GETTING DIGITAL INCLUDED SENIOR LEARNERS THROUGH THE TABLETS, NEEDS AND REQUIREMENTS FROM SENIORS@DIGIWORLD PROJECT

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Abstract

This paper shows the analysis performed during the first phase of the Seniors@DigiWorld project. We aimed to know the senior citizens learning needs and the staff involved in their education requirements. In the second stage, we are going to develop an educational programme that helps senior citizens to be more digital included and confident users of tablets. We consider that institutions that are working with senior learners (and not necessarily training ones) can be a good way to get previous aims. We conclude in this paper that become ICT competent is not a matter of training provided to senior citizens but it is more focused on the human capacity of the trainer for fulfilling the senior needs that surpass the skills, but are capable to keep motivating and offering exciting opportunities in the digital life.

Keywords: senior learner, digital inclusion, andragogy, ICT, tablets, pedagogy, trainers, elderly.

1 INTRODUCTION

The use of mobile devices to access the Internet is not as widespread among seniors as it is among other population groups. According to data from Eurostat 41% of adults from 65 to 74 years old use the Internet [1]. While educational institutions offer courses to increase the digital literacy, other organisations –we call them multipliers– such as libraries, elderly houses, social care centres, telescentres, etc. which come into direct contact with senior citizens are the first (and sometimes the only one), way to get help on the use of tablets. This kind of organisations are neither related to training nor have experience on education, but still keep offering tuition and assistance for senior citizens.

In this context, the Erasmus+ KA2 Strategic partnership project Seniors@DigiWorld [2] proposes to enable institutions which have direct contact with senior citizens, no matter whether they have educational expertise or not, to provide learning opportunities via the use of mobile devices.

According to Andragogy principles [3], adult and senior learners, compared to young ones, have following differences

- Goals. Commonly, in the young and adults working exists the aim of attaining a title or degree, professional training or certification; This motivation is extrinsic. In older or older adults, aims are directed toward achieving personal goals (curiosity, interest), or other cross-cutting purposes (socialization, adaptation) this is often an intrinsic motivation.
- The experience in the elderly is a characteristic that must be taken into account as an enhancer of education. It promotes the use of constructivist principles, mediated by information and communication technologies.
- Responsibility, motivation and need to be the directors of their own learning.
- Direct application of skills achieved in what they need

We should first locate their goals and motivation, while promote in the multipliers a training approach to take advantage of the experience. How is the best way to promote this attitude? Are the trainers willing to learn this?

ICT tools should not be considered only as tools for some purpose, they have very high emotional, affective and experiential components [4]. Seniors’ attitudes and interests differ from the young adults
but probably not so much, as some researchers [5] affirm that still the use of communication tools remain as one of the main uses in both age groups, but here we should go deeper to uncover to which extent are different; writing, reading and more reflexive [6], improving the networking, not in quantity but in quality [7].

2 METHODOLOGY
The first phase of the Seniors@DigiWorld project consisted on the analysis of senior citizens’ and multipliers’ training needs. This analysis was conducted in Jan-Feb-Mar 2017 to senior learners, multipliers (including staff and managers). We performed 383 questionnaires to senior citizens “Fig. 1” together with 160 multipliers all those performed in LT, RO, DE, and ES.

![Figure 1. Respondent ages.](image1)

![Figure 2. Use of digital devices by ages.](image2)

We wanted to know not only if the seniors used or not certain digital devices "Fig. 2", also if those tools were too confusing, afraid of breaking something, scared or not interested. Also, we included questions about if they knew some of the apps and services available and which uses could be more interested (communication, mails, news, banking, buying, e-books, maps, videos...). Finally, our interest was to know their preferred method for learning. More information about the survey provided can be obtained on-line: www.digital-seniors.eu

About multipliers we wanted to know their expertise and experience and to which extent they felt confidence about the use of tablets and guiding others on their use.
3 RESULTS

3.1 Senior learners

The first conclusions that can be drawn from the seniors' surveys is that the majority of learners is female (around 55-65% female) and in the age range of 65-69. We suggest the application the andragogy methodology as it is very suitable for this range of age and no any other further consideration related to the age differences or gender.

The usage of digital devices decreases as the age of the respondents increases. It can happen because of lack of interest, access (because of money or mobility) or capacity to use (disease or similar). Being the main aim of the Seniors@DigiWorld is to promote the digital inclusion of senior citizens, we consider relevant to explorer the reason why the access is decreasing, and promote the use of tablets in the range age that has lower chances and capacity to access the Internet, while at the same time, increase the potentialities of digital access to all ages. The proposal is to teach the multipliers for a user-centred approach, helping them to identify the needs, and find solutions to any age needs and requirements.

Fortunately, the respondents show a very positive attitude for learning (49%), but on the other side (44%) have a medium or high fear about learning something new. It should be noted that all these pre-conceived barriers are caused on senior learners because bad past experiences, preconceived ideas about the future (or both). Seniors@DigitWorld should introduce the digital teaching to seniors in a seamlessly way, with highly easy tasks, that will help both the seniors with some experience and the others without, while some of them gain confidence others will enjoy and go forward quick (or even help others).

The use of tablets can be very beneficial for senior citizens, although they seem not to be aware of that (67% “Lack of information on potential benefits”). It happens also that the tablet can be very multi-functional (there are a lot of apps) that can be useful for a lot of different scenarios based on user needs. We propose on the Seniors@DigiWorld project to create a compendium of most useful apps for senior citizens, and even create a platform where trainers can propose new ones. We consider it as a key aspect to show senior learners what they will get once they learn about using a tablet, with some very graphical examples. A lesson (or material, like a booklet for this purpose) can be very beneficial.

The barriers show that for 65% of respondents, tablet usage is confusing, while 9% didn’t know or didn’t provide any answer. That means that only 27% the use of tablet is not confusing. This can be seen from two perspectives:

There is a clear need of Seniors@DigiWorld project, we need to provide training to reach enough level of confidence to the senior learners. This is the first step to the self-learner, having some confidence to explore new things.
This confidence should be reinforced. The trainers in this context should acquire skills and confidences to transmit confidence and security. Trainers should be also aware of the emotional part that involves learning for a senior citizen, it can be very powerful, but also cause a lot of stress.

Being afraid of breaking something is somehow related to the confidence, but from different perspective; being afraid of making mistakes or doing something wrong is not necessarily negative, as far as we are conscious when we do something wrong. This is the first step of learning. For senior learners’ it can be very confusing, furthermore when a task is complex (requires a lot of steps) and when something is broken (as a file lost), they cannot identify what went wrong. Even so, we consider that knowledge about security (sharing personal information and online fraud) is a one of the main concerns between the learners.

We suggest that the first step is to start to communicate, visit pages, or be part of a community that is well known by all the learners (it can be an online platform shared by all the learners and that belongs to the institution).

We do not consider a key aspect to focus on disabled people, no more than the usual health issues that happens on ageing (for example vision), although we suggest focusing on tools that help seniors to be in contact with others and enjoy time to avoid loneliness and other problems of lack socialization.

The main topics senior learners like is to communicate with family and friends (89%). We consider this should be the main focus of the Seniors@DigiWorld training activity to seniors. Although a lot of them dislike (33%) to create content, still there is a huge quantity that would appreciate it (36%). We suggest not to focus on this kind of activities, still offer the possibility of being creative and participate in society to senior learners that love to, by doing this we offer great opportunities to promote a positive attitude of the elderly while creating a virtuous circle to other senior learners.

We should consider the senior citizens in a community (71% “somehow like to search for local commercial services” 73 % “maps and directions”). This would be difficult to be included in a course for senior learners (as we are creating a global product), but we should teach multipliers that are in direct contact with the elderly to show any resource that can be useful for them. We suggest including in the multiplier course some tips and suggestions about local services, practises about finding an address or even use advanced services as google earth or street view).

Watching movies and seeing photos (76%), together with music or radio (67%) is the most preferred task for leisure time compared to read e-books, playing games o dating. We do not suggest teaching how to use specific tools as YouTube or media platforms, but to show senior learners the huge quantity that is available on the Internet in a varied way (written, videos, images, audio) and explaining them the different kind of information it is (from official media and on the other side informal from non-trustful people). We should consider the possibility that seniors create a network to share things they like (as for example videos) or even learn a way to collect and organise all the materials. This can be very difficult as it requires installing and use a different tool which is additional to the tablet, but we can try to make It easy by offering some way to create bookmarks in the surfer. By doing this we would also avoid they keep searching things they already visited or know.

Some seniors are interested on the use of various devices (35% appreciate, 24% average) while others dislike knowing more (29%). We do not know if this opinion is based on founded information, even so we think it would be interesting to introduce (very shortly) how the technology is evolving (e.g. smart TV, internet of things, domotics). We should force them to use this kind of gadgets and linking all of them, but at least to be aware of the new possibilities to come, so they feel more integrated (capable to talk, discuss) in their families or recognise new possibilities when they appear (on an advertisement on TV or if a member of a family buys something).

Learning a small group with similar age people is the most preferred learning method for senior citizens (30%) followed by individually supported by trainers (21%), to get video instruction (7%) and audio instructions (4%) are the lowest preferred methods. The face-to-face contact, support from the trainer and socialising with other learners seems to be very positive in a learning context for seniors’ citizens, we understand it and propose that the main training activity to be in any of both preferred methods. We do not advise the use of online learning platform for senior learners for training, only as a support or secondary method.
3.2 Multipliers

The professional background of the multipliers is very wide, 29% work in a library, but 23% on Other. We consider we should not focus on a specific environment unless on later stages there is a significative difference about the learners attending these kinds of institutions. Majority of staff have experience (86%) working with senior citizens. We consider this is a good starting point, considering that our target are multipliers already involved with senior citizens we propose to go further, and focus on certain topics that they can have less experience, as pedagogies, techniques or other weaknesses that later in this survey were identified.

We have not identified a clear lack on the technical skills we have asked to the multipliers. By order, following are the ones that fewer people is “very confident” health (26%), play games (30%), eBooks (46%), payment and booking apps (35%), bank and on-line services (36%), film and share movies (39%), access government services (39%), buy and sell on-line (40%), maps (42%), apps for communication (44%) general information gathering (45%), create documents (47%), set-up and email (49%), take and share photos (53%), send and receive mails (65%).

We think convenient not to focus only on the previous tools to base the curriculum and course, but also on the senior needs and their context. For example, we think it is interesting to propose a learning unit to promote good health habits and playing games focused for keeping brain active. Other apps as sending and receiving mails should not introduced (as staff have enough confidence) but we can propose activities for the senior learners so they can gain expertise and experience, while enjoying and sharing their thoughts.

Because of changes on the tools and apps on the tablets, it becomes impossible to be aware and know all of them. We consider that in general terms, the fact that multipliers are confident on the use of tablet (43%), or confident depending on the task (41%), are very good scores. We appreciate the fact of confidence and the capacity of learning certain tools when they are need, or look for solutions on the Internet when problems or doubts arise. In the present technological society, it is not so important to know how to use all the tools available, but to know the basics, and have the skills to learn to use new ones. We consider that increase of confidence, capacity to learn, and to share their knowledge are the best approaches for multipliers that have later to teach or guide others. We propose to promote tricks and skills for finding solutions to certain doubts or questions.

Generally, multipliers are generally confident on manage and support trainers (68%), motivate the elderly (66%) and support different learning styles (54%), but still there is a significant lack on those skills. We think that it is not convenient to provide them with extensive theories, although some theoretical background and tricks (linking theory with practise).

Individual support is the most used method for supporting seniors on the use of ICT (53%), courses are in the second position (34%). As the method for teaching in an individual way is very different than the used in groups and each of them have benefits and different potentialities we propose to train multipliers on the differences on both them, so they can use any of each depending on the needs. The topics to be covered are in the areas of needs identification, individual support and group dynamics (promoting the support from each other).

4 CONCLUSIONS

We can conclude that becoming a trainer of senior learners is not a matter of pedagogical capacities (although respondents wished to have more skills on these aspects) but of having the capacity to increase the motivation and interest of the senior learner and being able, or at least, trying to remove any barrier that keeps seniors away from learning. Technical issues and pedagogical capacities should be provided differently to when teaching hard skills or technical capacities. Here, the pedagogical capacities put a huge effort on the social aspects of ICT, emotions, learning experience and connections with people; trainers should facilitate the creation of support networks, social learning and learning to learn attitude. Therefore, senior learners would become digitally included and not dependent on the training institution.

The use of tablets has also provided huge benefits on the senior learners, those are: more personal (sense of identity), intuitive (lack of bridge, as mouse), huge mobility (can carry them more easily) and enjoyable (associated to movies, books, websites), the use of computers has been demonstrated to be useful when having to work or write texts. Tablets become, therefore, the best gadget to promote digital inclusion on senior learners without ICT experience.
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