

## Students for Seniors: Basic ICT Education for the Elderly

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### Summary

*The mission of this project was to teach the elderly citizens the basic information and communication technology (ICT) skills. Students of information and communication sciences (museum studies and heritage management and librarianship) planned and realized this service learning project through interactive collaboration between Tin Ujević public library, Trešnjevka retirement home and Faculty of Humanities and Social Sciences in Zagreb. The education for the elderly, a social group that is least connected with the rest of the today's society through information technology, represents a very important issue for their social inclusion and staying in life's mainstream. The students taught the end beneficiaries the basics of information technology with the emphasis on social networks (Facebook and Skype). Out of 15 participants, the first level (basic computer skills) was successfully completed by 13 participants. Two participants had physical deficiencies (they could not coordinate the movements of their body with the visual input). The second level was completed by 9 participants, while 6 participants were able to complete the third level (creating and managing the Facebook account). The last level (creating and managing the Skype account) was successfully completed by only two participants.*

**Key words:** education, Facebook, Skype, information and communication technology, the elderly

### Introduction

In the today's society, the Internet is still unavailable to a large part of the elderly population, even though the research results show that information and communication technology (ICT) considerably improves their everyday activities and independence and supports their social inclusion<sup>1</sup>.

The elderly are often marginalized in terms of their social influence, since they are less economically stable than the younger population and their health condi-

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<sup>1</sup> Lewis S, Ariyachandra T. Seniors and online Social network use. CONISAR 2010: 1-15.

tions are decreased. The situation of women, who usually outlive the men, is especially difficult, since most of them are in a worse socio-economic position<sup>2</sup>. Depression is another condition common in the elderly population due to the loss of spouse, friends and their physical abilities<sup>3</sup>.

Society often forms stereotypes about the elderly, focusing on the negative characteristics of the third-age individuals, such as physical and intellectual disability. As a consequence, such a prejudice enables a certain type of social exclusion.

The basic goal of the project "*Students for seniors: Basic ICT education for the elderly*" was to teach the elderly the basics of information and communication technology in a comprehensible way. The project was designed and implemented by four graduate students of Information and Communication Sciences study at the Faculty of Humanities and Social Sciences (who are also authors of this paper) as part of the course *Service Learning in Information Sciences*.

The students in this project aimed to analyze if ICT education can enrich the lives of elderly and positively influence their social inclusion by expanding their personal social networks. (Social inclusion is defined as a condition where people feel valued, their differences are respected, and their basic needs are met so they can live in dignity)<sup>4</sup>.

There are various aspects of ICT education for elderly, such as browsing the Internet, sending e-mails, reading news, sending postcards, taking care of personal banking, etc.<sup>5</sup> Students, who planned and realized the project, taught the elderly the basic information retrieval skills on the Internet, how to use e-mail and Skype and the basics of communication on social networks (more precisely, Facebook), since research results show that social networks can positively affect elderly people's well-being, because they strengthen their mental and physical health, they feel safer and more secure<sup>6</sup>.

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<sup>2</sup> Laklija, M.; Rusac, S.; Žganec, N. Trendovi u skrbi za osobe starije životne dobi u Republici Hrvatskoj i u zemljama Europske Unije //Revija za socijalnu politiku, Vol.15 No.2 Lipanj 2008. Available from: [http://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=47998](http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=47998) [accessed 2012-12-23].

<sup>3</sup> Pečjak, V. Psihologija treće životne dobi, Zagreb: Naklada Prosvjeta, 2001, page 248.

<sup>4</sup> Mental Health Foundation. What is social inclusion and why is it so important? Like minds, line mine 2007; 30.

Fokkema T, Knipscheer K. Escape loneliness by going digital: A quantitative and qualitative evaluation of a Dutch experiment in using ECT to overcome loneliness among older adults. *Aging & Mental Health* 2007; 11(5): 496-504.

<sup>5</sup> Hernandez-Encuentra E, Pousada M, Gomez-Zuniga B. ICT and older people: beyond usability. *Educational Gerontology* 2009; 35: 226-245.

<sup>6</sup> Nahm E-S, Resnick B, Gaines J. Testing the reliability and validity of computer-mediated social support measures among older adults. *CIN: Computers, Informatics, Nursing* 2004; 22 (4): 211-219.

### **Project partners**

The project “*Students for seniors: Basic ICT education for the elderly*” used a unique service learning approach to the ICT education for the elderly. It stretched over a semester and took place in the Tin Ujević public library and Trešnjevka retirement home.

Tin Ujević public library is part of a large library system *The Zagreb City Libraries*. Their mission is to ensure that all the citizens of Zagreb have free and equal access to all types of information, wide spectre of knowledge, national and world’s heritage and diverse forms of cultural happenings, as well as to the basics of lifelong learning.

Trešnjevka retirement home in Zagreb provides care for the elderly population. They organize various activities and classes to raise the quality of life of their residents.

The library was chosen as a partner in this project because it is a public institution known for its accessibility, openness, and the initiative of the lifelong learning concept. The partnership with the library was established to attract all the home residents who wish to improve their ICT skills, but also to raise public awareness about a library as a place eager to satisfy the information, entertainment and educational needs of all social groups.

The retirement home was involved in the project with the intention to bring in and motivate as many members of the elderly population as possible, both the library users and those who do not necessarily recognize the advantage of the library services, so they could gain new ICT skills by participating in the project.

### **Project planning and realization**

The project “*Students for seniors: Basic ICT education for the elderly*” was based around four workshops, each lasting for three hours having the maximum of eight participants per workshop. The project was, among other reasons, created as a support to the initiative of aging in an active, healthy way, which includes adapting oneself to the new circumstances, acquiring information and communications skills and lifelong education.

Also, it was important for students to introduce the elderly to the positive aspects of the Internet and present them with the ways in which they can benefit from it, bringing them closer to all the advantages ICT has to offer, even if it is only for a brief time.

Around 15 people, with different levels of knowledge partook in our information literacy workshops. The group, consisting mostly of female members,

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Karahasanović A, Brandtzæg PB, Heim J, Löders M, Vermeir L, Pierson J, Lievens B, Vanattenhoven J, Jans G. Co-creation and user-generated content – elderly people’s user requirements. *Computers in Human Behavior* 2009; 25: 655-678.

was divided into beginner and the advanced users, who got a chance to reiterate what they had previously learned.

Students worked hard to motivate the elderly users to enrol in the workshop and to complete it successfully, in order to raise their interest to continue improving their skills, breaking some social stereotypes mentioned in the introductory part of this paper. None of the users showed up for the first workshop; it took a lot of convincing and additional motivation from the students to raise the attendance of their workshops.

Another important issue students had to consider was the physical state of the elderly. Although many members of the elderly population in the retirement home were happy to have a chance to participate in the workshops, they were physically limited having severe disabilities which prevented them from participating (such as hearing loss, poor eyesight, arthritis, limb or full body paralysis due to a stroke, etc). Unfortunately, these members could not have been taken into consideration as the participants in the workshops.

### **Project results**

A total of four workshops were held (on November 28th, December 5th, 12th and 19th of 2012). Workshops had 15 attendants, out of which the most were women (more specifically, there were 14 female participants and only one male attendant).

The participants were encouraged to recognize the advantages information and communication technology has to offer, to learn how to implement the ICT in their daily routine, raising the quality of their life (using social networks or freely available online newspapers).

Workshop topics were divided into 4 groups of ICT skills:

1. Basic computer skills (starting up and turning off the computer, understanding and executing essential functions of the mouse, the keyboard, windows, simple text messages on the screen and basic functions in a browser, managing browser windows and browsing to specified pages using search engines, freely available online newspapers)
2. Email (starting up an email application, writing and receiving emails)
3. Creating and managing Facebook profile
4. Creating and managing Skype profile

All participants in the workshops were expected to acquire all skills from the 4 groups of ICT skills described above. The adoption of skills from the previous groups was a prerequisite for the following group.

Restrictions have been such that, depending on the mental and physical abilities of attendants, their attention capabilities and the time limit of the workshop, participants progressed in different rhythms. Some of them were not able to work through all the levels. Out of 15 participants, the first level (basic computer skills) was successfully completed by 13 participants. Two participants had physical deficiencies, shaking their hands and having poor eyesight, so they

could not coordinate the movements of their body (hands) with the visual input (display on the computer screen). The second level was completed by 9 participants. Attendants who were not able to complete this level were limited in time (they lost too much time mastering the computer basics).

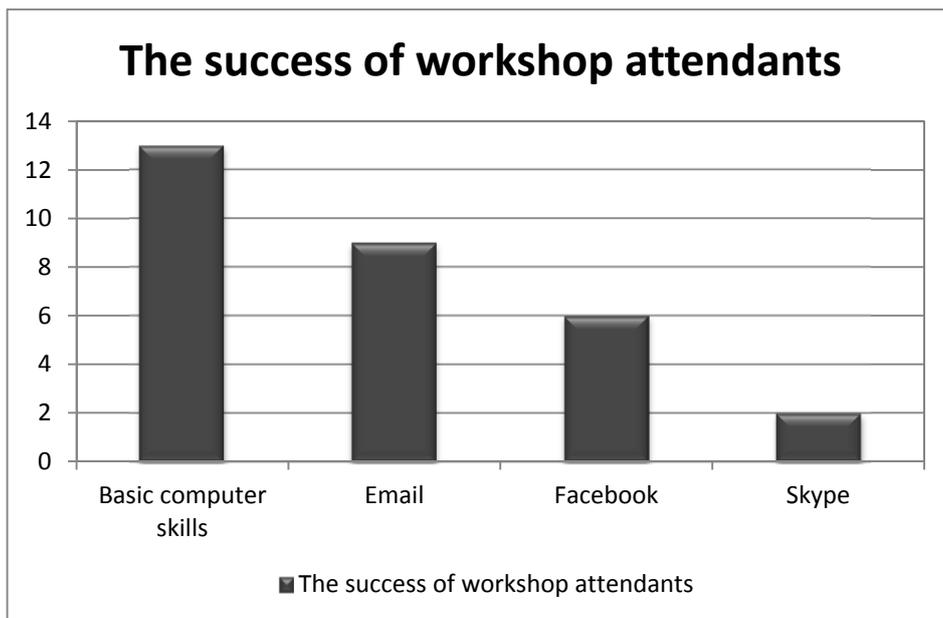


Figure 1. The performance of elderly using ICT technologies

Furthermore, 6 participants were able to complete the third level. Those who were not able to successfully adopt skills related to creating and managing the Facebook profile had trouble understanding all the options that Facebook offers; these skills were too complex compared to the time they had left after mastering the first two levels.

The last level (creating and managing the Skype account) was successfully completed by two participants. One of the reasons for such a low success rate was technical in nature (the majority of students did not have a camera installed on their home computer and therefore had no interest in this voice-over-IP service and instant messaging client). The other reason was a time limit. These two students who completed the final level and became familiar with Skype in a short time had a high motivation to acquire these skills.

## **Discussion**

These workshops provided the basic grounding for the further use of the information technology in the retirement home, motivating the end users to continue using their ICT knowledge and build upon it.

The workshops were adapted to the needs of the elderly through an interactive teaching and learning process. Students were not lecturing, but rather guiding and pointing elderly in the right direction, being very patient and not rushing the learning process. It was crucial for elderly not to feel forced upon at any point of the workshop<sup>7</sup>. Beginners also needed help to overcome the fear of computers. The elderly were constantly encouraged and animated by our students to improve on the existing knowledge they have.

Considering that the main preference of the elderly in their daily routine is to read newspapers, and since many of them cannot afford buying newspapers on a daily basis, having access and skills to online versions of their preferred journals and newspapers made our attendants feel less excluded from the contemporary digital age and more informed about the local and global events.

It is especially important to emphasize the huge role that the library played in the entire process, as a social centre where the elderly were able to expand their horizons, improve their social relations and meet new people with similar interests and hobbies using the Internet, as well as to communicate through social networks with their family, friends in different countries, etc.

The mission of the student service learning project was achieved: the elderly participants have learned basic ICT skills, were acquainted with computer equipment, they learned how to browse the Internet and search for different information.

Furthermore, this service learning project helped both university students and their faculty mentor to better understand the process of aging, the needs and interests of the elderly in our local society, especially information and communication needs of the third-age population.

Finally, since Trešnjevka retirement home owns ten laptops, the residents of the home (our end users) can continue to actively use the knowledge they acquired during the workshops.

## **Service learning project and the long-term changes in the society**

This part of the paper will address all benefits of the project that were obtained by each of the actors.

The improvement of the collaboration between two institutions, Trešnjevka retirement home and Tin Ujević public library is one of the many positive outcomes of this service learning project. After the workshops have finished, more

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<sup>7</sup> Maravić, J. Cjeloživotno učenje. // Časopis Edupoint 3, 17(2003). Available from: <http://www.carnet.hr/casopis/17/clanci/5> [accessed 2013-01-07].

elderly people came to the library on a daily basis, wanting to acquire new information and knowledge.

The other positive after-effect of the project is that students, their mentor, retirement home staff and library staff recognized the growing need for the continuous process of developing information literacy of the elderly, their introduction to the world of computers, the Internet and social networks.

Students have also concluded that the feeling of satisfaction for the exceptionally positive feedback from the elderly participants (who commented on how they liked the workshops, how useful they found them and how they helped them to learn many useful things), is priceless.

Creating a quality student- elderly relationship, developing and showing mutual respect, was another positive consequence of this project. During the workshops, the students have strived to develop a good relationship with the elderly, full of respect and patience.

The elderly showed that they felt it and reciprocated. While the elderly participants were happy and pleased they gained new skills, the students felt that their work was not purposeless because of the positive feedback. As a result, the students learned to teach, to be patient, to work in a group setting with the elderly and understand their learning pattern and the process of acquiring new knowledge.

### **Conclusion**

The active and healthy aging includes adapting to the new circumstances, acquiring information skills and lifelong learning so that the elderly population does not feel excluded from the trends of the modern society. Therefore, the basic aim of the student service learning project „*Students for seniors: Basic ICT education for the elderly*” was to propagate the above mentioned actions. Elderly users who participated in the workshop lived in institutional care (homes for the elderly) and generally had fewer options of socializing. For these people, the computer presented a way of communicating with friends and family and become more active and involved in the society.

Apart from helping the elderly, the project enabled the students to gain the knowledge and the experience needed to work with a specific age group, but it also improved their communication skills, as well as the public speaking and the presentation skills.

The project was realized in the form of small, user-oriented workshops for the elderly. It was thoroughly planned over a course of semester taking into consideration the specific age, physical ability and “limitations” of the end users in acquiring knowledge and keeping their focus during the workshop. The project proved to be useful for both the personal and professional development of our end users. The skills they acquired are applicable in their everyday life and might enrich their daily activities and fill their time.

The greatest challenge for students was to adapt the teaching approach and presentation of information to a group of people in which the majority of the members worked with this type of technology for the first time, and to explain the basic information and communication terminology in a way that is most appropriate to them. The elderly have not only mastered information literacy, but have learned to use the computer for their everyday activities and to communicate with their acquaintances through social networks.

Finally, this service learning project proved that even the basic ICT education can enrich the lives of elderly and positively influence their social inclusion by expanding their personal social networks.

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