally, the study identified the dissemination as a crucial factor in fostering the impact of projects. Involving stakeholders and users as early as possible and active cooperation with target groups are the main factors for increased impact and sustainability. Körbel suggested funding less projects than before to consider the high efforts in dissemination. But this smaller number of funded projects should be featured with higher budgets and therefore with better dissemination capacities and partners (Körbel, 2011, pp. 38).

The results of quantitative and qualitative studies in the project TOI TOI TOI corroborate with this study. As detected in the interviews, the impact of a project is a result of the named product(s), the structure and the competence of the consortium and its partners, and the dissemination of the results (see Figure 15). All three components have the same massive relevance on the impact of a project and the following short guidelines will focus on them.

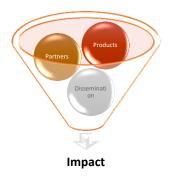


Figure 15: "Impact-Cone" of projects



At the first look, some of the advices provided here may sound too simple but these short guidelines will help coordinators avoid many problems during the project and will foster the impact in a pro-active way. It is not compulsory to complete the different tasks step by step; many of them can be completed simultaneously. At the end of project planning the coordinator should be able to "picture" the project as a whole with its product(s) and the needed consortium. Most of the short advices will help coordinators avoid several problems, as all changes during the lifetime of a project will cause massive problems in terms of internal cooperation and reporting to the responsible national agency.

Here are the guidelines:

1) Develop concrete products:

The first step of creating a project should be naming one concrete product which will be the main goal of all project work. Define it and name it. Many projects try to develop too many different products and the responsible people lose orientation and the focus in their priorities. The project budgets in many funding programs do not allow developing so many different outcomes. So it is better and wiser to focus on fewer products but to plan and develop them at a higher quality.

A detailed description of the product containing all relevant aspects in terms of contents, technical requirements and further relevant aspects is required to establish a clear view on the project. One crucial aspect in this step is to describe the aims and the objectives in a few words. One solution would be to define one concise sentence which identifies the basic aims of the planned project and its products. In the planning phase, it is good to keep this description simple because project planning is a very dynamic process and things may change permanently.

This document containing all relevant descriptions has to be well structured and is the basic paper for creating a timetable, a work plan and other relevant documents which are required for planning the project and searching the needed European partners.



2) Check the needs:

Besides describing the main product of a project, it is a must to check the concrete needs at different levels. Many proposals "identify" massive needs and present themselves as the only solution to solve the existing problem. But in many cases reality is different and this difference is crucial for the impact and the further use of project outcomes or products.

So the first step should be a web based needs analysis at the national level for the home country to get an overview on the actual situation and possible synergistic effects by using the results of other projects or regional/national activities and measures. In this regard, first, possible target groups and stakeholders can be examined to get further information. It is helpful to check existing databases, especially the ADAM-database which pictures thousands of European education projects.

The most important thing is to check the needs in the partner countries in the same way. This can be done by the coordinator for preparing the partner search or after contacting first possible partners. Many European project consortia consisted of partners which did not face similar problems. Furthermore, cultural diversities have to be considered in planning and forming the project team and it is good to involve possible partners in this step but not to fully trust them. If needs analysis generates that there already are existing projects in the respective field, the project idea and the products should be adapted or changed in a way that these existing outcomes are utilized in a synergetic way.

3) Check your partners:

As mentioned before basic needs analysis correlates with planning a consortium. So the first step in strategic consortia planning should be thinking about possible partner countries and partners. As presented in the scientific part of this publication, many coordinators preferred partners which they had known from former projects of activities and which they trust. This is one possible solution for establishing a project team but it is not strategic planning. Coordinators should try to find partner countries which face similar problems or which have different levels of development in basic fields of the project idea.

Finally, the partner institution itself should fit to the defined products, the needs and the aims of the project. Each partner should be responsible for certain parts of the project. So coordinators have to think how the institutions can be engaged in the project and what the benefits of including them as a



project partner are. In this regard, project platforms like ADAM or even social media platforms (e.g. Facebook-Group: Erasmus Plus- KA 2 Partner search or LinkedIn-Group: EU Projects Partner Search) offer many possibilities to find partners which fit to the needs of the prospective project, but a check of all the institutions which will answer in these social media platforms is strongly suggested.

The TOI TOI evaluation tools are useful for checking the possible partners in terms of all relevant competences needed for successful project management and work in European education projects. This pre-check generates an overview of the respective institutions and presents already conducted projects, relevant infrastructural aspects and etc. Especially the answers in the text-boxes picture the project experience of the partners and their educational competences which play a crucial role for the sustainability and the impact of European projects.

But there are several other issues to consider before officially inviting an institution to a European education project which is not possible to picture by the TOI TOI TOI evaluation tools. A simple phone call or a SKYPE meeting can clear many issues and help avoiding problems during the project lifetime. One of the most important aspects is to check the language skills of the involved staff in the partner organisations and a SKYPE meeting in English can provide an idea about the English language skills of the staff. Lack of language skills is still a problem in many European projects which cause serious problems during the lifetime of the projects.

The second important advice is to check the infrastructure in addition to the TOI TOI TOI evaluation tools. Still many SMEs with just a few employees try to act as educational partners in European projects without the required infrastructure or even basic seminar rooms. So it is crucial to check the educational infrastructure and the staff. Many institutions try to employ people as free-lancers just for the project or bill projects via dubious external bodies which is not allowed in the Erasmus+ program anymore. So the TOI TOI TOI team suggests collecting copies of the employment contracts of all involved employees before signing a partner contract and transferring the first funding tranche to the respective institutions.

In this regard it is very useful to talk about the funding guidelines of the respective project that explains the details of the funding to avoid misunderstandings and different opinions. It would be very helpful to prepare a short budget overview and to talk about the respective funding rules. Concerning the Erasmus+ program, the official program guide is updated every year and presents all relevant information (see: http://ec.europa.eu/programmes/erasmus-plus/resources en).



4) Plan post project strategies

The final step in strategic planning of a project consortium has to be the definition of strategies fostering the impact of the project and its products or outcomes. In short, it is a must to think about the time after the end of a project before starting it. In this regard project dissemination and marketing are crucial factors fostering these post project strategies.

One main step should be asking the partners to describe their own strategies and possibilities of midand long-term uses of the project products and outcomes. The TOI TOI TOI evaluation tools contain useful information on dissemination competences of the partners. Yet, in addition to the tools it is good to ask partners for possible strategies. It is useful to structure the planned impact according to different target groups and geographic areas and levels which fit to the questions in the proposal documents.

This detailed planning of post project strategies and scenarios will help evaluators get a detailed overview and insight of the project's impact and sustainability and it will also help coordinators evaluate the work of the team during the project. Finally, all of the national agencies are actively supporting coordinators in disseminating their results and ensuring a long-term impact of Erasmus+ projects. In this regard they regularly organise workshops on project impact and publish brochures and further documents which help coordinators for successful dissemination and use of project outcomes.



TOI TOI TOI Guidelines:

The following figure (see Figure 16) summarises the basic steps in strategic planning of project consortia. All parts are dynamic processes and should be evaluated and adapted consistently. This detailed preparation helps developing a well-structured project which fits the needs of the identified target groups and which ensures a maximum level of impact in different geographic (regional, national, European) and temporal (short-, mid- and long-term) aspects.

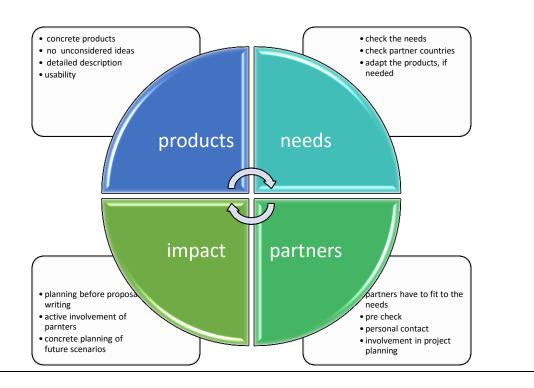


Figure 16: TOI TOI TOI Guidelines



5. BEST PRACTICE EXAMPLES

This final part of the "TOI TOI Guidelines" aims at presenting four examples of sustainable and impact oriented EU-projects. All the examples were chosen among high number of different projects within the former Leonardo da Vinci program and represent the broad variety of all the different activities and measures at the European level. Each of the development partners chose one project, described it in detail and finally discussed the reasons and characteristics for sustainability and high impact.

While planning this publication, the project team determined some hard facts as corner stones for identifying projects as the best practice example. At first the chosen projects had to be conducted within one part of Leonardo da Vinci programme. The German partner was responsible for describing a successful Pilot-Project within LdV programme to show its variety and to "think outside of the box" of Transfer of Innovation projects which had been in the focus of TOI TOI TOI ToI's work.

Furthermore, it was essential to choose one "sustainable" LdV-project. Yet, first of all the meaning of sustainability had to be explained in detail. The analysis of Austrian, German and Hungarian Transfer of Innovation projects from 2007 to 2012 indicated that a high percentage of project outcomes were not used after the official end of the funding period. In many cases documents concerning products and outcomes disappeared and in some cases it was very difficult to find documents proving the project activities on the web. So the project team agreed on describing projects whose outcomes are still in use, original or modified. The reason that the project team used just one main characteristic in terms of choosing best practices is due to quantitative and qualitative analysis which pointed out that the outcomes of many projects were not used at all after they had ended.

So the following four projects are among the number of successful Leonardo da Vinci projects which developed sustainable outcomes and products which are still successfully used in many European countries.



5.1 europass+

Lena Schmitz / Forschungsinstitut Betriebliche Bildung (f-bb) gGmbH







Project Title: europass+ - an online support instrument for the Europass-CV

Duration: October 1st 2006 - September 30th 2008

Project Number: D/06/B/P/PP-146490

Country: Germany

<u>Project Coordinator:</u> Forschungsinstitut Betriebliche Bildung (f-bb) gGmbH (Research Institute for Vocational Education and Training)_Rollnerstraße 14 D-90408 Nürnberg



The Forschungsinstitut Betriebliche Bildung (f-bb), the Research Institute for Vocational Education and Training, is a non-profit limited liability partnership fully owned by the Bildungswerk der Bayerischen Wirtschaft (bbw) e.V., a training centre operated by the representatives of the Bavarian economy.

The f-bb has been working on a wide portfolio of research and development projects on vocational education and training at regional, national and international level. Most of the projects are undertaken in cooperation with commercial, industrial and craft trade enterprises, other research institutes, vocational training institutions or schools providing vocational education. Throughout a lot of project work f-bb is closely involved with regional enterprises, especially with SME's.



The tasks carried out by the f-bb include, alongside basic research and model tests on vocational education and training, the design of case studies, the conduct of empirical surveys as well as the evaluation and scientific coaching of projects. Primary research interests focus on the relationship of new forms of work organizations, development of new counselling concepts in VET and new media and methods. Alongside these, f-bb investigates the implementation of EQF and ECEVET instruments supporting those involved in politics and occupational training in their work within the European educational area.

About 50 scientists are currently working in the f-bb. It is an interdisciplinary scientific staff in different areas including social, economic and occupation and vocational educational. The extensive experience and expertise of the institute's human resources enable the f-bb to successfully execute the assignment and to widely publish the results relevant to experts in a differentiated form (see, e.g. the institutes own series of books Wirtschaft und Weiterbildung).

In particular, the f-bb's competences lie in the fields of: vocational training and training planning; media and methodology; continuing education and training; training consultancy; Europeanization - internationalization of vocational education and training

The main sources of financing of the projects are national and European third-party funds. Contracting authorities and partners include enterprises, associations, ministries, such as the ministry for Education and Research and the ministry for Economy and Labour, and the European Commission. Due to the non-profit character of the institute, the financial and operational management of projects follow the principles of maximum transparency. In accordance with their quality management system, certified by ISO 9001:2008, all steps in the financial and operational project management remain traceable at any time.

During the past years, the f-bb has acquired plenty of experience in launching, coaching and exploring innovative training measures and instruments in VET. Moreover, it has solid expertise in carrying out scientific analyses of training, needs assessment and learning processes, the scientific coaching of pilot tests and projects, implementing e-learning as well as in programme evaluation.

The f-bb's key activities are: execution of pilot projects, conducting studies and scientific investigations, development of new concepts concerning training consultancy and vocational education and training, evaluation and scientific coaching, organisation of conferences and workshops at both national and international level, and publication.



Partners:

The partnership of multiple players, which includes training centres and research institutions as well as representatives of employers, trade unions and national organisations, guarantees that the instrument being developed meets the needs of young people and helps them produce an informative Europass CV.

VET-provision and VET-research:

- afpa association nationale pour la formation professionelle des adultes (FR)
- Fundación Tripartita (ES)
- TNOIK Towarzystwo Naukowe Organizacji i Kierownictwa (PL)
- VOX Voksenopplæringsinstituttet (NO)

Employers Federation:

- EEF West Midlands, Engineering Employers Federation (UK)
- MEDEF Franche Comté (FR)

Trade Unions:

- cfe/cgc Union Regional de Franche-Comté (FR)
- CFDT (FR)
- Solidarnosc (PL)
- TGWU Transport and General Workers Union (UK)

SME:

Widney UK Limited (UK)

Description of the project:

The Copenhagen Process and the promotion of lifelong learning have led to growing interest at European level in the transparency of learning outcomes. In the project europass+, educational experts from seven European countries developed an online instrument to support trainees in documenting informally acquired competences.

The Europass framework that was introduced in 2005 enables European citizens to make their qualifications and competences transparent throughout Europe. The principal instrument for achieving this is the Europass curriculum vitae (CV) which can be linked with other Europass documents such as the Language Passport, Mobility, Diploma Supplement, and Certificate Supplement. For young people who have the opportunity to take part in a mobility experience in another educational system



during their education and training, accurate documentation of their competences, including those acquired informally, is important.

Europass Language Passport users receive exemplary assistance in self-assessing their current level of linguistic competences. In contrast, young people are provided with very little support in documenting the outcomes of informal learning in their Europass CV. This requires a change, but European countries are not close to establishing a common language regarding the questions of outcome orientation. Young people in particular are often unaware of how large the proportion of competences gained outside the formal educational programmes is and, therefore, how important this makes additional information which supplements attestations and certificates of completion.

Europass+ aims to support young people in assuring themselves of their own competences and thus, in accord with a strategic aim of European policy on vocational education and training, contributes to making learning achievements apparent, independent of where and how they were acquired. (for more information see www.europassplus.info)



Figure 17: Screenshot of the project's website



Description of the products:

europass+ is primarily aims at enabling young users to comprehensively, quickly and independently record informally acquired competences in writing and in a form which can be understood throughout Europe. A support instrument was developed which:

- can be included in an expanded online support system for the Europass CV and / or made available on national platforms,
- enables significantly more comprehensive documentation of informally acquired competences through appropriate sub-categories, examples and suggestions,
- describes these competences in relation to the levels of the European Qualification Framework (EQF) and
- is also suitable for people who are not exceptionally digitally literate.

The actual situation after the end of the project:

The europass+ project was followed by another LdV project called "europass+ 2". Here, the instruments were adapted to the specific needs and situation of younger users.

"Stiftung Warentest" recently conducted and evaluation of the online tool. Its report is still confidential but what may be quoted is that so far 4.500 persons have used europass+ online, 120 persons of these used it in 2015.

<u>Criteria fostering the sustainability of this project:</u>

Two criteria were fundamental in terms of sustainability: First, the team work was based on mutual trust; most of the partners already knew each other. Second, the topic was already linked to a big pool of users: informal learning had just become an important European topic and at the same time, the europass was well known. So europass+ was directly distributed and offered to all europass users.



5.2 TAKE TECH



Rainer Schabereiter / Donau Universität Krems



Project Title: TAKE TECH www.take-tech.eu

Duration: 1st of October 2011 – 30th of September 2013

Project Number: LLP-LDV-TOI-11-AT-0004

Country: Austria

SFG >>

<u>Project Coordinator:</u> Steirische Wirtschaftsförderungsgesellschaft mbH SFG (Styrian Business Promotion Agency SFG) Nikolaiplatz 2 A-8020 Graz

Description of the project:

TAKE TECH was a LdV/Tol project coordinated by the Austrian institution SFG which is a regional business promoting agency in the Southern part of the country. On behalf of the Styrian regional government, SFG had developed and implemented the regional initiative so called "TAKE TECH" in 2009, two years before launching the homonymous EU-project. The background for both activities, the regional initiative and the LdV/Tol project, is based on the lack of young skilled workers in technical professions in Austria and many other European countries.

In general, the TAKE TECH methodology aims at raising awareness of young people in the area of apprenticeships in technical jobs and it bases on connecting schools and companies. In this regard SFG started several activities and a structured matchmaking between regional school-authorities, chambers of commerce and industry and especially secondary schools and companies on a regional



level to connect different parties as best as possible. Several seminars, workshops etc. were organised to connect education and economy. Since 2009, during the yearly "Action Week" in November hundreds of pupils visit regional companies which present themselves in an innovative and youth oriented way.

The LdV/ToI project TAKE TECH spread the methodology of the project all over Europe and enhanced the existing TAKE TECH method by developing and testing further educative tools and handbooks. Especially the systematic matchmaking was used to raise awareness for technical issues among youngsters through school visits to such companies. Like in the regional initiative, on the one hand, young people should get interested in technical professions through these company visits; on the other hand, companies could present themselves to future employees and prevent a possible lack of young skilled personnel. All in all about 4.000 pupils visited over 150 companies during the pilot phase of the LdV/ToI project (see ADAM Database, project page).

The project's structure followed a common scheme of LdV/ToI projects and consisted of four basic steps. The first step aimed at analysing best practices for measures, raising the awareness of young people for technical professions in all the participating countries. The second part focused on adapting these findings for developing two different handbooks: "TAKE TECH for schools" and "TAKE TECH for companies" and a short film on the methodology (see: http://www.take-tech.eu/index.php/en/download-area). The innovation transfer itself was done in a "Train the Trainer" course with participants from each partner country who got both handbooks and some further materials for training other people in their countries. Finally, each project partner organised, conducted and evaluated national courses in the TAKE TECH methodology.



Figure 18: Website www.take-tech.eu (21st of July 2016)



The project consortium was an interdisciplinary team of seven European institutions which represented all needed parties and bodies in conducting TAKE TECH (see ADAM Database Project Page)

Industry and Business:

- SFG Steirische Wirtschaftsförderungsgesellschaft mbH (Austria / coordinator)
- Unione Regionale delle Camere di Commercio Industria Artigianato Agricoltura del Veneto Unioncamere del Veneto (Italy)
- Chamber of Commerce and Industry of Dobrich -промишлена палата (Bulgaria)
- Kozep-Kozep-dunantuli Regionalis Innovacios Ugynokseg Nonprofit Kft. (Hungary)

Education and Youth:

- Sihtasutus Junior Achievement Eesti (Estonia)
- Steirische Volkswirtschaftliche Gesellschaft (Austria)
- KOISOCIAL YOUTH DEVELOPMENT NΩNIKH ANAΠΤΥΞΗ ΝΕΩΝ (Greece)

Description of the products:

The project generated lots of different outcome products which can be freely downloaded from the website www.take-tech.eu. Besides several dissemination-materials, there are some products which are relevant in terms of contents.

a) TAKE TECH – General project information

Download:

http://www.adam-europe.eu/adam/project/view.htm?prj=8780&page=FILES#.V5B5mzVSGeE

This booklet is the basic document for using TAKE TECH and its different tools. It involves all relevant information concerning TAKE TECH, its background, development and its aims and objectives. It presents the offers for schools and companies as the most relevant target groups. Finally, it describes the LdV/ToI project itself. Thus, this booklet can be used for both project marketing and general dissemination of the TAKE TECH methodology in other European countries.







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Figure 19: Contents of the TAKE TECH – General project description

b) TAKE TECH - Handbook for schools:



Figure 20: Title page TAKE TECH Handbook for schools



Download:

http://www.adam-europe.eu/adam/project/view.htm?prj=8780&page=FILES#.V5B5mzVSGeE

Besides general information on the TAKE TECH methodology, the handbook includes useful information for teachers such as how to plan a company visit in a professional and sustainable way and how to embed the contents in the educational process of different subjects. In this regard the handbook presents several planning tools and checklists for teachers. Furthermore, it provides several exercises and activities for practical lessons in schools to prepare the pupils in the best way. Even templates for parent's letters and many other supporting documents are included in the book. Finally, the post-processing of a company is very important to ensure a kind of sustainability of all the information and the book shows some possible ways for short- and mid-term post-processing of company visits. All exercises and activities are clearly described and the layout is standardised. So the TAKE TECH handbook for schools can be described as a very helpful "toolbox" which helps teachers in organising, preparing, conducting and post-processing a company visit in a very professional way. The handbook is available in English, German, Bulgarian, Estonian, Hungarian, Italian and Greek.

c) TAKE TECH – Handbook for companies:

Download:

http://www.adam-europe.eu/adam/project/view.htm?prj=8780&page=FILES#.V5B5mzVSGeE

This second TAKE TECH handbook is different than the first one in terms the chosen vocabulary and contents as it aims at reaching the target group "companies". It is divided into two main parts, theoretical and practical. It is also available in English, German, Bulgarian, Estonian, Hungarian, Italian and Greek.

The theoretical part presents the TAKE TECH methodology, its services for companies and some general information for planning and conducting a company visit by pupils in different ages. In this case it names several basic questions that responsible persons in the companies should ask themselves before inviting pupils for a visit. Furthermore, this chapter involves a very simple but useful schematic "dramaturgy" that identifies how to conduct a company visit and finally presents this dramaturgy in an example schedule.



The practical part presents methods and guidelines which should be taken into account to attract young people. After describing some basic information on types of learners, it points to the importance of activating all senses of pupils and it provides some documents for preparing and post-processing these visits. The practical part also provides practical exercises which can be done with pupils in companies. All of them are described in detail with the respective duration, required materials etc. So a company can use this handbook like a "toolbox" for planning and conducting visits of young people. Finally, the TAKE TECH handbook for companies provides empty planning-schemes and further forms for practical use.

The actual situation after the end of the project:

After the official end of the LdV/ToI project TAKE TECH, the initiative proceeded in a very successful way. The European project was awarded by the Austrian national agency OeAD GmbH as a best practice example. Furthermore, it was named as a best practice project by the European Commission and was described as a "success-story" by the Directorate General for Education and Culture (Interview with Susanne Reiber / SFG).

But being awarded in Vienna and Brussels was not an end for TAKE TECH project; the initiative used the results of the European project to strengthen the regional activities and TAKE TECH is still being conducted by the SFG and will proceed in 2017 (see: https://www.sfg.at/cms/2743/Take_Tech/). It is a fix part in SFG's portfolio and many Styrian schools and companies use different activities like preparation seminars, networking events or guidance offered more and more every year.





Figure 21: Facebook-Site of TAKE TECH in Styria

TAKE TECH is presented today in many local and regional media and supported by the regional government of Styria. In the last few years, teachers from secondary schools became familiar with many local companies. Moreover, the community uses Facebook as a platform for attracting more young people (see Figure.. 21; https://www.facebook.com/SFG.TakeTech/).

Finally, a Slovak chamber of commerce tried to establish a follow-up project "TAKE TECH II" as a "Strategic Partnership" in the new European program for education, youth and sports Erasmus+. Unfortunately, the proposal failed the national evaluation procedure but the lead-partner in Slovakia wants to try it again in the next year (Interview with Susanne Reiber / SFG). So TAKE TECH is still active at the European level even though the LdV/Tol project has ended in September 2013.

Estimation of criteria fostering the sustainability of this project:

TAKE TECH is a good example for transferring and extending already existing initiatives from regional level to European level by using European funding programs. The main reason for being a sustainable project was due to careful examination of possible post-project strategies during the



planning phase by the SFG as the coordinating institution. So the project team could use existing structures for establishing synergies at the European level. This project highlights the absolute need for checking possible post-project scenarios long before starting a European project. The regional initiative TAKE TECH had existed about two years before SFG started planning the LdV/Tol project.

Directly after the end of the project, especially SFG could use all developed materials for improving the regional activities and for disseminating it to actors at the national and European level. That was the reason that a Slovak chamber of commerce planned the project "TAKE TECH II" which unfortunately failed the national evaluation in Slovakia. But also some other official bodies from other countries contacted the coordinator after the end of the project, because they wanted to use parts of the products in their networks (Interview with Susanne Reiber).

TAKE TECH is still active in Styria and about 2.400 young people visited 80 companies in about 130 different company visits (SFG Website, 2016) and the Slovak chamber of commerce plans a second try in the Erasmus+ program.



5.3 INTERCULTURAL MEDICAL COMMUNICATION IN EUROPE – IMED-COMM-EU



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<u>Project Title:</u> Interkulturelle medizinische Kommunikation in Europa – Intercultural medical communication in Europe http://www.imed-komm.eu/

Duration: 1st of October 2012 – 30th of September 2014

Project Number: DE/12/LLP-LdV/TOI/147501

Country: Germany

<u>Project Coordinator:</u> IIK- Institut für Interkulturelle Kommunikation e.V.IIC Institute for Intercultural Communication e.V. Johann Sebastian Bach Platz 7D-91522 Ansbach



Description of the project:

The Institute of Intercultural Communication (IIC) aims at fostering international scientific, cultural and economic cooperation between language teachers, students, and skilled workers from the industry, crafts, commerce, the social sector and tourism. Other beneficiaries of their services include scientists and all other interested parties inside and outside Europe. The IIC offers a wide range of German



courses such as integration and orientation courses, additional measures for late repatriates, courses for females, A1-, A2-, B2 and C1 level and VET-oriented language courses etc. In addition to this, it offers special German courses for foreign doctors, summer courses for foreign students, grammar courses, TestDaF preparation courses, and DaZ language remedial classes for students with non-German origin as well as for business people in the context of international projects of occupation-specific courses. Finally, it also conducts tests in all levels within the common European Frameworks and ECL-exams etc. even in the field of medicine and health care.

Within the framework of the LdV/ToI program of the European Commission, Institute for Intercultural Communication (settled in Ansbach, Berlin, Jena, Erfurt) as the project coordinator developed the project with the name "Interkulturelle medizinische Kommunikation in Europa - Intercultural medical communication in Europe" with partners from Bulgaria, the Czech Republic, Hungary, and Slovakia.

Partners:

- Institute for Intercultural Communication e.V. (Coordinator / Germany)
- Medical University Varna (Bulgaria)
- Institute for Linguistic and Intercultural Communication GmbH (Slovakia)
- South Bohemian University Ceské Budejovice (Czech Republic)
- University Pécs (Hungary)





Figure 22: Project website www.imed-comm.eu (21st of July 2016)

Objectives of the project were identified as: the creation, systematization, modernization, testing, correction, enhancement and sustainable use / dissemination of modern, innovative, inclusive language learning materials, testing and certification techniques (ECL) for intercultural professional linguistic communication of foreign doctors and health professionals in the countries of the consortium as well as in other European Member States.

Since many years there has been a strong fluctuation in all European countries concerning medical staff. In some cases, it is called "doctors-migration". In order to get approval to work in other countries, doctors must have certain certificated language skills. General language courses offer common language skills without focusing on certain vet-criteria (medical language). So the project meets a European need. Target group of the project are: doctors, medical staff, clinics, education-centres, etc. At the end of the project, it was planned that the target groups should be able to use the given possibilities of European communication and the cross-border working in the EU member countries better.

As a first step, similar projects and materials existing in the partner countries and other materials developed in the transfer projects were examined. Based on this research, needs analysis and teaching experience, the project coordinator and the project partners developed modern, innovative, inclusive language learning materials, as well as testing and certification techniques (ECL) for the



intercultural professional linguistic communication of foreign doctors and medical professionals in the countries of the Consortium (D, BG, HU, CZ, SK) as well as in other European Union Member States. They set Web portals as well as teachers and learners handbooks in German, Bulgarian, Hungarian, Slovak and Czech. The core pieces are practical, modular courses with complex online and offline exercises for medical communication and medical aspects of modern tourism.

The courses usually include following parts: (programmed) self-learning exercises, exercises for the presence phase, glossaries, course manuals for trainers and learners.

The courses (11 courses as kernel product of about 1.800 hours to work with) are complemented by self-tests and quizzes, podcasts/videocasts, blogs and WIKIs, which are also freely available on the Web portal. The portal also have examples for Europe-wide recognized tests for medical communication and more detailed information for learners and teachers which can be found in special glossaries/counsellors (online - encyclopaedias, dictionaries, glossaries), or in additional links.

The project started in October 2012 and ended in September 2014. During this period, the consortium had five project meetings on the following themes: utilization and distribution of results; intercultural learning; lifelong learning; open and distance learning; language training; continuous training; ICT; higher education; and equal opportunity towards achieving the projects goals.

Description of the products:

The IMED-COME-EU Language Project produced five interconnected, complex blended learning portals for intercultural medical communication for foreign doctors and medical professionals in German, Bulgarian, Hungarian, and Slovak. As part of the project 11 comprehensive blended learning courses were developed comprising approximately 1.800 hours of study materials as well as a range of tests on intercultural medical communication. The materials were tested and optimized in the partner countries but their use far exceeds the scope of the partner countries. Later, other exercises were added concerning the medical aspects of modern tourism.

The modules are enhanced by private tests, a quiz, podcasts/video casts, blogs as well as WIKIs, all of which are freely accessible on the web portal. These tests can be taken at any of the partner institutions. The practice-orientated modules provide a platform for doctors and nurses to practice medical communication both online and offline. In addition, candidates can access examples of ECL



practice tests. Teachers and students are further supported with glossaries and guides on medical language. The outputs are completed with teacher's guides.

The language-courses (programmed and non-programmed exercises for the present-phases) are embedded at highlighted places (for example with bigger photos) into the external web-sites. In the modules, different texts and situations can be found, which can be relevant for the attendants of courses. At the beginning they go through compulsory tasks, for example written texts specially composed to fit their job descriptions. Next is a quiz that gives an idea to the participants, about their professional and linguistic knowledge in the respective field. Then, according to the modular-principle the users can decide how they want to proceed and which units and issues they want to work on.

In the courses four skills are targeted: reading, listening, writing and speaking. It is a challenging task to develop these four skills for learning a new language due to the varied background of participants, and many internal and external factors, especially at the respective area of activity.

The four language skills were developed according to the main goals of the specific characteristics of the teaching-situation and the type of technical instruments used. In connection to the programmed exercises there are mainly tasks for reading and listening comprehension in addition to supervised writing. In the last phase, mainly speaking and free writing are developed. The choice of vocabulary is essentially defined throughout chosen texts, audio and video materials for written and spoken communication. The main goals were chosen to deal with grammatical problems, regulated through the usual sorts of texts in the medical communication.

Additional and more in-depth information for teachers and students can be found in the special glossaries/guides on medical language (online reference books - dictionaries, glossaries; books on intercultural communication etc.).

The actual situation after the end of the project:

After the end of the project, all partners continued carrying out the language courses and about 700 people per year attended the courses in all partner countries. All in all, more than 200,000 users have engaged in the web portals with over 10 million hits. Furthermore, over 1,000 people took part in the dissemination and validating events. The product has been used with refugees as well. The latest development is that the product has been extended and new modules are being created.



The situation in the partner countries is similar. In many countries, the IMED-COM language courses are offered for refugees and the platform is still used by a high number of learners. The high number of daily users of the platform is presented graphically here: http://www.imed-komm.eu/stats/. The users are: doctors, medical staff, clinics and education centers who benefit from using the project's results. Meanwhile courses have already been adapted and further developed in other projects. (e.g. http://www.imed-komm.eu/kurs gesundheitstourismus).

Estimation of criteria fostering the sustainability of this project:

The geographical distribution of the chosen partners has shown that most of the partner countries were from the neighbour countries like Hungary, Slovakia, Czech Republic and Bulgaria. The partners have been in long term cooperation in training and in other EU projects.

All partners do have extensive pools of teaching and learning materials, modern equipment in their seminar rooms, a broad network and online communities. Furthermore, they own Websites for VET-and adult education and have produced teaching and training materials and they are experienced in blended learning. Some of them are also experienced in ECL. Specialists from medical practice and medical networks which are directly involved in the project are very important. Finally, extensive research was conducted in the partner countries on the topic of the project to ensure that the products address the real needs of the target groups.

Networks and multiplicators played a crucial role through the use of mailing, newsletters, information-events, interviews, meetings, workshops, conferences, publications, and etc. All partners worked in a very engaged way so that all expectations were met. The number of directly connected persons (e.g. meetings or conferences) was more than 1.000. Foreign doctors and medical staff in the partner organisations of the consortium played a crucial role for the utilization of the language courses for the aimed target groups and the reach new users in different countries.

Finally, the project fully covered existing needs by developing a concrete product. A unified methodological-didactic concept was developed to connect the five platforms. This methodological design ensures that any further additions to the product uphold the same academic standard as the original 11 courses.



Each project should base on certain demands and cover them by developing one main product which fits to the needs of the aimed target groups. IMED-COM used the lack of missing medical language courses and developed a very useful tool which led to a sustainable project.



5.4 "3C for Sustainable Cities" – Techniques and methods for climate change adaption for cities



Boglárka Eisingerné Balassa / Széchenyi István University Györ

<u>Project Title:</u> Techniques and methods for climate change adaption for cities- 3C for Sustainable Cities, www.3c-project.eu

Duration: 1st of October 2013 – 30th of September 2015

Project Number: 2013-1-HU1-LEO05-09613

Country: Hungary

<u>Project Coordinator:</u> Budapest University of Technology and Economics Muegyetem rakpart. 3, HU-1111 Budapest



Description of the project:

The Intergovernmental Panel on Climate Change (IPCC) states that beside mitigation the second response, adaptation for climate change is about learning to cope with temperature increases and extreme events associated with it. IPCC report that presented the forecast climate parameters for Central and Eastern Europe and Southeast Europe (CEE-SEE) countries shows that we have to cope with more frequent and extreme meteorological events and therefore demand-user fulfilments reconsideration in relation to water provider and meanwhile human skills and preparedness have to



be improved. Despite these facts, the issues of cities are in still delay. EEA member countries are at different stages of preparing, developing and implementing national adaptation strategies. The development depends on the magnitude and nature of the observed impacts, assessments of current and future vulnerability and the capacity to adapt. In addition, some actions and measures are increasingly being taken at regional and local levels (National Adaptation Strategies, EEA Website, 2012).

The project consortium was formed under the Tempus Public Foundation and it consists of two educational institutions, one regional private company, and two representatives of national municipal water utilities. The project aims to transfer know-how of climate change adaptation to Hungary and Romania, and includes methodology/approach for topic analyses, scenario building technique, LLL educational materials and also a guide for local handbook(s), which are based on several existing project results of DHI Czech office which explained to municipalities how they can plan and mitigate the impacts from climate changes and what actions and measures are to be prepared to get adapt to the phenomena. The project is based on the world-wide accepted state-of-the-art knowledge of ICCP.

Partners:

- Budapest University of Technology and Economics (Coordinator / Hungary)
- North Transdanubian Water Utility Ltd. (Hungary)
- DHI a.s. (Czech Republic)
- Technical University of Civil Engineering Bucharest (Romania)
- S.C. Apa Nova Bucharest (Romania)
- Hungarian Water Utility Association (Hungary)

Romania and Hungary are far behind in mitigation and adaptation for planning and that is valid for education, too, especially in field of urban water. The project aims at addressing to that situation by transferring methods and solutions, showing how the identification of probable scenarios saves life and assets. Structured certified trainings and seminars were implemented in HU and RO to bodies and entities related to city level management of emergency water issues in order to stimulate cooperation among relevant bodies and to develop current needs based on guidelines. The idea is to provide solutions for mitigation and adaptation to climate change issues to improve human skills and preparedness, and to overcome lack of knowledge in climate change related tasks at the city level.





Figure 23: Project Website "3C for Sustainable Cities" (www.3c-project.eu; 22nd of July 2016)

Description of the products:

The project provides intangible outcomes such as methodological knowledge of adaptation to climate change in urban areas, focussing on water supply, sewerage and urban drainage for a core staff of national experts (trainers). Follow-up activities such as courses and consultations were planned to disseminate this knowledge. This was supported by guidance tailor-made for national conditions in national languages.

The main products of the project are:

- 1. Good practice handbook for climate change adaption in urban areas
- 2. Handbook prepared for local decision makers and water engineers
- 3. Technical seminar to introduce climate change issues
- 4. Study (gap analysis)
- 5. Intensive trainings and wrap up workshops
- 6. National trainings (vocational training, professional days)
- 7. Accreditation of trainings and trainers by Hungarian Engineering Chamber



Especially the handbooks can be described as methodology papers including an overview of international experiences and solutions for climate change adaptation in urban areas, to provide a detailed overview on the relevant topics, and development of course content and teaching materials.

Besides this high number of different tangible products, the project team organised and conducted several dissemination activities such as joint cross-border event at the Hungarian-Romanian border, a study tour in the Czech Republic and a final conference. These events were used for project marketing on the one hand and for awareness rising on the other. So all in all the project outcomes supported and complemented each other.

Estimation of criteria fostering the sustainability of this project:

The structure of consortium clearly serves to reach the aims above. The international consulting company, DHI a.s. Prague as innovation supplier is well experienced in such types of activities with its qualified staff in partner countries. Budapest University of Technology and Economics and Technical University of Budapest, among of best universities of their countries, received and disseminated the innovative knowledge. They functioned as educational centres for VET, as well. Partners, North Transdanubian Water Utility Ltd. Tatabánya, and S.C. Apa Nova Bucharest are remarkable representatives of national municipal water utilities. They executed the pilot work so the knowledge could be directly transferred in their systems.

The project members were motivated, prepared and precise. They had already known each other and they were experienced in conducting European projects, especially of the Lifelong Learning Programme. It is important that the institutions were prepared for the administration of such big projects which lasted two to three years. The activity of each participant was equally important.

Finally, the project developed free materials as suggested by the European Commission. If the project team can offer an official accreditation of courses in addition to the free use, this will be the best way for a long-term implementation of project results / products on a national level at least.

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