



COMPARATIVE REPORT OF THE TEACHING ICT IN THE DIFFERENT INSTITUTIONS INVOLVED IN E-COM+45

SPAIN (AULA DE MAYORES DE LA UNIVERSIDAD DE MÁLAGA)

INTRODUCTION

Undoubtedly interesting is the extent to which both the social nature of human beings plus the interest in going on learning and learning remains untouched till the very last moments of our life. These, together with other realizations alike, together with the fact that the population worldwide is becoming of age, can certainly be said as the major drives that, from a time now, are pushing more and more entities —private and public— to offer courses, workshops and other activities alike, **specifically designed for the elderly people**. People over sixty and onwards (1) have a wide life experience that they offer to the rest of society and from which everybody may raise awareness on several aspects of life, (2) their attitude proves that human beings have an inherent ability and a wish for growing personally endlessly and (3) they teach how you can overcome those limitations that may have constrained your life in the past and learn to use any kind of machine or device simply by maintaining an open and flexible mind. Impossible is nothing, as they put it. Teachers and trainers should be careful and sensitive to cover the **needs of this particular group of students** so that their **motivation** to go on learning does not decrease.

Teaching elderly students has certainly very little to do —not to say *nothing* to do—, with facing classes targetted at any other age group. With this tenet in mind, it is of uppermost importance that teachers and trainers working in these environment are always prepared to be as flexible as possible and to change whatever necessary in class so that every leaner attending class can really engage in what is being delivered there. Avoiding exclusion at all costs is a must. Things will have to be repeated at times, and nothing should be taken as already known by them, even if having been previously dealt with

extensively in class. Also, the variety of activities should be comprehensive enough so that people with different cognitive styles and with different learning skills and previous (or no) learning experiences can all be *on board*.

Many and varied are the **personal characteristics** of the people who attend these courses, and equally different are the **reasons** for doing so. For example, In the case of Aula de Mayores of the University of Málaga, as we will see afterwards in a more detailed way, it becomes immediately apparent that the a vast majority of people participating are **female**. In this regard, it is interesting to note that when observing the attitude that the learners tend to exhibit in the practical workshops, lectures and other kinds of academic activities offered to them, female students are not only more, quantitatively speaking, but also more ready to take a more active role and to engage fully in the tasks set. On the other hand, as the participants themselves have stated in personal interviews, one determining reason to enroll these courses is how hard it was for them to have whole days ahead with nobody else to be with and without any serious responsibility once they got retired. They needed the contact of people, they wanted to meet people living under their same life circumstances, with plenty of leisure time, and with common likes and interests.

CONTEXT, GENERAL APPROACH AND OBJECTIVES

The ICT teaching programme for the elderly at the University of Málaga (UMA) is just one of the several subjects offered at the Senior Classroom programme at the UMA for the population over 55.

In general, most people at this age range lack any experience in the use of the ICT. This is what is widely known as the so-called “digital gap”. Thus, the main objective of this subject is to help these people get closer to the technologies of digital information and knowledge, or, in other words, to develop “Digital Literacy”. That is, providing our seniors with the necessary knowledge and tools to understand and properly use personal computers, the internet and other devices alike, such as digital cameras. In this sense, digital literacy is something more than merely learning the use and management of ICT. It implies breaking the digital divide given that the computer courses for elderly are a great opportunity to improve the quality of life of senior population, as they may find out skills that will enhance a better development in their own daily life and social integration.

LEARNERS PROFILE

People from **very different educational backgrounds** attend the “Aula de Mayores”. In fact, there are no requisites in this regard. Anybody is welcome as long as s/he is over 55. However, from the whole cohort of students attending our classes, we can easily observe a slight majority of graduated people, 56% vs 44% of undergraduate. This makes an extremely heterogeneous class which becomes even more if we take into account the learners’ professional fields of specialization for the graduated ones and the wide range of tasks that the undergraduated perform in their daily life.

It is equally interesting to note that the a vast majority of students are **female**, an aspect that correlates the reality of the population attending the University for the elderly in Málaga, most of whom are women.

By analysing the data gained in our study we can immediately notice that the group of learners who **live alone** is almost twice as big in size than those who are married. An interest in meeting new people and socialising, apart from an interest in developing academic skills and gaining contents in certain areas, is undoubtedly one of the major causes of initiating this type of activity at the University.

The scope of the **age of the participants** in this study is wide indeed, the eldest being over 80 years old. Quantitatively speaking, however, the most significant group is that of people in their fifties and sixties. Reasons for this being so could be found in the quality of life of people above that age, basically, the ability to drive by themselves (that gets significantly reduced with the passage of time) plus the possibility of personal manoeuvre and moving around (which also gets considerably reduced as time goes by and people get older) and in the fact that people may get retired in Spain with certain jobs at the age of 55 and onwards, whereas the majority retire when they are 65 or over.

The need to **become competent to use the ICT** has scored high in the students’ system of preferences. There is a group of 78% who value it to a different degree. The **need** to do something in life is as powerful a drive as any other personal circumstance such as motivation, desire, want and so on. They feel they need to cope with ICT to remain updated in the society we live. Generally speaking, all those learners who need to

learn something, do regard it as important; consequently, they do not mind having to invest great doses of effort and time to make their target feasible. They simply pursue the learning in question and make everything possible to achieve the best result. Bearing it in mind, we can easily assume that these learners learn better and more than the other average students who do not regard the learning of ICT as a need. We should expect a good performance on the part of our students after the period of instruction and training partly because of their perceived need to learn.

Concerning the “why”, many and different are the **reasons** given by students for their **high degree of interest in their successful learning**, but there are 4 which stand out distinctively, namely: (1) Feel better in whatever they do, 31% of the group; (2) Avoid a feeling of exclusion concerning the ICT, 25% of the group; (3) Socialise and keep contact with other people, 21% of the group; slightly lower, but pointing to the social sensitivity of our students, is their interest in applying their ICT skills to co-operate with different NGOs –a group of 11%.

Our informants’ motives have essentially a twofold nature:

(a) because society **progresses** and new advancements have come to change our life for the better, our students are aware that it is neither helpful nor constructive to get frightened of not being able to cope with them successfully and neglect them as if they did not exist. On the contrary, it proves a much more mentally-healthy attitude to do one’s best to learn step by step how to use them and **get progressively familiar** with their benefits in one’s daily life.

(b) as we could foresee in previous items, our students acknowledge the **social dimension of ICT**. This viewpoint reinforces the idea anticipated above that the social constituent of human beings is highly appreciated by people regardless their age. People assess their social links as invaluable. In fact, psychologists claim that a person could scarcely survive if s-/he is poorly nourished, whereas a person without love from others or isolated would sooner or later hopelessly die of sadness. Maintaining social contacts is vital for everybody.

In line with what has been said above about our students’ good expectations and positive attitude towards the development of their digital skills and how these factors contribute meaningfully to learning more and better, we reckon it crucial to make clear at this point that motivation and interest, need and wishful intention do not always correlate

succeed in the students' ability to cope with ICT. Unfortunately, it is not a mere question of being trained and wanted to learn, but the whole process of developing ability entails far more than. As their teacher puts it: "the elder they are, the more difficulty they find in assimilating what is presented in class". So motivation and need to learn push their improvement, however **the variable "age"** may somehow harm their straightforward succeed.

LENGTH OF THE COURSES AND LEVELS REGARDING CONTENTS (Offimatic, Internet, Communication, Digital Photo,...)

The ICT teaching programme for the elderly at the UMA is organized in three different levels (namely, Basic, Intermediate and Advanced), each with a length of one academic year. It should be stated that **no formal test** has never been used to diagnose the students' levels and allocate them accordingly or to know whether students have acquired the corresponding skills at the end of the course.

However, from September 2,010 onwards, and for the first time, a **requisite** in going to be intruduced in the **process of enrollment** and only those students who have passed the 1st or 2nd course will be allowed to register in the third level of the ICT class for a smooth development of classes with everybody being able to get acquainted with level of this upper course once they have accummulated practice in previous courses..

As the courses are concerned, the Basic Training Course or Level 0 is designed for people without any prior knowledge about ICT. Probably, this level is the more demanding one for the teacher because the students tend to need a personalized, individual attention. The Intermediate Level is designed for people with prior basic knowledge in handling ICT. Advanced Level is designed for people with solid knowledge in ICT, i.e. they have proficient domain of computers and of the internet as well so they know what they want and/or need to learn now.

Contents at the Basic Level

- **Basics of Computer Science.** It is the only theoretical issue (not practical) throughout

the whole course. This topic is intended to provide students with an overview of the digital world, starting from the computers and ending with a variety digital concepts.

- **Windows environment.** This unit is intended as a first real contact with the computer. Windows XP is the operating system used (which is available in the Computer Room). At this very elemental level, the student is introduced into the intuitive use of window management, including "training" to use the mouse through programmes that invite the learners to click and drag. (Windows Solitaire has proved to be a fun way to train drag and drop). Within this framework some exercises are proposed so that students can manage files, folders and directories in Windows.

- **Text processor.** This unit means an extension of the introduction to word processing management through basic editors such as those accompanying the distributions of Windows: Notepad and Wordpad. It is also a means through which those students not accustomed to QWERTY systems get proper training in keyboarding.

- **Internet Basics.** It is a first contact with the world wide web. This unit is intended to provoke the students' curiosity through attractive, useful pages. Usually it is the subject more appreciated by learners in the basic course. Sometimes, we can also consider an introduction to the use of some email client.

Contents at the Intermediate Level

- **Microsoft Office (Word, Excel and PowerPoint):** Theory and practical exercises using Microsoft Office 2003 editions (Computer Room) at the intermediate level.

- **Intermediate Internet:** This is an extended version of Internet basics of the basic course. It includes especially the use of search engines and using copy/paste information between applications on the Internet.

Contents at the Advanced Level

The contents at this level specifically respond to issues identified as interesting in previous and also the current course. They have to do mainly with digital media competition.

- **Digital Photography:** In recent years, a growing interest has been detected in elderly people in the world of digital photography (not “photo editing”). Issues such as "My son takes pictures and allocates them in the internet, but I do not know how to find and see them" or "And if I bought a digital camera, how would I transfer the pictures to the computer?" often raise in class. These sessions of the course are especially devoted to answering all the students' queries and to do exercises such as moving photos from camera to the PC or USB memory, and creating albums or resizing them and sending attached to an email.

- **Windows Live:** The platform of Microsoft Windows Live is a group of web services that provides the user with a wide range of options for communication via e-mail, agendas, calendars, real-time conversations and blogs, among other services. Everything from a web browser, storing the software and user data on Microsoft servers, rather than stored in the personal computer. Among the Windows Live services discussed in class we can find: Windows Live Hotmail, Windows Live People, Windows Live Calendar, Windows Live Messenger, Windows Live Spaces and Windows Live SkyDrive.

- Additional **units on demand**, suggested by the students.

PREVIOUS ASSESSMENT/PREPARATION BEFORE COURSES

As indicated above, **no previous evaluation** of the students' background knowledge or any other requisites must be met to attend the ICT programme: anybody is welcome as long as s-/he is over 55. This way, each student can attend any of the two (basic and intermediate) levels. However, as previously anticipated, in order to enroll the advanced level, a certificate of attendance to either basic or intermediate level is to be required.

METHODOLOGY AND DIDACTIC TECHNIQUES

In general, classes usually consists of **lectures** and **practical examples**, followed by exercises on the subject. Students are provided with notes for each topic written by the teacher. The notes are produced in ways easily understandable for people with little digital training and affecting the acquisition of knowledge in an eminently practical way. These notes have been developed specifically bearing in mind the students' profile, taking into account the digital gap and avoiding unnecessary technicisms.

The **pedagogical approach** is different for the acquisition of Microsoft Office skills or for giving students training on how to make the most of the Internet.

The scheme for the acquisition of knowledge in the case of Microsoft Office would be:

1. Explanation of the concept in question, an explanation supported by the notes previously given to the students.
2. Students' Awareness raising of the application of what has just been explained by watching practical examples using the teacher's computer with video projector.
3. Proposal of exercises for the students and, after a certain timespan, solution of the activity on the part of the teacher, who displays onto the screen how it has been obtained.

The scheme for the acquisition of Internet knowledge is as follows:

1. The operation of the browser follows the previous scheme.
2. Regarding the Internet, the next question should be answered: What can be done online? The concepts provided in the notes are divided into different areas of interest with the aim to give a coherent structure for learning:
 - a) Explain the concept supported by the notes given to students.
 - b) Visits to related websites that provoke students' curiosity.
 - c) Proposal of tasks for the student on the urls visited, if this is possible.

MATERIALS AND DIDACTIC RESOURCES

Materials and resources are always very simple: they are basically notes elaborated by the teacher, and the use of exercises, explanatory videos, projector screen and whiteboard.

EVALUATION

As indicated before, because **no formal test** is used at the end of the course to diagnose the students' eventual degree of development (or so as to assign them a mark), we can't verify for sure the exact amount of students who pass each course successfully, those who show attrition or the cohort of them who on their own make their decision to pass to the next course without proper knowledge —for reasons such as their friends' passing and wanting to stay with them in class, and without realising that they really lack the minimum knowledge to be able to cope with the contents to deal with in the upper level. Thus, they unavoidably mean a hindrance for the ordinary development of classes.

Regarding assessment, then, we only count with the instructor's observation and notes on the students' performance while teaching plus some comments coming from those students who, in a quite relaxed atmosphere, and on their own, tell the teacher how happy they are with the class, or what things are more or less complex for them to understand and perform from their own perspective.

No official qualification is obtained by learners at the end of every academic course but a certificate of attendance.

FRANCE (E-SENIORS)

General points

Initiation should be done with little groups : no more than 4 trainees per trainer, as the trainer has to be free at all times to answer each trainee's particular question and immediately resolve little "blockages" due to hesitating. In fact seniors often take less initiatives and experience hard or software problems.

In any case lecturing is not how we teach. A board is not necessary.

It is useful but not essential to get a "master" computer, connected to a video-projector or "beamer" for theoretical explanations which start sessions or even a general interest question. This part must not exceed 20 minutes during a 2-hour session.

Maximal time of a course should be 2 hours, with a 15-minute break.

You can choose a 90-minute course without a break.

A one-hour course is too short because we "lose" time in starting up or in general sharing about no specific subject. However, this is necessary to enhance convivial social interaction and pleasure.

In fact these seniors trainings are neither professional nor give a diploma. Time spent with us is perceived as leisure or free-time.

The principal aim begins with awareness about the omnipresence of the Internet and computer usefulness during the day, whether it be to communicate with friends or family or to simplify daily life. Therefore, it's urgent to appropriate or master this tool which will become indispensable in the next few years much like the telephone.

The heart of this initiation is how to use the Internet.

We can not avoid learning about computer electronics, hardware and work environments but this has to be reduced to a minimum. We should also avoid too technical or slang language.

If any technical term is used, it must be explained in normal language especially as we often use English words.

It's desirable to suggest a French-English dictionary for the most common terms.

Trainers need boundless patience. Trainers are generally not too young, meaning 35 or 40 years old or preferably more.

The ideal is to be close to 60 with a good general culture apart from computer science knowledge accompanied by a more technical competent assistant.

It is very easy to mix up paid and voluntary workers..

Sometimes we get volunteers who were trainees who want to practice by helping the new ones. In this way they can review.

Finally if "the customer is king", we don't hesitate to say that some participants are quite self-centred, and in every case if they talk too much about their personal problems or those that are computer-related, we have to stop them with courtesy because of group classes.

Teaching subjects and our part

Our model, for basic initiation, means a general training, composed of 8 classes of 2 hours per week for beginners who often never touch any computer. We organise an information presentation before the first lecture and then feedback at the end of training, during which trainees fill out an evaluation questionnaire and express suggestions, wishes or speak about different subjects connected to the course.

A frequent subject to discuss is about buying computer (price, where to buy, which to buy) or compare Internet access supplier.

Our role as advisor is very important. They trust us. We do not push them to consume nor spend.

We simply advise them to buy any Windows OS and find someone who can help or fix problems. We suggest they use open software like Avast or Open Office.

But the main task is to demystify the computer and how to approach it, and deal with anxiety about using it.

We just introduce those that are useful among the thousands of Microsoft functions or “gasworks” or several software options.

Otherwise, although there are several ways to perform such actions, we only display one.

The 8 session contents are mainly :

First : mouse and pad, different clicks: handling with help of a game (solitaire)

Second : connectic hardware - we let pupils connect cables (USB) and open the computer. Presentation of different storage aids (USB key, SD card, CD, DVD) and several peripherals.

Then we familiarize them with the keyboard and keys in typing characters in a simple text editor.

Third : create an e-mail address with Gmail and explain several basic functions.

It's important to rapidly start mail during a session. In this way trainees can send each other messages and practice mail reading upon starting each following session.

Writing messages helps trainees familiarize with the key board.

Fourth : Windows environment : desk, icones, windows, bars, tabs.

To make the session more playful, we show interesting websites then they can surf.

Actually you can do it at a previous session to excite curiosity and whet their learning appetites.

To make classes more amusing, they can put any photo at the starting window.

Fifth : Environment again but this time you have to explain how folder and work files work in the file tree or branches; copying and moving. Learn how to organise and research objects.

Sixth : Word-processing

Seventh : Basic principles in searching on Internet and important websites.

Eighth : Global review with corresponding exercises.

General remark

It is important is to give trainees some handouts during the course such as theoretic explanations, tutorials with subject (detailed and illustrated) taking action.

Advice : provide pauses thus giving time to trainees to take notes on handouts.

Finally, at the end of the class; we suggest to look at some videos on Youtube or Google video and others.

Preparing computer used in the class.

Each trainee has to get his computer before each class.

Software used during course must be installed in the same way on each machine corresponding to the handout.

It's important to fix character size, icones, soft background, etc

ITALY (FNP-CISL)

Lifelong learning and ICT : the methodological approach of FNP

We all know that the use of new technologies is a key element in knowledge-based society. This requires knowledge and capabilities, which can often be discriminating for the elderly.

Our methodological approach is focused on the opportunities to develop and maintain these skills for senior citizens through appropriate local lifelong learning programs, which could help the elderly acquire awareness of innovative processes and become or remain active participants in the knowledge society.

I would like to show you our methodological approach and the results of two targeted courses aimed on the use of the Computer, Email and Internet. The first one is called "Internet e PC easy for absolute beginners" and the second one is called "Internet and e-mail – elementary level".

Our learning initiatives are organized in the context of the FNP educational program aimed at introducing a large number of over-50s union members to the basics of ICT. It envisaged a mixed learning path of onsite and long distance activities.

Our courses are mainly based on onsite activities and traditional classroom sessions. Participants are divided into two groups on the basis of understanding of a number of conditions, such as basic knowledge of Windows and understanding of the use of E-mail and Web browsing, and availability of internet access at home.

We usually organize two different classroom groups of about ten people, each coordinated by a teacher and a tutor, fulfilling the criteria of homogeneity in age and gender (50% male and 50% female when it is possible).

These courses were aimed at developing two specific skills which are essential to e-citizens:- the use of computer for data storage, the use of search engines for information and resource retrieval; the management of web services.

The methodological approach adopted in this course is based on a learning strategy characterized by a strong network interaction between all participants: teachers, tutor and group of participants.

Each time, the teachers after a brief theoretical introduction to the main issue of the lesson, asks participants to do one or more guided exercises.

Time allowed for the learning activity is unlimited and each participant may return results personally or in cooperation with other attendees according to the dynamics based on self-regulated learning, self-help relations and peer-to-peer collaboration.

The classroom activities take the following forms:

- PC-training, carried out with guidance from the teacher and based on the reinforcement of classroom learning;
- Collaborative learning, aimed at an in-depth examination of some topics related to the use of PC and Internet.

During the lessons, the learning approach used to ensure one-to-many and many-to-many communication between teachers, tutors and participants and among participants themselves.

During all the lessons monitoring and evaluation processes are carried out by teachers and tutors and is aimed at:

- Detecting the achievement of the expected learning objectives,
- Estimating levels of participation and involvement of participants in the proposed activities and the level of individual involvement shown in group interaction.
- Measuring the degree of satisfaction and general attitude with respect to the learning methodology adopted to run the activities.

The main tool used to detect participants' attitude was the satisfaction questionnaire delivered at the end of the course.

The obtained information is integrated with data from participated observation of participants' interaction and of the more personal feedbacks between the teacher and each participant.

It's possible to integrate the course with a one-to-one lesson focused to recognize the real needs of each participant. It's a sort of individual mentoring carried out during the course by the teacher in individual meetings.

In relation to the assigned tasks the assessment of participants achievements took into account the level of correctness of their production. Approximately about a 40% of participants completed all the exercises correctly; 20% completed three-quarters without mistakes. Thus, about 60% of the total number achieve good results.

The results show that the acquisition of contents should be considered very satisfactory. However, given the particular conditions, caution is needed. In fact although varied (different entry-level skills, different cultural backgrounds, different ages) the considered sample is quite small for a statistical relevance.

But we can assert that the analysis of participation and interaction during the different lessons shows a fairly high level of participation and two different dynamics.

In fact, communication was either centered on few individuals or distributed more or less equally within the group.

The communication is on the whole reasonably distributed throughout the group of participants, even if more centered around some of them. In other situations there is no significant interaction between participants: the one-to-one communication is preferred between participant and teacher mainly aimed at completing the task.

Diversity in communication dynamics within the groups (more “horizontal” in the former and more “vertical” the latter), was effected by the teaching/ learning strategy adopted which played a part in such marked diversity rather than by composition of groups, which were homogeneous and started out from almost identical conditions. In fact, a strategy based on exercises tended to give priority to one-to-one communication between the teacher who assigned the tasks and the single participant who completed them. The many-to-many horizontal communication is adopted when relationship is based on self-help.

The presence of the second type of interaction can be influenced by individual factors such as the group members’ propensity for socialization, the teaching style or the teacher’s ability to raise participants’ interest and to facilitate socialization and collaborative interaction within the learning group. Usually there is a growth of this second kind of dynamics after the first lessons, thanks to the fact that the participants know each other better and start to cooperate and to help each other.

The general attitude of participants towards the course and the learning methodology adopted in our activities, measured by a satisfaction questionnaire delivered at the end of the course, is very positive.

The feeling of disorientation and mistrust towards the computer and Internet in the initial stages and attributed by participants to difficulties in relating to people they did not know or to lack of familiarity with technology, changed immediately after the first two lessons. This positive judgment was accompanied by the desire to attend similar courses and to establish a continuity between the training period and the habitual use of acquired knowledge.

The results of the analysis of our initiative targeted at elders, allowed some considerations that might help the design of similar initiatives and initiate new research activities related to this issue.

The elderly, compared to younger people, need direct personal interaction since they are unfamiliar with technology tools and are emotionally and socially weaker. For these reasons onsite activities, seem more convenient than e-learning.

Respect to younger participants, the elders have different response time, cognitive skills, needs and motivations. The complexity of these factors should be taken into account in course material design, in activities and learning strategies selection, in group forming and tutoring style to be adopted. As it happens in adult learning, elders should acknowledge the intrinsic value of the suggested learning path.

Learning must be contextualized and close to their own experiences and everyday life. The background of the elderly is varied and remarkable; the richness of their experience should be promoted and enhanced through self-regulated learning to make them feel responsible and autonomous, and through collaborative learning too, to promote knowledge exchange, sharing and construction.

As our has experience shown onsite training is the first necessary step to spread ICT culture among third agers, because the correct use of new technology is not just a matter of technical skills, but it entails the sustenance of self-identity or its reconstruction, self care, social relationships, dialogue with younger generations. Becoming digitally literate means to be able to participate in and contribute to innovation processes taking place in present society.

Marco Brugnola

HUNGARY (NET-MEX)

1 Introduction

The present study constitutes the Hungarian country report on various aspects of digital literacy. Throughout the survey, we used key national and European policy documents, surveys and statistics as main sources of information and data.

Most of the 50+ employed has never worked with computer and had no ICT-training at all, and they are often averse from computers. Nowadays it is nearly impossible to get a job without at least basic computer skills (MS Office, internet, e-mail), so elderly citizens must be trained to be able to work with computer. ICT is a core component of the knowledge society nowadays, a tool for modernisation and improvement. Many large companies have invested heavily in e-learning and content management systems who need workforce able to use and develop these innovative methods for a more effective and productive result. Online societies and networks ensure a core part of our social and leisure-time opportunities which has the opportunity to provide more satisfaction with later life due to connections and self-realization.

ICT thus is also a good way to make new social contacts and improve life quality.

With an advanced ICT-knowledge, better educational opportunities open up, better opportunity for exploiting their potentials and thus find a job they find more satisfying and that can lead to not only less unemployment rate, but the feeling of self-realisation and well being as well for the individuals.

The following sections of the study summarises policies and strategies for digital literacy development for elderly in Hungary, our own objectives, method used in the course, its content and lessons learnt.

2 Policies and strategies for digital literacy among the elderly in Hungary

2.1 The starting point

Hungary is currently placed in the middle to lower end in most aspects of information society development. The results show that broadband connectivity and internet access are below average. Due to insufficient growth rates, Hungary is being overtaken and falling in EU rankings. However, the broadband to narrowband ratio is above average, which suggests that users are going directly to broadband. Use of advanced internet services among citizens is also higher than average, except for banking.

Availability of public online services for citizens is about average while service supply for enterprises is relatively low. Use of eGovernment services is below average for citizens and very low for enterprises. Hungary has a relatively high number of broadband connected schools, thanks to initiatives aimed at infrastructural development of schools (School Net and Public Network Programmes), but the number of students per PC is high, and the actual use by teachers in class is amongst the lowest in Europe. As regards enterprises, their connectivity is low and the use of eBusiness and online services is one of Hungary's weakest points. The usage of eCommerce is better but still below EU average, despite Hungary having a fairly large ICT sector share of GDP and employment, and solid basic skill ratios.¹

The latest figures from July 2007 show that national broadband penetration in Hungary, measured as the number of broadband lines per 100 population, was 11.6 % compared with an EU27 average of 18.2% thereby giving Hungary a relative low ranking as number 20 of 27 countries according to the European Commission/COCOM report on broadband access in the EU published on 15 October 2007. The table below shows in actual terms the development in Hungarian and EU27 figures in the period since July 2004, but it is interesting to see that the EU27 average is up 3.3% since July 2006 (then 14.9%)²

Table 1: Retail broadband lines in the EU 2004-2007

	July 2004	July 2005	July 2006	July 2007	Rank
Hungary	257,016	457,557	760,271	1,172,067	20
EU27 ³	29,871,571	48,350,012	68,651,579	90,207,122	

Source: European Commission/COCOM – Communications Committee 2007.

With the number of broadband lines having more than quadrupled since July 2004 the rapid growth is also illustrated by European Commission figure published in the March 2007 in the “i2010 – Annual Information Society Report 2007” which highlights the fact that 85% of the population were covered by DSL in 2005 (see table 2 below) although this is not reflected by the number of actual connections (i.e. lines outlined in table 1 above) outlined above. Unfortunately the “i2010 – Annual Information Society Report 2007” only contains data till.

Other interesting data related to ICT in schools, internet usage, employment and skills is included in the table below.⁴

¹ i2010 - Annual Information Society Report 2007 : p39

² European Commission/COCOM – Communications Committee, 2007 *Broadband access in the EU: Situation at 1 July 2007* European Commission, Brussels, pp 5-12

³ Note: For the period 2004 to 2006 figures were not available for Romania and Bulgaria.

⁴ Demunter, C. Eurostat, 2006 *How skilled are Europeans in using computers and the Internet?* Luxembourg, Office for Official Publications of the European Communities, pp 22

Table 2: Aspects of ICT use in Hungary, 2003-2006

	2003	2004	2005	2006	EU25	Rank
Broadband						
Total DSL coverage (as % of total population)	58.0	70.0	85.0		87.4	18
DSL coverage in rural areas (as % of total population)			76.0		65.9	12
Broadband penetration (as % of population)		2.9	5.1	8.6	15.7	21
DSL penetration (as % of population)		1.9	3.3	5.3	12.8	19
ICT in schools						
Number of computers connected per 100 pupils				8.6	9.9	14
% of schools with broadband access				77.0	67.0	11
% of teachers using PC in class during the last 12 mths				42.8	74.3	25
Internet Usage						
% population who are regular internet users		21.3	33.6	41.7	46.7	17
Employment and Skills						
% employees using computers connected to the Internet		26.3		20.6	36.1	25
% of persons employed with ICT user skills,	19.5	19.9	20.0	20.1	18.5	5
% of persons employed with ICT specialist skills	3.2	2.9	2.6	2.9	3.1	15

Source: European Commission 2007.

According to the Eurostat 2007 results concerning digital literacy and ICT skills, 51% of the Hungarian residents aged 16 to 74 do not regularly use the Internet and 39% have never used a computer. Compared to the EU27, where the figures are 49% and 34%, respectively, Hungary is lagging behind most European countries in digital literacy. Figures in 2006 were 66% and 57% in 2006 showing steady progress in this regard.⁵

As regards the distinction between different groups of individuals, we find that in the EU25 as well as in Hungary, more men have high level ICT skills than women, who rather have medium or low skills level. In Hungary the difference between men and women is not so significant though, compared to the European average. Taking into account age, the younger generation has better ICT skills than the older population, which is not surprising. However, in Hungary, still a great proportion of young people have no basic ICT skills, which is not true for any other EU-countries. Manual workers score much worse than unemployed people in Hungary, and both have lower skills level than students, non-manual workers or employees, which corresponds to the EU27 results.⁶

Table 3: Individuals' level of basic computer skills (2007) - % of individuals aged 16 to 74

	HU	EU27	Difference (%-points)
No basic computer skills	41	40	1
Low level	10	13	-3
Medium level	22	24	-2
High level	27	23	4

Source: Eurostat 25 January 2008

⁵ Source: Community survey on ICT usage in households and by individuals, in Eurostat 2006 : p2

Notes: Data on computer use is not available for Belgium (percentage not regularly using the Internet: 47%) ; no data available for France and Malta.

⁶ Source: Eurostat, Community survey on ICT usage in households and by individuals, in Eurostat 2006 : p5

Note: (i) Data not available for BE, CZ, ES, FR, IE, MT, NL and FI. (ii) 'No basic computer skills' includes individuals who have never used a computer

2.2 Digital initiatives for the socially disadvantaged elderly

According to the figures from HISS – The Hungarian Information Society Strategy an average of 50-60 persons are served by an eHungary point, which means that in total approx. 10000 elderly persons have the opportunities to use the opportunities offered by the information society. In order to facilitate the internet use of the elderly people a number of initiatives have been launched including the "Click Grandma!", the "Grandma-net" and the "Grandchildren-Grandparents IT Contest".

Other initiatives for the marginalised and disadvantaged population groups include the:

- Informatics for the Blind Foundation (Informatika a Látássérültekért Alapítvány)
- Association of Hungarian Net-using Women (Magyar Internetező Nők Egyesülete, MINŐK)
- Nonprofit Information and Training Centre (Nonprofit Információs és Oktató Központ, NIOK)
- Brunszkvik Teréz Kindergarten Computer Programme
- Special education centre for blind people

Click on it, Granny!

The "Click on it, Granny!" method of teaching the use of internet to the elderly was developed in 2002 by the Budapest Community Centre, and since then the program has been very popular, not only in Budapest but also in other cities where available. Since 2006 UPC (one of the biggest internet-providers in Hungary) has supported the trainings. There are organised follow-up groups, too (Carry on, Granny!) and a network for elderly net-users (Ezüstnet – Silvernet). It should in this context be noted that according to Eurostat, 84% of the 55-74 year old Hungarian citizens has no IT-knowledge so they are excluded from the information society.

(http://www.bmknet.hu/index.php?option=com_content&task=blogsection&id=19&Itemid=125)

Association of Hungarian Net-using Women (Magyar Internetező Nők Egyesülete, MINŐK)

This association is aimed to promote the ICT use amongst women both young and old. The activities of the association are: organising ICT-courses, networking with national and international women's organisations, digitalising documents related to the history of Hungarian women, research activities on ICT and information society. It also promotes telework and eLearning and its webpage provides a lot of information for women living in the information society (www.minok.hu).

2.3 Assessment of social inclusion potential

In terms of social inclusion, Hungary has, instead of ensuring equal opportunities by passive means (allowances and other financial benefits), realised that integration of disadvantaged or just indifferent target groups should be realized by improving physical and communication accessibility and by rehabilitation.

Initiatives aimed at bridging the divide by means of e-learning programmes and infrastructure support to disadvantaged groups achieve outstanding results, but the maintenance of the installed infrastructure and the continuation of programmes and integration of them into networks are usually lacking. Besides e-Learning programs, the education of our main target group, the elderly needed different teaching methods. These requirements were met in the "Click on it, Granny" Programme.

3 Objectives of the Course

The objective of this initiative is to help elderly citizens to keep abreast with the modern techniques in order to know how to use the internet and what is it good for. As the participants has never been in touch with computers, the course starts from the very basics (like how to switch on and off the computer, how to use the mouse etc.) and the only aim is to teach the participants the use of the internet and e-mail. The elderly will not be use the internet for professional reasons or for further training, this is just a hobby, leasure time activity. The seniors are very motivated and interested in taking part the course. Most of the are coming willingly, some of the are "sent" by the relatives, children and grandchildren.

4 Method used

The method that is used derives from the 'Click On It Grandma!' programme, developed by the Budapest Community Center. The essence of it is to advance very slowly and parctice a lot with a lot of revision. No special equipment or software is needed, the aim is to empwer the elderly to use the internet. For this they need only to know how to swith the computer on, how to start the browser etc. The target group does not need any specialised technique, because they are not hediccapped just old. So they use the normal computer and basic programs which is available at the shops and internet cafes of public internet access points.

After the course there is the opportunity for the interested people to attend a club, where there are regularly trainings on interesting topics (e.g. how to use the netbank, how to download pictures from the camera etc.

No special method is adopted. E-learning is not suitable for the tipical target group. Very slow advance, a lot of revision and practice, and 1 person at 1 computer are the most important things at the training. Formal learning in the classroom. The course lasts 25 lessons, 2 times a week for 8 weeks, the last lesson is the exam, where the students got 3 questions via e-mail and they have to send the answer via email back (e.g. search for a night program, train timetable,

5 Content of the course

The course is also based on the successful 'Click On It Grandma!' programme. Each Click On It Grandma course consists of 25 hours over a period of 8 weeks, is conducted by qualified instructors, and prepared by the BCC. Participants receive a professionally prepared and printed 50-page textbook with examples, exercises and additional information. The practice-oriented e-skills learning and training courses developed by BCC are specially designed for and targeted to meet the special needs of senior citizens, and are also compliant to the laws on adult education. Participants learn step by step about computers and internet in general, how to find relevant and useful information on the web, how to send emails and use chat, forums, discussion groups, share pictures etc. Practical courses provide a solid base of knowledge and skills that can be deepened by further practices. For this purpose, the sites of the courses (cultural and community centers, libraries, telehouses) provide internet access points free of charge during and after the courses.

In addition to the courses, Click ON It Grandma has formed 'self-teaching circles' in every city. Click On It Grandma Clubs have been created, where current and former participants and others citizens get together to further talk, learn and share ICT experiences and knowledge.

Structure of the courses:

Twenty-five-hour course is usually divided into six occasions by us. Two days a week teaching a 3-4 hour-long lesson each time.

The course is designed for teaching skills to use the Internet and e-mail together with additional basic programs (e.g.: Word, Excel, Power Point). The senior students also can attend the course without any prior knowledge! Each student learns the Internet on their own computer, usually in a group of ten with an instructor. In special occasions we recommend individual learning methods.

1. lesson

The computer architecture.

Using the mouse and keyboard.

The operating system is a basic application (desktop, taskbar, icon concept, a program by the properties windows).

The Internet operation in principle and possible applications (e-mail, FTP, WWW, etc).

2. lesson

In Internet Explorer (Firefox) browser application.

Using the World Wide Web.

Using various search engines.

3. lesson

Browsing.

Initial sites and portals to achieve.

Interesting Sites Save, Print.

The concept of e-mail, free e-mail account creation, sending and receiving messages.

4. lesson

Browse, search exercise.

Correspondence exercise, send the attached file.

5. lesson

In the browser options (Favorites, History ...).

E-mail, Internet search.

Saving files from the Internet, send e-mail.

6. lesson

A short repetition of learned skills.

Players the skills exams, interactive format.

Evaluation of the course, visit the transfer of certificates.

7. lesson

Optional

8. lesson

Optional

The themes vary depending on the composition of the groups. The group members' interests will characterise the content in accordance with the "Click on it, Grandma!" course guidelines. Usually thus it includes additional topics, such as multimedia on the web pages, etc. cultural material. If there is free time, we recommend teaching the use of Windows Live Messenger program.

6 Lessons learnt

Lesson 1 - There is a strong need and demand to support seniors in their e-inclusion. Seniors, contrary to adopted stereotypes, want to learn about ICT and use it in a daily basis. The key is to provide them with the opportunity. Seniors are active and do not want to be left behind. They appreciate the role of technology, and are extremely grateful for the support offered to them.

Lesson 2 - Great value of the courses for participants and society. The courses stimulate personal development, build self-esteem, allow for more efficient communication, and reduce loneliness.

Lesson 3 - Internet is a great tool for linking generations, through (1) bringing seniors together, (2) building bridges and relationships, (3) strengthening the role of seniors in families (seniors are slowly losing their positions in today's world of technology), (4) helping form vibrant communities and (5) to find stimulate a meaningful and productive time during retirement.

Lesson 4 - Effective example of public private partnership between a commercial company - UPC - and the Budapest Cultural Center as well as community centres. This PPP gives an additional value to the program and makes it more professional and credible.

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BULGARIA (INTELEKTI)

INTRODUCTION

Thirst for knowledge is characteristic of the Bulgarians.

Throughout their conscious life they seek to learn something new and acquire more and more skills in various areas of public life.

On the other hand, the demographic crisis, in which the country finds itself in recent years, leads to an increased trend towards aging of population.

These characteristics differentiate specific target group of potential students, these are people aged over 50 years. They should be offered courses, seminars and other training specifically tailored to meet their needs.

It should be noted that these people, in most cases are unemployed, which determines the two main areas in their training - to increase their qualifications or acquire new. Based on our previous experience in conducting training of this target group, we may make the conclusion that the ratio of men and women is 20 % to 80%. The reason is that women keep their social activity for a longer time and they have the ability to adapt more easily to the new conditions of the environment.

A major problem for teachers is to increase the motivation of people to participate in training, since many of them have lost their study habits.

CONTEXT, GENERAL APPROACH AND OBJECTIVES

Fundamental to this report is the concept of 'computer literacy', as ICT is fundamental in shaping the work of adult educators and the support they provide to adult learners in acquiring these new literacies.

A report for the International ICT Literacy Panel, defines ICT literacy as follows:

ICT literacy is using digital technology, communication tools, and/or networks to access, manage, integrate, evaluate and create information in order to function in a knowledge society.

It's also important to note that ICT requires a 'new' literacy. Even when learners are 'traditionally' or 'book' literate skills required to read - navigate and understand - the information on a web page, for example, are quite different from those required to read - navigate - a book or a newspaper. Communicating by email requires a different literacy skill from that used to communicate through letters or reports.

ICT literacy is best developed through experiences that integrate cognitive and technical learning. ICT literacy skills need to be integrated appropriately into curricula addressing cognitive skills as well as those skills addressing IT and technical skills in order to ensure improved ICT literacy.

LEARNERS PROFILE

The overall picture of the students at Intelekti VTC is one of generally independent learners aged between 40 – 60, the most significant

group is that of people in their 40s and 50s, who have decided that ICT can help them meet a purpose, achieve a goal or in some other way enrich their lives, and, often, the lives of others in their personal circles or wider communities. They have a clear sense of their own purpose for acquiring new skills. The barriers to learning are largely those faced by all adult learners, compounded by the factor of being part of a generation that has not grown up with computer technology.

7.1.1.1 Why do they undertake the development of ICT skills?

We have explored the learners' attitudes to ICT and reasons for undertaking ICT skills development programs. In brief, some of the key reasons are:

- skills - rather than qualifications
- potential employment outcomes
- personal development - vocational and personal training
- social contact – through shared interest in ICT, and using ICT to connect with family and friends
- for personal business and for study
- to maintain independence
- financial benefits (cost savings).

Here we present the The Top Ten characteristics of elderly learners engaged in ICT learning:

Elderly students:

1. are more likely to undertake short non-award vocational courses - aim is to gain skills rather than qualifications

2. increasingly turn to community training providers for vocational and personal training
3. prefer learning in an informal learning environment, in small classes or groups
4. need slower paced, low intensity training and often prefer self-paced learning
5. take increasing responsibility for their training and learning and for sourcing learning which meets their needs, constraints and learning-style preferences
6. are often independent learners - self-directed and with a clear idea of their own purpose for undertaking training
7. highly value peer support, mentoring and tutoring
8. value and respond to supportive and responsive teachers, tutors and volunteers
9. want clear and explicit instructions, with print and web-based resources designed to accommodate age-affected sight and hearing
10. generally feel more comfortable learning with a similar aged cohort

Potential barriers to elderly learners that can discourag them from ICT learning:

1. lack of basic computer skills, lack of knowledge of computer terminology
2. fear of computer technology
3. the 'digital divide' – not growing up with the technology
4. skills level of many formal training courses – if too high learners can feel disempowered
5. formal training environments – may not always suit self-directed, independent learners
6. lack of recognition of prior experience – self-esteem may be affected
7. age-related barriers - sight, hearing and mental agility
8. language and literacy skills

LENGTH OF THE COURSES AND LEVELS REGARDING CONTENTS (Offimatic, Internet, Communication, Digital Photo,...)

ICT skills levels

We use the following seven modules to define ICT skill levels: Basic Concepts of Information Technology, Using the Computer and Managing Files, Spreadsheets, Databases, Word Processing, Information & Communication and Presentations. The elements of each module are divided into three levels - basic, intermediate and advanced

Module 1: Basic Concepts of IT The physical make-up of a personal computer and concepts such as data storage and memory.

Module 2: Using the Computer and Managing Files The fundamental functions of a personal computer and its operation system.

Module 3: Word Processing Creating, formatting and finishing a word-processing document, and using more advanced word-processing features.

Module 6: Presentations Creating, formatting and preparing presentations, using graphics and charts and various slide show effects.

Module 7: Information and Communication (Internet and Email) Using a Web browser application and available search engine tools to accomplish Web search tasks; using E-mail software to send, receive and organise messages.

We then 'mapped' the elements of each module into three levels - basic, intermediate and advanced to use for data collection.

It should be stated that there is a formal test used to diagnose students' levels and allocate them appropriately or to find out whether students have acquired the corresponding skills at the end of the course.

PREVIOUS ASSESSMENT/PREPARATION BEFORE COURSES

The ICT courses for adults are attended by students in the age bracket of 40s-60s, who have no or very little previous knowledge and they are enrolled in the Basic level course.

If students have any background knowledge and skills in ICT, it is assessed by entry tests, except for those attending the Basic level courses. Over the course of study, students' progress is evaluated by interim tests, and all courses end with a final test.

METHODOLOGY AND DIDACTIC TECHNIQUES

Over the years of teaching ICT to adult learners, we have reached the conclusion that the following factors could be identified as significant in supporting the learning process:

- peer support, mentoring and tutoring
- supportive, accessible teacher/trainer; including tutors and volunteers
- 'slower' paced, low intensity training
- self-paced learning
- informal learning environment
- small classes or groups
- clear and explicit visual instructions
- same aged cohort.

ICT teachers/trainers at Intellecti VTC are interested in the possibilities of ICT and the personal and employment-related opportunities it presents for elderly learners, and deliver their programs in a spirit of mutual co-operation and enjoyment. They are all able to adapt to the needs of the learners as well as the demands of formal and informal teaching and learning situations.

Significantly, all our teachers/trainers have an extensive background in teaching ICT to adults, and are therefore experienced in teaching literacy and communication skills as well as having underpinning knowledge of the social nature of learning. They are available for just-in-time and on demand training that works well for group as it allows for independence and facilitates adult learning.

The teachers/trainers are all actively engaged in a learner-centred approach based on adult learning principles:

- adults tend to be self-directing
- adults have a rich reservoir of experience that can serve as a resource for learning
- since adults' readiness to learn is frequently affected by their need to know or do something, they tend to have a life-, task-, or problem-centered orientation to learning as opposed to a subject-matter orientation
- adults are generally motivated to learn due to internal (such as helping their child with homework) as opposed to external forces (such as a raise in salary).

Our teachers/trainers of teaching ICT courses for adults have developed effective strategies in the following three areas: strategies for establishing a purpose for learning, creating a safe and supportive learning environment and assisting learners to develop ICT literacy skills.

7.1.1.2 Establishing a purpose for learning

Provide motivational strategies for learners.

- Relate training back to practical applications in every day life.
- Explain how ICT skills can enhance job searching techniques and employment prospects.

Negotiate the process of learning.

- Learners usually have a purpose and a context when they come for training - often it is because they are looking for employment, or want to increase their employment prospects - others wish to communicate with friends and relatives - others have lifestyle choices they wish to pursue.

7.1.1.3 Establishing a comfortable and supportive learning environment

Effective strategies for creating a safe and non-threatening environment:

- Use humour – make the class and learning fun
- Provide plenty of time for social interaction (social aspect of learning) - this helps make learners more comfortable and at ease - it also helps peer mentoring relationships to develop more quickly - provide a room/space for learners to meet
- Be patient and provide a lot of individual reassurance
- Establish and encourage peer mentoring - getting the class to work as a team and support each other is crucial to success
- Obtain background information on participants who could have potential problems
- Be prepared to admit to mistakes and learn from them
- Organise small groups with a high ratio of tutors and volunteer assistants
- Recognise the value of learners' extensive life experience
- Demystify computers – dispel the myths that older people, and especially older women, are “dumb” when it comes to computers and ICT
- Acknowledge that learners know what they want to learn, and for what purposes

7.1.1.4 Effective teaching and learning strategies

- Provide effective classroom teaching - adults don't want to 'waste time'
- Locate or develop good print-based, CD-based or on-line materials - ensure text size allows for comfortable reading
- Provide engaging materials and plenty of practice activities
- Revise what has been covered in previous sessions - this provides the opportunity for questions and clarification - and assists memory by reinforcing skills learned
- Deliver training in small 'chunks' - this aids retention - and learners don't feel overwhelmed by too much at once
- Keep training informal and encourage questions along the way
- Provide access to quality equipment - computers and the Internet
- Allow for independent adult learning styles - variety in catering for individual learning styles is crucial - a combination of theory, visuals, notes and opportunities to practise can be most effective - provide specific skills workshops as required by the learners
- Support and encourage peer mentoring and peer tutoring - Older learners often prefer to learn from their peers. Socially constructed learning is an effective strategy for many adult learners.
- Allow for basic achievement by learners with extension opportunities for those who are more skilled or who commit large amounts of time to the course requirement

- Introduce new concepts through a carefully managed set of steps – Many learners have not been engaged in formal ICT learning before, and this is a ‘new (and unfamiliar) literacy’ for most of them.
- Allow plenty of breaks- Older learners often need or prefer shorter sitting times.
- Be patient - Older learners often need more time and more repetition before they fully ‘own’ the new information/skill.
- Use appropriate humour and make it fun

MATERIALS AND DIDACTIC RESOURCES

Materials and didactic resources used include lectures developed by the teachers/trainers, on-line exercises, which are uploaded on our server, explanatory presentations, practical tasks.

A white board and multimedia projector are used, as visual demonstration supports the learning style of many older learners.

Provide a well equipped and managed computer room – Good, reliable computing equipment, access to networks and the Internet are all essential, not only for access, but also to maintain confidence.

- Demonstrate keystrokes and navigational aspects of ICT repeatedly - Learners may need visual demonstrations to find the required icons and the keys on their own keyboard.
- Use and/or create interactive PowerPoint presentations - Interactive PowerPoint presentation can illustrate specific aspects of computer operations, and can be very engaging to the visual learner.
- With print based materials, teachers/trainers ensure that: pages are well-laid-out, exercises and assessment tasks are clearly identified, font style used is easy-to-read; Consider the amount and size of text on web pages before you use them with older learners

EVALUATION

Evaluating and monitoring of courses or modes of study is vital within any learning organisation in order to ascertain effectiveness. At Intelekti VTC, we decided to undertake both a quantitative and qualitative evaluation of the general ICT courses, in order to assess how well students had performed and to find out from the students themselves, whether the course they attended had indeed provided them with the ICT skills they sought to acquire. At the time of enrollment, students provide some demographic data about themselves and they also complete an initial questionnaire, which ask them about their expectations of the course and they are also asked to judge their own ICT skills. At the end of the course, students completed questionnaires on the course itself and their performance after it.

The themes dealt with in the questionnaires are:

- ICT skills – students own evaluation of their skills before and after the module
- Support – provided by teachers/trainers, materials and interim tests

It is also important for us to ascertain whether the students have received the support they need through the course and whether they have developed collaborative mentality.

As part of the evaluation process, students take a final exam at the end of each course. Undergoing interim online tests also contributes to students’ success in their final exam. Most of the students who achieve good results in their final exam have taken all the interim tests offered online. The online environment allows students to continually verify the level of the new skills they are learning, thus providing a more stimulating environment for the learner.

Future ideas

The need for continuing education for elderly is apparent. Where courses can give an initial boost for

computer skills, clubs and continuing learning of elderly people are needed to maintain and enhance the skills

learnt. Thus, the team of teachers/trainers at Intelekti VTC has started developing their idea to organise a weekly 2-hour “computer club” meeting for its elderly students, aged 55-65. Students pay the fee for the “computer club” participation or a small part of the fee could be covered by local organisations, such as pensioners' clubs, etc.

During classes, guidance is to be provided by a teacher/trainer from Intelekti VTC, as well as 1 or 2 student tutors to facilitate the learning and give hands-on support when needed.

At the beginning of each term (winter, summer), teachers/trainers and students collaborate in planning the program for the term, so that everybody can express his/her wishes and learning needs. Topics covered during the year vary from basic use of keyboard, mouse and folder system to services on the Internet (social networks, ticket ordering, on-line banking, Skype), using e-mail, cleaning up the computer, image editing, music and films.

ESTONIA (LOOK@WORLD)

7.1 Introduction

YSBF decided to introduce a case-study from Estonia about a project, which gave over 100 000 people a basic knowledge of the use of computers and internet. The project was called Look@World and was financed both by government as well as also by private companies.

The aim of promoting the spread of the Internet among the population of Estonia was driving the project. Giving computer and Internet usage skills to everyone who was interested was one of the biggest challenges ahead of us.

This mass supply of elementary computer and Internet training came at exactly the right time in Estonia's development. Estonian society is closely observing the global trends according to which only those countries with developed information societies will be capable of being successful and competitive in the future. But a cornerstone of any information society is the ability of its residents to use information technology to their advantage. Hence social development created a need for the training project while the project itself accelerated the development of society.

7.2 Facts about the training project

- 102 697 people i.e. some 10% of the adult population of Estonia, received training.
- 11 693 courses were carried out – 35 courses were being held on any given day.
- 8-hour elementary computer and Internet training was free of charge for participants.
- 17 new Look@World classrooms with 34 full-time trainers/coordinators were established.
- 245 classrooms for training and 280 part-time teachers were involved.
- Average grade given by participants to the course was 4.8 in a scale of five.
- Over 70% of participants have started using the Internet.
- 442 Public Access Internet Points (PAIP) employees received special training.

- It took only 1.5 months after the decision to launch the project was made for the first training session to be carried out.
- The entire project took less than 2 years, including pilot projects.
- 90,000 people were trained within 1.5 years during the main project.
- Project costs stood at 39.9 million kroons, which were fully covered by four private companies: Hansabank, Eesti Ühispank, Elion and EMT.

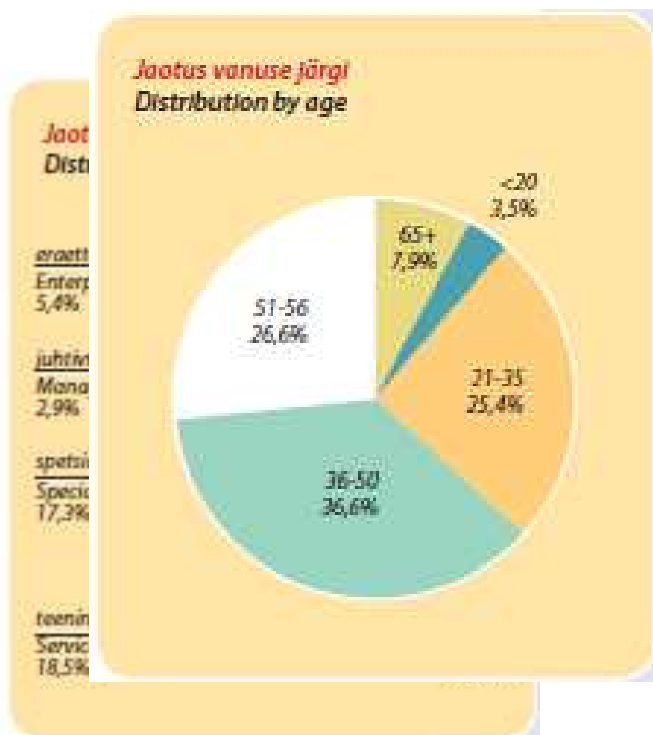
7.3 Project set-up

17 new IT classrooms were set up in larger towns. Elsewhere part time-teachers were employed and computer classrooms at schools were used. This way a very good geographical coverage was achieved. 34 full-time trainer/coordinators worked in the main classrooms of Look@World and besides daily training they also coordinated the work of part-time teachers by region. 280 part-time teachers carried out an average of two courses per month, using computer classrooms at their schools or institutions.

7.4 Learner's profile

Look@World offered short courses for introducing IT and to reduce the „digital divide“ for all parts of Estonian society, but primarily for older generations.

The following tables highlight the distribution of learners by profession and by age:



7.5 Didactic techniques

Main focus point was to provide elementary computer and Internet training and to eliminate fear of using the technology and to encourage initial perception, daring and interest in it.

It would have been unreasonable to assume that the participants would obtain all the necessary skills during the short course, and so it was considered most important to inspire people to continue studies on their own. With this in mind, each participant received a 100-page manual, which also

included additional information to the material covered during the course. While devising what form the course would take, it was considered important that the training should not be a theoretical lecture on how to use the computer and the Internet. Organizers' wish was that all the participants would sit behind their computer screens and try everything that was being taught in practice. Only this way would it be possible for them to get over their fear of computers.

Logistically a one-day course would have been the simplest solution, but the participants might not have been capable of learning completely new material for a whole day and, as a consequence, the quality of the course would have suffered. A two-day course (4+4 hours) was considered to be the optimal solution, since this would enable us to cover the necessities without the participants burning out. It could be said that the groups of older participants found the pace somewhat too fast, but this was compensated for by the manual, which enabled everyone to check on those issues that remained unclear. Still, some courses aimed specifically at older people had been planned to be longer than eight hours from the very beginning.

Since it was an elementary course, it was important that the instructors have sufficient time to deal with each of the participants individually. 8 to 9 (maximum 11) people was considered to be the optimum group size. In reality, the average number of people per course was 8.8. It is quite significant that the average use of available spaces was 85% – a very good result for a free course.

No preliminary testing of participants, was carried out since we did not want to create unnecessary barriers. We took into consideration the possibility that “wrong” people, i.e. regular Internet users, would join the courses – but fortunately the number of such participants was just 5%.

7.6 Content of the course

The duration of the two-day course was 8 hours, which imposed significant limitations on what topics to choose and how thoroughly to deal with them.

Even though the primary objective was to train Internet usage, the course had to start from computer training since few participants had handled a computer before. Both topics would be equally needed and therefore it was opted to divide them – computer training on the first day and Internet usage on the second.

The training program was based on the Windows operating system and the Internet Explorer web-browser, since in practice these are obviously the most widely used platforms in Estonia, particularly among individuals and beginners.

The first 4 hours were spent getting to know the computer:

- what the (main) parts of the computer were (monitor, keyboard etc.);
- how to start working with the computer;
- how to handle the keyboard and mouse;
- what Windows was, how to use it and how to start Windows programmes;
- how to enter, process and print texts;
- what a file was and how to handle them.

The four hours the next day were spent getting to know the Internet:

- what the Internet and WWW were;
- how to establish an Internet connection;
- the meaning/structure of webaddresses;
- how to search for useful information on the Internet, e.g. bus schedules, job advertisements, telephone numbers, newspaper articles etc.;
- how to use services via the Internet, e.g. perform bank transactions, monitor telephone bills, report on electricity consumption, communicate with local municipalities etc.;
- how to use e-mail to communicate with people from around the world quickly and cheaply. A free e-mail address was created for each participant for this purpose.

Since the training was comparatively short, all the participants were given an extensive course manual so that they could later refresh their memories, if necessary. The manual was even more extensive than the material covered during the course and included numerous references to Internet sites that provide good opportunities for continued self-development.

** The current report has been compiled on the basis of materials from Look@World Foundation in Estonia.*

K	Spain	Italy	Hungary	Bulgaria	France	Estonia
Levels taught	Three: Beginner, Intermediate & Advanced Beginners: 45, Intermediate: 50, Advanced: 46	"absolute" beginners	Beginner, advanced	Beginner, Intermediate, Advanced	Beginners, Intermediate, Advanced	Beginners
Number of learners in a class	Beginners: 35, Intermediate: 40, Advanced: 36	8/12/2011	Beginners: 13, Advanced: 12	4-12 trainees	4-15 learners	6-10 learners
Number of trainers per learner		1 trainer	1 trainer	1 per group	1 trainer per 4 learners	1 trainer for the whole group
Length of a learning cycle	3 years	8 weeks	10 weeks	8 weeks - Beginner, Intermediate 4 weeks - Advanced	8 weeks	2 days
Number of hours per level	Beginners: 56, Intermediate: 56, Advanced: 56	8 sessions of 2 hours => 16 hours	2x40 hours (40 hours beginner, 40 hours advanced)	80 hours - Beginner, Intermediate 45 hours - Advanced	8 sessions of 2 hours => 16 hours	2 sessions of 4 hours
Equipment used				Over 40 years old male trainees, experienced in teaching elderly students from absolute beginners in ICT to advanced in a "language" understandable to non-specialists.	Over 40 years Patient and comforting Concrete using real vocabulary	Profile varies in terms of age. Patient and ready to understand the questions and needs of total beginners
Trainers' profile	Degree in Computer Sciences with a huge experience in teaching seniors in different levels. Creation of a handbook in not technical languages to support the teaching. Lectures easy to understand and a lot of patience. -from very different educational backgrounds, with a slight majority of graduated people over 55 -majority female -most of them living alone (loneliness, interest in socialising) -appreciation of the need to become competent ICT users -Good expectations, positive attitude	"10 years of experience with the patient and comforting Concrete using real vocabulary" "Mostly over 55 Interested in Internet and PC but afraid of it Looking for friendly leisure activity" basic introduction to Hardware and Software Turnin on/off a Computer, Peripheral - mouse, keyboard etc Windows environment, using the computer and managing files Basics of text editing Internet searching for information (e.g. travel) Web based email (gmail): creating an address and accessing it.	Over 40 years old informatics and geography teacher with more than 10 years of experience in adult education and teaching in primary schools. People over 45 with mostly basic ICT knowledge who would like to improve their professional chances and using ICT for work. The other scope is people above 55 who does not have any ICT knowledge and are enthusiastic to enhance their social life, entertain themselves and keep in touch with the younger generation.	Mostly over 40-year-old people with no or superficial knowledge in ICT, who are interested in earning much experience in ICT, because they want to change their current job, or are unemployed and need retraining. Chans meet the knowledge and skills to have fun as the computer and Internet is their hobby.	Over 40 years Patient and comforting Concrete using real vocabulary	Mostly over 55 Aware of the place of computers in daily life Interested in technology but afraid of it Looking for friendly leisure activity
Learner's profile						Mostly over 50. Has had limited experience with computers in daily life. Is interested in improving the understanding of computers for work or leisure related activities.
Beginners - main topics	-Basics of Computer Science -Windows Environment -Text processor -Internet Basics		Using the computer in general, turning on and off, basic usage possibilities of Windows, Microsoft Office, Internet Explorer	Hardware basics - CPU, RAM, video card, LAN card, Peripherals - mouse, keyboard, printers, scanners. Starting Windows and personalization, basic text editing.	Hardware connection Peripheral - mouse, keyboard etc Email Window environment Text editing Internet	Hardware - turning on a computer, screen, mouse, keyboard, Windows and files, Basic information about text editing and printing, Internet - using Internet banking, searching for information (e.g. bus schedules), payment of bills via Internet, Web-based e-mail - creating an address and accessing it.
Intermediate - main topic	-Microsoft Office (Word, Excel & ppt) -Internet (intermediate level)			Microsoft Office, Internet work, wired and wireless communication, work with PDAs, Laptops and PCs; set up and maintenance of home wireless routers Autocad, PhotoShop, CorelDraw, Indesign		
Advanced - main topics	-Digital Photography -Windows Live -Other topics on students' demand		Advanced usage possibilities of Microsoft Office and browsing the internet, Windows Live and topics on demand			
Special advantages of the program	-Open to everybody -Promotes mentally-healthy attitudes and invites people to make efforts to keep fit mentally -Social advantages of ICT		An advantage of the program is that it is specific to the needs of the target group, thus very flexible and promotes keeping up with the pace of life, strengthening competences and social life of people above 45	One of the advantages of the program is that it is flexible and easy to adapt to a particular group of learners.	De-emyfication Individual advice comprehensive and human approach	The program was a program conducted 5 years ago, which provided basic computer education to more than 100 000 learners. The courses were provided in many locations close to the home of potential learners.
Specific important issues	Social support for the elderly		Social support and professional empowerment			