



Leadership for European Public Health

Final Report Public Part

Project information

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Executive Summary

The mission of the Leadership for European Public Health (LEPHIE) Project was to develop a Problem-based, Blended Learning Leadership module/curriculum for European Public Health professionals. The curriculum is competence-based, process and output oriented, embedded in the Public Health paradigm, reflecting core PH functions and applicable to the performance within essential public health services. It is specifically related to European Public Health agenda and the way it is carried out at EU, Euregional, and national and community level. The Public Health Leadership curriculum aims at the development, mastering and enhancement of leadership competencies excluding management skills. The curriculum is designed for public health professionals at an intermediate leadership level and students aspiring for the leadership positions. It is supported by modern on-line technology such as: Elluminate (a web-conferencing program), Skype (a software application for voice and video calls and chat over the internet) and Blackboard or Moodle (learning management systems).

The main results of the project are: (1) a Module/Curriculum on leadership for European PH professionals including educational interactive e-learning materials in a Problem-based/Blended Learning (PBL/BL) format. We define BL as a combination of face-toface learning and e-learning (online learning). The Module is featured by three documents: Nominal Plan, Students Module Book, and Teachers' Handbook which constitute a complete educational program which can be used by any educational institution which wants to introduce leadership in its educational portfolio. The module is available in English, German and Lithuanian, (2) trained staff in partner institutions in the delivery of blended learning courses, (3) evaluation of the effectiveness of the PBL/BL practice in partner countries, (4) quality assurance mechanisms, quality criteria and quality guidelines, (5) educational blended learning network comprising partner countries, (6) dissemination actives at the local, national and international level, (7) final conference –Senior Public Health Leadership Forum, and (8) 4 pilot case studies as well as (9) a central repository (interactive web-page www.LEPHIE.eu). Moreover several scientific publications publication(s) in peer reviewed journals, international professional meetings and workshops and the Public Health Competencies Framework which can serve can serve as a useful tool in identifying gaps in knowledge and skills, and shaping adequate competency-based CPD curricula for public health professionals.

The project benefited PH professionals, academic tutors, lecturers and partner universities which tested and implemented the innovative BL curriculum. On long term, PH employers, professional organizations and higher education institutions will benefit from this project as due to the increased number of trained professionals and the impact their acquired competencies on PH practice. Finally, the implementation of the Module in partner institutions as well as promotion of the new innovative educational offer on Leadership in

Public Health at Association of the Schools of Public Health in European Region (ASPHER) web page (www.aspher.org) has a marked impact on the PH field.

The project is interdisciplinary, innovative and based on the knowledge transfer which is facilitated by learning in meaningful contexts. Problem-based learning supports the ability of learners to solve real-life problems whilst fostering communication and cooperation among students. This educational approach proves to be successful in the LLL context.

The project addresses higher education decision makers, course planners, teachers and trainers, researchers, public health professionals in Europe, public health employers and policy makers.

The well established, striving for success project partnership includes: Maastricht University (The Netherlands), the Sheffield Hallam University (UK), Kaunas University of Health Sciences (LT), Medical University of Graz (A) and the Association of Schools of Public Health in the European Region (ASPHER) which plays a key role in promotion and dissemination activities. It is worth noting that the project attracted some collaborating institutions to support the activities of the consortium with their advice and know how. The institutions include: The University of Griffiths (AUS), The Canterbury Christ Church University (UK) and the Rethmeier Group (North Carolina Chapel Hill, US). The collaboration shows that on-line education spans the world and is global. The success of the project proved that public health leadership BL/PBL teaching and learning is without borders.

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1. Project Objectives

The Leadership for European Public Health (LEPHIE) project, funded by the European Commission Lifelong Learning Program, aimed to develop a problem-based, blended-learning continuing education module/curriculum entitled Leadership for European Public Health. This competency-based curriculum provides a continuing education opportunity for Public Health professionals who hold or will hold leadership positions within their institutions or students of master courses in the area of public health or health related disciplines. The curriculum is also fit to prepare Public Health professionals interested in taking a leadership role in Public Health policy at the regional, country, and EU levels. Given the challenges facing public health professionals such as globalization, health threats, ageing society, and social and health inequalities which result in the increased level of unpredictability, a multidisciplinary public health workforce needs to be supported by new skills and expertise to develop leadership competencies to be effective in the 21st century political and policy oriented health care environment The main objectives of the project were as follows:

- to develop a PBL/BL module on leadership for European PH to be delivered by the network of higher education institutions to meet the educational needs of PH labour market and professionals who would like to access Leadership training in a part-time, less time demanding fashion.
- to develop the interdisciplinary content and teaching materials informed by the other LLP leadership project to meet current learning needs of European PH professionals;
- to transfer of the knowledge regarding PBL/BL from UM to partner institutions and training the teaching staff in use of PBL e-learning techniques,
- to pilot the Module in the UK at Sheffield Hallam University,
- to develop the evaluation methodology and guidelines which will facilitate the measurement of the efficiency of the developed practice, its feasibility, cultural relevance and continuity potential;
- to translate the module into a number of European languages (LT, DE, NL) in order to develop Public Health leadership potential across a range of European settings and networks of institutions capable of delivering PBL/BL courses;
- to develop the quality criteria related to the format , credits, work load, academic recognition of the Module comparable across partner organizations and quality guidelines to help develop the public health leadership curriculum for the future;
- to disseminate the results through project web-page serving as a central repository of teaching/evaluation materials, peer reviewed publications, ASPHER/EUPHA conference workshops and a final conference.

The proposed design of the project contributes to the development of behavioural, interpersonal skills which pertain to leadership competencies, generic competencies such as

ability to use modern ICT technology and PH specific skills related to PH leadership practice in Europe and is in line with the objectives of the LLP related to the development of skills to enhance employability and competitiveness of the beneficiaries on PH job market.

The proposed programme is an attempt to develop an integrated mutually recognised European Public Health leadership curriculum supported by high standard educational materials including: Nominal Plan, Student Module Book and Teachers Handbook. Each on-line session is planned to be delivered by a different university based on their interdisciplinary expertise but based on the detailed materials and instruction each university can deliver the module independently.

After being successfully piloted in the UK, Maastricht, Kaunas and Graz a mutually recognized international problem-based (PBL), blended learning (BL) leadership module worth 7 ECTS was fully mastered and weaker points were eliminated.

We hope that the integration of modern learning technology with collaborative learning of professionals supported by interdisciplinary competence-based educational offer which transcends institutional boundaries will result in a transformative learning which is about developing leadership attributes¹ and will constitute a small step towards interprofessional and trans-professional education.

The project involves modern technology, research and quality assurance components reflected by other project objectives such as the development of the blended learning manual to support course participants, evaluation research on the effectiveness of the blended and on-line learning method, the leadership content taught within a range of diverse educational and public health

The project seeks to assure a high level of educational quality therefore the educational materials such as Nominal Plan, Students Module Book as well as Tutor/Lecturer Handbook were developed in stages and each stage was assessed by the Quality Assurance Committee based on the special quality indicators for Blended Learning instruction. Moreover the project aimed to develop a network of institutions which promote PBL/BL and support national practices based on these educational approaches which has been reflected in the agreement signed by the project leads from each centre and the number of collaborating institutions which support the consortium in their innovative educational endeavour.

Finally, the project consortium undertook a wide dissemination campaign to promote the process, developed practice, educational approaches and the end product: Leadership for Public Health continuing education curriculum. The project has developed a web page: www.LEPHIE.eu which serves as a promotion, communication platform as well as a

¹ Frenk, J., Lincoln Chen, Zulfiqar A. Bhutta, Jordan Cohen, Nigel Crisp, Timothy Evans, Harvey Fineberg, Patricia Garcia, Yang Ke, Patrick Kelley, Barry Kistnasamy, Afaf Meleis, David Naylor, Ariel Pablos-Mendez, Srinath Reddy, Susan Scrimshaw, Jaime Sepulveda, David Serwadda, and Huda Zurayk. 2010. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet*. 376: 1923-1958.

repository of key materials and documents on leadership which can be useful for contemporary Public Health professionals in Europe. Every year LEPHIE project partners took part in the annual European Public Health conference sharing the results of their activities with international audience through presentations or thematic workshops. The consortium managed to publish scientific papers related to Public Health leadership and effectiveness of LLL Module on leadership using modern technology.

2. Project Approach

The LEPHIE is a multidisciplinary, complex and multifaceted project integrating European, Public Health, modern leadership and innovative educational methodological approaches.

The European dimension is on one hand reflected by the integrated know-how of the participating scholars, teachers, and their institutions and on the other it is seen in the content and scope of the project which places local, regional, national and global public health developments within a wider European perspective. The project assumes Public Health approach where Public Health is described as "the science and art of preventing disease, prolonging life and promoting health through the organised efforts and informed choices of society, organisations, public and private communities and individuals"². Integration of Public Health disciplines, and leadership content in this course aims to stimulate learning through a multidisciplinary process that allows for the development of solutions that can be applied in diverse European public health practices and contexts. The program specifically relates to the European public health agenda and the way it is carried out at the European, Euro-regional, national and community/local level.

In order to teach leadership to Public Health professionals and students in a LLL format the project uses innovative educational approaches and methods such as problem-based and blended learning modalities. In blended learning face-to-face and online education are combined. Online education can take many different forms, and hence also blends on-line education and face-to-face education. The on-line education can be synchronous or asynchronous.

Problem-based learning (PBL) was used as the instructional model in the development and implementation of the leadership curriculum. It was designed that students work on tasks in small groups on solving real problems. The students are viewed as active participants in learning, rather than passive recipients of knowledge and take responsibility for and plan their own learning as they construct or reconstruct their knowledge networks. Learning becomes a collaborative process in which the following conditions are met: students have a common goal, share responsibilities, are mutually dependent on each other for their learning needs, and are able to reach agreement through open interaction.³ Knowledge transfer can be facilitated by learning in meaningful contexts, and problem-based learning nurtures the ability of learners to solve real-life problems whilst fostering communication and cooperation among students.⁴ Such an educational approach

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² Winslow A. The untilled fields of public health. Science. 1920;51:23-33.

³ Suzuki, Y., Niwa, M., Shibata, T., Takahashi, Y., Chirasak, K., Ariyawardana, A., et al. (2007). Internet-based Problem-based Learning: International Collaborative Learning Experiences. In T. Oon-Seng (Ed.), *Problem-based Learning in eLearning Breakthroughs* (pp. 131-146). Singapore: Seng Lee Press.

⁴ ibidem

proves to be successful in the LLL context. Learning is contextual, collaborative, and constructive and the students can regulate their own learning. ⁵ The participants are offered interactive lectures, tutorial group meetings and other collaborative sessions at a distance. The course is delivered via an intranet such as Blackboard or Moodle and course material can be directly downloaded from the intranet. The combination of blended learning and PBL enabled international students to explore the main theoretical elements with regard to leadership in the public health domain and included a range of activities for self-development and assessment, face to face contact, e- activities and self-directed learning, supervised by international content experts as tutors.

To support the development and delivery of the course a lot of research and development activities were undertaken by the partners. The work on the course began with an extensive review of existing literature in Public Health leadership and blended-learning. Simultaneously an extensive literature review was conducted to develop a leadership competency framework to support the final module.

Through regular on-line and face-to-face contact, the partners worked together to develop the Leadership curriculum. Knowledge transfers between partners in blended-learning, problem-based learning, and leadership instruction allowed the program to be developed. The final Module consists of two face-to-face introductory meetings and six consecutive on-line sessions including on-line lectures and tutorials. This instruction took place primarily online via Elluminate and Skype, two main tools for online communication. A combination of reading, lecture, problem-based discussion, and student presentation was used to present the material. Presentations and participation in problem-solving were used to evaluate the progress of the participants.

A special attention was drawn to the quality of the module and developed materials. Following each pilot, the participants were asked for their opinion of the success of the course what they felt worked well, and which aspects could be improved. The LEPHIE partners took into account the feedback from both the students and teachers in the final elaboration of the Leadership curriculum.

⁵ Dolmans, D. H. J. M., De Grave, W., Wolfhagen, I. H. A. P., & Van der Vleuten, C. P. M. (2005). Problem based learning: Future challenges for educational practice and research. *Medical Education*, *39*, 733.

3. Project Outcomes and Results

The outcomes of the LEPHIE project can be placed within 6 major dimensions:

- Educational program
- Training
- Research
- Modern Technology
- Quality assurance
- Impact and Dissemination.

The educational program of the Leaders of European Public Health Module has been primarily developed based on Leonardo da Vinci project of the European Commission 'Developing Leadership Improving Healthcare (DELTAH). This project concentrated on the development of EU standards for leadership training in healthcare.³ In the present program, the DELTAH project functioned as its guide however based on the extensive literature review on leadership and leadership training we have developed a program which is designed to introduce many facets of leading in the modern public health environment in Europe and help the participants to develop leadership competencies through the following:

- Examining the key debates around Leadership in Public Health in relationship to modernism, postmodernism, technological change and their implications for leaders within organisations.
- Introducing key theoretical frameworks that underpin leadership learning, and enable the critical use of this knowledge and understanding by applying theory to actual practice within the context of Public Health.
- Developing the ability to reflect on the Public Health leadership role and development needs of individuals, so that personal and professional development planning for a leadership role is built upon sound analysis of self in context.
- Stimulating self-assessment of leadership competencies by the participants to help identify knowledge gaps and further training needs in leadership.

Educational materials consisting of Nominal Plan, Student Module book and Teacher Handbook together with supporting detailed documentation including session plans, literature, exercises, on-line lectures and interviews with public Health leaders have been developed covering the following sessions: *Systems Thinking, Political Leadership, Collaborative leadership: Building and Leading Interdisciplinary Teams, Leadership and Communication, Leading Change, Emotional Intelligence and Leadership in Team-based Organizations, Leadership, Organizational Learning and Development.* Additional elective sessions on *Public Health Values* has been developed a collaborative partners (the Rethmeier Group, US) to support our Module and cover the horizontal dimension on *Ethics and Professionalism*.

The Module is competence-based therefore the Public Health Leadership Competency Framework has been developed to support the curriculum. It was developed in a systematic way including four rounds of consensus development panels and review using the Delphi method the ASPHER's Working Groups on Innovation and Good Practice in Public Health Teaching and Education (WPIGP). The Framework can serve as a useful tool The Public Health Leadership Competency Framework can serve as a useful tool in identifying gaps in knowledge and skills, and shaping adequate competency-based CPD curricula for public health professionals. It can also be used by public health professionals as a tool for self-assessment and personal development planning.

Four pilots took place to test the module the participants followed 8 weeks of primarily online meetings conducted via Elluminate and Skype. Face-to-face meeting were used to introduce the participants to the course and the blended-learning technology they would need to use. Reports and recordings from the pilots have been preserved on the LEPHIE website in the student section (restricted to participants) for future for consultation.

To build the practical reference of the Module a series of interviews with top Public Health leaders "Expert Videos" have been recorded in professional studio to serve as an educational material for the students. They are included in the educational materials and the students can use them for their final assessment exercise.

Specialised training

The teachers and tutors from the partner institutions were offered training in problem-based learning, blended learning and technology as a result a Blended Learning Manual has been developed to support the educational activities on line. Besides the training, the teachers/tutors were offered a possibility to test their sessions using the Elluminate interface under the supervision of experts from the Maastricht University. Moreover additional training was provided for the staff from the Sheffield Hallam University and the Sheffield University which inspired by our project introduced the Blackboard Collaborate system in their teaching practice.

Research

The research component of the project was cantered around 4 aspects: 1) systematic literature review of the existent leadership and public leadership programs to support the development of the curriculum, 2) systematic literature review of the leadership competencies and frameworks to support the competence-based aspect of the leadership Module, 3) systematic literature review on the effectiveness of blended/hybrid learning to support the development of the module and evaluation of the training and 4) evaluative research based on the case study design in which each pilot course was separately evaluated thus forming an individual case study. The Competency framework was used as a pre- and

post- self-assessment study and standardised tests to measure students' performance, satisfaction and effectiveness of the course using BL/PBL methodology. The results of the research have been summarised in the form of research articles submitted to relevant peer reviewed journals. Additionally, through the collaboration with ASPHER some synergies were found and the study on public health education in Europe was conducted based on the survey and the results published in the peer reviewed journal.

Modern Technology

In order to acquaint the students and faculty with modern technology numerous trainings took place both F2F and on line. Special instructional materials were developed to support the students and teachers. Learning environments of the participating universities have been compared and best solutions were sought for the delivery of the Leadership Module. Blended Learning Coordinator from Maastricht University took special care to supervise and guide the participants and staff before and during teaching sessions. For each pilot a Virtual Learning Environment (VLE) was constructed. The Maastricht and Graz pilots used the 'Blackboard' platform, whereas the Kaunas pilot used the 'First Class'. Each platform was accessible by a username and a password. Only registered students and faculty staff could enter the VLE. Maastricht students were familiar with Blackboard. The Austrian students were using the 'Moodle' at their own university and the Kaunas students and teachers used 'Blackboard' for the first time and were new to the phenomena VLE. Special organization was always developed in VLE to support learning, communication and access to the materials. Recordings of the sessions are stored at the LEPHIE project web page.

Two publications related to online education have been published in which the LEPHIE project and its innovative technological approach is presented as a good practice. One publication is a book on World-wide education and another is a guidebook on on-line and problem oriented learning.

Quality Assurance

At the start of the project three Committees were formed to assure the quality of the products and activities: The Quality Assurance Committee, Scientific Committee and Management Committee. The LEPHIE Quality Assurance Committee (QAC) was responsible for monitoring the quality of the LEPHIE curriculum, teaching materials, and associated products (such as the student and tutor handbooks) to ensure that they are consistent with quality standards applicable to a broad range of institutions in the European Higher Education Sector. One major facet of this work included evaluating the learning outcomes, teaching methods, content, case-study, and reading materials for each problem-based learning session as well as identifying quality criteria for problem-based (PBL) and/or blended learning (BL) programmes in the published literature. The work of QAC was delivered in 5 phases: 1: Reviewing and developing quality criteria, 2: Developing a quality

criteria questionnaire, 3: Evaluate the LEPHIE module nominal plan, 4: Preparation of academic quality guidelines, 5: Development of LEPHIE AQC Guidelines. The Quality Committee has met both on line and in face and developed the quality criteria and made sure that the partners provide adequate information related the university practice in their centres such as: requirements for the launch of the course or module, admission criteria, resources, student assessment, credits and their calculation. This information was important for the development of the Nominal Plan a document which serves as a description of the course and its requirements which is necessary in the institutionalisation process of the course and mutual recognition of the final diploma or credits.

The Scientific Committee consisting of senior academic makes recommendations related to the location of the leadership Module within the university structures and its future. Finally, the Management Committee consisting of the project lead partners made sure that the project meets it objectives and delivers the outcomes at the best possible level given institutional or time constraints.

Impact and Dissemination

Dissemination activities have taken place throughout the LEPHIE project. The project aimed to reach a wider public health audience through dissemination activities such as participation and presentation at major public health scientific and educational events such as annual European Public Health Conference(Amsterdam 2010, Copenhagen 2011, Malta 2012), project webpage, scientific publications in peer reviewed journals and promotion publications and communications on a local and European level which covered the aspects of European Public Health Leadership, leadership competencies, competence-education, Blended/Learning and on-line education, lifelong learning and Continuous Professional Development (CDP) for public health professionals and research on the effectiveness of teaching using on-line technology. It is worth noting that the partners managed to publish in very influential journals such as The Lancet and European Journal of Public and other important scientific fore. The consortium also tried to participate in educational fairs and promotion activities. The project has a very big impact on public health community through not only communicating and debating with key European and Public Health stakeholders but also through conducting pilot training courses recruiting Public Health professionals from various European public health environments in the UK, The Netherlands, Lithuania and Austria. The impact of the project is also secured by recording and disseminating a series of interviews with Top Public Health Leaders such as: The Director of WHO Europe Zsuzanna Jakab, Director of EU Health and Consumers DG, Professor of European Public Health and ASPHER President Helmut Brand, Scientific Director of the School the School for Public Health and Primary Care (CAPHRI), Maastricht University. Professor Dirk Ruwaard the Chair of the Department of Health Services Research at Maastricht University and Jan Harm Drissen, a COO of the Management Board of Maastricht UMC+. The interviews serve as an educational material for the students and a road map for future leaders.

Project website is maintained and updated on the regular basis and it forms a very important reference platform for educators, public health professionals and students who are interested in public health leadership and in leadership in general. The web page may be visited at http://lephie.eu (English). We also try to find synergies with other projects and programs, for example: the project is highly visible in the agenda of ASPHER Working Group on Innovation and Good Practice in Public Health Teaching and Education which invited the LEPHIE project to participate in the "Best Practice Sharing Seminar" on e-learning Practice in Public Health. We also participated in the development of the Policy Brief entitled: THE EUROPEAN PUBLIC HEALTH WORKFORCE — EDUCATION AND SKILLS DEVELOPMENT under the Framework of the ASPHER operating grant: 20103202-ASPHER_FY2011. It is published by the European Observatory on Health Systems and has high impact on key public health educational institutions in Europe.

ASPHER as the partner leading project dissemination, with its 94 member institutions represented in 41 European countries, co-organiser of the European Public Health Conference, organiser of the Global Summit of Schools of Public Health, leading partner of the APHEA accreditation consortium, and host to the European Academic Global Health Alliance, is key organization to support the sustainability of the project and its impact. ASPHER is central within the EU policy context with its work programme financed partly via the EU Health and Lifelong Learning Programmes. It has a leading role in the work on European Public Health Operation seven (EPHO 7 -workforce development) under the WHO EURO Health 2020 policy. The high profile of the LEPHIR project is facilitated by ASPHER which included presentations of the LEPHIE and will still include beyond its lifetime at various events such as: yearly ASPHER Deans' and Directors' Retreats, Maastricht 2013, ASPHER Honours Committee, European Public Health Conference – Brussels 2013, Global Summit of Schools of Public Health at EPH Conference – Brussels 2013.

Finally it is worth noting that the Final Project Conference: The Senior Leadership Forum held in Brussels on 21st March gathered the high profile audience from all over Europe, the US, and Thailand interested in public health education and leadership who could listen to high profile key note presentations on EU policies related to LLP, transforming public health education and new trends on global PhD leadership courses and leadership and 2020 Strategy. Project partners presented their achievements and professional debate was facilitated. The conference could be accessed on line and input from the participants who were on-line was facilitated.

4. Partnerships

The LEPHIE partnership represents a unique constellation of the institutions which fully support the interdisciplinary and innovative aspects of the project. Each institution represents expertise and competencies which complement each other. The involved departments and staff bring a "know how" which contributes to the creation of the European added value. Maastricht University (NL) is bringing expertise in European aspects of public health, leading in education and modern approaches to learning and teaching supporting them by educational research, in cooperation with the Sheffield Hallam University (UK), "Centre for Leadership in health and Social Care"- an expert in team-based teaching, leadership and inter-professional education, Lithuanian University of Health Sciences (LT) a modern and dynamic institution bringing in Public Health education and research expertise, Medical University of Graz (AT) contributing with the interdisciplinary health care knowledge and modern approach to education and finally the Association of Schools of Public Health in the European Region (ASPHER) which links the partners with all major stakeholders in the area of public health in Europe and supports promotion and dissemination activities assuring great impact of the project. Since 1st October 2010 the LEPHIE partners have been working together to make the European Erasmus Multilateral, Curriculum Development project 'Leaders for European Public Health' (LEPHIE) a success.

It has to be emphasised that the Consortium managed to attract collaborating partners interested in the on-line public health education and leadership. Therefore three institutions have joint the work of the partnership supporting the development of the educational sessions, providing different perspectives and supporting dissemination activities. The institutions included: The University of Canterbury Christ Church College (UK), Griffith University (AUS). The Rethmeier Group, North Carolina Chapel Hill (US) joined us at the end of the project and contributed with the development of additional training session.

5. Plans for the Future

Although the official ending date of the LEPHIE project was on 31st March 2013, the Consortium has assured that the some of the activities will be carried out beyond the lifetime of the program. The Leadership curriculum has been institutionalised and will be run on a yearly basis. It has been incorporated in the Master Studies of European Public Health at the Faculty of Health Medicine and Life Sciences at Maastricht University as a horizontal trajectory. Each session of the Leadership Module will be run once or twice a month. The same partners are committed to deliver their sessions. The VLE of Maastricht University will be used for this purpose. Other partner universities will offer the Module as an elective Module. Moreover ASPHER will advertise the Public Health Leadership Module through its web-page for the schools of public health in Europe. Collaborating partners will be also involved in teaching and further research related to competence self-assessment. The partners are still working on additional publications based on the project.

Additionally some activities which are vital for the development of public health workforce and their competencies and qualifications will be undertaken. One of the success and future prospects of the project is its involvement in the collaboration with WHO Europe within the European Action Plan (EAP) on strengthening public health capacities and services. The EAP reflects an important mandate for strengthening public health services in the WHO European Region. The project will be a part of the Working Group of *Public Health Workforce Development*.

Another collaboration path falls within the ASPHER Competencies project where LEPHIE will contribute with expanding the list of public health competencies with the leadership competencies developed in the project.

The partners still foresee participation in the conferences and seminars in order to promote the achievements of the project e.g. LINQ Conference Rome 16-17 May, ASPHER Deans and Directors Retreat and Annual Public Health Conference 2013 to be held in Brussels.

There are many spin off activities which will be picked up by the project partners in the area of new technologies and on-line learning, competencies, evaluation, public health capacities building and leadership.

6. Contribution to EU policies

Given the challenges facing public health, a multidisciplinary public health workforce is needed supported by new skills and expertise. Europe 2020 Strategy puts among other things knowledge and innovation at the heart of the EU's blueprint for competitiveness⁶.

Leaders for European Public Health (LEPHIE) is a project which greatly contributes to various EU policies especially Education and Training 2010 Work Programme strategic framework for European cooperation in education and training ("ET 2020") which is a follow-up to the earlier Education and Training 2010 work programme launched in 2001. Since lifelong learning is one of the priorities and at the same time is a key to employment, economic growth and more skilled workforce, capable of contributing and adjusting to technological change with new organizational work patterns. Our project recognizes a considerable challenge of rapidly-changing skills needs in EU labour market, the need for social, transformative skills, advanced ICT literacy and a need for innovation in educational and training practices in higher education.

The EPHIE project is in line with its operational objectives of the LLL program by supporting:

- the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning through the development of ICT-based leadership content, using BL techniques, providing tutorials and lectures fully in the virtual learning environment contributing to the development of new pedagogical tools and acquisition of new skills by staff and students to make the LLL practice more innovative. The adaptation of institutional setting and rising awareness of the possibilities of ICT technologies contributes to the modernization of the participating universities.
- the contribution of higher education and advanced vocational education to the process
 of innovation by the development of high quality educational practice. The content of
 the course has been developed in a collaborative way by partners and is a fully
 integrated delivered from different locations educational innovation contributing to high
 performance level and European dimension in modern educational systems,
- the development of innovative practices in education and training at tertiary level, and
 their transfer, including from one participating country to others by transferring
 knowledge not only from existent piloted and internationally evaluated course on
 leadership from another EU LdV Pilot Project DELTAH but also from the expertise and
 excellence of other universities in the area of modern educational methods and on-line
 teaching techniques.

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⁶Zsuzsanna Jakabm Opening Ceremony Medipol University Istanbul, Turkey, 18 October 2010 http://www.euro.who.int/__data/assets/pdf_file/0006/124593/Rdspeech1810Tur-medipol-university.pdf

- Programmes or modules with the use of ICT tools and services. The Module on Leadership is delivered using blended learning and teaching approaches which are fully ICT based and make use of SKYPE and other relevant programs such as Elluminate and Moodle which facilitate learning and teaching in virtual learning environment. The partners are trained in the use and delivery of ICT tools and services.
- Promoting an awareness of the importance of cultural and linguistic diversity within Europe, as well as of the need to combat racism, prejudice and xenophobia by recognizing the importance of cultural differences related to the content of the leadership module as well as the linguistic diversity. That is why national practices and translations of the materials will be carried out to meet the demand of the public health professionals who do not speak English. WP4 LEPHIE National Practice is devoted to this policy.
- Making provision for learners with special needs, and in particular by helping to promote their integration into mainstream education and training particular by helping to promote their integration into making provision for learners with special needs, and in particular by helping to promote their integration into mainstream education and training by the use of e-learning technology which fosters inclusion of those who might have problems with attending the traditional courses and can take advantage of the innovating LLL offer from home. Additionally, that is accounted for possible language problems of practitioners who don't speak English. They can follow the course in their own language.

By improving the quality and efficiency of higher education LLL training related to leadership in PH, the project addresses the ET2010 complementarily area helping PH professionals to be better skilled and competitive, fostering equity and social inclusion. The project responds to the needs of the labour market making learning more relevant and based on competencies in line with EQF on national and European levels. To certain extend it also addresses the Erasmus Mundus complementarily area by the fact that partnership develops the module which will be mutually recognized by partner institutions. The partners have already developed an architecture which allows for integrated provision of the course/module elements from various locations, meeting students on-line in virtual learning environments thus supporting LLL and offering more friendly learning opportunities for professionals.