

Vocational Training for Fifty-Year Old Workers – A Challenge for Everybody

Maria Cristina Migliore

Contents

Innovation and Ageing	1
The low level of participation of over 50s in vocational training programmes	
The context and its rules in the training decisions of workers and employers	8
Which contexts and rules are favourable to the training of workers over 50?	10
Learning the use of ICT is not just a cognitive issue	12
Final remarks	17
Bibliographic References	

Innovation and Ageing

Process and product innovation, increasingly boosted by progress in research and scientific knowledge, have become the hallmark of the economic development of the most advanced countries. This kind of transformation has been interpreted and named in different ways – post-industrialism, information economy, tertiarization, knowledge society, to give only some examples (Bell 1973, Castells 2000, Stehr 1994). Piedmont, with an economic system based on industrial manufacturing, has slowly started on a path which seems to direct the production of goods and services towards higher levels of innovation, information and knowledge. In parallel to this deep process of change, another shift is becoming more apparent: the ageing of the population, especially the labour force, with a shrinking number of young people both in absolute and relative terms, and a rise in the share of senior citizens (Abburrà & Migliore 2004). Ageing in Piedmont is among the highest in the European Union. In 2003, among the 250 regions belonging to the European Union (EU-25), Piedmont ranked sixth, with the lowest percentage of population between 0 and 19 years of age, and thirteen with the highest percentage of people over 65.

According to the Kok report (Kok 2004), prompted by the European Council in Brussels for a relaunch of the Lisbon Strategy, in the absence of a significant increase in productivity, the ongoing ageing process, combined with the current low levels of employment of older workers, may cause a conspicuous slowing down in European economic growth. To put remedy to this phenomenon and sustain economic growth, the report emphasizes the need to reach the Stockholm objective of a 50% employment rate among the population over 55 by 2010.

Indeed, from the Stockholm Council Meeting (2001) onwards, the European Union has devoted continual and growing attention to the employment of the elderly population: from setting a general employment rate growth target, an agreement has been reached towards a gradual rise of the actual average retirement age of 5 years approximately. This can be attained through a reduction of early retirement schemes, a reduction of incentives to retirement and through the adoption of flexible and gradual retirement programmes coupled with greater training opportunities (Barcelona Council 2002), all in a framework of policies to promote active ageing (European Council of Brussels 2003).

The United Nations was the first institution to develop the approach of active ageing, which has now become a benchmark for European policies and for those who suggest that the ageing of the population is not a painful phenomenon to be passively accepted. It should instead be considered both a fact and an achievement of progress in human society. If we look at it more closely, the prolongation of life can be considered an innovation in and of itself, which must be adequately incorporated into our social organization, with a view to generating further innovation (Abburrà & Donati 2004).

At a European level, the answer to the question whether an ageing region like Piedmont can tackle the on-going economic transformations with adequate human resources and whether ageing might slow down innovation, lies in life-long vocational training as the main strategy to counter skill obsolescence and sustain innovation processes. This paper will discuss the current low levels of participation in vocational training by people over 50 years of age, and will argue that a wider participation by this category of workers requires not only their engagement of course, but also the commitment of all the other stakeholders in the business world and in vocational training, as well as of public decision-makers. We shall specifically consider the learning of Information and Communication Technologies (ICT) as a typical case where ageing and innovation come together. We are going to suggest that this kind of learning not only implies cognitive aspects for older workers, but above all a re-definition of their role in interpersonal and social relations. Lastly, the paper will focus on the positive relation between individual and company training needs as a preliminary condition to ensure the success of training activities. The suggestion is made that a positive matching of the two elements is even more necessary when retirement age approaches. Indeed, the vision of senior workers about their future life after retirement can be the starting point to involve them in vocational training programmes which can also meet business needs.

The low level of participation of over 50s in vocational training programmes

We shall begin our investigation from the statistical data available on senior workers attendance to vocational training courses funded by the Region of Piedmont¹. These data highlight both the low degree of participation and their very modest incidence on the total number of senior workers.

As regards voluntary or company training programmes funded by the Piedmont Region, they mainly involve younger workers and the number of participants starts to decline in the age group of 35-39 years, to become clearly modest starting from 50 years (Figure 1). In the past few years the average age of participants registered a slight increase (from 36.5 years in 2002 to 37.1 in 2004) because of a higher share of older age groups and a lower percentage of younger ones. Nonetheless training activities remain powerfully imbalanced to the benefit of participants in younger age groups.

Figure 1



Employed workers attending vocational training courses funded by the Piedmont Region by age in 2002, 2003 and 2004. Percentages.

¹ Another form of funding for on the job vocational training programmes is now developing. It is based on interprofessional funds fed by the transfer of 0.30% of social security contributions (INPS) upon company request. No overall statistical data is available however, and the incidence of this type of training programmes as against those funded by the Region cannot be assessed, nor can we analyse the social and demographic composition of participants.

Source: work based on ORML data

As regards gender distribution, men are more numerous than women, especially among over 50s and above all over 60s – as well as in the first age group of 15-19 years (Figure 2).

Figure 2





We shall now compare voluntary training courses with those organized by companies. The fact that companies tend not to invest on older labour force (Iacci et al. 2005) makes voluntary courses an interesting case. Actually the Piedmont Region has invested an increasing amount of resources to promote voluntary programmes. In Piedmont, attendance to voluntary vocational training courses is funded by the Region (through each Province) by means of vouchers which cover 80% of the overall cost, the remaining 20% is paid by each participant, to promote their sense of ownership. This kind of action, external to companies, could encourage a new and more open attitude towards vocational training, especially if targeted on the elderly workers' group. Actions of this kind allow workers, both men and women, to be the owners of their professional development and growth. Moreover, as the Piedmont Region highlighted, this kind of training and company needs. At the same time, it also allows territorial needs to be met through specific development incentives (Viano 2005). On the other hand, recent surveys have emphasized that a considerable number of participants attend these courses after having agreed them with their employers (Provincia-di-

Source: work based on ORML data

Torino & ISFOL 2005). The relation between voluntary training courses and courses provided by companies will be investigated again further on in the paper.

A higher percentage of younger workers emerges from the analysis of the workers' composition by age, with specific reference to those who benefited from vouchers for participation in vocational training courses versus those trained in company courses. Nonetheless, it is interesting to note that in 2004 workers over 55 were slightly more represented in voluntary training courses as against company ones (Figure 3). This is the consequence of a growth in voluntary programmes in previous years which led to a higher percentage of the elderly group in comparison to courses provided by companies. Yet differences are very modest and do not reverse the overall trend: the involvement of workers over 50 in voluntary training programmes remains difficult.

Figure 3



Participants in voluntary or company vocational training courses by age groups in 2004. Percentages.

Source: work based on ORML data

From the point of view of gender composition, in the group of over 50s a higher percentage of women is observed in voluntary courses rather than those provided by companies (Figure 4). The share of women workers over 50 benefiting from company courses is on the increase. It is interesting to note that in voluntary training women workers are slightly over-represented if compared with gender distribution in the group of over 50s. In 2004, women over 50 accounted for about 44% of workers over 50. In the group of workers over 50 attending training courses in 2003

and 2004, women were instead 50%. It is hard to attempt an interpretation of this higher propensity to training on the part of women without more in-depth research.

Figure 4



Percentage of women workers over 50 out of the total number of participants in both voluntary and company vocational training courses

Following the few data available we may assume that a certain perception of the need to equip oneself with new knowledge through training provided in specific centres is beginning to spread out among elderly men and women workers. Yet further incentives are needed to foster the training participation of workers over 50 with the aim of supporting employability and increasing employment rates. These objectives can only be achieved through a thorough understanding of the causes underlying a lower participation. In the next paragraph we will first offer an explanatory framework, following the above-mentioned line of thinking, and then subsequently propose the context, rules and training which are more likely to promote a greater involvement of over 50s in vocational training.

So far, we have analysed the gender and age composition of employed workers attending vocational training courses funded by the Region of Piedmont. In closing this first set of considerations, an interesting observation is about the low participation in vocational training courses for workers funded by the Region as against the overall reference population (employed workers in general), which drops even further with age (Table 1). In the younger groups, under forty years of age, the rate of participation is more than double as against the rate observed from fifty years onwards.

Source: work based on ORML data

Table 1

Rate of participation in vocational training courses for employed persons funded by the Region (participants in voluntary and company training courses in 2003 out of the overall number of employees, average 2003)

Age groups	%
15-19	3,1
20-24	5,8
25-29	7,2
30-34	6,9
35-39	6,1
40-49	4,9
50-59	3,0
60 +	1,5
TOTAL	5,3

Source: work based on ORML data

In conclusion, both our analysis and other studies show that companies tend to invest in the training of younger, more qualified and male employees and to decrease investments starting from 45 years of age (IRES-Piemonte 2005). Indeed, according to the literature, in Italy the trend seems to point to a further lowering of this age threshold, rather than an increase (Iacci et al. 2005). More generally, some scholars share the opinion that certain types of businesses, more keen on short-term profit maximisation for shareholders, are characterized by inadequate investments in training (Gallino 2005). In Italy the issue might be further aggravated by the prevalence of small and medium-sized companies facing a fierce competitive challenge which further reduces their room for manoeuvre in management control and financial reporting.

On the other hand, our survey has highlighted that even in voluntary courses there is a higher number of younger workers, to a greater extent than in company courses. A positive trend can be observed in the increasing number of over 50s, especially women. But a lot remains to be done.

In the international scenario, Italian vocational training levels among adults (25-64 years) rank well below the European average (in 2005 this value was equal to 6.2% in Italy versus 10.8% in EU-25).

In this regard, please consider that the European average objective to be reached by 2010 in the Union in terms of percentage of adult workers (in their working age) involved in vocational training² was set at 12.5% by the European Council (European Council 2003). There is still a long

² This indicator is based on the number of people in the age group between 25 and 64 years attending vocational training in the four weeks preceding the Labour Force Statistical Survey.

way to go for Italy to take significant steps in this direction. Since the percentage is lower in Piedmont as against the national average and the trend points to a drop in participants, Piedmont will have to work even harder³. More specifically, conspicuous energies and resources will have to be diverted to promote the participation of the group of over 50s in vocational training. For successful actions to be taken we need a shared identification and explanation of the root causes underlying the lack of participation of senior men and women workers in vocational training. In the following paragraph, I will frame the issue into the theoretical cultural-historical paradigm⁴ (Chaiklin 2003) and in the landscape of Italian specialized literature.

The context and its rules in the training decisions of workers and employers

Which are the factors underlying the insufficient presence of senior men and women workers in training courses in Italy? The answer to this question implies a diverse range of elements contributing to define a changing scenario, a scenario yet which continues to be informed by a traditional culture, and which tends to be little innovative in all respects.

The analysis will first focus on the individual experiential level to subsequently move to context aspects. The call for lifelong learning tends to neglect the fact that this objective, for the overwhelming majority of over 50s, is no longer attainable, for the simple fact that for the current generations of men and women workers education and training ended when they started to work after completing their education in their youth.

For over 50s learning activities may be a discontinuity both in personal and professional life and may be associated to remote experiences in their youth. Going back to learn in a structured manner, with the aim of acquiring new knowledge, may be perceived as going back to school. For those who are young now, who have just left the educational system and enter the labour market, the experience of lifelong learning will generate a different perception of training, even when they are fifty. If lifelong learning becomes popular in Italy too, similarly to other European countries, then the current younger generations will really continue to learn all along their life.

Therefore, a first challenge with people over 50 is that of changing their belief that training is confined to the early stages of life. However, even in the absence of prejudice against going back to

³ Please see the Lifelong Learning trend in the "Autonomy/Safety" dominion in the system of Regional Indicators (SISREG) <u>http://213.254.4.222/sisreg/index.asp</u>.

⁴ For a more detailed presentation of the application of this paradigm to the vocational training of older men and women workers please refer to Maria Cristina Migliore's paper, 2005. "The contribution of cultural historical activity theory in analysing vocational e-training of older workers". Pages 476-481 in *Lifelong E-learning. Bringing e-learning close to lifelong learning and working life: a new period of uptake,* edited by Andràs Szucs, and Ingeborg BØ, EDEN, European Distance and E-learning Network. You can unload the paper at http://www.demos.piemonte.it/PDF/RelFinl05.pdf

school at fifty, there may be many other obstacles to overcome. First of all there must be a perceived need to learn something specific. It is not a generic motivation to learn, but rather the perception of the need to learn something that one does not know.

This need for knowing develops around the activities in which men and women workers are engaged, since it is only through actual practice that knowledge gaps can be identified. Knowing of not knowing is not enough though: the wish to learn will only be developed if it makes sense to embark in a training activity. In the case of men and women workers over 50, the life context may often be unfavourable to develop both a need for knowledge and training as the correct action to meet this need. For the current generations of over 50s, in particular for men, work is often a key aspect of their daily life. For many of them, it is the area where a need for knowledge might develop.

Research has highlighted that several factors weaken the working position of over 50s, especially when companies carry out intensive restructuring operations (delocalizations, mergers, joint ventures) and process and product innovation. In these instances, businesses tend to perceive older workers as a break to change, they complain their lack of flexibility, insufficient openness to change, and their being attached to the past; for these reasons they prefer to replace them with younger workers (Iacci et al. 2005). An additional deterrent is the high cost of older workers, not necessarily correlated to productivity, since seniority still remains an important element in wage progression. In such a stiff context for the management of human resources, it is easy to take alleged drops in cognitive skills connected to age as an excuse to dismiss investments in vocational training for senior workers.

From the workers' viewpoint, given the changing environment, a difficulty in perceiving innovation in a positive matter and the prospect of a close retirement, there is clearly the tendency to seek retirement in the shortest possible delay: according to recent surveys reported by Iacci et al. (2005, 45), about 50% of workers over 45 would like the retire as soon as they can. It is quite understandable then that companies can hardly see any return in training investments for senior men and women workers. Currently, in Italy, we are witnessing a close correlation between the structural context characteristics (labour policies and retirement system regulations) and the actions of both employers on the one side and workers and unions on the other: in other words nobody seems to be inclined to enhance the experience of senior workers. As Soro sharply noticed a paradox applies: in the "entertainment" culture people are eternally young and the stars of the Sixties are still worshipped. In the manufacturing world instead, people are already old when they are forty (Iacci et al. 2005)

Which contexts and rules are favourable to the training of workers over 50?

Seen from outside, the situation appears to be difficult to change: all the actors seem to be right in their own way. Why senior men and women workers should suddenly be flexible, after working for decades in hierarchical organizations, and not be involved in changes if not to adapt to them according to other people's plans? How can they promptly accept innovations which threaten acquired and safe positions? Why should they participate in training courses if retirement is drawing closer? It is quite understandable that they cannot find any relevance to them in training. On the other hand, neither workers nor their employers will be easily led into believing that it is enough to do training under the pressure of change and innovation. It is often too late, adapting to the new takes time and retirement is close. At times of change a solid relationship of trust is necessary to be able to look to the future with hope and farsightedness (even beyond retirement) and let oneself get deeply involved. On the other hand we cannot underestimate the need for labour policies to enhance senior human resources and build a context favourable to investing in training.

At present, a strong trend among employers and managers, who perhaps were not able to train their personnel in change management, is to favour generational turn-over, even at the risk of loosing a significant heritage of technical know-how and relations (with suppliers, customers, etc).

In these circumstances, the unions too find it difficult to promote and support innovative programmes to enhance the skills of senior men and women workers, and tend to focus on the interests of their own members. The latter belong to the best protected sectors, their age is generally mature and, if the above-mentioned surveys were successful in detecting a common trend, we may assume that they prefer to turn their attention to retirement rather than redefine their working role.

How to break a mechanism whereby neither the workers, nor the employers or managers seem to be interested in maximising the value of all the skills and knowledge accumulated all over the working life? It is reasonable to expect that a different behaviour of all the actors involved in the system will be prompted by the gradual adjustment of labour rules and regulations and the composition of senior workers, as well as by a cultural change in general. As a matter of fact, the Dini reform is close to its full implementation: starting from 2008, retirement will be conditional to either 40 years of social contributions, or the achievement of retirement age which has been raised to 60 for women and to 65 for men. Besides, the group of workers over 50 is becoming larger because of a

higher number of people who completed their studies at a more mature age and therefore entered the labour market later. This group will reach the required level of contributions to obtain a pension when they are older than the current retirement age. Because of these changes in the working environment the share of workers over 50 is bound to increase and receive more attention from managers, unionists, workers' associations, public authorities, training institutions, etc. Lastly, the rise in average workers' education (both men and women), and a more widespread support for active ageing may create a more favourable context to the enhancement of skills and knowledge accumulated through one's experience and to investments aimed at countering skill obsolescence and protect employability. The larger representation of workers over 50 in vocational training in Piedmont in the past few years might be considered as a indicator of this trend.

Anyway, the entire system, including companies, workers, unions, public institutions, training agencies, would undoubtedly benefit from appropriate actions to support and accelerate this development. More specifically, what can be done for men and women workers who did not experience lifelong learning and worked in companies which did not encourage their versatility and rewarded seniority rather than skills?

Sure enough, as I already hinted, the forthcoming demographic changes may lead to more proactiveness in taking the challenge of the profound changes that many workers over 50 have to tackle. If economy in Piedmont starts to recover and expand boosting employment, some tensions are likely to be felt in the labour market because of the lack of young workers (Lanzetti 2001). Companies more open to innovation will certainly engage in the development of senior workers, and their management will be able to create a trustful, favourable climate and widespread leadership. These companies will be able to recognize the value of diversity and combine individual with company expectations (Iacci et al. 2005, Tidd et al. 1997).

As regards that kind of autonomy and experience which seem to hamper innovation, rather then seeing it as the inability to tackle innovation, we might consider it as the manifestation of the fear of losing one's role⁵. Indeed experience and autonomy may even contribute to innovation and creativity. Perhaps young people are not an obstacle to innovation because they have no previous experience to compare novelties with and they can more easily adapt to innovative projects, whereas senior workers need a feeling of greater involvement and participation because of their accumulated experience (Goldberg 2005). Opening up to the contribution of experienced workers may actually be very helpful and reduce the risk of misjudgements. In parallel, the management of

⁵ The issue of controlling one's role is more thoroughly analysed in the next paragraph entitled: "Learning the use of ICT is not just a cognitive issue".

human resources should promote the integration of different generations of workers. Eventually, the emerging challenge now is to manage workers who joined the company at different times, who have different backgrounds and life stories, and which, because of innovation, compete one against the other. A management option might be that of managing conflicts through the recognition and development of their diverse and complementary skills.

However, the creation of a satisfactory working environment is not enough: it is important to support it with gradual changes in the regulatory framework. Along these lines, it is of paramount importance that labour policies favouring senior workers continue to improve. Stakeholders should give up early retirement as well as retirement incentives and retirement regulations should be reformed to envisage gradual and more flexible formats, without penalizing workers whose pensions are calculated based on the compensation method (Iacci et al. 2005). Furthermore, once retirement incentives have been eliminated, the possibility of combining retirement income with income earned from a job should be further liberalised - it could become another source of contribution to the pension system.

Moreover, since the labour market has become more and more flexible, it is perhaps important to promote atypical contracts for senior men and women workers too, so as to make it easier for them to find a job when they have been made redundant because of industrial restructuring. Quite clearly, before introducing further measures of flexibilisation, priority should be given to the implementation of more adequate active income defence policies (Iacci et al. 2005).

Another aspect to be considered in promoting access to vocational training is the possible competition between training and other activities, including work. The issue of time constraints has emerged in a recent research in some European countries showing that women are squeezed between work and their other family engagements (Tikkanen et al. 2002). The same study highlights middle management pressure put on workers to prevent them from participating in training courses because of work requirements. The same pressure may also come from the unions or arise from internal conflicts. Once again, this empirical evidence shows that training is not just relevant to workers, both men and women, but also to all the other social actors.

Learning the use of ICT is not just a cognitive issue

This chapter is devoted to the use of ICT in vocational training courses for men and women workers over 50 years of age⁶. This topic is a typical case of interconnection between ageing and innovation.

⁶ For the purpose of this article we do not need a distinction between learning the use of ICT for its own sake or learning it instrumentally in other learning activities. Our focus here is learning of new tools like ICT for people

What I will try to argue, however, is that the key issue here is not ageing, but the relational and social repercussions of the use of new tools in the activities ordinarily performed by individuals.

To many men and women workers the use of ICT is something quite new. In Piedmont, the age profile of those who use a computer every week is very uneven, it declines with age and it shows a significant drop starting from 55 year of age (Cantamessa & Paolucci 2004).

Figure 5





Source: Regional-Ist, figure reported in Cantamessa & Paolucci, 2004, page 15.

Following the above-mentioned trends a debate about the congruency of innovative tools like ICT in the learning practices of senior men and women workers would be mandatory. Given the low level of access of over 50s to the use of new information and communication technologies, does it make sense, from a strategic viewpoint, to address training courses with the use of ICT to this category of users?

There is no easy answer to this question, nor can we give a negative answer, since the use of new technologies in learning is growing and may become a further disadvantage and bias in training

belonging to cohorts who experienced them in their daily and working life only as adults and therefore are less familiar with them. Only the last part of the paragraph briefly deals with training with the support of ICT.

access for men and women workers. More specifically, the use of ICT is intrinsic to computer literacy courses which are mostly needed by over 50s.

We shall therefore discuss the implications of the involvement of over 50s in vocational training courses requiring the use of ICT.

In this framework and with reference to the conceptual grid utilized⁷, there are more complex aspects than is usually reported in the literature about the cognitive skills of elderly people. On the other hand, the findings of psychometric studies on the alleged decline in cognitive capabilities related to ageing are controversial, especially for the people who are still working (Schaie & Schooler 1998). While test laboratories confirm the thesis of a decline in some cognitive skills, other studies on the working performance of older workers do not find any correlation with age. This discrepancy can be partly explained by the compensative role of features typical of older workers such as experience, familiarity with working tasks, motivation, and work involvement, but the issue remains open.

Coming to the more specific subject of computer skills in senior persons, research studies point to a poorer performance of older versus younger individuals (Baracat & Marquié 1994, Charness et al. 1996, Czaja 1996, Elias et al. 1981, Rabbitt & Carmichael 1994, Rogers et al. 1996). These studies, however, raise several methodological issues, for example the inadequate consideration of cohort effects (in other words they do not take into account the historical period when people lived and their life path) and research patterns uniquely based on laboratory experiments (Schaie & Schooler 1998).

In the light of these findings the theoretical perspective adopted in this paper seems to be particularly appropriate. Individuals are considered within the context where they perform their activities, using material and immaterial tools they have learnt in their personal and social relations all along their life (Chaiklin 2003, Engeström et al. 1999, Migliore 2005). In this theoretical perspective, the tools used in specific actions and activities play a key role in the development of their cognitive skills. Their use is then linked to the dimension of the control of resources and more generally of power (Giddens 1979). Power is defined as control of resources and people in the attempt of making the others adhere to their wishes. For Giddens power implies relations of autonomy and dependency. In other words, power is two-way: even the most powerful individual is dependent to some extent while, on the other hand, even the weakest individual retains a little autonomy.

⁷ See note 4

For the purpose of this paper I will focus on the issue of power and control related to the use of tools, an aspect neglected in the literature.

Every individual tries to have control on social relations and their resources through his/her activities. He/she also tends towards the stability of the reference system, since it is through this system that he/she can reach self-recognition in daily life. Control is achieved through what one knows and knows how to use. Over the years, senior men and women workers have acquired practices, techniques and technologies used at work and being the experts they may have gained a certain power over their colleagues. The process of acquiring new knowledge turns them into beginners once again, making them loose control over people, things and situations.

In the theoretical approach adopted a person's performance is the outcome of the interaction of multiple factors, where individual aspects can hardly be separated from contextual ones. Cognitive skills undoubtedly play an important role, but individual performance cannot be considered disconnected from the context, from social relations, from the degree of control over such relations and the main drives in their individual lives. Those individuals who have utilized certain tools for a long time have developed the kind of cognitive capabilities related to those tools. The adoption of new tools has both social and power implications, as well as cognitive ones.

As we previously underscored, for an individual to acquire new knowledge and skills – for example the use of ICT – it is necessary that the person feels the need for it. Besides, such need should not come into conflict with other needs, in which case conflict resolution becomes a pre-condition to develop the drive to satisfy that need.

In the next paragraphs I will make some hypotheses about which conditions may support the development of the need and drive to learn the use of ICT. These hypotheses are being tested in a research performed by IRES-Piemonte.

My hypothesis is that the drive to learn ICT among senior men and women workers can be promoted through *innovative working contexts* (Tidd et al. 1997), where ICT have become or are becoming more commonly used, where one can feel the need to acquire new skills related to new technologies, have trust on the way innovative working practices will be received and positively used, and not be the object of age discriminations. Contexts where instead power relations are based on *non innovative organizations* may deter senior men and women workers from adopting innovative behaviours like that of learning ICT. In such organizations power is likely to be based on traditional tools and knowledge, where new technologies and new behaviours are not encouraged.

In these situations workers are likely to try to gain control through traditional tools and knowledge, which are the only ones recognized as linked to power, and they can therefore not be motivated to learn the use of new technologies.

Nevertheless, I think that even a worker coming from such a traditional working environment may develop the drive to learn new skills like the use of ICT. This may be the case when other life contexts, in additional to work, are important to the individual and in these other contexts the conditions are there to develop the drive to learn ICT.

Following these hypotheses, I do not believe that the advantages offered by distance learning in terms of time and space management, based on the use of ICT – can be a decisive factor in the choice of attending a vocational training programme. Distance learning may be particularly useful to people with time constraints, but the factors leading to this kind of choice, as we attempted to illustrate, are very complex and not fully under the control of workers over 50. In fact their degree of power varies according to their interaction with the context. As we previously stated, the decision to attend a vocational training course provided with the support of ICT requires, first and foremost, that the individual feels the need for knowing and the drive to learn to satisfy that need. Favourable conditions to this process can only be found in innovative working contexts and in spheres of daily life where the use of ICT might be useful to control people and resources⁸.

How to make training appealing to over 50s

The remaining question to be answered is how to make training appealing when retirement age is drawing closer. We had previously reported that both companies and workers alike are reluctant to invest in training when the latter approach the retirement age. According to some authors, men and women workers should be allowed to choose courses which are not strictly related to their working needs, but which may be connected to their projects after the end of their working life. Some empirical evidence shows that senior workers do favour computer courses or training to develop general skills and this proves that the training content chosen individually may also be relevant to company requirements (Warr & Birdi 1998). Should a convergence of interest be reached by workers and employers, with the support of public authorities, vocational training for senior workers could become a way to encourage them to build up their future as active pensioners and increase their motivation to learn and therefore their readiness to learn skills useful at work. The interest of this proposal is to be seen in relation to active ageing.

⁸ In this theoretical approach the control of resources and people is considered correlated to every social interaction, with no regulatory or moral implications.

Furthermore, the suggestion is made that the idea of separating personal from company interests in vocational training no longer applies. Several times the point has been made in this paper that the attempt to separate personal objectives from company ones is not viable and perhaps not even desirable. This was particularly clear in the case of voluntary training courses funded by the Region of Piedmont, where a significant number of men and women workers had chosen their courses in agreement with the company, whereas the goal of this type of training was "...encouraging workers to make their decisions quite independently from the business strategies of their companies and their possible pressures." (Provincia-di-Torino & ISFOL 2005). But the same process of involvement and participation in innovation at work, with the aim of developing the need and drive to learn new skills, suggests that vocational training for company purposes needs an intense emotional involvement and a certain passion for what you do. Here again, the idea of separating personal from company objectives must be considered very cautiously. Instead, new management styles in the literature suggest to try to combine individual and company needs (Iacci et al. 1005). On the other hand it is only through personal involvement that a greater endorsement of company goals can be achieved.

Final remarks

In Italy the ageing of the population is more prominent than in other European countries because of a small proportion of young people and a consequent increase in the percentage of older people (Crisci & Heins 2006) Average age is growing even in the workers' group (Abburrà & Migliore 2004). Still, there are hardly any efforts to start a debate on how social organization should adjust to these deep transformations in the age structure of the population, and early retirement is still a common measure to tackle company restructurings.

The analysis highlights that current changes in the regulatory framework and in the composition of the labour force will inevitably drive the system towards a greater and better use of men and women workers over 50. This process, however, must be accompanied by a debate to raise awareness on the issue, to step up innovative developments and to highlight all its aspects. The aim of this essay is offer a vision where ageing and innovation are not one in contradiction to the other and to highlight that obstacles often stem from the following issues: 1) inadequate labour market rules in a changing context, 2) contexts still dominated by traditional practices and characterised by discrimination against the older population (ageism) and not sufficiently sensitive to active ageing strategies, 3) the underestimation of power and control connected to the use of working tools.

The focus of this paper is the group of workers over 50, but in fact the lack of participation in vocational training is relevant to people in their forties too. I decided to focus on over 50s because it

is in this age group that the issue becomes more acute and has specific implications like the approaching of retirement. The identification of solutions and actions to the benefit of this age group, taking account the different dimensions involved, will naturally benefit forty-year old workers as well. Ultimately, what we need is the development of contexts, rules and appropriate cultures to make lifelong learning real.

Turin, February 21, 2006

Bibliographic References

- Abburrà, Luciano, and Elisabetta Donati. 2004. *Ageing: verso un mondo più maturo. Il mutamento delle età come fattore di innovazione.* IRES.
- Abburrà, Luciano, and Maria Cristina Migliore. 2004. *Le sfide della popolazione all'economia e alla politica*. IRES-Piemonte.
- Baracat, B, and J. C Marquié. 1994. "Training the middle-aged in new computer technology using signal detection theory in a real-life word-processing learning situation." Pp. 197-211 in *Work and Aging. A European Prospective*, edited by Jan Snel, and Roel Cremer. Taylor&Francis.
- Bell, Daniel. 1973. The Coming of Post-Industrial Society. A Venture in Social Forecasting. Basic Books.
- Cantamessa, Marco, and Emilio Paolucci. 2004. Lo sviluppo della società dell'informazione in Piemonte. Tra tradizione industriale e nuove opportunità. [The development of the Information Society in Piedmont. Between industrial tradition and new opportunities.]. IRES.
- Castells, Manuel. 2000. The Rise of the Network Society, Second edition ed. Blackwell.
- Chaiklin, Seth. 2003. Activity, Theory and Social Practice: Cultural Historical Approaches. Aarhus University Press.
- Charness, Neil, Catherine Kelley, Elizabeth Bosman, and Melvin Mottram. 1996. "Cognitive Theory and Word Processing Training: When Prediction Fails." Pp. 221-239 in *Aging and Skilled Performance. Advances in Theory and Applications*, edited by A. Wendy Rogers, D. Arthur Fisk, and Neff Walker. Lawrence Erlbaum Associates.
- Crisci, Massimiliano, and Frank Heins. 2006. "L'invecchiamento nelle regioni dell'Unione Europea: processi e risposte politiche." *Informaires* 30.
- Czaja, Sara J. 1996. "Aging and the Acquisition of Computer Skills." Pp. 201-220 in *Aging and Skilled Performance. Advances in Theory and Applications*, edited by A. Wendy Rogers, D. Arthur Fisk, and Neff Walker. Lawrence Erlbaum Associates.
- Elias, P. K, M. F Elias, M. A Robbins, and P Gage. 1981. "Acquisition of word-processing skills by younger, middle-age, and older adults." *Psychology and Aging* (2):340-348.
- Engeström, Yrjö, Reijo Miettinen, and Raija-Leena Punamäki (eds.). 1999. *Perspectives on Activity Theory*. Cambridge University Press.
- European-Council. 2001. "Presidency Conclusions." Pp. 22 in Stockholm European Council.

Gallino, Luciano. 2005. L'impresa irresponsabile. Einaudi.

- Giddens, Anthony. 1979. Central problems in social theory. Action, Structure and Contradiction in Social Analysis. The MacMillan Press.
- Goldberg, Elkhonon. 2005. The Wisdom Paradox: How Your Mind Can Grow Stronger as Your Brain Grows Older. Free Press.

- Iacci, Paolo, Gianni Rebora, Giorgio Soro, and Romano Trabucchi. 2005. *Troppo vecchi a quarant'anni*? Il Sole 24 ORE.
- IRES-Piemonte (ed.). 2005. Piemonte Economico Sociale 2004. IRES-Piemonte.
- Kok, Wim. 2004. "Facing the challenge. The Lisbon strategy for growth and employment." Europeen Communities.
- Lanzetti, Renato. 2001. "Il sistema produttivo." Pp. 153-180 in *Scenari per il Piemonte del Duemila. Primo rapporto triennale*, edited by IRES-Piemonte. IRES-Piemonte.
- Migliore, Maria Cristina. 2005. "The contribution of cultural historical activity theory in analysing vocational e-training of older workers." Pp. 476-481 in *Lifelong E-learning. Bringing e-learning close to lifelong learning and working life: a new period of uptake*, edited by András Szücs, and Ingeborg Bø. EDEN, European Distance and E-learning Network.
- Provincia-di-Torino, and ISFOL. 2005. *La formazione individuale dei lavoratori. Strumenti pratiche opportunità*. Levrotto&Bella.
- Rabbitt, P. M. A, and A Carmichael. 1994. "Designing communications and information-handling systems for elderly and disabled users." Pp. 173-195 in *Work and Aging. A European Prospective*, edited by Jan Snel, and Roel Cremer. Taylor&Francis.
- Rogers, A. Wendy, D. Arthur Fisk, and Neff Walker (eds.). 1996. *Aging and Skilled Performance*. *Advances in Theory and Applications*. Lawrence Erlbaum Associates.
- Schaie, K. Warner, and Carmi Schooler (eds.). 1998. *Impact of Work on Older Adults*. Springer Publishing Company.
- Stehr, Nico. 1994. Knowledge Societies. Sage.
- Tidd, Joe, John Bessant, and Keith Pavitt. 1997. *Managing Innovation. Integrating Technological, Market and Organizational Change*. John Wiley & Sons Ltd.
- Tikkanen, Tarja, Leif Christian Lahn, Alexandra Withnall, Peter Ward, and Kolbein Lyng. 2002. *Working life changes and training of older workers*. VOX - Forskningsavdelingen.
- Viano, Francesco. 2005. "Buona pratica: Formazione continua a domanda individuale." in *Incontro annuale QCS Ob. 3*.
- Warr, Peter, and Kamal Birdi. 1998. "Employee age and voluntary development activity." *International Journal of Training and Development* 2(3):190-204.