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## Teachers of life and ICT

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#### Abstract

The idea of this paper originated during the Socrates Grundtvig Project "The Memory Line: an intergenerational course of learning and communication". The Memory Line Project is based on the conviction that the promotion of intergenerational exchanges is extremely important because it takes advantage of human and social capital and keeps the memory line of knowledge alive. With the exchange of information, social support and personal empowerment forms of isolation are avoided. The Memory Line Project "aims at training groups of elderly and young citizens resident in the project's partner countries to collect records (stories, songs, poems, experiences, trades, etc.) in order to ensure their conservation and dissemination with a view to creating a model of cooperation and inter-regional and intergenerational learning (among European regions) based on memory and communication and promote innovative experiences within the area of lifelong training." In this paper we present the results of the focus group realised in Italy during the Memory Line Project.

Keywords: intergenerational digital divide, ICT, digital natives, "over 65", memory, focus group.

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#### 1. INTRODUCTION

The digital divide, a problem that is a worldwide issue which unfortunately is not well considered in Italy (Zocchi, 2003; Tarallo, 2003; Ferri, Mangiatordi and Pozzali, 2010) represents the main obstacle needed to overcome in order to transform the Information and Communication Technology (ICT) age into an opportunity for everyone. Up until now, ICT globalization has paradoxically created more closure than opening on the part of the underdeveloped societies and also inside the developed countries, with the creation of an economic and intergenerational divide (Papert, 1996; Jolly and

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Clark, 2002; Cruz and Snider, 2009; Pfeil, Arjan, Zephiris, 2009), while it has served as an economic and democratic multiplier for the "happy few" connected people in western societies. We will focus our attention on the intergenerational digital divide.

Most of the elderly, the "over 65", are not yet able to take advantage of what the digital era offers, only 10% of them use Internet. In fact, the use of Internet would allow elders to have free or very inexpensive communications, like instant messaging and services such as online banking which could answer some of their real needs. Many old people, frustrated with problems of eyesight, hearing or mobility, do not feel like venturing out into the vast world of the information society. ICT can help most of the elderly to improve the quality of their life, to stay in good health and to live autonomously longer. In fact, innovative ICT solutions are emerging which should contribute to providing a solution to memory, eyesight, hearing and mobility problems which are more evident as people grow older. Furthermore, ICT gives seniors a way to stay active in their work and their community.

Young people, those born from approximately 1980 until 2000, are part of the Internet Generation (Oblinger & Oblinger, 2005, Eubanks, 2006; Howe and Strauss, 2003). These individuals have been differently labelled: iGeneration, Generation Y, native speakers, digital natives (the opposite of digital immigrants), Millennial Generation, Net Generation or Net Gens and Generation Me. In this paper we refer to these people as Net Gens. In general, the Net Gens are considered the children of the Baby Boomers. The main feature that distinguishes this generation from previous ones is that of being born and raised with ICT and the network. Like Diana and Jim Oblinger (2005) underline "as long as they've been alive, the world has been a connected place, and more than any preceding generation they have seized on the potential of networked media." Prensky (2004, page 2) said that "their online life is a whole lot bigger than just the Internet. This online life has become an entire strategy for how to live, survive and thrive in the 21st century where cyberspace is a part of everyday life."

Being brought up in an era of media saturation and unlimited access to digital technologies has meant that the Net Gens have a different way of thinking, communicating and learning than previous generations (Oblinger and Oblinger, 2005; Prensky, 2006; Tapscott, 1998). This generation is unique because it is the first one to be born and raised with digital technologies and information. Members of the Net Generation have never known life without ICT and the Net. Participating in online communities, showing others what they can do or voicing their opinions online has been part of their everyday life since childhood (Oblinger and Oblinger, 2005, McMillan and Morrison, 2006). Net Gens use technology extensively to network and socialize; in their personal lives, buddy lists, virtual communities and social networks are heavily used (Oblinger and Oblinger, 2005). From Oblingers's studies it emerged that physical and virtual are seamless: "personal" does not always mean "in person" to the Net Generation because online conversations may be as meaningful as those that are face-to-face. Their communities and social networks are physical, virtual, and hybrid.

All generations alive today have experienced the development of technology and adapted to the changes it has brought to society, while the Net Gens are the only ones who did not live through the *emergence* of this technology as adults. The Net Gens, on the other hand, have and will continue to

come of age in a society where personal computers and the Internet with its related technologies are a given – part of everyday life (Sutherland and Thompson, 2001). Net Gens are amazed by this technology no more than previous generations are amazed by television or radio. Prensky (2001) describes the situation with the analogy that Net Gens are "natives" in a society that is dominated by ICT, whereas previous generations are "digital immigrants". There are significant implications for the differences in the ways that the natives and the immigrants think about the land they live in. Both immigrants and natives may use the same technology, but the two groups do these activities differently; this situation leads to dissonance and a disconnection between the two groups (Prensky, 2004). Natives are creating their own way of doing things, often without the awareness of immigrants (Prensky, 2004). Natives and immigrants also have a different idea of technology. When asked about technology, the natives' definitions centered on "new", or better "newest", technologies. For example, a cell phone with a new feature was considered technology; a cell phone with standard features was not. What immigrants might consider "new technology", such as blogs or wikis, are not thought of as technology by natives. However, if you ask Net Gens what technology they use, you will often get a blank stare. They don't think in terms of technology; they think in terms of the activity technology enables. The enabled activity is more important to the Net Gen than the technology behind it. They often use the word "talk" when they describe text messaging or instant messaging. Software blends into the background; it enables certain activities to occur, but it is not new, novel, or customizable; this is all part of the Net Gens', or natives, definition of technology.

The idea of this contribution originated during the Socrates Grundtvig Project "The Memory Line: course communication" intergenerational of learning and (www.memoryline.org/index.php?option=com\_content&task=view&id=18&Itemid=25). Memory Line Project is based on the conviction that the promotion of intergenerational exchanges is extremely important because it takes advantage of human and social capital and keeps the memory line of knowledge alive. With the exchange of information, social support and personal empowerment forms of isolation are avoided. The project aims at training groups of elderly and young citizens, residents in the project partner countries (Italy, Romania, Holland, Finland, Switzerland) to collect records (stories, songs, poems, experiences, etc.) and to save them in a digital form, mainly by using the methodology of digital story telling "...a workshop-based process by which "ordinary people" create their own short autobiographical films that can be streamed on the web or broadcasted in the television". Once digitalised, these stories can be easily conserved and disseminated in order to create a model of cooperation and intergenerational learning, and to promote innovative experiences within the area of lifelong learning. All work of record gathering and of digital storytelling has been conducted in the intergenerational ateliers that have been organised in each project partner countries. These ateliers have given birth to many products, including digital puppets show, theatrical performances, publications, blogs and so on. At the same time, the two Universities involved in the project (the University of Milano-Bicocca and the University of Veliko Turnovo) have not only contributed to the realisation of the ateliers, but have also done am in depth analysis of the main research themes connected to this project.

The field work was conducted with a series of focus groups with people involved in the intergenerational ateliers. Those focus groups have been carried out in order to gather first hand evidence directly from the voices of people involved in the project, and to enable an ongoing monitoring and self evaluation of the project itself. In this paper we will present the results of the focus group realised in Italy during the Memory Line Project.

### 2. METHOD

In April 2008 in Pescia (Pistoia, Italy), a focus group was created in which all the Italian participants in the Memory Line Project were present, ten elderly (six women and four men) and four girls. All participants in the project were recruited on the basis of voluntary participation. The length of the focus group was one hour and a half, and the level of participation and involvement of participants was fairly high, especially for what concerned the elderly. The involvement of young people was somehow more problematic, in many cases they limited themselves to listening to what other people were saying. Thus, a direct intervention of the moderator was sometimes needed in order to assure their active participation in the debate. The group was led by a moderator with the presence of an observer, who took field-notes during the development of the focus.

The main points during the focus group were:

- 1. Different attitudes toward technologies. We focused our attention on the relationships that people have with technologies, considered both as "traditional" or "old" technologies (for example the dishwasher, the car, the washing-machine) and more specifically as new digital information and communication technologies.
- 2. How do new technologies of information and communication change the way in which we communicate with other people? We focus our attention on the analysis of the consequences that new technologies can have on communication processes between people.
- 3. Technologies and memories. We discuss the impact (good or bad) that these same technologies can have where the preservation of memories (both at the individual and social level) and the building of a sense of shared community are concerned.

The focus group was video recorded with the consent of participants; the recording proved to be very useful for the analysis of the content realised by three different researchers. Concerning the reliability of the content analysis, Neuendorf (2002) suggests that when human coders are used in content analysis, reliability translates to inter coder reliability or "the amount of agreement or correspondence among two or more coders". Regarding the validity, Robert Philip Weber (1990) notes: "To make valid inferences from the text, it is important that the classification procedure be reliable in the sense of being consistent: Different people should code the same text in the same way" (p. 12). The content analysis of the focus group, realised by three researchers was developed by paying attention to the following themes: how do elderly and young people relate with technology in general?, how do they specifically interact with modern digital technologies of

information and communication?, what are the pros and cons of the present wave of technological progress?, how can new technologies be helpful to create, share and preserve local memories and enhance processes of intergenerational communication?.

#### 3. RESULTS

Concerning different attitudes toward technologies ("traditional" and "old" technologies) when the moderator invited the subjects to speak about a technology which "gave them satisfaction", the answers of the elders went from the washing machine to the dishwasher, from the VCR (the senior who mentioned his VCR has a library of 400 videocassettes) to the "Topolino" (the very small Fiat automobile made in the 50's is still very famous in Italy), to the radio transistor which is listened to during housework. An elderly woman talking about the Topolino remembers how in the 50s, the "idea of racing, of going, of seeing .... that car gave me a sense of freedom of movement! It was the 50s!" When the moderator asked the young people, "which technology gave you the most satisfaction", an elderly woman quickly and decisively answered, "I say it's the mobile phone!!" and the young women had nothing to say. Silent agreement?

For many elders the TV is an integral part of their daily life, as is the computer, internet and the mobile phone for the younger generations. In some cases the TV is always turned on, "when I'm home I keep it turned on, not that I watch it, I listen to it ....", "when I iron it keeps me company", "I watch it often". For several seniors there are regular TV appointments related to their personal interests such as "basketball games on Monday and Tuesday evenings" or the "shows on Sunday afternoon". While the younger generations watch TV only during meals at "lunch and at dinnertime along with some news", at snack time "a few cartoons"; they do not watch much else on TV.

Regarding the "new technologies", the focus group has clearly shown that elderly people have a "mixed attitude" towards new information and communication technologies. A few people, who have been able to overcome the initial difficulties in approaching these technologies, have after a while and on their own developed the ability to use them even in a very advanced way. For example, a man has learned, thanks to the Memory Line Project, to use blogs and has even created his own blog. On one hand, the seniors recognize the usefulness of the computer, while on the other hand, the prevalent feeling is still one of refusal or at best, suspicion. Regarding the recognized usefulness of the computer, an elder says "It is so interesting, in Internet I find news and information I never thought even existed....like the history of Cambodia and Laos".

Concerning the feeling of refusal and suspicion, some elderly people show real resentment towards the computer. "I can't stand to learn to use the computer, I have refused to learn to use it...I hate the computer". Another elderly woman said, "I have one...it's been turned off for a year...I look at it with hatred...I'm afraid to turn it on.... I'm afraid that it will blow up when I turn it on". Also "reading a newspaper online doesn't give me the same satisfaction as reading the news on paper...picking up a newspaper and turning the pages and smelling the ink...!"

The focus group has shown that there are some elders who would love to learn to use the computer...an elderly woman said that she would like to learn to use the computer, but that she thinks she is too old to do so, "I would love to learn to use it, but at my age, where do I go to be taught? They tell me to go to bed." Another woman said, "I like the computer, but the computer and I don't get along very well, but I want to learn and be more updated".

Among the difficulties that still may prevent elderly people from interacting in a positive way with the computer and with all the related technologies, two of the most significant factors are related to memory and language. On one side, some people said that they have experienced many difficulties in remembering all the different things (e.g. procedures, tasks, instructions) that are needed to make the computer work. Another problem is related to the fact that still for many uses and specific applications, it is not possible to interact with the computer in people's native language, but it is necessary to use English, which is not commonly known by old people. An elderly woman tied her resentment to the computer to linguistic problems, to the fact that "the computer is in English. I hate the computer because it is in English....I studied French and German....why do I have to learn English....we are in Italy....we speak Italian!". Moreover, especially when some problems arise, messages and prompts coming from the computer are formulated in a "technical jargon" that is quite difficult to understand.

When it comes to younger people, as it was obviously expected, things are quite different, as the interaction with the computer and with the new technologies of communication has become a normal part of everyday life. For the younger people it is normal to stay online all day. A girl says, "I pay a monthly rate...my computer is on all day even if I'm not always in front of it". Even more than the computer itself, the cell phone seems to be the technology that young people use the most. What differentiates between young and elderly people in regards to cellular phone usage is not only linked to the sheer amount of time, but also to the specific tasks performed: while the elderly use the cell phone almost exclusively to make calls, young people make a more intensive use of it, since they also exchange text messages, use it as a personal agenda, listen to music, take pictures and so on. The relationship with the cell phone can become almost symbiotic.

The use of the mobile phone for the younger generations has been part of their daily life since childhood. A girl says, "I have had a mobile phone since I was 12....it was a gift". Young people send SMS text messages regularly; while seniors use their home phone when they are at home and their mobile phones when they are travelling or for sending SMS text messages with relatives abroad. They do not have anything against the mobile phone if it is used "correctly"; and unlike the younger generations, they always use it "correctly", with a note of controversy towards the young women present and absent. An elderly woman declares, "the mobile phone is very important for me, but I use it correctly." Two women, for example, do not use SMS text messages, but they would like to learn to use them if someone would teach them how.

What is interesting here is that, even if there is complete awareness of the fact that checking the cell phone every fifteen minutes is quite useless, as long as every call or every new message is signalled with a sound, people still need to look at the phone on a regular basis. It seems that in a given sense, the cell phone could be perceived as an integral part of the sense of personal identity.

Young people take photos with their mobiles, while seniors do not use the mobile to take photographs; rather they sustain, referring to the cases of bullying in schools that "if there weren't the possibility to take pictures with the mobile, many problems wouldn't have even existed".

When the moderator asked the subjects to speak about the way how new technologies of information and communication change the way in which they communicate with other people, it emerged that in a certain sense, it is quite obvious that new technologies have substantially changed the way in which we communicate, but still it is difficult to precisely assess the overall impact that they are still producing in our everyday life. If we favour an "optimistic" view of technologies, we can say that surely they have enhanced our abilities to communicate, but it is also possible to hold a more pessimistic stance by saying that this enhancement is merely a quantitative one and that under the surface, the real quality of our communications has actually decreased. In particular, this "pessimistic" view is common among elders. Seniors fear that the computer creates limits; or if used excessively, it "destroys social relations" and interpersonal relationships. Seniors prefer face to face communications with respect to computer mediated communications. A woman confirmed that "I use the computer for necessity; I learned to used it for necessity even if I don't love it very much, while I love to meet and listen to other people! The use of the computer is very important, and I think its abuse is a problem, it destroys social relationships... it takes away from the social relations; the personal relationships we once had, going out. Instead, people close themselves up in front of these boxes".

It is quite clear that the point here is in determining exactly what we mean by "communications". As a first approximation, we can distinguish between the communication one does for everyday work and other more personal communications. New technologies have surely had a great positive impact on our abilities to communicate for our work. This view was almost unanimously shared by all people involved in the focus groups. However, things change a bit when it comes to personal communications, there was no unanimous consensus on the fact that new technologies can carry only positive consequences. The view that they can also lead to a lower level of direct, face-to-face interaction was indeed shared by many of the participants, and this was in turn perceived in many cases as a factor that can lead to more superficial, and impoverished, communications. Actually, there are a lot of things that may go on in the course of direct interaction, and it may not be necessary to use words in order for certain feelings to be communicated and shared among people: all these non-verbal ways of communicating are clearly irreplaceable with, for example, a phone call, but still they represent a very important part of our everyday communication.

Quite paradoxically, the impact that new technologies can have on our personal communication (as distinguished from communications made for work purposes) could be in a certain sense linked to geographical distance, in a sort of inverse relationship: these technologies may indeed enhance our ability to communicate with people who are very far away (for example, we can chat with our friends who live in different continents), but may also lead us to hold more superficial communications with people who are nearer (for example, we can phone our parents while commuting on a train from home to work or vice versa, and this may prevent us from visiting them).

An elderly woman said, "It lets you communicate with those who are far away, but it doesn't help your relationship with your neighbour".

Concerning technologies and memories, clear differences between young and elderly people appear to be present, as the former are very used to considering their computer as a natural extension of their mnemonic faculties, while the latter prefer to use more traditional ways of keeping track of facts, events, and information. We can use as an example the different ways in which people tend to store their personal pictures: while elderly people keep them in the traditional photo albums or in shoe boxes, young people directly use the computer as an archive. Elderly people are much more suspicious about the possibility of keeping their personal memories on the computer, also because they fear that something may go wrong (for example, a crash in the hard disk may occur), thus leading to a loss of data and information. Only a minority of elderly people use or would like to use new technologies to preserve their memories. An elderly man declared his enthusiasm with, "I use it [the computer] as I can, I learned to use it by myself and for many years I have put in my memory, stories, and personal experiences..." In general, concepts such as "backup", or "safety copy", are not easily managed by elderly people, while young people are more confident in their ability to prevent bad accidents: some of them also have said that copies of all personal data, files and information can now be easily stored directly on the Internet; and this is the best way to cope with the risk of a personal hard disk crash. This point is interesting as long as it highlights how the relationship with the web can develop from a simple passive consultation toward more active usages, in which the net becomes an integral part of a personal self identity.

#### 4. DISCUSSION

Concerning technologies and memories, the relationship between technologies and memories is another significant issue that was debated in the course of the focus groups. It is well known, thanks also to the work of well known scholars such as Marshall Mc Luhan and Walter Ong (1982), that every advancement in communication technologies has a deep repercussion on the way in which we use our memory. Even if we must be careful in drawing clear-cut distinctions, as long as new waves of technological advancement cannot completely replace old practices and habits, there are no doubts that, for example, the introduction of the printing technique marked a crucial step in the development of modern civilization. Currently, with the "digital revolution" we are living in, we are perhaps witnessing another important turning point. The analysis of the way in which the computer and all related technologies can change the way in which we memorize things therefore represents a point that deserves special attention.

To better understand the intergenerational differences concerning the attitudes toward ICT and the use of ICT, it is necessary to understand better what digital immigrants feel and think about the technology of the digital immigrants. "The importance of the distinction is this: As Digital Immigrants learn – like all immigrants, some better than others – to adapt to their environment, they always retain to some degree, their "accent," that is, their foot in the past" (Prensky, 2001). The digital immigrant accent can be detected in many ways; for example, turning to the Internet for

information second rather than first, or in reading the manual for a program rather than assuming that the program itself will teach us to use it. The digital immigrants do not consider first ICT a communitarian and identity medium. Today's elders, inside a Gutemberg Mass society, were "socialized" differently from their kids; and are now in the process of learning a new language. And a language learned later in life goes into a different part of the brain. "There are hundreds of examples of the digital immigrant accent. They include printing out your email (or having your secretary print it out for you – an even "thicker" accent); needing to print out a document written on the computer in order to edit it (rather than, just editing on the screen); and bringing people physically into your office to see an interesting web site (rather than just sending them the URL). I am sure you can think of one or two examples of your own without much difficulty. My own favourite example is: "Did you get my email?" (Prensky, 2001).

#### 5. CONCLUSION

As long as the participation of young people is concerned, a relevant observation must be made and underlined. As in the focus group it has been observed that young people are more reluctant to openly express their views, notwithstanding the efforts made by the moderators to actively involve them in the debate. This phenomenon was evident, the moderator encouraged participants to express their opinions, obtaining "excessive" results from the seniors and decidedly insufficient results from the young people. In fact, the seniors were insatiable in expressing their opinions, while the young people were reluctant to speak; it seemed that they became shy by the enthusiasm and loquacity of the elders. This did not only happen in the focus group, but also in the rest of the workshop; one young girl said "we are here together every now and then, and we listen". More than once when the moderator asked a question to the young person, the elders answered instead of the young person. For example, the moderator asked the young person, "which technology satisfies you the most?" An elderly woman immediately and decisively answered, "I'll tell you, the mobile phone!!" When the moderator asked the young person, "on average how many text messages a day do you send?" an elderly man answered, "oh, lots!!" During the whole focus group the elders turned to the young people present as representatives of young people in general, with their "idea of young people today", people who "do not have the values of the past" and that they spend all day on their computers, or they are sending messages, neglecting social relations and what's really important in life. Maybe this negative and sometimes aggressive approach of elderly people against young people is also due to the fact that seniors feel that "young people do not listen to them". In fact, seniors recognize the great importance of their experience and memory, and they complain a lot about the fact that they would like to speak with young people, but they do not want to listen, especially their children. For example, an elderly man said, "when I want to tell my daughter something which would be useful to her for not making a mistake, she tells me that she prefers to make a mistake on her own than do it right with my advice.... and so she doesn't listen to me". The seniors underline that everything was very different when they were young; they listened to and considered not only their parents and their grandparents as precious "teachers of life", but also to other elders of the community.

In general the Memory Line Project was instrumental in helping elderly people to overcome, or at least to start reconsidering, their previous negative attitude toward the computer. As has emerged strongly during the Memory Line project and from the focus group, in particular for people from different generations like the "over 65" and the Net Gens to work together, it is essential that these people create a communication channel based on understanding and mutual respect. To start the construction of this communication channel, it is necessary that people realize that those who belong to another generation, "the others", are neither better nor worse but simply different than they are. To promote this growing awareness by people, it is useful to give them information on the "other" generations with which they come into contact to help them reflect on it.

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