

INFORMATION TECHNOLOGY FOR GRANDPARENTS AND GRANDCHILDREN

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Abstract

In a global and technology society, new technologies often represent an exclusion factor for the elderly population, unlike what happens with the digital natives. By contrast, young people today are fluent in the language of the new digital technologies. Information Technologies and Communication (ICT) can be key elements to bring different generations and promote the strengthening of family ties and sharing experiences. In this context, TINA project (Information Technology for Grandparents and Grandchildren) whose main aim is to promote family cohesion between grandchildren and grandparents through the ICT including through the Internet. It presents a pilot experiment involving two groups of grandparents and grandchildren in the district of Bragança, Portugal, in 2010. Apart from living promoted by the ICT, participants were trained in basic ICT skills and participated in workshops on the use of communication/interaction technologies between grandparents and grandchildren. The project culminated with the completion of a contest based on webquests before the Grandparents day.

Keywords: Lifelong Learning, Intergenerational Learning, Internet, Information Technology and Communication.

1 INTRODUCTION

The project Information Technologies for Grandparents and Grandchildren (TINA) was launched in 2010 however, the idea goes back to 2002/2003 when developing Catraios' Portal - Kids and Adults of Childhood Education and Basic Education Portal (<http://www.catraios.pt>). This project aimed to promote communication between pre-school and primary education, and of these, with the community in general and with children and their parents or guardians in particular, especially through collaborative tools, learning objects and content for dissemination and promotion. This portal is intended as a reference site on the Internet, not only for children but also for their teachers or educators, parents or guardians. Intended to foster a community that naturally grow and develop synergies, providing all information for all [1].

But only now had the opportunity to streamline the relationship between grandparents and grandchildren, as recommended by the cartoons Catraios' Portal, Grandfather "Continhos" and their grandchildren, "Bilhó" and "Casquinha", promoting the connection between them through ICT, in particular of Internet technologies.

2 PILOT EXPERIENCE

2.1 TINA Project: what is it?

The TINA project is an initiative of the School of Education (ESE), Polytechnic Institute of Bragança (IPB), particularly the Department of Educational Technology and Information Management, and aims to promote the bond between grandparents and grandchildren through ICT, the coexistence between generations and family cohesion.

This project took place between April and June 2010 in the district of Bragança, specifically in the city of Bragança and the village of Mogadouro the completion of two training sessions (one for grandparents over 50 years accompanied by their grandchildren over 5 years and one for grandparents over 50 years and children over 5 years) allowing them to provide the basic ICT skills. Later, there were two workshops, one about Internet security aimed at parents and other about web presentation technologies of communication/interaction between grandparents and grandchildren. The project culminated with a contest based on Webquests before the day of her grandparents.

2.2 TINA Project: how?

The organization and training of this project was responsibility of the authors of this paper, with the support of the institution (ESE-IPB) and the partners involved (Mogadouro City Hall and Social and Holy Centre Santos Mártires of Bragança). Between January and March 2010 were made every reasonable effort to project implementation on the ground. The disclosure was made through posters, leaflets, news in local newspapers, the website of the institution (ESE-IPB), the project page on Facebook (<http://www.facebook.com/pages/Braganca-Portugal/Projecto-TINA/115448758465209>) and partners. It was also made a handbook of ICT in order to help grandparents and grandchildren on this trip by ICT/Internet, accompanied by the grandfather “Continhos” and his grandchildren: “Bilhó” and “Casquinha” (Fig. 1).



Figure 1. Handbook of ICT

The first training session took place on 7, 8 and 9 April 2010, simultaneously in Bragança city and Mogadouro village, corresponding to a total of 12 training hours. This first training session took 12 grandparents accompanied by their grandchildren.

On days 22, 23 and 24 June 2010 was held the second training course, in the same locations with the same period of the previous action. In Braganca, attended six seniors and six children, but in Mogadouro were present only 5 seniors for 15 children.

The program of basic ICT training, both training sessions, focused on the following contents:

- Introduction to Windows: basic concepts of Windows, the Windows desktop, window manipulation and creation of folders;
- Introduction to Word: start Word, components of the program and editing Word document;
- Introduction to the Internet: Internet Explorer, search information on the Internet, print information from the Internet and email.

These contents were discussed in very informal focusing in activities "learn by playing". After the syllabus was taught students were able to exchange e-mail messages among themselves in order to put into practice the competences acquired, socialize and strengthen family ties.

At the end of training, the trainees who wished they could request the examination of basic skills in Information Technology (IT), which enabled them to obtain the Diploma of Basic Skills in IT (DCB).

The DCB was created by Decree-Law No. 140/2001 of 24 April as a tool to fight digital divide, enhancing citizenship and promoting social cohesion in the context of the Information Society [2].

The workshop on Internet Safety to parents of children held in Bragança on June 7, 2010, aiming to inform and alert parents to the dangers that their children are exposed to when surfing the Internet, as well as ways to minimize potential threats.

The second workshop addressed the use of Web tools, communication/interaction between grandparents and grandchildren, to the participants of the two training sessions, on June 30, 2010.

Then came the contest based on Webquests of the TINA Project Webquest (Fig. 2) whose task was to find two special dates in the year 2010.



Figure 2. TINA Project Webquest

A webquest is an activity-oriented research in which some or all of the information with which students interact comes from resources on the Internet [3]. Therefore, this educational technology proved to be best suited to challenge the grandparents and grandchildren.

At the end of the activity, there was a space dedicated to communication/interaction synchronous among participants from the two localities, which required not only production but also between them, the sharing of discoveries, experiences and the experiences gained in this project. According Jonassen (2007), synchronous chat environments act as networked virtual environments based on text, graphics, audio and video in order to get the immersion of students in conversation [4]. Synchronous communication allows students to test and refine what they are learning in a community that offers immediate feedback to their thought processes and writing. That is, synchronous communication is potentially powerful to support collaboration and social negotiation.

The delivery of certificates of participation and the DCB's marked the closing of the project.

3 TINA PROJECT: WHO BENEFITS?

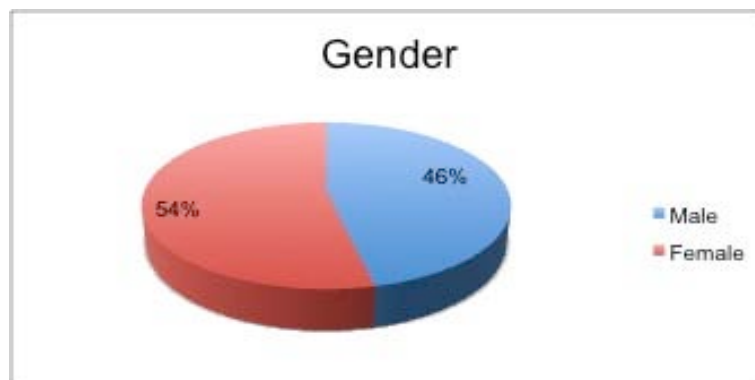
Data collection was performed at two different times of the project through a diagnostic questionnaire and an evaluation questionnaire.

The diagnostic questionnaire aimed to better understand the project participants in order to better know their requirements for training in ICT. This group included a questionnaire on personal data and other ICTs.

The questionnaire aim to evaluate the training program by participants. It should also be noted that a master student evaluated the project.

3.1 Initial Diagnostic

Through the personal data we found that female participants were in the majority (Graphic 1).



Graphic 1 – Gender

In relation to their age, children were in the age group between 5 and 12 years since the age of grandparents ranged between 53 and 89 years.

All children are students and the elderly are retired. Their qualifications can be found in the table presented below (Table 1).

Qualifications	Grandchildren	Grandparents
Uneducated	0%	13%
Pre-school education	18%	0%
Primary education	82%	78%
Secondary education	0%	9%
Higher education	0%	0%

Table 1 – Qualifications

When asked about the main reason that led them to participate in this project, everybody said: have fun, socialize and learn to use ICT. Nevertheless, they all valued the importance of spending more time with his grandson/grandparent.

In the group of questions about ICT, we found that 43% of children have their own computer equipment with Internet connection and 48% of seniors do not have computer equipment, 55% of children have no training in ICT, increasing to 87% in the elderly, the frequency of ICT use (less than once a week) is very low, both to children (76%) as too for the elderly (87%).

3.2 Final Evaluation

The evaluation of the training was agreed by the participants and allowed us to discover that:

- The location of the training and teaching aids used were adequate;
- The documentation (manual) was quality and easy to understand;
- Training should be less intensive and longer duration (25 hours);
- The items discussed were interesting, easy to understand, motivate and enable the acquisition of new knowledge;
- Interaction with other students was rewarding and the support of the grandchild/grandparent or child/elder was essential;
- Interaction grandchild/grandparent, or child/elder, was important for a better understanding of the

content and use of ICT;

- Participants would attend other training in ICT;
- Highlighted the key role in promoting this project link between grandparents and grandchildren, recommending the same to other grandchildren/grandparents;
- Evaluated the overall training as positive.

4 CONCLUSION

The dynamics of the relationship between grandparents/grandchildren and children/seniors through ICT and the Internet provided the acquisition of basic ICT competences and skills for interaction/communication between grandparents and grandchildren.

However, during the training sessions we were checking some access limitations to the elderly, particularly at the level of skills in handling the mouse and keyboard and difficulties in viewing information on screen. Should also be noted that it was not easy to form groups' grandchildren/grandparents, nor reconcile the hours of training against the unavailability of grandchildren/grandparents and teachers.

However, we believe that we were offered favorable conditions to promote and strengthen intergenerational families, as well as empathy for the elderly with technology.

A relevant observation of this project is to retain that ICT can be decisive elements to bring different generations, promote the strengthening of family ties, the sharing of experiences between generations and combating social isolation of older people.

In the near future, we intend to build partnerships in order to not only bring this initiative to more locations in the district of Bragança, but also to spread this experience in other districts.

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