



**Promoting the improvement of elderly ICT skills  
and wellbeing by inter-generational and multi-  
sectoral education (PRIMER-ICT)**

Final Report

Public Part

## Project information

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## Executive Summary

As the 'third age' of human life becomes noticeably longer, the opportunity for elderly to obtain new skills reduces the tendency to consider this period of life as being disadvantaged. Hence, the fundamental aim of the project PRIMER-ICT is to educate older people in four participating countries (Slovenia, Ireland, UK and Austria) in Information and Communication Technologies (ICT) skills/practice by using an inter-generational and multisectoral approach empowering elderly to use ICT on everyday basis to improve their quality of life and to re-engage them in the society. To achieve this aim, students, primarily from health and ICT related fields have been recruited to become 'trainers/teachers'. These students in turn have and will utilise acquired skills and knowledge to help train multipliers (community nurses, nurses in elderly homes, family members, volunteers from different sectors/ages, elderly), who in turn help training elderly. The initial task of the PRIMER-ICT project was the preparation, translation and localisation of blended learning course materials for all three target groups. Concurrently, the development of a PRIMER-ICT Portal and Moodle platform has been completed. The developed "blended" learning paradigm consists of pedagogical/didactic principles (like problem based learning, enquiry based learning, active learning and experiential learning) and methodologies for the most effective and efficient presentation of blended courses to target groups. All developed materials are open to public. During the last half of the project we executed the blended courses for all three types of users with great success. We reached a substantial number of elderly people within the elderly homes and the evaluation showed the great satisfaction of all types of learners. As a consequence the project generated a great interest among elderly homes and older people organisations and the plans for future courses implementation have been prepared and some new courses already started in the beginning of 2011. The primary reason for the success of the project is the three levelled educational scheme, multisectoral cooperation and the inclusion of well-trained multipliers into the learning process who were able to motivate, recruit and keep elderly interested in the courses. The individual working in small groups and short courses is another prerequisite for successful work with elderly.

Following the replacement of Finnish partner with the Austrian partner, the new consortium worked well together and brought together all the skills and competencies required to carry out the proposed work programme. There was an appropriate distribution of tasks across the partners and appropriate contributions of all partners. An exploitation plan was devised by all partners, led by UK two key approaches utilising two approaches: internal exploitation and direct external exploitation. It is also noted that the exploitation considerations are different for each partner given the difference in their organisational, policy and educational contexts.

To ensure sustainability we have adopted a two-prong approach. First, we ensured that the project website will be maintained beyond the funding period. It has been agreed that our lead partner, Slovenia is responsible for the maintenance of the portal, through their experts in ICT. Currently, the portal is located in a secure site. Making our results sustainable is another route for exploitation. Keeping our results on a website after our project has finished (either free-of-charge or at a cost for the user) is one way of ensuring they have a life.

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# 1. Project Objectives

The project aims were to educate students primarily from health and ICT related fields (called teachers), which then educated the multipliers (community nurses, nurses in elderly homes, family members, volunteers from different sectors/ages), who latter educate elderly.

As a consequence the second main PRIMER-ICT aim was to (1) assure reduction of isolation of elderly by promoting their collaboration through ICT channels of communication, (2) to improve their quality of live by increasing their ICT skills and subsequently their employment of ICT in everyday activities and (3) their reactivation into the society (the elderly will be able to transfer their live earned skills, knowledge, and wisdom back to the society).

The contents of e-learning courses were prepared in languages of all participating countries.

The content is aimed to:

- Teachers (course materials from the ICT and gerontology fields, pedagogical/andragogical theories, information and data security),
- Multipliers (materials from the ICT and gerontology fields, health promotion, healthy living),
- Elderly (basic ICT skills like browsing the Internet, writing e-mails, using word processors, using chat rooms, forums available through self-developed PRIMER-ICT portal).

During the PRIMER-ICT project we also developed a portal (web page) which enables the connection of participants through various forms of communication like e-mail, social networks, chat rooms, forums and blogs; portal also includes daily overview of news and events.

Previous experiences in the preparation of e-learning material for different users showed us that working with smaller groups of people are preferred in environments where the target population has low ICT literacy levels. This also enables the organisation of mobile e-classrooms.

## 2. Project Approach

### 2.1. Methodology

The PRIMER-ICT project has a multisectoral and inter-generational target population: elderly, who live in homes for the elderly, their own homes or sheltered housing, members of self-help group networks, community nurses, nurses in elderly homes, social workers, students, family members and volunteers focused on three main target groups namely: elderly (acquiring ICT skills), educators - students from health and ICT related fields (acquiring and transferring ICT skills and knowledge about working with elderly) and multipliers (acquiring and transferring ICT skills and knowledge in working with older people). Because of the importance of the project (teaching older people the ICT skills), measures were made to ensure that all involved in the delivery of the programme offered in this project are adequately prepared and trained for their role and that the project has had the desired impact: motivated elderly using ICT to improve their quality of life on everyday basis. To this end, we have included modules for each of the various groups, 'Teacher/trainers' (students, nurses, physicians, volunteers, family members and other professions) as well as dedicated ICT courses for older people.

The initial task of PRIMER-ICT project was the preparation, translation and localisation of e-materials for educators, multipliers and elderly. Concurrently, the development of the PRIMER-ICT Portal and Moodle platform has been completed. The paradigm for blended courses and the strategy for the course implementation have also been successfully designed. All partners have been involved in above-mentioned tasks. All learning courses materials are open to public. In general, one of the greatest challenges in using e-learning, is the neglect of the individual needs and abilities of the learners especially when dealing with elderly, due to the fact that they are invariably from different age groups, diverse socio-economic backgrounds including formative, secondary and tertiary education and possibly have other special needs. In view of these diverse characteristics adaptability and personalisation was integrated into course materials and materials and course management platform to meet individual needs. Recent research shows that automatic course personalisation is not always desirable. Thus the main methodological achievement of the project are the well trained multipliers who were and are able to motivate, recruit and keep elderly interested in learning, in addition to ensuring the individualisation and personalisation of learning paths for each elderly employing individual approach. .

Course materials were developed in the manner to enable blended learning. A "blended" paradigm developed consists of pedagogical principles and methodologies for the most effective and efficient presentation of blended courses to all three target groups. Following completion of the blended courses, the coordination strategy for course presentation has been developed in the manner to most effectively reach all three target groups in all countries.

In the last six months of the project, ICT courses for older people have been implemented. They were delivered through blended learning methods (partly online partly face-to-face). Due to previous experiences in preparation of e-learning material

for different users we worked with smaller groups of elderly using the project mobile e-classrooms consisting of 5-8 portable computers and of course the facilities and infrastructure provided by cooperating external institutions. In addition we developed course materials, individual work with multipliers, elderly were further motivated to participate in the courses with videoconferencing, Nintendo Wii games and small awards.

## 2.2. Project management

All project activities were monitored and controlled by Project Management Board (PMB) that consisted of senior representatives of each partner institution. FHS UM was the Chair of the Project Management Board (PMB), representing the project with the EACEA and other authorities. Chair of PMB worked closely together with work package leaders and the quality assurance leader on all significant issues. PMB was ensuring that the project had robust mechanisms for financial management and control and was distributing EC funds to partner contractors. It also transferred complete costs statements to the EACEA, together with the final report and oversaw corrective actions in case of deviation from plans.

The quality assurance group (QAG) of the project was assessing execution of individual activities, tasks, products; outcomes and the project impact on target groups especially elderly. They also evaluated the participants' satisfaction after courses implementation and the gained ICT skills and knowledge of target groups' participants. Each partner has appointed one member to the QAG and an external expert was appointed as its chairman.

For the monitoring of the execution of the project, administrative and financial control and the assessment of involvement of partners the PMB developed reporting tools (approved by QAG) have been used and were submitted to the coordinator on monthly basis. The detailed project planning and monitoring was done by MS Project software. For the communication purposes and project repository management Google Groups and Dropbox file storage were used.

The PMB has had four very productive face to face meetings; two of them were combined with the QAG meeting.

## 2.3. Dissemination

A project dissemination strategy was devised to effectively implement dissemination strategies. This ensured that the results of the project were published in a planned and orderly manner. The dissemination activities included the webpage, project flyers, a brochure, publications, oral presentations, conference presentations, seminars, workshops, training courses and newspaper articles. An editorial board was set up to monitor the publications and to ensure a standardised approach to promotional material. The Project logo defined and identified the dissemination outputs. Continuity and updating of public material took and will take place through the website which contains all relevant information about the project partners such as



contact details and an automated newsfeed on the page gives alerts to current events relevant to the project.

Coordinated dissemination activities took place at each stage of the project commencing at local level to attract interest from community organisations, voluntary bodies and other interested groups, to the project. This was further expanded to reach the three target groups for the courses, teachers (students from health and ICT related fields), multipliers (community nurses, volunteers, carers) and older people (acquiring ICT skills) culminating with the wider national, European and international audiences through publications and conferences presentations.

Communication among the partners was managed through discussion forums, emails, uploaded files, web links, video conferences and attendance at planned project meetings that adhered to pre-planned agendas. Promotional events were in preparation to run following the completion of the courses which expanded the audience for the project achievements.

Following completion of the courses detailed analysis of the work were conducted to learn from the project and to expand the audience for the course which it is envisaged will grow exponentially especially if previous students from the course become multipliers thus sustaining the project into the future.

#### 2.4. Exploitation

WP 7 'Exploitation' focuses on the usage of project results after the project has ended. An exploitation plan was devised by all partners, led by UK. It has been accomplished by the consortium using two key approaches. The first approach related to an internal exploitation while the second approach comprises of a direct external exploitation of the project results. PRIMER-ICT's exploitation included all activities of the consortium in the past and detailed public information about this project. It is also noted that the exploitation considerations are different for each partner given the difference in their organisational, policy and educational contexts. The project website will be maintained after the EU funding has been ended. This will be possible due to the fact that some teachers acquired enough skills that allow them to update the main PRIMER-ICT website.

The exploitation of PRIMER-ICT is targeted at a number of groups of individuals, organisations including Non-Government Organisations (NGOs), service providers for older/elderly people, as well as the older population in general. Because our project also aims to foster inter-generational learning, it is important to target the younger generation who has an important and potential role to contribute to the society that has an increasing ageing population. The reciprocal relationship within the inter-generational and multi-sectoral contexts cannot be over-emphasised.

As modules developed by PRIMER-ICT project partners are already translated in three European languages and implemented in four EU countries, there is a great possibility that interest from other countries might result in materials being translated into other languages. Thus, the quality of education and training in ICT skills will be improved throughout Europe, enhancing the lives of older/elderly people's health and independence in the long-run.

A number of exploitation activities were performed, including demonstration workshops in each partner country as well as at international conference.

## 2.5. Sustainability

The Sustainability of PRIMER-ICT is the capacity of the project to continue to exist and function beyond the end of the project timeline. In this project our aim was to ensure that we will be able to make the best long-term use of the results at the local, national and international level. We have adopted a two-prong approach. First, we intend to maintain our website beyond the funding period. It has been agreed that our lead partner, Slovenia will be responsible for the maintenance of the portal, through their experts in ICT. Currently, the portal is located in a secure site. Making our results sustainable is another route for exploitation. Keeping our results on a website after our project has finished (either free-of-charge or at a cost for the user) is one way of ensuring they have a life. Second, we secured further funding for PRIMER-ICT as a means of keeping our project and its results sustainable in the short and long term. PRIMER-ICT aims to guarantee the sustainability of this project results by reaching the critical mass of users through various networks and promotional activities as well as funding sources.

From a local perspective within each partner country, efforts were being made to tap into local knowledge of the target market through the development of a market plan so that known competitors and commercial interests would be identified. Local networks including business and commercial sectors are targeted.

Nationally, there is scope to influence policy and practice through national bodies that represent older/elderly people so that campaigns for government support and funding could be raised to sustain the work of PRIMER-ICT. The nature of sustainability of PRIMER-ICT may differ in each partner country.

From an international perspective, modules developed by PRIMER-ICT project partners are already in three European languages and will be implemented in four EU countries. It is recognised that there is great potential for this work to be translated into other languages. To guarantee the international dissemination and to offer PRIMER-ICT materials for use in countries currently not involved in this project, our results were and will be presented at international events including conferences. Dialogue and information exchange between EU experts in teaching ICT skills is to be encouraged and structured.

### 3. Project Outcomes & Results

As the 'third age' of human life is becoming noticeably longer, the opportunity for senior citizens to obtain new skills lowers the degree to which ageing is considered as a period of life dominated by being disadvantaged in many ways. Post-professional life is no longer seen as a period of disengagement but rather as a period which opens up on new opportunities and new perspectives; older people are no longer seen as dependent and taken care of, but rather as active and self-determined. Beyond this individual perspective, however, the societal perspective is of equal importance: recent studies have shown that, due to decreasing reproduction rates throughout Europe, the competence and experience of older people will be absolutely crucial in the future in order to stabilise economies and to maintain the overall competence of the societies of Europe.

The PRIMER-ICT project is a significant extension of the successfully finished EU Socrates - Grundtvig project »Promoting the Involvement of Older People in Partnership Learning Experiences – POPPIE«. In the POPPIE project we used the participative approach – elderly could decide how they would like to be involved into the research activities regarding their use of the technology. The results showed that elderly clearly presented the interest to employ information and communication technology (ICT) in their daily activities. Based on this fact we designed the PRIMER – ICT project work plan in the manner to further promote the use of ICT among elderly and to educate elderly population in ICT skills/practice using inter-generational and multisectoral approach with the aim to empower them to prevent feeling isolated, improve their quality of life and their feeling of usefulness to society, to be in more in control of their own lives and finally to re-engage elderly into the society (elderly would be able to use their transferable skills, knowledge and wisdom to contribute to the society as a whole). Contrary to similar endeavours the main aim of the project is to educate elderly in such manner that they will persuade not just go to seminars but to use ICT in their everyday lives and to find the best didactic and presentation methods to achieve this aim. To fulfil this task we educate students primarily from health and ICT related fields, which then educated multipliers (community nurses, nurses in elderly homes, family members, volunteers from different sectors/ages), and then multipliers educated, and will be educating elderly.

Another outcome of this project is to empower the elderly to employ ICT in the manner to be able to access and provide information which in turn, would enable them to identify resources that might help them to improve their well-being and quality of life. At the same time PRIMER-ICT developed a wide network of educators and multipliers that will have the knowledge and experience of working with older people and also in various ICT skills. In that manner we strive to ensure the sustainability and the continuous development of the network to benefit a larger audience thus extending our widening access of ICT education and use among a larger proportion of older people and their extended family.

The content of e-learning courses has been prepared in the languages of all participating countries. Each partner has also adapted and localised the materials for their local environment. The content is aimed to educators/trainers (course materials from the ICT and gerontology fields, pedagogical/andragogical theories, information

and data security), multipliers (materials from the ICT and gerontology fields, promotion, healthy living), older people (basic ICT skills, browsing the Internet, writing e-mails, using word processors, using chat rooms, forums available through self-developed PRIMER-ICT portal, materials on healthy living such as nutrition and healthy eating, active living and ageing, health promotion and education, as well as on communication. We also develop applications that will enable the connection of participants through various forms of communication like e-mail, chat rooms, forums and blogs; and the portal also includes daily overview of news and events.

During the last half year of the project we executed the blended courses for all three types of users with great success. We reached a substantial number of elderly people within the elderly homes and the evaluation showed the great satisfaction of all types of learners. The evaluation showed the great satisfaction of all learners especially teachers and multipliers. The project generated a great interest among elderly homes and older people organisations and the plans for future courses implementation have been prepared and some courses already started in the beginning of 2011. The primary reason for the success of the project is the three levelled educational scheme, multisectoral cooperation and the inclusion of well-trained multipliers into the learning process who were able to motivate, recruit and keep elderly interested in the courses. The individual working in small groups and short courses is another prerequisite for successful work with elderly.

## 4. Partnerships

After the replacement of Finnish partner with the Austrian one, the new consortium worked very well together and brought together all the skills and competencies required to carry out the proposed work programme. There was an appropriate distribution of tasks across the partners and appropriate contributions from each partner. Each of the partners in addition to general knowledge in gerontology, geriatric and health care had contributed specific experiences which are necessary for the project execution, namely Slovenian partner had expertise in ICT, e-learning, blended learning and developing adaptive course materials, the Austrian partner the skills in e-learning, didactical and pedagogical issues in working with elderly and quality assurance, the Dublin and UK partners had specific knowledge in gerontology and andragogical/pedagogical principles and health promotion.

The main added value of working together was:

- Integrating different expertise, experiences, cultures of caring for elderly, national policies regarding elderly,
- Combining best practices of partner countries, viewpoints of how to work with elderly, how to teach them ICT skills and execute courses in different cultural and country specific contexts, and integrate these skills in their everyday lives,
- Geographical spread of the project and
- The course materials, paradigm and other project outcomes are produced in three different languages namely Slovene, English and German.

From the wider international perspective, we established the partnership with top rated organisations from USA (Johns Hopkins School of Nursing, University of California School of Nursing, University of Memphis School of Nursing) and Japan (University of Tokyo) in topics related to the PRIMER – ICT in the manner to cooperate in scope of other international initiatives.

## 5. Plans for the Future

The Sustainability of the PRIMER-ICT project is the capacity of the project to continue to exist and function beyond the end of the project timeline. In this project our aim was to ensure that we will be able to make the best long-term use of the results at the local, national and international level. We have adopted a two-prong approach. First, we intend to maintain our website beyond the funding period. It has been agreed that our lead partner, Slovenia will be responsible for the maintenance of the portal, through their experts in ICT. Currently, the portal is located in a secure site. Making our results sustainable is another route for exploitation. Keeping our results on a website after our project has finished (either free-of-charge or at a cost for the user) is one way of ensuring they have a life. Second, we secured further funding for PRIMER-ICT as a means of keeping our project and its results sustainable in the short-and long term. PRIMER-ICT aims to guarantee the sustainability of this project results by reaching the critical mass of users through various networks and promotional activities as well as funding sources.

From a local perspective within each partner country, efforts were being made to tap into local knowledge of the target market through the development of a market plan so that known competitors and commercial interests would be identified. Local networks including business and commercial sectors are targeted.

Nationally, there is scope to influence policy and practice through national bodies that represent older/elderly people so that campaigns for government support and funding could be raised to sustain the work of PRIMER-ICT. The nature of sustainability of PRIMER-ICT may differ in each partner country. Also each participating country will try to implement the PRIMER-ICT curriculum to the different health care curriculums to be able to educate students from health sciences for proper didactical approaches to elderly people regarding the use of ICT. In this way students and later graduates will empower quality of life of elderly people.

From an international perspective, modules developed by PRIMER-ICT project partners are already in three European languages and will be implemented in four EU countries. It is recognised that there is great potential for this work to be translated into other languages. To guarantee the international dissemination and to offer PRIMER-ICT materials for use in countries currently not involved in this project, our results were and will be presented at international events including conferences. Dialogue and information exchange between EU experts in teaching ICT skills is to be encouraged and structured.

As part of the PRIMER-ICT project an exploitation plan was devised by all partners, led by UK partner. This section provides an overview of the exploitation possibilities.

- Logo and graphical identity
- Collaborative workspaces
- Mailing lists
- Promotion materials like leaflet and Brochure

- PRIMER- ICT Curriculum and course materials for Life Long Learning
- E-learning environment
- Organization for face to face blended learning

The exploitation activities planned by the project consortium are outlined here

1. Commercialisation: offering the courses to non EU countries
2. Accreditation: to offer the possibility Multiplier as a profession and to accredit the modules as a lifelong program education
3. Mainstreaming: sharing information on the internet and through other networks that we already have
4. Transfer of outcomes: translation of materials to other languages is a great potential and funding need to be sought from various EU programmes

While project results are promising the consortium believes that other project proposal in educational and research areas could be built on them. We will prepare proposals answering on the calls below:

- The Ambient Assisted Living Joint Programme will launch the third Call for Proposals with the topic "ICT based solutions for Advancement of Older Persons"
- Another funding source from the EU is the ICT for improved public services for citizens and business (ICP PSP). The European Commission is now in the process of preparing the next ICT research Work Programme for years 2011-2013. Here is a short list of calls that could be used as a funding source for the further research based on the results of PRIMER-ICT project:
  - o ICT Call 9: Dec 2011 - Apr 2012
  - o PPP Future Internet (Call 2): Jun 2012 - Sep 2012
- LLP call 2011: possible extension of the PRIMER ICT to third countries and other EU countries

## 6. Contribution to EU policies

Strategy	Policy	Primer ICT contribution
<b>General</b>	<i>To reinforce the contribution of lifelong learning to social cohesion, active citizenship, intercultural dialogue, gender equality and personal fulfilment</i>	Project PRIMER-ICT was focused on blended-learning courses for elderly to emphasize the social integration and reactivation and active cooperation between project participants. They become connected with help of portal, where they can use chat rooms, forums or other communication channels. At the same time intergenerational dialogue will also have many possibilities for future developments and project sustainability
	<i>To contribute to increased participation in lifelong learning by people of all ages, including those with special needs and disadvantaged groups, regardless of their socio-economic background</i>	The platform, which is in use during the PRIMER-ICT courses, has the possibility to adapt e-learning materials and content to individuals' needs. Therefore it is possible to include different participants and adapt e materials and courses to their special needs. The fact that PRIMER-ICT includes elderly and educators or multipliers of different ages is supporting one of the most important Objective of LLP programme – inclusion of people of all ages and multisectoral cooperation
<b>Lisbon Education &amp; Training Progress Indicators</b>	<i>Age distribution of teachers together with upper and lower retirement age</i>	PRIMER-ICT covers all age groups of teachers and trainers. There are two groups of teachers/trainers included in PRIMER-ICT – the first group consists of so called teachers or educators that represent a younger group of teachers or university level students that will teach groups of so called multipliers that will finally transfer knowledge to elderly people. Multiplieres can be from all ages and professions.
<b>Lisbon Key Competences</b>	<i>Digital competence</i>	One of the main competences acquired during the blended courses are different ICT competence, or rather digital competence and information literacy (similar to ECDL). All participants – elderly, educators as



		well as multipliers will gain considerable skills with emphasis on ICT skills.
	<i>Interpersonal, intercultural and social competences and civic competence</i>	Through the blended courses proposed in PRIMER-ICT project all current and future participants will have many opportunities to connect with each other as well as connecting with others. As well as gaining ICT skills, they will also acquire different social and communication skills. For communicating through ICT channels, such as chat rooms, forums, social networks and e-mail has its own rules and standards
<b>Other</b>	<i>ICT and the community's statistical programme</i>	ICT knowledge among groups of elderly people is usually left out in most statistical surveys on ICT. Such surveys usually focus on ICT among younger generations or employed people. Therefore data collected during our pre and post course ICT knowledge for elderly people will be available to European Statistical System – Eurostat

