



Learn how to learn!

Knowledge society, education
and training

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J'aime mieux forger mon âme que la meubler.
Michel de Montaigne.

*I personally believe that there is at least one problem... that all the
people who think are interested in: the problem of understanding the
world, ourselves and our knowledge, as it is a part of the world.*
Karl Popper.

*La maggior parte delle persone brillanti al mondo non lavora per te,
a meno che tu non sia in rete con loro.*

Learn how to learn! A short introduction

by Barbara Bertagni, Michele La Rosa and Fernando Salvetti

To be successful, people need to master skills quickly in a new field. In short: learn how to learn. This is the main purpose of obtaining an education. In other words, the learning process is much more important than the content learnt. The buzzwords of the times are complex problem setting and solving, creativity and innovation, social skills and interpersonal communication, cross-cultural intelligence, flexibility – in terms of place, time, and type of work.

The present book faces a strategic topic: 21st-Century education, or training in the knowledge society. Seen from the European point of view, globalization, great migrations and opening of international markets are some of the elements characterizing the societies where we live and which our training systems have to deal with. In the present scenario, the primary economic resources are not the financial assets or work or the natural resources, but the relationships, knowledge, and the human and intellectual assets.

The need to train people with high qualifications, shaped on the basis of a local culture, has to be compared with the need to supply the fundamental competencies in order to face a society without borders as well as the world. All this is true considering the main job market transformations that emphasize the importance of knowledge circulation into a logic ,that aims at training individuals with not only concern to both the work related/productive sphere, but also with respect to his personal and social growth (*empowerment* and *self-empowerment*). The individual is an active subject responsible and able to call himself into question, more than once, as well as into employment markets, that are mobile, fluid, flexible and precarious.

Knowledge, abilities and imagination and the networking used to share experiences, competences and the ability of learning, which are more important than physical, technological and financial assets, traditionally at the centre of economic and organizational scenarios. The role of individuals

becomes central as a resource, in which the professional identity recalls not only technical abilities, but also the human assets that must be built and rebuilt all through life.

Knowledge, in present society, stands as a continuous transformation in every field, and new information is added continuously and quickly in the complex scenario of knowledge. It is not possible to continue to offer knowledge in traditional ways anymore, and if the training institutions (schools and universities on the first hand) do not adjust their methods of knowledge transmission, they will run the risk of being emarginated by the new infrastructures of knowledge production. Traditional competences must be added, today, to general and cross competences (or meta-competences), as this allows the worker to move in diminishing ruled contexts. *E-competence* has become a utilized term and a request, which is tendered more and more in both our working scenarios and private lives.

The use of the word “competence”, in the reflection on *knowledge* and on *know-how*, has long since been a debate topic as it is a concept with faded borders. This term, is not casually used to express the ambivalence of cultural transformation concerning the passage from the centrality of the *teaching* concept to the *learning* one, and - as we refer to the social-productive system - from Fordism to post-Fordism, and therefore to the consequent crisis concerning the traditional classes, used to define work and professions. If we switch on this perspective, reflecting on training and education means not only to focus on contents (the specific knowledge and the people), but to focus on the *way* we predispose the person to the learning process. Active and inter-subject learning, as well as network knowledge and networking, becomes the centre around which – at every level – training outputs rotates (from a systemic and a constructivist perspective). Every person engages himself actively to build (or rebuild) his abilities, focusing on his way of learning, and on how learning is built.

When it comes to companies and organizations, only in the last several years have the majority of executives started to consider knowledge and competences as strategic resources, which should be managed in the same way as they manage economic income and outcome fluxus, personnel or natural resources. This is relevant especially for *learning organizations*, as they are "cognitive systems" that are able to structure knowledge and behaviors among those who are part of it, the *knowledge governance*. Therefore the management of human and intellectual resources, as well as

the other “*intangibles*”, constitutes a strategic and critical target.

In the proximate future, managerial work will be characterized, more than today, by human and intellectual resources development: organizational knowledge creation, knowledge, competences, abilities management and development, in order to spread them inside/outside organizations and transform them into products, services and operative systems. While being always aware that knowledge is a complex and multifaceted object: next to verbal (anyway verbalized and accounted) or numeric knowledge, we find personal *insights*, intuitions, mental models, beliefs, perceptions and various forms of "silent knowledge." Thus reminding ourselves that we are able to achieve knowledge and know-how more than we can express and that the most precious knowledge can hardly be taught and transmitted through a direct modality. It belongs to the family of what we used to refer to as "Cartesian's rationalism," keeping in mind that technologies by themselves cannot grant the optimal use of the human and intellectual assets. Also, the most relevant key element for a full utilization (or, if we prefer, for an effective productive "exploitation") of knowledge and abilities is built on strengthening the organizational culture oriented to encourage and support the sharing of knowledge and competences.

How can we manage knowledge, human and intellectual resources, and cognitive and behavioral dynamics at their best within corporations? How do we create and manage, in a flexible and dynamic way, an effective organization, filled with people always ready to learn and develop? To increase people's learning ability means to allow them to develop their creativity and spirit of innovation. In recent years experiential learning has developed significantly. It is a client-focused, supported approach to individual, group and organizational development that engages learners by using the elements of action, reflection and transfer. The key role of networking, as written above, is to share experiences, competences and knowledge. There are many experiential methods that used to carry out such an activity: from coaching to e-tutoring, from action learning to learning by doing, from seminars on divergent (“multi-polar” and “multi-perspective”) thinking to the experiences within a research lab, from peer-to-peer meetings to benchmarking and cross-fertilization seminars.

Developing learning ability requires flexible strategies and good tools that foster the aptitude to adapt and to orient oneself in dynamic situations.

Education can be offered in different ways. Learning can represent a lengthy process of continuous challenge wherein learners build and apply skills while taking the time to generate deep expertise. Or it can be a real-time match-making process of carefully selected, specific solutions applied to people with specific, pressing problems. Selecting the first approach is a challenge. The process of building expertise demands patience and commitment. It is hard. In the corporate world, it means exploring raw data, cases and stories, and pushing oneself to make sense of them. By contrast, the quick-fix recipes for success, how-to's and specific solutions for specific challenges, seem appealing. They provide immediate gratification. But is it enduring? Does this provide a manager with the confidence of an expert mountaineer, as he faces the next issue that comes into his office? The risk is that the manager becomes only a vehicle for implementing solutions generated by others. Usually an encyclopedia of learning and development methods lists more or less 700 relevant methods. Depending on the situation, we can choose the adequate mix of methods. If the managers need short-term, problem-solving-based education, it cannot be theoretical and must be explicit and actionable. But if they need education designed to build long-term, core expertise, it must be exploratory, difficult, deeply personal and intellectual. These are two extremes, but meeting in the middle we can find many alternative experiential methods.

Last, but not least, a dimension of great importance to facilitate the implementation of learning ability is fostering cultural intelligence, mainly as it relates to the anthropology of knowledge and epistemology. Cultural intelligence enables to better learn how to learn. Culture refers to a group or community with which you share common experiences that shape the way you understand the world. Culture is the "lens" through which you view the world. It is central to what you see, how you make sense of what you see and how you express yourself. Cultural intelligence is the ability to bridge and benefit from the cultural complexity of people with different nationalities, professional backgrounds and fields, personalities and organizational cultures. Cultural intelligence combines the emotional, cognitive and practical dimensions of cross-cultural encounters and ensures more effective and fulfilling cross-cultural collaboration.

Today cultural intelligence is the primary challenge. The cognitive paradigms, the relational schemas and the value systems among cultures have been shown to vary significantly, not only among different countries, but also among professional people working in the same corporation. For

instance, people from different cultural backgrounds are likely to have different attitudes towards hierarchy, ambiguity, achievement orientation, time and working with others. Do you know how to understand the implicit, basic assumptions that guide people's behavior in different areas of the world? Do you know how to interpret the explicit norms and values that guide a foreign society? Starting with these questions, or with similar ones, we may draw up a scheme useful in understanding a new business context and, at the same time, develop our own cognitive maps. In other words, we can develop our intellectual flexibility, our creativity and our ability to innovate.

To be innovative, you have to be an "outsider," able to see the same things in many different ways. Being an "outsider" is both a challenge and a competitive advantage. You see and think differently about a business need, a problem, a niche, and you have a good chance of coming up with an *out-of-the-box* approach - one that's original, unique and competitive. To be innovative, people need to be able to master new skills quickly in a new field, and to think *out-of-the-box*. Therefore, today, HR educational programs must meet two primary challenges: those of cultural intelligence and innovation. Our vision for the years ahead will become obsolete more quickly than expected. Whatever the future, it will not be as we imagine it. The precise line of our future is one we cannot draw. We shall never be able to describe, in detail, the society or the new markets of tomorrow. The real world is too complicated to envisage. We should, then, take nothing for granted. Innovation, with its unlimited potential, is the driving force that ensures our competitive edge - which, increasingly, relies on itself, and hence on cultural intelligence.

Education for the New Century

by Howard Gardner

As an educational thinker, I've had the privilege of meeting with ministers of education from many countries. They speak knowledgeably about current trends. But when I notice what excites them, it almost always turns out to be the same thing: "How do we improve, or how do we maintain, our standing on international comparisons, such as those carried out with scores on the TIMSS (Trends in International Mathematics and Science Study) or the PISA (Program for International Student Assessment) tests?"

Now, I have nothing against doing well on these measures. But for the same reasons that generals typically refight the last war, educators must recognize that they often draw on outmoded thinking and technology. Indeed, as I peer around the world, I am struck by the extent to which even our best educationalists are preparing youngsters for the schools and society of centuries past.

The world of 2008 is dramatically different from the worlds of 1908 or even of 1958. Our world today is aggressively globalized. The disparate regions are connected through technology, the movement of capital, the rapid circulation of information, media, fashion, mores and the migration of millions of people each year. No individual or society, can cordon itself off from the rest of humankind. Powerful technologies flawlessly carry out activities and services that used to require large number of human beings. Problems such as poverty, crime, disease and climate change do not stop at national or regional boundaries. They cannot be addressed unless individuals from different societies and different disciplines work together smoothly. Indeed, the notion of the solitary creator or problem solver increasingly gives way to large teams, who must be able to work together well, often "just in time." Massive weapon systems, whether in the hands of nation or states or within the grasps of terrorists, can cause havoc.

Does knowing how to solve quadratic equations, place items in the periodic table, or name prime ministers from the past, constitute adequate preparation for this dramatically new world? In my book, "Five Minds for the Future," I delineate the capacities that I think are the most crucial for

the 21st century. My task is both descriptive and prescriptive. These are the five minds that we need to survive; these are the five minds that we should nurture in order to thrive.

The Five minds of the Future

The Disciplined Mind has attained genuine expertise in at least one area. Individuals with such a mind are current in their chosen field – be it accounting, physics, modern dance, the law or genetic therapy – and manifests the discipline to keep up, so long as they are active. Disciplined individuals exhibit characteristic ways of thinking and these are formed in school, when one (hopefully) learns to think scientifically, mathematically, historically and artistically. Note, however, that this way of thinking is not primarily a mastery of facts as typically tested. But is rather, knowing how to think about a new problem, in a way that other experts would. Those who lack discipline are likely to be unemployed or work for others who are disciplined.

The Synthesizing Mind provides the most interesting challenges. All of us are deluged with information, much of it of questionable value. The synthesizing mind invokes a set of criteria in deciding what to pay attention to and what to ignore. It then puts together the information in ways that are powerful and memorable. The synthesizing mind must also be able to pass on the synthesis efficiently and effectively to others. I agree with Nobel Laureate Murray Gell-Mann, who declared: “In the 21st century, the most important mind will be the synthesizing mind.”

As captured by the familiar cliché, the Creating Mind is able to think outside the box – to come up with new problems, new methods, new solutions and new paradigms. The crucial point here is that one cannot think outside the box, unless one has a box! That box comes as a result of mastering one or more disciplines and carrying out necessary syntheses – tasks that take a solid decade. Creativity favors the young mind. The challenge to aspiring creators is to become sufficiently disciplined and synthetic, so that one has time and energy to venture into the unknown. Contrary to conventional wisdom, creativity has at least as much to do with personality, temperament and motivations as with sheer intellect. Creative people want to be innovative and, when they fail, they pick themselves up and try again. Silicon Valley and Hollywood are bastions of creativity not

because of the quality of their schools, but because of the “take a risk” atmosphere that suffuses the Californian air.

The Respectful Mind and the Ethical Mind concern our relation to other people, not our computing powers. The Respectful Mind recognizes that the world is composed of people of multifarious backgrounds, belief systems and appearances. Rather than deploring, or simply tolerating this situation, the respectful mind makes a committed effort to get to know other people, to understand their perspective and to work effectively with them. Respect is easy to detect; it begins shortly after birth and is based on how adults treat young people and how they treat one another. Alas, we are surrounded by copious examples of disrespect, or of respect with too many preconditions. In the absence of an atmosphere of mutual respect, individuals cannot live and work together and thrive.

The Ethical Mind asks: “To whom or what am I responsible, and for what things?” The question is asked both with respect to one’s role as a worker (“I am a scientist – or lawyer or manager – to whom or what should I feel responsible?”) and one’s role as a citizen (“I live in Boston, in the US and on planet earth – to whom or what should I feel responsible?”). It is relatively easy to act responsibly, ethically, when it is in one’s own self-interest. The acid test comes when one acts as one should act, even when it goes against one’s own self-interest. Yet I do not see how we can survive as a set of societies, nor as a planet, unless ethical behavior is prioritized and valorized across the globe.

Embodying the Kinds of Minds

Achieving these five minds in our young people and in ourselves is hardly an easy task. And synthesizing them into a single functioning person poses even greater challenges. There can be tension across minds, for example, respect versus creativity and discipline versus creativity. Probably the most important thing that we can do, as educators, whether at school or in the workplace, is to have leaders who themselves embody the five kinds of minds. We need to create an atmosphere that rewards those who exhibit these minds, nurtures those who can be helped and removes those who continue to behave in unethical or disrespectful ways.

And what about assessments of these five minds? Clearly we know best how to assess the disciplined mind, though there is too much emphasis on knowing information and not enough on how to think in a disciplined manner. As we come to understand better the process of synthesizing, we should be able to assess this capacity as well. There are no formulas for ensuring creativity, but we can readily identify those environments that preclude or discourage it. Finally, when it comes to atmospheres that are respectful or disrespectful, ethical or unethical, these judgments are best made by individuals who themselves embody the virtues and are given the opportunity to immerse themselves in the community – in short, by a contemporary version of the “school inspectorate.”

Not everything can be measured by a paper and pencil test. Repeated attempts to assess mastery of information that can be carried in a handheld personal assistant may well marginalize those values and virtues that are far more important to transmit to the generations of the future.

Europe 2025: Investments in Education and Training

by Odile Quintin

The prospective visions become obsolete quicker than expected. Whatever the future, it will not be as we imagine it. The precise line of our future we cannot draw.

Though we know it already, some fundamental trends will have a higher impact on the Europe of 2025. The sustainable development will be a determining variable in the lay-out of the world of tomorrow. The same goes for demographic aging and globalization, in spite of the financial crisis shaking it today. Finally, the importance and the rhythm of the change which went on accelerating these last few years *via* technological progress will not change the tempo. On the contrary, an amplification of the process itself, of the social, economical and political changes, will certainly come out. Through the analysis of these said trends, we can envisage the most probable *scenario*. A matter of fact appears for each of them. The near and far future of the Europeans will be prosperous if it relies on an active political training.

1. "The future, the object of today"¹

We shall never be able to describe, in detail, the society or the labor market of tomorrow. The real world is too complicated to envisage; perhaps one day, an equation in order to unveil its hidden determinism will be discovered.

One should then "take nothing for granted," as the political will could reverse the influence of chance and need. For, what will happen tomorrow depends as much on the heavy trends we are subject to, as on policies adopted to face such trends. This is why the Commission undertook to act in favor of the modernization of the European systems of education and

¹ Gaston Berger, *Etapes de la prospective*, 1964.

training. We can prepare the younger generations for what we are unable to know today by simply teaching them to adapt themselves to changes. Transmission of knowledge is fundamental. But "learn to learn" is a must, referring to Montaigne's: "*I prefer to forge my soul than to fill it*"². The spirit is not only a bowl to be filled with fine knowledge. It is also a living matrix that implies exercise and training. Today, the Commission is elaborating on a new approach in investing more in the combination of flexible and interactive competences.³ To increase the adaptation capacity of the younger generations – their skill to solve problems, their sense of analysis and their ability to communicate – means to allow them to develop their creativity and spirit of innovation. Today, there are many firms looking for these types of competences. From now on, our systems of education and training will offer, at the same time, sound basic competences together with real technical and professional skills.

A second aspect of transversal competences is of great importance: the social and intercultural competences. Our future is a continuously varying Europe. Teaching plays an increasing role in creating and transmitting a culture of opening. The schools are, in fact, places where the required knowledge, competences and aptitudes for an active citizenship and an intercultural dialogue are ensured (social and civic competences, competences of communication and foreign languages). The time of school is also the moment when the social integration of each single child – whatever his community of origin – is possible, wishful and necessary. Besides, we have published in July 2008, a *Green book* on migration and mobility⁴ with the purpose to open a discussion on the integration of migrants thanks to teaching, by means of national policies based on actions at the Union level.

2. The "invisible hand" of the Europe of education and training

Thus, with such a capacity for adaptation, our younger generations must be able to face the unexpected future. We must also see to it that they have

² Michel de Montaigne, *Essais*, 1572.

³ *Improving Competences for the 21st Century: An Agenda for European Cooperation on Schools*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, July 2008.

⁴ *Migration et mobilité: enjeux et opportunités pour les systèmes éducatifs européens*, Juillet 2008.

the *ad hoc* competences to meet the requirements of the labor market.

With our Communication "*New skills for new jobs*,"⁵ we are proposing to set up an instrument net in order to identify the future needs as well as potential deficits concerning qualification. In the most realistic way, we are aiming at featuring the image of the requirement for the labor to come and the trainings relating thereto, to date. The European Commission together with other European *Eurofound* et *Cedefop* agencies, and cooperation of social partners and the sixteen sectors, covering the three quarters of jobs of the private sector in the Union, will analyze the requirements of institutions of the Union.⁶ Getting this "full-size" picture will help us to ensure a real labor market on a European scale.

What will be the future labor requirements in 2025 in Europe? We cannot predict it: the main lines are already clearly drawn up. More jobs will require high level competences. Some twenty million of new highly qualified jobs will be created by 2020 as well as thirteen million intermediary level jobs.

In parallel, a net loss of about 12.5 million unqualified or weakly qualified jobs is foreseeable.⁷ So, while investing in basic competences, we must ensure an increased number of people with skills meeting the requirements of the labor market, especially in science, mathematics and technology. Faced with emerging economies – the famous *BRIC* (Brazil, Russia, India and China), Europe has no other option than to keep and strengthen its competitive advantage. Our insatiable need for scientists, engineers and researchers will certainly not make us forget that training for basic competences must be offered to all. This has always been the priority of the Union. Nobody should be left at the door of knowledge.

3. "Conceiving a wishful future as well as the real means to get it"⁸

How could our systems of education and training reach all these targets? We have seen it, part of the reply lies in a tight link between the "offer" and the "demand."

⁵ December 2008.

⁶ The results of this analysis will be available in the course of the year 2009.

⁷ CEDEFOP, *Future Skill Needs in Europe. Focus on 2020*, Synthesis report, 2008.

⁸ Russel Ackoff, *Méthodes de planification dans l'entreprise*, 1973.

First of all, it is in the frame of our systems of education and training that the younger generations will be able to acquire the competences required for their success. This is why it is essential that all the places for training be open to the world. The dialogue between a firm and training will allow ensuring skills that satisfy the expectations of the labor market. Moreover, it is a matter of passing into a real partnership between the firm and the school. The firm can bring in a new and creative spirit.⁹ This approach is one of the key points of our new Communication on schools.¹⁰

By bringing concrete solutions to the school institutions, we will support them on the way to modernization. From this day on, the stake is to build a new educational and formative frame where knowledge, apprenticeship and a way of being, fully belonging to the present-day world, are dispensed. The firms can also play a catalyzing role at each level of teaching. The public-private partnerships supply, no doubt, the means to adjust the offer of professional training to the requirements of the labor market. The same goes for Universities. For example, we have launched lately the "University Business Forum" in order to sensitize Universities to the requirements of society and to the registrations of trainings meant for the firms in the proposed courses.¹¹

Such partnership-like approaches represent the basis of one of our primary initiatives: the setting out of the European Institute of Technology. This institute is based on an energetic partnership between teaching, research and firms. It will ensure a first-class place in the world run on innovation. In fact, IET has a vocation to train a substantial number of third cycle students in masters and doctorates in the most select fields, meeting partly Europe's competence requirements. It is a real place of innovation sharing. Its existence and radiance promote and inspire already a change of point of view within the higher teaching institutions in Europe.

Aware of such stakes and wishing to write it down, on top of all the European political agendas, we have made 2009 the "European Year of creativity and innovation." During this prominent period, the political

⁹ *Fostering entrepreneurial mindsets through education and learning, Implementing the Community Lisbon Programme*, European Commission Communication, February 2006.

¹⁰ *Improving Competences for the 21st Century: An Agenda for European Cooperation on Schools*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, July 2008.

¹¹ Commission Communication "Delivering on the Modernization Agenda for Universities: Education, Research and Innovation," COM(2006)208.

debates will be stimulated, the research supported, the exchange of good proceedings enhanced and the themes dealt with that will be diffused Within the scientific community, the corporate world and civil society.

Finally, wishing to adapt our policies to the present time and to the future, we have entered into a new phase of our cooperation with the member States. We are going to propose an updated version of our strategic frame for the European cooperation in the field of education and training.¹² This new version, integrating the distance covered in nearly ten years, will be published in December, 2008. It will be the subject of discussions with our partners, the State members.

The reply to European challenges must be European. We know that creativity and innovation are and will be a must for the performance and well-being of everyone, whichever the society he belongs to. A necessary condition, but not sufficient. We, also, know that the future of each European citizen relies on the future of his society: Europe. Ensuring the competitive position and capacity of the Union to maintain a sustainable growth is an "enthusiastic obligation" for the well-being of all.

In this autumn 2008, we are all worried by the turbulence of the financial markets. The public deciders feverishly consider any *express* solution permitting to adapt oneself to the deep geopolitical disorder that this crisis will provoke. Let us not overlook our future. It is definitely essential that we take our time to consider carefully the adjustment modalities of our systems of education and training. As this is where our future aptitude to take up challenges lies.

¹² Mid-November 2008.

Education and Europe: how to grasp global and interconnected problems.

by Fernando Salvetti and Barbara Bertagni

«*J'ai poursuivi mes études sans jamais les rattraper*», Alphonse Allais, at the end of the 19th century, used to tell about himself in the persona of the writer. We can tell his story today, while thinking of the educational system that we know. In too many cases *deux et deux font cinq*. OECD countries spend over 80,000 USD per student during primary and secondary education. Though when we look at the results... *Pas de bile!* Across OECD countries, governments are seeking policies to make education more effective, while searching for additional resources to meet the increasing demand for education.

It is not possible anymore to continue offering education in the traditional way. If the educational institutions (schools and universities, first of all) do not adjust their methods, they will run the risk of being marginalized by the new trends of knowledge production and sharing: from peer to peer production to experiential learning, without omitting the home-schooling experience.

The question of skills is vital. And the question of efficiency in education is equally important. Let us focalize on the European Union. Though there are many examples of successful schools across the European Union, there are also signs that more work needs to be done on improving the literacy of 15-year-olds, reducing the number of those leaving school early and improving the completion rate of upper secondary education. All of which are key benchmarks in the Union's Lisbon Strategy for growth and jobs. At present (according to the *European Commission working paper on schools for the 21st century* – 11.07.2007):

- One fifth of under 15-year-olds attain only the lowest level of proficiency in reading.
- Almost 15% of 18 – 24-year-olds leave school prematurely.

- Only 77% of 22-year-olds have completed upper secondary education.

Education lies at the center of efforts to improve the Union's competitiveness and social cohesion. Some of the most important questions and challenges which have the greatest significance for the wellbeing of individuals and the good of society relate to the quality of initial education and training.

In light of these preliminary statements, there follows the need of re-orientating the typology of the participants as financial aid granted by the European Union through the new financial assigning programs with, a higher share of such funds to compulsory education, according to logics answering a series of questions. Crucial questions are: what type of competences do we need to live and understand the knowledge society and the digital economy? How do the students acquire the capacity of taking their own responsibility for their personal course of continuous learning?

The 21st century society is really different from the society for which the education system, that we are about to change, was planned. In the present scenario, the primary economic resources are not the financial capital and neither is work itself or the natural resources, but the relationships, knowledge and the human and intellectual capital. Knowledge, abilities, imagination and the networking used to share experiences, competences and the ability of learning which is more important than physical, technological and financial capital, traditionally at the center of economic and organizational scenarios.

The role of individuals becomes central as a resource, where the professional identity calls for not only technical abilities, but also a human capital that must be built and rebuilt all through life. Therefore, the characteristics requested of "new" workers are changing. They are not only asking for general knowledge, but also a willingness to learn, the ability to comprehend signs of change and react to problems, flexibility and unemployment. Traditional competences must be added today to the general and cross competences (or metacompetences), that allow the worker to move in diminishing ruled contexts. Also, e-competence has become a term and a request, more and more present both in our working scenarios and private lives.

The need to educate people with high qualifications, on the basis of the local culture, has to be compared with the need to supply the fundamental competences in order to face a society without borders and the world. All this is true considering the main job market transformations that emphasize the importance of knowledge circulation into a logic which aims at training individuals with concern to both the work related/productive sphere as well as with respect to their personal and social growth (empowerment and self-empowerment) as active subjects, responsible and able to call themselves into question, concerning employment markets that are mobile, fluid, flexible and “precarious.”

The active and inter-subjective learning, as well as the network knowledge and the networking, becomes the center around which the training setting-out rotates, in a perspective that remarks its constructive nature. Every subject applies himself in the building of his abilities, gains awareness of his point of view, in a continuous organizational and re-organizational activity of his own knowledge and competences, in a process during which the person has an active role, focusing in detail on his way to learn and on how learning is built.

But beware of thinking about education just considering skills, efficiency and effectiveness, rather than the usefulness required in the job markets or competitiveness amongst governmental and socioeconomic systems.

Education, is above all a question of life, wellbeing, self-esteem and self-accomplishment, both personal and professional. And these are dimensions which concern us even prior to inclusion in compulsory education. *Inside the locket was a mirror, and in the mirror was her very reflection. “Why, it’s me!” she thought. “It’s really me. I’m the magic in the locket.” From then on, the little girl wore the locket every day. Every day she held the locket tightly and whispered, “I believe in you” The locket was filled with her own special magic and from that day on she was never without it*¹.

There is evidence that high-quality pre-school programs that focus on learning as well as personal and social competences have long-lasting benefits for pupils’ achievement and socialization at school and in later life, especially for the most disadvantaged, particularly, if they are followed up with interventions such as support for language learning and social

¹ Elisabeth Koda-Callan, *The Magic Locket* Workman Publishing Company, 2004.

adjustment. Despite this, provision of early learning and pre-school education varies widely between Member States. Furthermore, though no school system provides the same quality of education for all, the range of disparities between students differs widely among countries, suggesting that there is still scope for improvement in this area.

Education is a question which should be addressed even before compulsory education, perhaps, starting from intrauterine development, certainly in the first years of childhood and during that crucial period of life which in our society corresponds usually to nursery-school.

There are many theories and reference learning, as well as orientations and discussions. Without entering into the subject, I believe it would be useful to underline that the question that we should have in mind quite often is: which kindergarten for our children? The most important period of life is not the period of university studies, but the first one, the period from birth to the age of six. For, that is the time when man's intelligence itself, his greatest implement, is being formed. But this not only encompasses his intelligence; it includes the full totality of his psychic powers.

Perhaps in the knowledge society we shall continue to *poursuivre* our studies without necessarily catching them up, even after some good reform of the organization of learning, which is getting more and more disjointed, subdivided and inadequate to face problems requiring multidisciplinary (and multiethnic?) approaches.

Most certainly it would be appropriate to promote learning courses and knowledge forums that would enable us more and more to grasp global and interconnected problems, so that we insert therein the partial and local knowledge we dispose of.

Even before this, it would be appropriate "to teach the grasp" of both ourselves and others. A course that starts from self-esteem and then goes onto the esteem and respect of others would be appropriate. And our planet needs mutual comprehension in all possible meanings.

Educational Change: A Global Challenge

by Philippe Herzog

Within the Universalist tradition of European education, there are two closely interrelated dimensions: transcendence and freedom. This was already the object of a debate in ancient Greece: for Socrates, education awakened the soul, while the Sophists thought it should endow each individual with the skills needed to live in society. Dante wrote: “You taught me how a man becomes eternal”. Education perpetuates humanity, at the same time as it enables individuals to live their lives. Comenius was among the first to understand that elitist ideas about education had to be overcome. Individuals are personally responsible for themselves and for the world around them, and in order to assume this responsibility, they must have received an education. But although his program aimed for a schooling system that was fundamentally open to the world – the study of several languages was the basis of his teaching method – education for the masses became organized within a strictly national framework.

It is not exaggerated to stress the moral and political obligation that school systems must now seize to meet the formidable demands and opportunities offered by globalization. Education must not continue to be an introverted, reserved national public service. When we speak of “the knowledge society,” it should be understood to be a choice that must be “forged” and, in my mind, the establishment of a global society is the latest frontier!

The issues of sustainable development and of equity are now indeed posed at a global level. Conflict prevention and resolution require that people cooperate more closely and develop improved dialogue skills to interrelate better. Any attempts to “resist globalization” can therefore only

lead to a dangerous dead-end. It is necessary to go out into the world to be able to shape it and organize it. Besides, globalization does not usher in competition and conflict only, but a major potential for improving human relations.

Knowledge and technologies are to be shared. The internationalization of manufacturing and of the global financial system leads us to ever-growing interdependence. All multinational companies are network firms where staff teams are in constant communication with each other, whether for purposes of research, design, production or product sales and services. This causes an upheaval in the “territories” that previously hosted businesses and culture. We are witnessing a “de-territorialization” of the internal domestic area (offshoring, relocating and restructuring). Simultaneously, however, we are also seeing an inclusion of all territories and of all nations into the global economy. Capitalism is sharing development. It is undoubtedly true that this type of globalization is not equitable and that the formidable growth it promotes will not be sustainable in its current form. However, nowhere on the planet is anyone planning to drop capitalistic globalization to promote a development strategy; quite the contrary, every population wants to find its place and its role in it. And, following a wave of liberalization, the need for regulation in the general interest is being felt and calls for the renewal of international institutions.

Let us not forget, either, that globalization cannot be dissociated from this other major transformation: the information and technology revolution. We now have unprecedented communication and information tools available to us, enabling each one to explore space and time. To use these tools, we must be able to assimilate and synthesize knowledge.

The radical difference between the industrial revolution of the past and the information revolution today is the fact that the first was accompanied by a substantial divestiture of qualifications, while today each job requires and will continue to require greater knowledge and competency. Education must prepare individuals to enter and to return to the labor market, to become qualified and to change activity, and to come and go for international business assignments. That is why we must imagine new training-employment and school-business relationships.

Today, individuals must be capable of analyzing the world around them, of taking initiatives, and of demonstrating that they are capable of creativity and of innovation within an increasingly widening relational circle. Training subjects who are responsible for themselves and for others requires a more complex education, as Edgar Morin has clearly

demonstrated. As it happens, a dangerous illusion of being autonomous has developed among young people and among individuals as a whole in our western societies. This is despite the fact that they are often lacking in genuine capabilities, although their affirmation of having entitlements overrides considerations about actual abilities or the responsibilities to be shouldered.

National education systems have accomplished a great deal. The greatest democratization occurred during the second half of the 20th century, however, without the missions having been redefined. If ensuring “equal opportunity” was the objective, it has been achieved in terms of mass education, but certainly not in terms of social advancement. Inequalities have grown. And I would like to emphasize the fact that this definition implicitly conveys both elitism and competition. I prefer the principle of justice expounded by Armatya Sen, for whom the goal of each individual is to be able to exercise genuine freedom, without exclusion. Having a good education and being able to access the labor market are essential conditions for individuals to be able to exercise their effective freedom. In my view, the prospect is the development and full use of human capabilities.

At the moment, academic failure begins as early as primary school. The system has sought solutions in the areas of “educational sciences,” pedagogy and psychology – as if these could compensate for the shortfalls of scholastic content and in the socialization of young people! The basic problem, in France at least, is due to educational content that is deeply abstract and elitist. I have seen generations being excluded because of a system that imposes the most abstract mathematical concepts possible. I have seen literature being reduced to little more than technique and syntactic structures, alongside a “deconstruction” philosophy that no longer even tries to elucidate the meaning of a literary work. Tzvetan Todorov has analyzed this departure clearly. The teaching of history is imprisoned in its national ideological prism. And what can be said about our disastrous economics education, which is relegated to being an option at the end of secondary school and which teaches students to denigrate business and the market, without explaining what they are. For all these reasons, school has become a “marshalling yard” where students are selected and segregated. Furthermore, it supplies educational programs for young people whose worlds and destinations are unknown. It generates fear and frustration about the realities of working life. Even the “European classes,” when they exist, operate on a selective basis and avoid the general system.

George Steiner has written: «*Le parti pris du monumental, du hiérarchique et du prescriptif, qui légitime la figure et la fonction du maître, est enraciné dans l'image que les français ont d'eux-mêmes*» (“the bias for the monumental, hierarchical and prescriptive, which legitimizes the figure and function of the [school] master, is deeply rooted in the image the French have of themselves.” This is an essential source of our problems. The upheaval in 1968 was a revolt against a monolithic, vertical concept of the master and of the order, but it did not build any new educational projects.

Like Ulrich Beck, I think that education must aim for a new cosmopolitanism. A new ethics of responsibility is of the essence when it comes to humanity’s common good. In appropriating complex knowledge, we must not forget the crucial challenge of seeing change in interrelations with others. The “Other” comes before the “Subject,” who is never fully formed unless constructed through exchanges with and responsibility for others.

The new educational projects must thus meet two challenges: intercultural relations and innovation – in other words, they must provide the capacity to associate ideas with markets and to meet needs expressed around the world. Innovation, with its unlimited potential, is the driver that ensures a competitive edge, which increasingly relies on it and hence on intelligence. We need research that stimulates education and turns it towards innovation, an education that confers pre-employment qualifications, further training that imparts lifelong learning, and mobility as the pre-requisite for openness and adaptability. These are now the crucial factors underlying individual and collective development. They will require new modes of socialization for youngsters – and for “schoolmasters” as well – and a continual training effort at work and throughout life. The new educational contents cannot be dissociated from changes occurring in various worlds and their linked organizational modes.

1. The crucial problem of educational missions and contents

The engine for change did not come from the State or through democratic deliberation, but via economic pressure. And it was not through the foundation – at primary and secondary levels – that it emerged, but through higher education. The “excellence challenge” is a global

phenomenon. It is significant that the impact of the Shanghai classification, initially designed to guide Chinese students in selecting the best schools abroad, was so considerable.

Economists have revamped the theory about the connection between education and growth. The standard economic theory simply postulated that lengthening the duration of studies is a productivity growth factor and that the diploma is a competence indicator. As Philippe Aghion and Elie Cohen have shown, endogenous growth theories have called both these postulates into question. The quality of education and its effective societal and economic contribution must now be assessed. The analysis has focused on the link between innovation and higher education. A general correlation seems well established between the development of higher education and the capacity to innovate, particularly where cutting-edge innovations in technology are concerned. It appears that 39% of the population in the United States benefits from higher education, while 24% of the European population has a higher education; in terms of expenditure, this amounts to 3.3% of GDP compared to 1.3% of GDP respectively. That said, the success in the USA is based on quality and not simply on quantity.

The challenge consists of linking research, higher education and innovation. University should have three missions, in fact, if not four: research, education, contribution to economic innovation and student integration into the workplace. In Sweden, these missions are established by law. Universities are autonomous and they cooperate to achieve them. They are evaluated and financed based on their results. Prior to the reforms in France, it was quite the contrary: the University was separate from fundamental research institutions. Research for application was largely conducted in the major public enterprises, themselves associated with “*grandes écoles*,” distinct from the University. And University-Business links were virtually non-existent. The cultural bias opposing the establishment of interdisciplinary research-university-business relationships should be emphasized. In fundamental research circles, it is often “art for art’s sake,” while “utilitarian” ideas are viewed with contempt, as if fundamental research need not be concerned with its impacts and contributions to society. Thomas Philippon and Nicolas Véron clearly established the crucial nature of renewing the fabric of business enterprises and providing support for the development of innovative firms. Companies are expecting greater human competences from education while they have a wealth of concrete experience about change that the educational system

could certainly use and that the public administration by itself is quite incapable of transmitting. We can but regret that they do not take greater responsibility for improving the educational system, and for introducing ongoing personnel training on the job and retraining their staff. Because innovation is not only a question of creation, but also the ability to continually adapt to technological and organizational changes. Public State University has a dual handicap: its silo administration and its lack of openness to business and to international affairs. Added to this are the narrow disciplinary and union corporatism that, associated with administrative centralism, determine the accreditation of diplomas, recruitment and organization. The links to business and mobility are hindered as much for teachers as for students. And the life-time tenure status of University professors/lecturers is highly contestable.

Let us again insist on the weakness of professionalized training and the lack of innovation-related and economic-development skills in Europe. The demographic upheaval is seriously under-estimated. The drop in the active population, particularly in Central and Eastern Europe is even more pronounced as concerns the young active population. Research and Development expenditures remain insufficient, except in Scandinavian countries, and they are even insignificant in the East. The shortage of qualifications is affecting many sectors, including the teaching corps. And while a considerable proportion of young people leave school without a basic education level (15% in France), many others – and despite their training – are not capable of adapting to the technological changes in teaching jobs. The demand for qualified young graduates is growing everywhere. Even in finance today, despite the crisis the banking and financial industry is undergoing, demand is soaring. Engineers are very popular and all the more so since basic industries have been neglected for a long time. Head hunting consultancies are prospering. And even if the real value of the MBA (master of business administration) is contested, it is a qualification that is increasingly sought after. The preoccupation of businesses with obtaining skilled workers goes very far and, I wish to stress this point, their initiatives are not limited to higher education. Several German groups are turning to kindergartens to detect the future harvest of engineers they will need. Moreover, the increasing popularity of the private sector at primary school level, due to innovation failures in the public model, should be noted. Since the 1994 reforms, the proportion of privately educated Swedish children has risen by over 10%. Chains of schools have been established that value tutoring, reporting and Internet browsing.

Awareness is rising about the fact that the failures of our Universities are not just of their own doing, but also due to upstream circumstance, since the university system depends on the prior training of students, just as it does of their choices.

This being the case around the world, and the training and employment needs of qualified young people and adults being enormous, an international market has developed. Attractiveness and placement strategies are in place. Thus, if the United States is preoccupied with the relative drop in the appeal science and technology hold for its citizens, it is compensating through the entrance of non-resident students and retaining its leadership. Some 41% of the PhDs in these fields are held by “non-residents,” many of whom will become residents. In the United States and in Australia, companies can contract directly with Universities. It should be noted that in several European countries, including France, the word “market” is virtually an obscenity. In reality, the market is a form of mobility for students and professors, which has become a key quality component. That being the case, it remains limited to two million students throughout the world, and marginal for professors, underlines Sylvain Kahn. The exchanges are the result of multiple strategies developed by individual players and much less due to State initiatives. Limited as these may still be, they will revolutionize the global geography of knowledge.

It seems evident that the excellence concept and the driving force of competition can serve as engines to accentuate the dichotomy in our societies, and at the planetary level as well. Without setting aside this concept and this force – which is impossible to do anyway – they need to be balanced by implementing equity and public good principles. I therefore want to expand on a dual aspect of my earlier deliberations: the challenge is not only taken up at the University level but well before; and the problem of contents is fundamental, although it is generally neglected by economists who only deal with issues of governance and financing.

Everything begins at the base, through a redefinition of missions. In France, the question of the content in the common foundation of knowledge and skills was only exposed to public scrutiny very recently. For decades, program definition was left to committees where disciplinary corporatism are preponderant, in what Ulrich Beck has termed a “sub-political” procedure, outside any democratic consensus. This definition, still remains affected by the elitist republican notion of knowledge transmission today,

while disagreements center more on pedagogical methods and school scheduling. In point of fact, the current contents – and I would like to repeat myself here – do not restate the meaning of works and are exclusive due to an excess of abstraction, caring very little about the connection to real life. Above all, I want to discuss the need to open up to the international dimension. It should be brought about via the political decision to confer a European dimension on basic education.

Learning two foreign languages should be developed right from the primary level, including taking English classes since this is the de facto language of communication. It would be taught by foreign teachers in their own language – with reciprocity being organized within the framework of establishment twinning, for instance. At secondary level, the study of languages would be pursued within the framework of civilization courses, with foreign teachers who might be English, German or Spanish in France, and reciprocally! Most Governments consider that history teaching consists of instilling our national foundations, and they even turn this into a strategic imperative. Real history is, in fact, the intermingled history of populations. We must set our myths aside and accept the perspectives others have about us. Although the Poles have joined the Union, how many Western populations have made a point of welcoming them or have sought to find out who they are? Like Jacques Attali, I want to see business and the economy being taught as early as primary school. These subjects are both international and, here again, the viewpoint of foreign teachers is necessary. Schools and public authorities should conceive and manage these exchanges of teachers and students via twinning.

As for method, doesn't a Finnish example exist? In this country, the common foundation of knowledge and skills is defined nationally, but it is the municipalities that play a preponderant role in their capacity as education providers and they are responsible for it, at a local level. Individual support of students is essential, particularly support for the development of self knowledge and of motivation. The assessment of intellectual competency, work aptitude and behavior is continual and individual. The level of skills required of teachers themselves is very high. Competition and even comparisons among establishments are not at all encouraged, however.

Let us now take a look at higher education. Here, the pressure rises a notch: where are the students going to find themselves tomorrow? In

France, many young people leave school with no diploma and, despite market demand many graduates are among those suffering from unemployment or from integration problems. There is therefore indeed a problem in the quality of the skills acquired. Is it due to a lack of entrance selection? The comparative study shows great national diversity as regards selection, without any obvious correlation with university performance. And most importantly, the knowledge society does not need fewer, but more students. Practically speaking, most countries implement free access, with selection occurring after the first year, or even later; where the doctorate is concerned, in any case, the selection principle seems well established. The work of the Bruegel Institute shows that at the undergraduate level, Europe has caught up some of its developmental lag with the United States and that it is progressing with respect to the masters-doctorate level. It appears to have as many doctors as the USA now. However, the gap in terms of excellence is still substantial. Both the lack of money and organizational quality are incriminated, but shouldn't we be examining the choice of curricula at the same time? A debate has been launched about the right time for university specialization: "not too early," they say. I believe that the problem lies largely elsewhere. When the University must prove its social contribution – creativity of research and concern with innovation, professionalized skills and internationalization of studies – a general re-examination of educational tracks is necessary. At the moment, for instance, the French system works upside-down. The liberal arts university track (humanities & social sciences) studied by the vast majority, is especially the victim of specialization and of its imprisonment in national culture. While multi-disciplinary tracks focused on professionalized skills are, for their part, selective and under-developed. In a system concerned by real needs, highly demanding "pure disciplines" should be selective and highly internationalized. Mass education tracks would, for their part, become multidisciplinary and ensure professionalization, with an opening up to a more international outlook. Tracks with two majors would help bridge the gap between Humanities/Social Sciences and Sciences/Technologies. A narrow disciplinary rationale represents a serious obstacle to changing course contents, just as to achieving establishment objectives.

Furthermore, although the approach may be generalist and flexible at the beginning of the curricula, it should later be accompanied by the possibility of an apprenticeship or even a work-study program. Many young people suffer from the very long interval between their studies and getting out into

the world, as well as the resultant lack of autonomy. Internships are, in fact, becoming increasingly necessary (compensation is often a problem) and students must combine studying with small jobs.

The recomposition of tracks and curricula must not originate with central authorities; it should be prompted via bottom-up initiatives and experimentation seeking to converge towards quality. But let us ensure that such efforts are federated around a collective purpose: a European educational project. We are currently seeing a trend towards an inward-looking national focus and local identity cults. Public territorial authorities play a major role in looking ahead and promoting a broader outlook about school and University reforms.

2. University autonomy, governance and financing

The notion that all Universities should be autonomous seems well established. This has to be stipulated because some people interpret autonomy in an irresponsible, libertarian light. They wish to teach just as they please, while demanding more resources; they demonize mobility and Europe, describing them as a form of merchandising. And all this is in the name of public service which they are actually taking hostage. Autonomy does not mean self-government; there is an obligation to obtain results and to complete a mission. Autonomy with respect to recruitment tends to predominate in Europe, while it remains rare with respect to actually determining salaries. This human resource issue is crucial. The average age of academics in Europe is 44 years old; renewing these teachers mostly internally must be avoided because endogamy is a major risk that inhibits quality. It is important, moreover, to retain competent young graduates here in Europe and, to be sure, competitiveness is also a question of compensation.

Autonomy is, therefore, not a panacea in itself; it must go hand in hand with good governance and adequate financing. The board or steering committee must be independent, and external participation within it must be substantial, if not dominant. The constant link between American universities and innovation managers is an enormous advantage over our situation. The presence of placement offices within the University would also be very useful. However, the notion of it becoming an “entrepreneurial

institution” is contestable as the principal mission of a University is not business.

University establishments are becoming differentiated and are specializing but, at the same time, it is absolutely imperative for them to form alliances and partnerships with other establishments and with other organizations and community groups. It is actually a question of being able to combine the three major functions (research, education and innovation) into an interdisciplinary network and to pool costs (including that of compensating highly qualified teachers). At a practical level, the effort to group together is immediately necessary from the time autonomy is acquired as otherwise the problem of resources cannot be resolved. Hence, in France, the possibility of establishing PRES (research and higher education clusters) and of taking part in them is just as important as the autonomy acquired. Nonetheless, how will this dynamic work in terms of business relationships? In France, as is true in other countries, “competitiveness clusters” have become established for innovation purposes: How will this dynamic and that of the PRES operate together? We should stress that the territorial public authorities neither have the same weight nor the same strategies nor the same interests, and that the negotiation capabilities of university establishments are very uneven. In fact, the competitiveness clusters will have to group together and join cross-border networks (European research and innovation centers in particular).

The “critical mass” of a University is a question of networking as opposed to one of size. The most excellent Universities are not megastructures; they are complete Universities in terms of the research-education-innovation triangle and in terms of their wide range of contents, while they interact within the rich fabric of increasingly internationalized exchanges. The importance of these alliances does not only concern critical mass in order to pool costs and obtain financing, but just as much the possibility of “professionalizing” the curricula, improving employability and anticipating needs. This means that they must reflect a genuine strategy. The German experience with the “excellence initiative” – a stimulation and coordination process – serves as a benchmark because it enabled refining University profiles, and the reputations of the clusters were enhanced at the international level. It was accompanied by excellence initiatives of a regional nature.

Let us now examine the problems of financing. Universities receive public funding everywhere, including in the United States, which spends relatively more than the others in public and private funding. There does not seem to be a net correlation between performance and the financing mode. Sweden thus has substantial recourse to public funding, but also assesses results very strictly. Public expenditure for education in Europe is stagnant. Economists are requesting a specific, massive effort in favor of higher education and the Bruegel Institute has thus advanced the objective of +1% of GDP over 10 years. Masters and Doctorates would be targeted in particular and establishments would be selected for the quality of their research functions and ability to prepare human capital.

Public funding must be mixed with private financing. The contractualization of the University-Business alliance will require assessing costs and the quality-cost ratio; as a result, transparency, the provision of accessible data and a consensus on the very nature of the quality indicators will be necessary. Economic players will only invest if the Research-Universities-Business relationship becomes established. The insurer AXA has just established a €100 million fund for university research about risk and climate change. With less than 7,000 students, Princeton University manages an R&D budget of \$1bn. Cambridge (UK) and Harvard (US) each has \$2.2bn available to them. The role of foundations (as in Australia) is significant. Investment funds should be devoted to human capital. Increases in school fees are acceptable if they are accompanied by an appreciation in the number and amounts of grants, and better individual attention devoted to each student. That said the cost of quality education never stops growing. In the case of private British schools (known as “public schools”), tuition has doubled over a 20-year period in real terms and the studies of a 4-year old entering primary school will cost parents approximately €200,000 through secondary school. Deferred loans are available: these are an option in view of future compensation levels (young people who graduate from these private “public schools” earn considerably more than those who leave State schools, although no generalization can be made). In the United States, the average indebtedness of students amounts to \$20,000 when they leave the University.

The quality requirement and financing difficulty make assessing establishment results mandatory. It is a problem that is all the more complex in as much, say analysts, as there are a variety of objectives within Universities. One must be very clear about the objectives being pursued.

Then, a great deal of work must be done with respect to the objectives and determining the related result indicators, of course, to be distinguished from the resource indicators. Everyone knows that indicators create conflict and that teachers do not like evaluations. Accountability, along with the results and efficiency culture, are not administrative and technical matters – what is important is motivation, ethics and healthy competition/ emulation. Bringing the players involved together is a challenge. Fortunately, the process is underway. That being the case, we should emphasize the dangers of superficial comparisons in view of the enormous disparity among Universities and specialization choices. There is no standardized evaluation system in Europe, although a “quality assurance” approach has been implemented in Member States in a coordinated manner. Establishment accreditation is based on the assessment of its results. Quality assurance determines the empowerment value of the diplomas and so requires transparency and intelligibility.

3. Towards a European Education Community ushering in a cultural Renaissance

With respect to national reforms, the European Union is not a constraint but, a support. It already plays a remarkable experimentation and catalyst role by working towards greater international openness.

The Union became aware of Europe’s lag in the field of R&D initially and it then launched common research and development framework programs (RDFP) as early as the 1980s. The Lisbon Strategy for growth, jobs and competitiveness extended the deliberations and promoted the objective of establishing “the knowledge society.” As it only had a “supportive competence” with respect to States endowed with sovereign prerogatives in the area of education, it was nonetheless able to stimulate the comparison and mobility of students, and it worked to establish triangular Research-Higher Education-Business relations. The Commission is currently emphasizing the rapid changes underway in global balances, which thus intensifies the imperative need for highly developed human skills to ensure competitiveness. Over the 1995-2004 decade, the number of university students more than doubled in China, where higher education degrees numbered over 4.4 million in 2005, compared to 2.5 million in the EU. The Commission simultaneously stresses the demographic challenge. It anticipates that the active workforce will drop by 6 to 8 million individuals by 2020, which reflects the massive preoccupations of

businesses faced with the aging population, lack of retraining of seniors, the insufficient female employment rate and the inadequacies in the education and training of many young people. And whereas it would be necessary to mobilize a great deal more resources to promote human capital, pensions and aging costs will weigh heavily on public finances. Before drawing political conclusions concerning forward-looking initiatives, let us provide some details about the Union's achievements and results.

The European R&D policy rests on a framework programs. The 7th program is endowed with a €50bn budget for the 2007-2013 periods, which is substantially higher compared to the previous ones. The majority of the funds are intended for research in transnational consortia and university establishment. The remainder backs scientific excellence, promoted by a new European Research Council, along with researcher mobility and infrastructures. In view of soaring costs in cutting-edge research in technology, this financing is thus far from sufficient.

Anxious to ensure improved expenditure efficiency and the promotion of public-private partnerships, Commissioner Philippe Busquin launched the construction of a European Research Area intended to decompartmentalize fragmented national research and to pool costs. Coordination and cooperation were implemented through the establishment of European technology platforms and common technology initiative networks. More recently, a European Institute of Innovation and Technology (EIT) was established in Budapest. The original idea was to find a European style MIT (Massachusetts Institute of technology), but this concept was set aside for the purpose of selecting, evaluating and supporting "Knowledge and Innovation Communities" (KICs), which are autonomous and composed of partnerships among the players in the Higher Education, Research and Business-Innovation triangle. Their aim, in particular, will be to transform Research-Higher Education results into commercially usable innovations. In exchange the EIT label will increase the visibility and prestige of the KICs.

In terms of education, training and lifelong learning, the Union has no policy but it is organizing cooperation among Member States. The "open method of coordination," which is the key tool of the Lisbon strategy, has entered the educational field. The progress in the educational systems of Member States is monitored with the help of indicators. The Union provides key skill definitions, a certification framework and credit unit

transfer tools. It encourages a change in teaching methods towards apprenticeships. This being the fact, the States have not defined a common work program and the Commission has focused on promoting cooperation tools. Of its €7bn budget in this field, 80% is devoted to initiatives that promote the mobility of students, teachers and researchers. The Erasmus Program (launched in 1987) is the best known; now open to non-European participants, it finances Masters in Cooperation, in particular, and will be extended to include Doctorates. In an intergovernmental mode, the Bologna process encouraged the standardization of grades and the validation of credit units earned in several countries

The Commission is also seeking to establish a forward-looking attitude. It believes that between 2006 and 2015, 12.5 million highly-skilled and 9.5 million medium-skill jobs should be created, while the number of low-skill jobs would be reduced to 8.5 million. It works to ensure a better welcome for students and skilled non-European immigrants. And it aims to promote quality and higher education by coordinating quality assurance initiatives – although without going so far as to create a quality label.

However, results fall short of objectives. With respect to R&D, the Union is stagnating at 1.9% of GDP, while the objective had been for 3% in 2010. As for education, Commissioner Figel stresses the lag in relation to the four key indicators. One out of every six young European leaves the school system at the lower secondary school level (*collège*) without later obtaining any further training. There is a 15% dropout rate in high school. At the age of 15, one youngster out of five cannot read satisfactorily. Only 9.6% of Europeans between the ages of 25 and 64 have participated in training programs. However, the number of students in higher education has increased, although this performance should be viewed in relation to other regions in the world, as well as in relation to quality. The overall progression conceals considerable differences between the information track (an 80% increase between 2000 and 2005) and the physics track (a 5% decrease). The emphasis placed on the new communication and information technologies, now reinforced by the cultural industries, should be contrasted with the depreciation in scientific and technical courses, a situation that runs the risk of weighing heavily on the future of basic industries.

How can we fail to draw attention to the lack of results produced regarding the essential objective of mobility despite the European Union's

initiatives? Erasmus is good, but to have only been of interest to 2.5% of students above 20 years is very little. Moreover, the interest in Erasmus seems to be waning. And what can be said about the Comenius program? Only 10,000 students per year! And Leonardo: just 2,500 lower secondary students or apprentices! The reasons for this failure obviously lie with the obstacles created by national administrations to counter this mobility. The nationalist culture is anchored in the educational sectors. Alain Lamassoure has plainly pointed out the fact that Community law does not apply to individual citizens, or in a scandalously inefficient way. This is particularly true where diploma equivalences are concerned. It is impossible for an English person to teach English in France! In order to bypass this dead-end situation, a steely political resolve will be needed. And the role of the EU, whose mission should be the acculturation of young people to Europe, must be expanded. The European dimension and mobility must be introduced in curricula and study programs for all students. It would be fundamental to spend a few weeks abroad for language courses and to welcome foreign teachers directly from primary school. As for higher education, the major battle concerns a head-on obstacle of national diplomas. Certifications or quality labels and joint educational programs would be welcome. These are currently in the embryonic stage. With the support of the States, the Union must focus on competence rather than on diplomas. Promoting the objective of lifelong learning implies the validation of skills.

Let us ensure equity. European university centers of excellence will be created, particularly through the establishment of the KICs. We must be careful: if differentiation among Universities is necessary, since all of them do not have the same vocation, they all have the same dignified right to Europeanness. If we were to establish the principle of mandatory mobility, we would combat dichotomy. This obviously poses an enormous financing and cost-pooling problem. A massive revaluation of European structural funds used for skills development and freedom of movement will be necessary, in any case. Additionally, the EU will have to establish investment funds devoted to University-Business partnership development. The proposal to find a World Education Bank, suggested by a former British Ambassador to Washington, David Manning, provides food for thought. Why not in Europe?

The time has come to promote the ambition of establishing a European Education Community. The goal is a triple one: a cultural revolution, first of all. The Renaissance began with Education; to renounce identifying and

promoting European culture would lead to failure. Competition, secondly: we must play the game because our standard of living is at stake, and no one is stopping us from promoting the public good aspect as a specific European choice and asset in this competition. And, finally, economic efficiency: the fragmentation of national educational systems currently entails very high duplication costs due to the conditions under which intra-European exchanges and equivalences are made, thus hindering innovation. Pooling costs would enable considerably improving the efficiency of the invested funds. In addition, university exchanges between Europe and the major world regions are very limited; they must be multiplied with joint development in mind. In the meantime, the United States is accumulating brain power and China is internationalizing its education and training methods.

In order to progress, we need powerful ambitions and unrestrained drive. Without a common educational and cultural project, the Union would remain weak and the future of divided and declining European nations would not be very bright. Let us initiate this debate as part of a pan-European dialogue aimed at appropriating the key issues and clarifying the responsibilities. I am urging a renewed collective commitment.

(Translated by Louise Elliott Wallace)

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Intangibles, Research and Innovation Processes

by Roberto Panzarani

“May God free us from the simple vision and the Newton’s sleep.”
William Blake

If we had to assume again the concepts linked to the thematic of the intangibles, we could say that the reduction of dimension of a chip (the law of Moore) and the miniaturization of the electronic components is by now a reality in industry and high technology. But at the base of this revolution lies a great idea, the importance of which has not been understood yet: the matter is becoming less important. More and more often we observe that what gives value to a product is not only the physical characteristics, like dimensions and weight, but intangible elements that "rotate" around the same product, such as acquaintance, information, services, software and entertainment.

So the value of a company can be brought back to three fundamental components: physical assets, different forms of financial capital and the intangible assets and the intellectual capital. The intangibility of intellectual capital does not refer to its immateriality but to the fact that it cannot be easily translated in financial terms. For a building or for credit titles of a company, there are standard criteria that help with translating the value in terms of running currency. Instead, the intangible components of an organization, the elements linked to human capital (values, culture, acquaintance, competences, style, strategies and brand) cannot be translated in monetary terms through the reference to standard criteria of

measurement. It is well known in detail how to estimate the financial assets of an enterprise while the methods of quantitative appraisal, in currency or through other units of measure, are still rudimentary, confused and often misinterpreted. Intangible values like the brand, the quality of the relationship with the customer, the ability of management or organizational excellence, does not appear in the bookkeeping reports, although they represent essential elements of the value of an enterprise. The registration of such intangible assets in a budget determines a twofold opportunity. On one side, it allows greater transparency in the comparisons of the market and the investor, which are put to an acquaintance of characteristics that can determine the investment of medium/long term assets, limiting as an example the volatility of quoted new societies of the New Economy. On the other side it determines the business necessity to invest in "Human Capital" not just in order to predict the future, but to govern the discontinuities and create new opportunities of growth and system development.

In fact, in the competitive dynamics of today, characterized by affirmation of the globalization of the markets, survival and company development depend on those distinctive abilities, regarding the competition, which allow them a position of competitive advantage, continuous in time.

The dynamism of the markets requires, in an increasing way, products with greater built-in technological values, operating structures highly oriented towards innovation, organizational abilities oriented towards training and professional valorization of human resources, competences, design of products and resources founded on intangible values.

And it is the immaterial part, because it is difficult to imitate, unlike the material one, which guarantees a greater differentiation in competition, allowing business systems to increase in long-lasting ways in its economic value and to extend its permanence in the market. The relation between tangible and intangible in the organization has been for a long time very characterized and univocal, the first one decorating the second, without a change in nature. The organizational place was a piece of a physical space (a building or a part of it) decorated with sense: objects and machines had a function; men and women had a role; and documents had a meaning.

In such a point of view, the tangible is simply appearance in space-time, deprived of any sense. The intangible appears, instead, like a metaphoric

enrichment of the space-time in which we live and in which we work. Moreover, it is this that transforms, in the space-time, a generic group of persons in an organization and in a community. ICT's eruption (Information and Communication Technologies) in the life of organizations has made more flexible the relation between space-temporal dimension and the intangible. ICT can in fact be used in order to produce a virtualization of the tangible one or, on the otherwise, in order to put into effect a transformation of the tangible one. Therefore categories of time and space, that are the two ancestral categories of our lives, turn out modified.

Virtual reality, as an example, evokes simulation. An emulation of the physical space-time on a digital support, with the objective to reproduce what is in the base of our understanding. In the new virtual world it is moreover possible to act and to intervene, which changes deeply human relations inside and outside the organization. The professional figures are transformed, mobility is accelerated, telework appears, externalization and internationalization of productive cycles occurs, necessity of cost-reduction appears and processes of spin off occur. There is a strong reorganization of the role of a factory: factor in the organization of the society and the advent of conditioned organizational forms from virtual nets. The life of every organization, therefore, is characterized by the new, delicate relationship that is established between the tangible and intangible. The creative relationship between these two dimensions will determine the ability of companies to produce value. Moreover, the weight of the intangibles will prevail more and more regarding the tangibles, determining the passage from an industry and service based economy to a knowledge- based one. And for this reason, investments in knowledge, research & development, technological innovation and training, have and will have, for companies returns of advanced seriousness, more so than investments in tangible assets.

Accelerating the process of institutional unification, until realizing a true social political unit, is the first step for a valid future plan that can have, above all, a coherent program of economic reforms and can contribute to a total re-launch. Against the decline risk, it is necessary to create a system, investing in strategic fields from basic research to high technology, from infrastructure empowerment to the training of human capital, to the reorganization of credit.

The people in the organizations with their competences and relations have become the strategic asset in generating value. The engine power of a modern enterprise is knowledge, which represents the “invisible advantage.” Intangible assets construct competitive advantage. The value of triangulation research, innovation and training is the starting point, a paradigm made of three interdependent poles. In the years before the great technological euphoria, thanks to stability in the markets, the great societies did not perceive the need to practice the activity of advanced education connected to the laboratories of research and the centers of experimentation. Today classroom activity, the training course and the study path must be the end product of a process that does not have to remain apart from the value chain of innovation. Intangible means emotion, ability to invent and fantasy. This is a series of elements clearly important even before, but today they arouse detailed attention and I have to say, also worry. From this worry derives attention to *human capital*.

The last concept mentioned is a concept that absolutely assumes a great importance at this moment in time because the economy today is in the form of a net, a network created of people, intelligence and brains.

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Training in the Society of Knowledge

by Ulderico Capucci

1. Technology, marketing and knowledge

Traditionally and with reference to cultural conventions, we use the word “technology” in order to indicate KNOWLEDGE, a COMPETENCE that has specificity of a technical-scientific nature. Knowledge, incorporated in technology, has always existed and it has always been fundamental. The innovation of technology has allowed for social and economic progress. It has marked the history of humanity. Technology is founded on the knowledge that, due to its nature, has the characteristics of being sure and rationally transferable in time and space. Every organization can “acquire”, through licenses and agreements, the technology possessed by other organizations.

For at least twenty years, organizations have been moved, or they are being moved, from products to the markets. This affirmation is significant for enterprises, banks and services, Public Administration, Institutions, Universities and all other organizations. The technologies of product and process remain a necessary factor, but not sufficient anymore, to the orientation of the customer and at the market, as the satisfaction of the existing, emergent, latent needs is the source of the value generation, the basis of the strategies of differentiation, and development of their own competitive identity.

In consequence, orientation towards the customer and the market calls for marketing. Marketing is not clearly distinguished from the instrumentation of pricing, publicity, promotion, communication and distribution. But, in reality, marketing is a “technology.” KNOWING TO MAKE, a COMPETENCE, then is based on a body of common and consolidated knowledge. In fact, marketing is a “technology of knowledge,” based on the ability to acquire, to accumulate, to adapt a segment of knowledge of the rules that move the market, customers and

contenders, non-customers and competitors. It is based on deep knowledge of the relationship between causes and effects, the levers of marketing mix and the answers of consumers. To know marketing means to know the market, to listen to and interpret the infinite “differences” that are inside the market which does not have a characteristic of homogeneity. Here is the point: the technology is sure, stable, homogenous and “scientific.” Marketing is a technology that elaborates infinite variable information into places, unstable in time, transforms them in knowledge, extremely differentiated and found in continuous evolution. A market is “segmentable,” and the criteria with which we can characterize, recognize and classify the differences of behavior of the customer are many. We can pick “differences”, for eg, between customers of a bank in terms of: sex, age, family state, profession, activity, wealth possessed and the attitude towards saving, money and risk. We can still classify them, according to needs, available time and stability of the yield (if we think in terms of the multiple criteria of segmentation). We can go ahead and see whether the market for banking is different in city and province, in the North and the South, in the rich and poor zones, in the zones with more competitors and those with less. The market is different in different periods of the year: for Christmas or mid-August, the 28th of the month after the wage, or before. What we want to say is that marketing has no culture, no homogeneity - it is KNOWLEDGE and a COMPETENCE founded exclusively on rigorous methods that allow it to acquire, to elaborate information in continuation, in specific ways for segments, places, territories and moments in order to create knowledge.

Let’s think about the strategies of “globalization,” which necessitate later to be declined locally. All “the global” organizations and progressively many initiatives from the not-for-profit field, the social welfare and the voluntary service, have the need to know with precision how to articulate the relationship between the centralization of global variables and the decentralization of those premises, and ,also, profoundly which are the problems, resources, opportunities and specificities of their territories.

Industrial marketing, institutional or associative, need to elaborate, constantly differentiated, specific, customized knowledge in the context of which different units and different levels they operate.

Marketing is a “technology of knowledge,” that has the role of a deputy, to generate value through its own ability, to elaborate articulated

differentiated and flexible knowledge. The training for marketing and for the market is an “education,” carrier of methods, competences and values.

First of all “valoriale” education: to take apart common places and negative stereotypes and to construct a correct culture of “market orientation.” In the collective imaginary - apart from the meaning attached to the activity - marketing still has a negative connotation.

Marketing is considered to be “*sales plus publicity*”: doing marketing is equivalent to doing business, promoting itself and advertising its own activity. It is still not clear the precise difference between “sales” and “marketing”. The former is exactly “to sell” something to someone, of which he/she does not have need, and is in the seller’s exclusive interest. Marketing, on the other hand, aims at knowing the demand - or better the need, and at “serving” the demand. Sure, there is an interest, achieved but only through the knowledge before and the respect and service after.

There is still a stereotype that marketing can manipulate consumers and create nonexistent needs. This assumption is incorrect because the “manipulation” of publicity and marketing does not work if customers are not available to be manipulated. Marketing does not create needs, but makes it explicit if it is latent or however it exists. Otherwise we would not understand why many excellent plans of marketing fail or do not work.

Marketing in a serious and true form, contains many positive, but antithetical values in comparison to the sales. Marketing is listening. It is humility of those who does not know and wants to know, respect for the needs of the others, refusal of one’s own opinion, self reference, in favor of facts and of data, and an observation of truth.

So-called commercial training often has more emphasis on selling contents than of marketing ones; it is pushed towards the relationship with the customer, the service relationship and the positive relation of the front-end.

Two considerations can be drawn. The first one tells us that the passage from the product to the market opens the doors to “economy of knowledge” and in this way makes us extremely rich. The second one tells us that a profound training and education in “marketing” would be fundamental today, at the personal, organizational and institutional levels. The

orientation to the market is a “driver” of the economy’s change, just like personal behavior, and deeply educational.

2. Decisions and knowledge

The management of an organization makes decisions. All its activity and functions of strategic planning, operation management and organization is translated into actions, that are parts of the decision-making process, or in the phase of “problem solving,” “decision making,” implementation and control. In general terms, we can say that every human activity produces decisions of more or less meaningful importance. Now we have to imagine that the decisional process involves a fundamental raw material that is knowledge which is part of all the decision process. Knowledge is the object of the analysis and of the diagnosis and knowledge feeds the elaboration of the alternatives. Knowledge allows estimating the alternatives, according to the objectives, or according to their risk scheme. And the operating realization of the decision “execution” needs knowledge. Its speed and quality is surely due to the organization of behaviors and the rigor in respecting the programs, but it contains also a good dose of knowledge, relative to the “realism” with which a decision is confronted to its degrees of probability or to the typology of uncertainty with which it is confronted. So, the decisional process is fed constantly by the availability and quality of the knowledge.

We think now that every decision is elaborated and realized within a detailed “context,” characterized by conditions of greater or smaller complexities and uncertainty. We say that today the organization in particular, and the society in general terms, lives in a condition of high complexity.

A context introduces increasing degrees of complexity according to some characteristics:

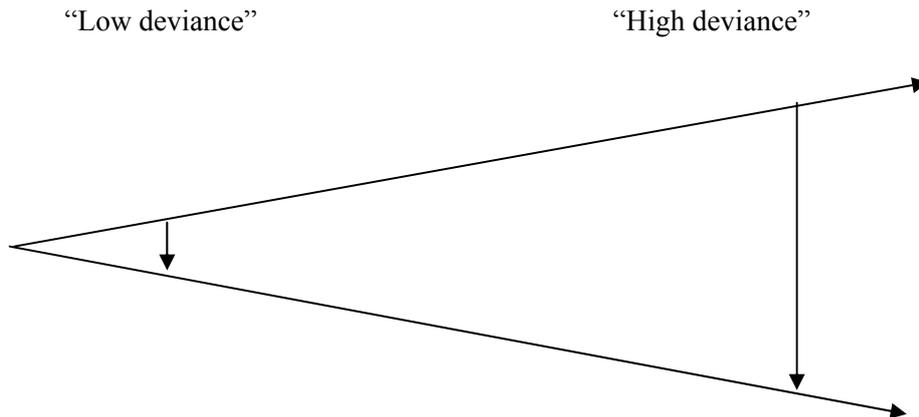
The number of variables which determine it: *Simple conditions and Complex conditions*

Their

- Unpredictability.

- Interdependence.
- Involvement of risk by degrees.
- The rapidity of the demanded answer time.

We can visualize the context in which we operate as:



In conditions which are *simple*, "ambient," and less complex, when the variables are few and expectable, the problems can be defined with "low deviance" from the previous experience, and from the conditions known. In this case the needed knowledge, necessary to make decisions, is already available, accumulated from the last experience, consolidated and possessed by many.

In more complex conditions, the phenomenon changes from the previous one. The elevated deviance of the introduced problems confronts with a lower previous experience, with a greater difficulty to elaborate the necessary knowledge. But a further phenomenon joins, thinking about the insufficient time for the answer. This means that the single person who decides cannot make confident decisions either on known solutions or on the possibility of trying to find the answers elsewhere. That is why one must have already, in his own cognitive field, a greater amount of knowledge that must be updated, in a position to make connections between these. Finally, he must be in a position to use them in order "to learn" in real time. So, in a scholastic way, we have perceived more in depth the relationship between decisions and knowledge.

Think about going to a mountain for adventure. In an “easy” mountain path, the complexity is limited and we can bring with us an expert or a guide. Even though being non-experts, we can deal with the situations faced with little procedures, a bit of attention and physical ability. If we try out an extreme path, a much more difficult one, rather a “new way,” everything changes. We need that much expertise so that knowledge becomes sophisticated, viz, climatic knowledge, knowledge about materials, cliff and snow, physical-biological knowledge, etc. We need a wide knowledge of common rules to allow interacting with the maximum individual autonomy, with maximum confidence and with respect to the relation between the climbers.

This metaphor seems very lucid with regard to the correlation between contrasts, complicity, decisions and knowledge. It tells us that knowledge is individual as well as collective, homogenous and organizational. It also suggests the interdisciplinary nature of knowledge and how everyone, in order to face the path, is in charge of his own innovation, in order not to put at risk the others who - in case of serious danger - are ethically called to support and to risk for him.

The metaphor also throws light on many things about nature, ties, usefulness, depth and experimentation of knowledge. It informs that above all the rules of behavior, command and relation are all a function of knowledge and a source of exclusive legitimization of power.

Presently, training tells everyone that today we live in a complex environment and it familiarises something or a lot about the implications of the complexity. Still it does not succeed in deeply educating and developing completely a culture of knowledge connected with the multiple requirements that we have tried here to explore. Fortunately, we do not have to do extreme climbing, but certainly we left far behind the easy walks and excursions. We are half way up the road probably, but the result shows that we still have to learn a lot.

3. The organization and knowledge

In the last 40 years we have made a “path” constructing models, principles, designs and the operation of the organization.

The passage from tailoring to the “organization” is only a starting point. Today, it is necessary to explore other perspectives in order to understand how much has happened. We have a model that we can define as “vertical.” First of all, regarding the “production” structure, the production process happened entirely within the enterprise and it was shaped within the organization of “mass production,” a production in mass with a strategy of quantitative increase. The “volume” of the production was the driver of efficiency, economy of scale and cost reduction. The strategy not only carried through quantitative growth and push on volume; but also through diversification. As the enterprise becomes large, the volume and mass production being the verticality of inner production processes are the elements that standardize an enterprise model that can be visualized as vertical. At the same time the organization moves, increasing its dimension, and assumes an analogous vertical design as it stands on a hierarchy. Every 7-8 people may need a head of unit, a department and an office and every 4-5 units, a head that exercises supervision and control. Thus, the organization is also shaped vertically and assumes a pyramidal design. It is then supported on the principle of hierarchy, on the principle of control and is regulated - in its stable decisional processes - by a package of procedures and prescriptive norms. Not only does there exist tailoring and the assembly line, but also verticality of the enterprise, the production and the structure.

Today the phenomenon is progressively “flattened.” The production process, as a whole, is progressively externalized. Aggregations of enterprises are connected to each other by a “network.” We are moving towards a “network” enterprise: constituted from a series of horizontal connections that feed a progressive series of ties of interdependence between micro-enterprises, by means of a supplier-customer relationship. The strategy is not diversification anymore, but has now become focalization. Smaller enterprises having born and specialized, stay more connected. Thus mass production has been transformed into “lean production” whose main paradigm is not volume, but quality and timeliness which are the answer to the market. The control of costs is not bound to the economy of scale or optimization of amounts, but to the elimination of refuse, of wastes, of pauses, of non-optimal use of resources and pre-existing investments.

With “lean production,” a light and fast production process, the way has lead to a “lean organization” which is a light one that eliminates everything

that does not produce value. It eliminates, primarily, the hierarchies or the role of supervision of the hierarchy, standing instead in the integration role. Thus the model of enterprise and the organizational model, from a vertical configuration, are transformed progressively into a horizontal, inner and external model and resemble enterprise net, generated from the productive externalization and the necessity of government of the integrated relations. But a “lean organization” eliminates other things that do not produce value for eg; it eliminates controls, because they are based on previous defects, which have a cost that cannot be paid by the last customer anymore. It eliminates the procedures which lengthen time and are made to work in sequence. They involve losses of value in the separation of the exchange instant. It also eliminates the escorts that do not serve, the warehouses that cost, the semi finished ones which are closed and increase the circulating capital employed. Through all these operations of elimination of expensive elements, lean organizations blend ,“HARD” enough to be rigid but solid, things enough to support the organization, thus becoming fragile, risking not staying on its feet. Flat, fluid, horizontal and cross-sectional, the organization needs a new adhesive to have “a more liquid” form, but still a form. This new adhesive can be found in knowledge, or better in organized knowledge, which gives form and consistency to the horizontal processes, the exchange of value that happens in every horizontal transmission between a supplier and a customer, fundamentally based on the exchange of knowledge and the optimization of the knowledge between the demands and the resources, the problems of the customer and the possible solutions of the supplier. Between the usefulness generated for the customer and for the optimal employment of the resources of the supplier.

Knowledge feeds the processes and the relations of exchange in the network. Knowledge also allows the governing of the processes. A process is governed, only when a standard is known and when the gap in this standard is known. The “resource” gives the knowledge of the gap; the standard is the increase of the knowledge of the expected performance. The procedure makes solid a previous experience, translates it in a prescriptive disposition, applied without need of added knowledge. The operating process demands from all the operator’s previous knowledge, exchanged knowledge, knowledge of the gap and knowledge for the improvement.

So we explored a bit of the knowledge content demanded for a passage from a vertical model of enterprise to a horizontal model, from a

hierarchical and proceduralized organization to a flat and process driven organization.

Also, in this case, we are dealing with knowledge and increasing it in amount and quality. We have to do the same with other categories regarding knowledge. The first ones are that deal with the “exchange” that supports integration; then those that deal with the knowledge of the operating processes of the suppliers and the customers; and later that deal with standards, measures, gaps and improvements. Thus we have enriched a little, the bundle of the relative reflections to the impact of the organizational innovation regarding the government of knowledge.

4. Training and organizational learning

In the society of knowledge, the training, acknowledgement of all the importance that we want and must attribute to it, plays a modest role in the wide field of studies, instruments and paths, with which organizations learn.

We have to remember the difference between individual competence, collective competence and organizational competence. The passage from individual competence to the collective one, characteristic of a professional “community,” involves a remarkable qualitative step. Collective competence involves some meaningful operations:

- First of all its “homogeneity.” A professional family is formed when the ties inside the family are weld on a common base of knowledge and competences of social standard, which the community arranges and in which it acknowledges itself. In the absence of this requirement, the competence remains an individual patrimony of the subjects and is self-referenced, because socially it is not recognized. The homogeneity of the knowledge -collective competence is not a homologation, but a common reference that everyone uses in a way which characterizes them and that the communication between the persons allows for their interaction and mutual confidence. This foundation makes it possible that a true professional family exists and can be practiced the value of the “exchange” of knowledge, the value of “professional confidence,” the praxis of

the acceptance of other people's competence and opening to the cession of his own. The collective competence is such that, even if all the people who recognize it and detain it are not called to operate together, they are not called to interact in an organizational context that makes them operate for a common scope. We can think about the collective competence of doctors, engineers and pilots of airplanes. The collective competence allows replaceability but it necessarily does not imply interaction and integration.

- The collective competence thus, by definition, is an explicit competence and not tacit. It is codified and can be codified in a formal way. It is famous and visible to the community and is communicable and transmissible. In time it will become interiorized. This means that who belongs to a professional family, uses the collective competence in an automatic way, without questioning and without having many doubts, because it is entrusted and having faith in knowledge permits a greater degree of certainty in the measure in which it is shared with the others. This is the added value of the collective competence that becomes culture, in the measure in which, besides its common acknowledgment, and assumes the value of the “internalization” from the members. The collective competence is something more than the sum of the individual competences, in the way it contains the added value of the acceptance-sharing-internalization of the entire social body.
- The collective competence is “distinctive” from the single family and is distinctive from the others. This is due to not only specialization, but also to the meaning of belongingness to the other that distinguishes the evolved collectiveness. If we think of, for example, comparing a natural phenomenon of knowledge and the competence of a sea diver, this becomes evident. The various communities that live on the water have developed during time a competence, a knowhow of a boat that is typical of that community and that has become a characteristic of the same one. If you have travelled a little in the world you have seen an infinite number of various boats that is distinguished from each other in function, physical context and materials. In the Mediterranean we have in Liguria, “gozzo”

from Liguria and in Sorrento the “gozzo” Neapolitan. The collective competence makes use of a distinctive characteristic that is an integral part of the identity of the community development that codifies, diffuses, recognizes and uses it.

Thus we have moved towards describing some meaningful elements of the transition from individual competence to the collective one, in order to prove the elements that make not only a quantitative difference, but also a qualitative one. Evidently, training can contribute to the creation of collective competences and it not only characterizes them, within the organizations, or between the organizations, but in the measure in which it works regarding real “professional families” or professional communities. It is obvious that training is not enough to make this operation thus described, but make sure its way to operate, above all at the beginning and at the end of a formative participation, can contribute to the creation of collective competences.

But the more important passage is the second, from the collective competence to the organizational one. In this case the subject that learns is the same organization and not the people, and this is true whether in the community or in families. The organizational learning is the learning of a various entity, a team and not a group, that learns to interact in order to produce a result which is one of the organizations. We cannot continue to speak about jobs in teams, organizational processes or a network of nets. If we do not differentiate very clearly the following: in the team, in the process or in the network, the result is not fruit of the competence of subjects, but it is produced above all by the quality and effectiveness of their relation and interaction. This point is fundamental, and is deeply understood if we as operators of training and learning within the organization, want to contribute to improve the competitiveness of our system, at all levels. Two considerations:

- In the society and organization of knowledge, organizational learning is more important than one which characterizes them. By now in the society of the network and the respective organization, all the meaningful results do not come from a single subject, but from an integrating relation.
- In particular, if we think about Italy, about the Italian organizations, we are reasonably sure that the individuals, the

managers of the companies and also of Public Administration, are not less prepared, able or competent than their colleagues from other countries; but the result and the efficiency of the organizations is sure to be less competitive than other countries and more efficient and effective systems.

All music lovers recognize in the orchestra, an organizational competence that goes beyond single members. This is completely insufficient to produce a good team game. We must have the same clarity in recognizing competence in all other organizations.

We watch companies in which today the organization is “processual.” Its main results depend on the quality of the processes and the organizational competence that supports them:

- Innovation is the daughter of a process. Product innovation is the daughter of the competence of the search, planning, industrialization, marketing and its transfer in value for the customer. Quite often it is the daughter of a “system.” Thus the time-to-market is the fruit of the competence of the relations between the various processes of development of the new product.
- The total quality that unifies the quality perceived with the optimal employment of the resources is the daughter of a process. It is the same for the quality of the service. Anyone who tried to ask the check-in employee at the airport, “When will the plane leave, is it on time?” had as an answer “I do not know.” The organization knows how to answer, knows to connect the knowledge of the control tower with that of the earth structures with that of the crew and with that of the boarding bench. Some organizations know how to make it, others don’t.

Then the competence at the bottom is that of process designer, in order to make it work. But the process then is not a procedure or an assembly line. Demands all its operators to learn the operation, to manage the operating instruments in order to make it work, to learn at last how to interact in order to face “together” the deviance, the emergency or the unpredictability that characterizes the process with the exception of the

simple procedure. That is why an orchestra makes the “tests” with the Director, a team trains itself during the week in order to learn the game outlines, and the National Fire Departments practices in order to learn to dominate the fire. That is why training is weak facing the problem of corporate learning. It needs to complement the organizational levels and it needs to complement the operating instruments with the mechanisms for integration. Above all, it needs to transform itself from a process of education of the individual or the community, into an instrument of “learning organization,” which for a long time we spoke of, but had little operation of.

This speech relating to the “team,” and to the organization process, to the enterprise-network, does not only regard the enterprise and the productive organization today. Let us think about Public Administration, which today is assigned and entrusted the role of promoting the economy and the well-being of the territory. This is possible only if we forget the Public agencies of the traditional P.A, and think instead about administration, management and development of the “common good,” for corporate assets, pursued together by the institutions, the citizens, the enterprises and society.

The problems to resolve, those of the economic growth, mobility, emergency, school, job, atmosphere and health, are entrusted today to the operation of a network of “bearers of interests” and stake-holders that have by definition various roles and interests, but which must pursue common purposes. The plans of local development need “hard partners” with a strong net of ties in order to exceed the infinite particulars.

Even this is a process which does not work “spontaneously,” but which needs new competence: competences of “production chains,” processes that tie each other various operators, economic and not; competences of economic-social appraisal, between various solutions, often regarding the non-solution of a problem; competences of aggregation of social consent; competences of capitalization of local resources and development of the specific identity of a territory. All these competences of a corporate nature are social “know how” which distinguishes a network. A network is when it is not a simple plurality of subjects, but when the qualification of a new subjectivity with all the characteristics of a single organization and which works on the basis of processes and organizational competences that are perceived.

That is why the society of knowledge has to be completely understood, in order to clearly “see” all the deep and wide implications at the level of a single subject, by every organization, by a network and at last by a society. The knowledge only becomes patrimony when it declines within a competence that is specific to the subjects formerly, then by the community and finally by the organization-society at the end of the path.

5. Knowledge management

In nature the “progress” of man, of his various social organizations called tribes, people or society, has been visibly bound to his learning ability and to “managing” his own patrimony of knowledge and experience. Man has survived, but this has occurred over a long time, millennia before and centuries after or in other words over a long course of time. In society and within organizations of knowledge we want to achieve the same competency “to manage” the patrimony of knowing, but within shorter times with wider populations and with more articulated and complex content.

Furthermore, civilization has accumulated and managed through history a patrimony of “mostly theoretical” competences, of a visible and hard nature. Today we would like to make an analogous operation for “soft” competences, by definition intangible, immaterial ones. In effect every generation inherited from the preceding one all the theorist-technological baggage, but it benefited little from the experiences. They were tied to the relations, the behavior, to the service and at the market.

All this implies that in the organizations with a high intensity of knowledge and with the requirement to develop “learning organizations,” the first problem is the problem of “knowledge management,” the reproduction, therefore, of the natural historical process of man and of his systematization, in order to take what happened in the past and to apply it to a pocketbook of knowledge and competences much more complex and articulated, with typologies of technical acquaintances and not, immaterial materials and, succeeding then to accomplish it in little time and with wide populations. If training desires to really give a greater contribution to the organization of knowledge, it must surely increase the perimeter of its own participations, to exit from the classroom, to govern the process of “knowledge management” in its different parts and in its multiple

applications and instruments, assuming the role that has been defined as “facilitator” of this process. Today we recognize that every organization has a determining patrimony of KNOWING, that can be managed with the same logic as other business resources, as it is in fact the patrimony of the productivity systems that are planned, acquired, installed, used and maintained with continuously measured and improved performances. Let us try to remember briefly what is contained within this process of “knowledge management.”

We can identify six steps of the process of knowledge management, which are phases of

- 1) Development and acquisition.
- 2) Codification and industrialization
- 3) Custody - accumulation – patrimonization.
- 4) Diffusion, distribution and homogenization.
- 5) Monitoring, measurement and evaluation.
- 6) Maintenance and improvement.

Obviously, there is an assumption to make. In all of this process, in its different steps, there is a twofold component. There is constantly the combination of a theorist-organizational path and an exclusively ethical-value feeding. We can think of this as, a “cold current” and a “warm current.”

The first one demands organization, data banks, informatization, operating instruments and without these it is difficult to accumulate the knowledge and conserve it has in complex situations.

The second one, which is more important than the previous one, demands that the knowledge is legitimized and recognized or, that the inner part of the organization makes a strategic use of it, being the first actor and customer of the same process. It is still necessary that the community accepts the exchange, practices the acknowledgment, and is available for comparison and innovation of knowledge.

Therefore, the process of knowledge management demands to have “education” as the basis of its existence and during its life, before being the object of learning itself. It needs to educate from the top and draw for the community a mental map that recognizes an enterprise model, a model of

management, a model of behavior that moves towards success, convenience and the cohabitation of power and knowledge. The following six steps of the cited process stress this principle:

1: *The acquisition and development of knowledge.*

Technological knowledge is applied to its own search, or the acquisition of others, under the form of agreements or licenses. Analogously, it can be made with other knowledge through various modalities:

- The analysis and diagnosis of its own success and failures. This is an important source of search. The trainers know that the learning process of adults consolidates with success; the errors are fundamental, only if we understand the reasons and if we avoid repeating errors. The success also acquires value if we understand the reason. In an organization all success and failures can be an object of research. In this sense training can, indeed, do a lot.
- A similar form of research is the analysis and diagnosis for comparison or what can be called the inner benchmark. In every organization there are those who perform better and who perform worse. There is a unit-factory-branch (office)-point sales, but there is also a unit-faculty-municipality that regularly turns out to be better than the others - superior to the average one and to those standards. What can be discovered and learned by analyzing what is made, actions and praxes of the best, is amazing. The excellence of every organization is already reached, only if all of the best are approached and if they succeed in increasing overall performance. If all hospitals functioned as the best hospital does, if all the municipalities worked as the best municipality does, we would have been a different country. If Fiat Auto performs badly, but Iveco does well, it would be practical to understand why. What has been made here and there, without limiting oneself to say that "... the situation is different...?" The research then needs to be followed by experimentation. Even within the organization, a construction site or a laboratory, an experimentation place can be opened. Various organizations today work with the logic of the "project," in order to produce innovation or in order to

resolve problems and complex situations. There are also new projects that have a different purpose: to experiment in order to produce “learning.”

2: Codification and industrialization.

Knowledge and competence, in order to be usefully treated, transferred and diffused, need a second phase. The key words of this operation involve the translation of knowledge in “fluid routines.”

- Routine - it is evocative of the fact that the competence is translated in praxis, as a behavior able to generate performance and in the most possible repetitive way in order to become automatic. We can accept to use the idea of “engineerization” of the competence in “routine” praxes. This terminology does not satisfy us and it seems reductive and mechanical, but it is not. The basis of every “codified” profession is made of codified routines. Let’s think about the medical surgeon who faces a complex operation. He does not invent solutions which he uses during the procedure, but he is entrusted to consolidate praxis, defined as “protocols.”
- The routine, however, must be “fluid”. It must be defined with a criterion that allows from one part and demands from the other context of the specific situation. In other words “knowledge management” takes knowledge and the experience acquired and incorporates them into a series of codified practices that give to one who works, all the baggage incorporated from the past leaving on one side, and demanding from the other, the management of the decision.

This operation of “codifying” takes place differently. The most common is the “handbook” one. At school we learn from books. Every amateur who wants to cultivate flowers or to dedicate himself to fishing or to photography, goes to a library and reads a handbook, studies it and then experiments. Then if he does not succeed in learning what he meant to, he discards the handbook. The purpose of the handbook is to become worthless, but they are an irreplaceable source of knowledge. These kitchen prescriptions contain “routine fluids” that need to be complemented with the ability of the one who consults them.

3: The patrimonization.

Knowledge can be accumulated and conserved. In the technical environments of today, the “technical memory” is of use. Once a project is finished, for example, a documented trace is left of how it had been planned and of what was learned, that is, applied during various stages of planning. However, outside these theorist areas, this practise is not diffused. Also in this case training can contribute a lot. The localization and the conservation of “best practices” are being diffused. Conservation of knowledge has today benefited a lot by technology. It is possible to construct “shelves and closets” in order to guard, to conserve and to accumulate knowledge. With the support of the technology, it is possible to practically construct “data banks” that allow accumulating knowledge and experiences, in all fields. Also the communities of the practice are orchestrated and organized in order for everyone to allow nourishing of the common knowledge, exchanging it and making it available for others. The Internet is a great container of knowledge of all kinds and is now available to everybody.

4: The diffusion, distribution and homogenization.

This is the most known and traditionally used phase. School is from the beginning the institutional deputy for spreading knowledge in its different expressions. Traditional education is a means and a channel for the spread of knowledge. Here we want to look from the inside of the specific problem of knowledge management and then the work inside an organization that learns and so we want to recall the spread of that specific knowledge that is created in specific and distinctive ways within that organization.

The Corporate University has been created for this purpose; to be a University of a specific organization; a deputy to diffuse just the specific knowledge developed and codified by itself. Training can do a lot in order to put itself to service for this specific process, in order to transform itself specifically for the “inner school” position of deputy and for being the point of reference for this detailed purpose.

5: Monitoring, measurement and evaluation.

The topic of the measurement of competences is obligatory, as what is not measured does not exist. Every competence has a “grading”. The measure of the competences is not only an assessment of its presence or

less, but a real evaluation of its level. This opinion is possible only if there is a standard of criteria for a reference for the evaluation. In sports there are quantitative measures and there are also qualitative ones. The competence in judo or in artistic skating, for eg, is being unified in order to have defined a criterion at the bottom. The competences within an organization can be measured based on various criteria. As an example, the competence based on its empirics or theoretical support can be measured. This can be measured based on the possibility to resolve simple or complex problems, based on the degree of autonomy of who possesses it, and based on the depth and the amplitude. Today “scorecards” are a theoretical instrument to do this. Monitoring competences means to estimate, to find who possesses them, where they can be found, how they are spread in a population, the rate of modernization and innovation and the distance between the existing competences and the demanded ones. The monitoring means to list them, to map them, to estimate them in a way that is much more articulated, at an individual and collective level.

6: Maintenance and improvement.

Monitoring has as a purpose to be able to face the improvement.

This can lead us to explore new competences, or to modernize the previous ones or consolidate them and to maintain them or identify the quality or improve the diffusion. All are possible paths of improvement within a focus of knowledge management. The instruments of improvement bring us back to the initial phase, the acquisition, with a widening of sources and paths. This is the recall to the process of knowledge management, to its phases and instruments. There is an evident possibility for the training to become protagonist of the entire process or specialize in a specific phase or to become less partially contributing or more so or to single out activities and instruments. In society and the organization of knowledge the government of the process of knowledge management is due. A big work is waiting to be done.

6. Which training in the society of knowledge?

Today, and more and more in the future, our organizations will have a growing need to transfer and to distribute knowledge of a different nature and for a different purpose.

There is a need for the modernization of the existing knowledge. It is said that a doctor, if he does not keep his knowledge up to date continuously, will have, on average, an obsolete competence in three to four years. In the field of civil electronics, the technology of cellular telephones has a life-cycle inferior to a year. Also in our market of trainers, we witness a quick change of demanded competences: all the “functional” participation, from the e-learning to the knowledge management, as we have seen, demands a strong modernization of knowledge and competences. If we think about the transition from the model of management of profit to the value model, we have something more than a simple “modernization;” we are already in the area of a change to our basic assumptions and paradigms of reference. So we must consider the “grading” of knowledge. It can be done in many ways and more or less in depth. I can say “I know” a person, because I met him once, or because I have been in contact over a long time span or because we are intimate friends. In the Bible, the “knowing” of a woman had another meaning. I can say I know the market, because I know the qualitative data and the morphology, or because I know deeply the laws that govern it. I can say that I have an empirical knowledge of the money flows, or my knowledge is supported from a strong background of knowledge of the theoretical models that interpret it. We must imagine that the depth of knowledge demanded by organizations is increasing, with higher “grading” in order to measure the availability.

Another path indicates progressive integration of the different types of knowledge that the organization demands. The interdisciplinary nature is carried out by the processes and the organizational forms that move from the sequences to the simultaneity, from the structures more and more expected to assume a role of “sistemistic” and to play it out by implementing the plan of “combining” knowledge.

We still need to elaborate and to diffuse new competences not available before. Let us think about the P.A., whose mission and strategy, commanded by the requirements of citizens and mediated by politics, is by now turned to promote the development of the territory. In order to make it, it is necessary to dispose of knowledge and competence relative to the various “weaving factories,” to the links between the interests of the various “stakeholders.” The management of mobility, the protection of the environment, the promotion of the local economy, the waste management problem and all the other new economic and social problems demand the

development of new competences, of course, usually completely new to a P.A.

In general terms, the innovation includes not only the technological one, but that of market, organizational and of service. The lengthening and the shift of the value demand chain requires new competences. But do these different trends indicate a crescent need of training? Surely, not. Training has a really high cost in economic and time terms. Training has obvious quantitative limits to its uses. In reality, the society of knowledge does not need training, but it needs learning and evidently it is not the same thing.

In reality it needs increased value of learning, not only learning for individuals, but a transfer of it via jobs and the application of what is learned to their performance and their improvement. More importantly, we have to think of useful learning for the competitive positioning of an organization. There are four passages, if we want to think about the “value of learning.” The future objective is to improve progressively the cost-benefit relation of training: with more useful learning and with fewer costs.

At this point, the traditional function of the classroom, even the most innovative one that is outdoors, appears to be an important answer but insufficient to meet the amount and quality of today’s and future society’s knowledge. We have to find a mechanism that matches this contradiction, i.e, more useful learning with less training. As an ancient reflection: learning by doing. For the answer that we have to find to increase the product of learning contained in the job, we have to give the “job” a different content and meaning.

7. Work and learning

In the society of knowledge, jobs change their intrinsic nature. The “tailorism,” in general terms of the production of mass and the economy of capitals, has not only created the rigid separation of tasks, tight roles and defined borders, but it has above all separated thought from action, doing so from thinking on how to make it better. Not only did the assembly line have this dogma, but the “officer” who was the bureaucrat that was in charge of simple application of procedures. This was also true at the level of management and it was clear that there is difference between the level of those in charge of elaborating the strategies and the others responsible for

realizing it. In the organization which is “knowledge intensive,” all that is completely turned upside down: to all the levels, jobs have seen a resetting between concrete action, practical, material, reflection, separated, theoretical and immaterial. Silvio Ceccato, a peculiar personality, is an author who dwells between science, philosophy and narration, explained that human activity is substantially made of job, game and study. Ceccato explained that work is an activity that all of us do and give to others, in order to have a corresponding compensation. The game, which the adults instead call a “hobby,” equals in fact work, hard work or an engagement, but made for oneself, not for giving to others and a reward is not a pursued aim. Study equaled work, but aimed towards advantages delayed in time. Now modern organizations are “approaching” these three different moments. Sure it has approached work and study, also partially work and hobby. The ideal would be to arrive at a complete overlap of the three moments, of the relative ones contained and their meanings. Presently, let us bring back this resetting between making and thinking, between execution and reflection, in all the roles of the organization.

Also at the manpower level, in the overall view of production, work does not only mean execution, hard work or manual work. The person assigned the management of a system, feeds and supervises the operation, keeping up to date a long series of data about production, quality, waste, consumption and pauses; otherwise in the “integrated factory” all the diagrams showing the progress of the processes on the board of the so-called “visual factory,” as well as thinking about producing quantity, quality, flexibility, continuity and improvement of its system. The quantity of knowledge demanded and produced is conspicuous.

The “work” is about to become “immaterial,” full of analysis, diagnosis, participations and always less simple executions. A mechanic who takes care of car repairs on average uses his hands two hours out of eight: for the rest, he uses diagnostic electronics and he consults handbooks and studies participations. This pure execution does not contain value anymore. In the factory it ends in automatization, in the office it ends in the PC and otherwise progressively becomes eliminated. A bank employee who limits himself to making simple manual operations will soon be replaced by machinery. The value of his performance will be only justified in the context of relation with the customer.

The work therefore has a twofold trend. On one side it demands a progressive increment of knowledge content, indispensable for a person performing it. On the other hand, work generates knowledge. It is a principal source of learning production, as it has been for centuries and millennia of history. In the new humanism of our current and future organizations it comes to the same end. In order to meet the need of generating useful work while deepening with fewer costs and less formation, the master road to pursue seems to be this one.

We must learn to teach how to render more explicitness and awareness, intense and useful, the learning content in daily actions. We need a “reflective action”. A job which surely consists of making, from an action, that knowledge contains, but which simultaneously produces a “reflection.” We need a daily working action to produce two outputs and not just one. On one side a performance, but on the other an immaterial output, consisting of the progressive accumulation of “learning,” whether from historical memory of errors or from noises and numbers. It means using “action learning” or “on the job training” as a didactic modality, like an alternative training methodology, educating people to nourish constantly this action learning, outside an institutional participation aiming at learning. It means identifying learning on the job in a stable manner, explicit and aware, usable for all, even and especially, outside a training intervention.

8. Examples of work evolution

Let us try to see some examples of how knowledge is transforming work. In a Roadside cafe, in the part of restaurants where there is a market, there is a person who refuels the goods to the exhibitors and has a key function. His task is to check the sold products, capture others from the warehouse, record the codes and physically re-supply the exposed goods as they were previously, in the same quantity and mix of brands, formats and assortments. In another instance, a person is “trained” to make something more and better. Consulting the computer for the speed of the purchased goods in his unit in the last two weeks, knowing the central assortment policies and some fundamental ones of visual-merchandising, an assigned person was asked to modify the space assigned to every product in favor of those with a greater turnover. The purpose was to assign a responsibility to increase the revenue of the unit, with the necessary knowledge to complete discretionary operation and to manage independently the use of the

exhibitor. In a second phase, a person was trained, knowing the profitability margin of different products and the fundamentals of the DPP (Direct Product Profitability), to increase autonomy and responsibility in order to manage the profitability of a unit, maintaining always the fixed assortment from the central market. In the ulterior phase, he was also given training in how to organize small promotional operations for example on “Daddy’s Day,” attaching a necktie to a bottle with tape and exposing all of them on a small table in order to increase finally a value of the space. This is an example of a complete transformation of “work” (initially repetitive, boring, physically laborious, including pure execution, material overall) leading also to the transformation of the person into a real entrepreneur for his branch, into the one who knows the logics of consumption, the importance of the exhibition light, the spin of the goods, the refueling forecasts and its local market. We have re-united the action with a good dose of thought. Indeed the executive part has by now drowned within many cognitive spaces.

Let us now use the example of a role with a high technical content, in which the work has a good amount of relative technical competences linked to the planned product and let us see how the additional knowledge enriches its contribution to the value chain. We begin from the economic knowledge, the cost of the materials, the cost of the production, the cost of the distribution, the operating costs or in the case of maintenance, maintenance costs, until we succeed in knowing how to estimate not only the cost of the product at the beginning, but also all the costs that the product will have in its life-cycle. When the planner knows and can govern this long chain of costs he will enrich its patrimony of technical knowledge with a rich and deep knowledge of all the operating processes, from the production to the customer, until the finished product is in hand. We make the same operation regarding market knowledge, the customer, his needs, his factors of purchase and above all, how much a customer would pay, how much he appreciates the products, how much value he attributes to all benefits of a product, material and immaterial benefits, existing, emergent and latent needs.

Now let us talk instead of the useful knowledge of the planner regarding his future suppliers of materials, members and services. His suppliers are external, but also internal. His technical-economic knowledge enables him to make a value for his external and/or internal suppliers, using at best their resources, their materials, their systems and their technical competence. In

this case, completely different from the previous, we have made a different operation. We made it possible for the planner to develop an awareness of how much his planning action influences results made and effects far from his role, whether from above towards production and market, or from the bottom towards production and suppliers.

The job which was already rich with knowledge, all inner to his role of planner, has transformed him into an entrepreneur of his product, into an “industrial craftsman” who knows deeply, in its deeply technical role, all the other phenomena and technical effects, of quality, of process and of market for the entire value chain. In this case too, the transformation is most remarkable.

We will take a third case, the role of a vendor, again different from the previous two. A vendor role is rich with ability and very poor of knowledge. The classic role of a vendor requires a brilliant person, extroverted, a little aggressive and reasonably clever. His success does not depend on the amount and quality of his knowledge, however acquired. He has to know a little about the product that he sells, be informed about the terms of sale, but even more than this. To know how to sell is substantially linked to one’s natural gifts, one’s genetic DNA, to the qualities of a person and not to studies and school. For him “to know the customer” means to know how to pick the weaknesses of the customer, to know how to flatter his vanity and to gain on compliances. But it does not certainly mean knowing the needs, the use functions or the operating problems. Therefore, the vendor is a role rich with action, with intelligent intuition, poor of rational estimation, of analytical problem-solving and of professional knowing. A role, we could define as “muscular” in the rich tradition of “sexist” connotations. Today this vendor becomes the partner of the customer. He has studied a lot and he became rich with a profound knowledge. He knows the potential market, he knows how a customer purchases from others and why. He knows the economic value that he offers to a customer. A Ferrero vendor of Great Distribution, upon becoming a Key Account, discusses with the Category Manager about the distribution and he makes plans for trade marketing and of Co-marketing. He is in a position to calculate the profit that his product generates for “trade,” measured in relationship with occupied linear meters. He has also become an “entrepreneur,” in connection with the customer, which has become a multinational company of distribution.

Even here, another different conception of the work, which is not measured by a number of visits made in a day, but rather by the profit for the customer and is continuous in time and doomed to last because it is stable in its longevity.

Three different examples, with a common constant: a different meaning of work, a different relationship between the very person and his work, a sunset of the traditional nomenclature and duties traditionally recognized and the birth of new duties within the organization of knowledge, of “professions.”

9. The training and its role

For a conclusion, the final observations about the state of the art of training in organizations will be made. Let us analyse a recently terminated research made jointly by AIF and the University of Cà Foscari, on the investments and the training activities of twenty great Italian companies. The research has been rather analytical, qualitative and quantitative, with questionnaires and interviews; it has traced all the relative points to the training process; the companies were selected and again segregated to those which are meaningful in the training engagement. The result is that we only have the space here to discuss the summary, moreover allow a reliable cross-sectional reading of an actual role of training. What emerges is a picture with many positive elements. Training at this point is legitimized, does not have any identity crisis and is not any more self-referred. The investments are stable or advancing. The demand instead is increasing.

The process of needs analysis is more linked to strategies and plans, the relationship between demand and needs is estimated in a substantially positive way. There is an increase of population, a push towards not only quality training, but a “useful one.” There is a growing interest towards the evaluation of the results and there is a growing connection between training and the lines of development and the model of the competences. This is the picture of the positivity which assigns to training even a larger role in the improvement of the competitiveness.

However, there is also a picture of potential critical points, due to an emerging trend towards the “dispersal” of the training and learning phenomenon. The increase of its borders has different guidelines; the

responsibility of people for their own development, that begins to create a legitimized bearer of personal requirements, the decentralization and the business taking over the charge of training, the separation of training and the classroom into the process of knowledge management, and a clear growing visibility of an “invisible training,” born on the job. All these drives found training behind schedule whether regarding its innovation, or in the management of a more diffused phenomenon, or in the role of integrator of systems between new training articulations. All of this leaves a great deal of room for imagination concerning a future role for training in the society of knowledge.

Training and Education Today: Role and Perspectives

by Claudia Montedoro, Dunia Pepe and Francesca Serra

1. The redefinition of the cognitive and professional paths in the knowledge society

The development of information technology and the phenomenon of globalization are among the factors which mainly contribute to characterizing the present society as a 'society of knowledge' or a 'society of information.' The White Book of the European Commission- *Growth, Competitiveness, Occupation* – has, already, in 1995 emphasized how the diffusion of ICT would influence our way to communicate and to work, as well as our habits and free time. The imposing development of the mass media would have represented the origin of decreasing distances, spatial and temporal, of the birth of multinational and transnational corporations and, therefore, of the globalization of cultures.

The socio-economic changes over past decades, observed by Domenico Lipari,¹ are in the first instance due to profound transformation of the nature of work and profession, inevitability of the technological change and a field of services to the aims of the economic well-being, 'globalization' of the relations and the economic exchanges accompanied by an increasing dynamism of periods and ways of exchange, cruciality of the processes of production and management of information, even in light of the impossibility for long term planning linked to an increase in change of speed and to the reduced possibility of stability.

¹ Lipari D. (2002), *Logiche di azione formativa nelle organizzazioni*, Guerini e Associati, Milano, p. 95.

Because being immersed in the society of knowledge and being turned, above all, to the creation of knowledge, the institutions and the organizations are today in a situation where they have to face completely new contradictions and difficulties.² In the globalization era, companies must be able to reach total integration and achieve local adaptation. They must know how to face various contexts in terms of working power, customers, suppliers and correlated enterprises. Finally, they must have, the ability to manage their inner context and at the same time to surmount it in order to be able to work in an efficient way and to overcome the challenges of globalization.

The possibility for an enterprise to live, to grow, to manage the contradictions and the uncertainties is linked, therefore, to the entity, the wealth and the flexibility of its patrimony of knowledge. The companies that have more *chances* are those able to manage conflicting forces, like competition and cooperation, integration and disintegration, creativity and efficiency. The companies must have the time and the possibility to construct and to consolidate their knowledge, to accumulate it and to reproduce it and they must know how to convert tacit knowledge into the explicit one and must know how to use it in an efficient and fast way if they want to be competitive in the market.³

It is within this perspective that the concept of the 'Society of Information' is transformed into the 'Society of Knowledge.' "The individual knowledge acquires primary importance; the growing complexity of the economic and social scene demands not only the acquisition of new information, but also the ability to produce and to develop new knowledge and competences necessary to face evolutionary and social tasks for the individual, professional and civil development. The accent is placed on the pervasive character of the knowledge, of the competences at work, as well as in the individual and social life, in the economy and the policies of development."⁴

Lifelong learning becomes a proper right in an active citizenship. The practice of which is necessary as a productive factor, as an individual growth factor, as a human resource development and as a social cohesion

² Nonaka, I. e Toyama, R. (2003), "L'impresa che crea conoscenza," In *Sviluppo & organizzazione*, n. 197, p. 83.

³ Ibidem.

⁴ Alberici, A. (2002), *L'educazione degli adulti*, Carocci, Roma, pp. 10-11.

factor.⁵ With the Councils of Feira and Lisbon, in 2000, the European Union dedicated a priority axis to the topics of teaching and permanent training. The favorable outcome of the transition towards an economy and a society based on knowledge has to be accompanied by an orientation towards teaching and permanent training.

In program documents by the EU, the term *lifelong learning* indicates all the activities of learning aimed at improving knowledge, the abilities and the competences in personal and civic, social and occupational perspectives. All this, with the perspective to realize the four great objectives of the active citizenship, the possible realization of every individual, of the social inclusion and the employability through all the possible activities of learning: formal, semi formal and informal.

Already in 1970, Paul Lengrand in the *Introduction to the permanent education*, written for UNESCO on the occasion of the international year of education, emphasized that education does not regard only the acquisition of a patrimony of knowledge, but the development of the whole individual. From this derives the fact that the tasks of training are inclined in two specific directions: to favor the activation of structures and methods in order to help individuals in the continuity of their learning and their training for all their lives and to equip them also through the multiple forms of self-learning, so that they can be creators of their own development.

Access to the employment world is characterized by the demands for growing qualifications towards any professional category, at the level of competences or of professions, or of technical qualifications or of a cross-sectional nature, above all in the terms of ability to react to changes. Within this perspective, the exclusion risks are obvious for those who are not sufficiently competent or who do not answer to the demands of the market. “The coercive feature of the corporate scene and the market, writes Quaglino,⁶ has become more pressing for an individual, who is more and more often found in the condition of having to start again looking for an occupation after the precedent has exhausted with time.” Against this situation, the objectives of training and the orientation place the accent on the individuals’ abilities to act. “The individual, observes Aureliana

⁵ Ibidem.

⁶ Quaglino, G. P., (2003), “Orientamento e rapporti con la formazione,” in *1° Rapporto della ricerca Isfol nell’ambito del progetto di Istituto. Modelli cognitivo-psicologici nella scelta e nel successo della professione*,” Isfol, Roma, p. 18.

Alberici,⁷ today is invited to construct by himself his own certainties, taking care, first of all, of the possibilities of insertion in the labor market through teaching and training. Moreover he should not forget that what characterizes the phenomenon of exclusion in modern societies is primarily lacking inclusion in employment and civil society, which nearly passes always for 'a training exclusion' in a tight sense or through diverting population layers towards a weak training, so inadequate to the needs of modern societies.

An additional fact is that lacking important guarantees like economic and employment security, political, religious belongings and family etc., generally increases the sense of uncertainty of all citizens. New needs for security emerge, the satisfaction of which is perceived by a subject as being necessary for the aim to become a stronger, more independent person; to be able to orient at work as well as in social life, give meaning to the mass of information and the daily act of discovering networks of meanings and thus strengthening one's confidence, and increase one's own competences at work as well as in the wider area of social reality.

“The transformation processes of the institutional and corporate realities prove, in the first instance, the course from an ascending hierarchical logic (game of the *up - down* or of the *down - up*) to a social dynamic that develops horizontally (game of *in - out*). The subject does not need the capacity to sharpen his performances in function of career advance, at the same work or in the same company, but the ability to pass from one function to another and from one working environment to another.”⁸ A meaningful second passage regards the progressive reduction of the dependent work, in favor of the independent one, within a system of *workless growth*, where the growth does not necessarily bring the work.⁹ The subject, no longer supported and managed from his own working context, is found in a condition of having confidence in his own abilities and potentials, that regard, above all, knowing how to find the areas of suitable action for his own characteristics, on one side, and knowing to act with the aim to increase the possibility to use the training, on the other.

⁷ Alberici, A. (2002), *op. cit.*, pp. 10-11.

⁸ Cunti, A. (2000), *Pedagogia e didattica della formazione*, Liquori, Napoli, p. 58.

⁹ De Rita G. (1998), “Il futuro dei giovani tra lavoro e bisogni formative,” in S. Bucci *Giovani Società Educazione nell'Europa del 2000*, Università degli Studi di Perugia, Perugia, pp. 27-35.

This factor usually indicated as 'knowing at work' in the perspective of Fontana and Varchetta¹⁰ represents, on one side, a fundamental strategic resource of contemporary society, on the other, the foundation of an uncertainty and an incessant competition. To live and work in companies is much more tiring and troublesome today than before and this also applies to people with high responsibility positions. Regarding the difficulties of living today within companies and regarding the necessity of individuals to construct and to reconstruct their career path, Edgar Morin¹¹ writes that training seems to have "the task of overwhelming the sense of void and inadequacy and to facilitate obtaining a new way to observe the world. Training and, in particular, lifelong learning become in the last analysis an instrument able to support an individual in uncertainty."

The training moment becomes an essential answer to a problematic situation, tied to a lack/deficiency of knowledge, competences are considered necessary to face it.¹² Recent research on the attitudes and the behaviors of workers faced with training tells us that what continues to grow are the interest and the number of the individuals who choose to spend part of their free time to become professionally rich. But it must be said that it is not still clear whether these choices are to be attributed to a necessity to construct in advance new ways of escape from fields in crisis or intentions to improve working performances. From the analysis of typologies of the attended courses it appears that the workers want to grow culturally in order to feel more adequate for the actual employment world but that, at the same time, they still clearly do not have the model of professional engagement that will see them occupied in the years to come.¹³ Through permanent education, the individual tries to exceed the challenges in his own personal sphere, but he tries also to give a sense to his own and other people's actions, to participate actively in the political, social and cultural spheres in a single and associated life.

"These are some of the main characteristics which contribute to a composition of a society profile, marked by precariousness of individual

¹⁰ Fontana A. e Varchetta G. (2005), *La valutazione riconoscente*, Guerini e Associati, Milano, p. 87.

¹¹ Morin E. (1999), *I sette saperi necessari all'educazione del futuro*, tr. it. Franco Angeli, Milano.

¹² Alberici, A. (2002), *op. cit.*, p. 48.

¹³ ISFOL Report 2005 (synthesis), pp. 17-18.

choices and therefore by the subject's obligation to decide."¹⁴ "The centrality of the subject evokes the concept of *responsibility*, meaning independent and conscious management of one's own activities, even in situations of dependent work, or as a construction of a capital of knowledge and practices permeable to its modification and reconstitution. The characteristics of the social system, on one side, and those which connote the "being adult" in the actual historical moment, on the other side, slowly place first the emergency training, that opens the pedagogical reflection on the scenarios of the various social areas, where the individual will interact intentionally and with various ways in relation to acquired training."¹⁵

Relative to this problem, Pineau observes that training has become anthropotraining, a process through which a man 'is given a form' as a subject, in the interaction between life in its complexity and individual forms. "In particular, the scene of training appears dominated by four great topics: the *hermeneutic phenomenology of the experience, the exploration and the interpretation of our experience, the search of sense and 'giving a form.'* Processes of searching for sense and of construction of an individual form are objective, while those linked to the analysis of the experience and its interpretation are instruments through which such aims are to be reached. It is typical for a human organism, in fact, to try to achieve a completed existential form, part of which is also a 'professional form.' This motivates the search for a sense, a compound, in the first instance, beginning from experience. Training, therefore, is an exploration and a translation interpreted and interpreting of this same experience, often tacit and unknown."¹⁶

A good training is, according to Demetrio, an experience of transformative character, the peculiarity of which is to generate other needs of training at the moment when it encourages the interrogation of oneself. The training must, in fact, be understood as a development of a personal interrogation process. Once being able to put it into an argument, the subject is predisposed to self-training. In the instant when the subject perceives himself enriched and changed, a self-sufficient person can perceive themselves clearly within the plan of management concerning the

¹⁴ Cunti, A. (2000), op. cit., p. 59.

¹⁵ Sarracino V. (2003), "Progettare la formazione," in V. Sarracino e M.R. Stollo, *Ripensare la formazione*, Liguori, Napoli.

¹⁶ Pineau, G. (2004) cit. in A. Grimaldi e G.P. Quaglino *Tra orientamento e auto-orientamento, tra formazione e autoformazione*, Isfol, Roma, p. 62.

relationship of the level of 'management' of their own subjectivity and themselves; in other words the change process triggers the processes of autonomization: self-appropriation and self-realization.

The reality of employment and training, as written by Fontana and Varchetta, gives life to a conflicting and difficult picture of society nowadays. But it is from the inside of the contradiction that emerges a question irreducible of subjectivity, by those who inhabit companies and want to be trained there. "An individual request that is tenaciously oriented towards the recovery of a personal meaning of work and a collective demand for reciprocity and social acknowledgment through work ... In other words, an individual - lonelier than before – now has the concrete possibility to conquer "individual projections" in corporate events, assuming individually the responsibility of such projectual and executive effort." It is a choice, neither banal nor expected, expressed from women and men who, "in their own plan for life and work do not renounce searching for themselves and others and do not fear the fight for acknowledgment."

It is exactly through this acknowledgment that individuals try not to pause uselessly, not to fall back on themselves and to enter into a relation with others. It is through this acknowledgment, after all, that individuals try to construct a feeling of belonging to the dynamics of training and work, a kind of 'citizenship', using the words of Massimo Tomassini. And it is important to emphasize that, in this modern city, as happened in the *politeia* of ancient Greece, citizenship is not a passive status reflecting just the birth and a territory, but a system that is born by action and giving a sense to people endowed and calls in and causes a plurality of cognitive, affective, social, discursive, ethics and reflecting competences."¹⁷

2. The innovation of the training models and the learning of strategic competences

The requirement for a profound restoration of the training culture is taking place over the last several years, observes Domenico Lipari,¹⁸ to be configured as a diffused need in a growing variety of technical and professional contexts. What appears decisive, for the companies exposed to

¹⁷ Tomassini M. (2004), "Apprendimento e cittadinanza nelle organizzazioni," in *Professionalità*, anno XXIV, n. 81, pp. 18-19.

¹⁸ Lipari, D., introduction to AAVV (2005), *La simulazione nella formazione a distanza: modelli di apprendimento nella knowledge society*, Isfol, Roma, pp. 11-12.

the international competition, is the ability to innovate and to transform. And since innovation is in wide measure tied to the possibility of organizing and activating *reflecting abilities* concerning accumulated experience in consolidated practical work, emerges with force the priority and centrality, for this kind of organization, of the human resource, of intellectual capital, of investment in search and innovative knowledge. A new logic is delineated, in a more and more defined way, opposite to that of the rationalization, and based on interlacing of four essential dimensions: the innovation ability; the turnover of the relationship amount-quality in the sense of the supremacy of the quality; the centrality of the human resource; and the ability to listen and learn.

The passage from the industrial to the post-industrial society has transformed definitively our way of working and it demands from all the different actors a 'primary' strategic competence, of a 'meta' kind, that governs the uncertainty and faces the change actively. To adapt one's self to anticipate, to innovate and to risk, becomes therefore a strategic competence of primary importance, a cultural survival kit for subjects and companies. Today a worker is expected to be endowed with complex and articulated competences and culture in order to face and to manage change and for being competitive at a global level.

The centrality of the learning concept is definitively translated in the metacompetence concept and is understood as an ability of the individual to adapt himself to the evolutionary dynamics of his professional system of reference, to know how to orient himself within the labor market, continuously transform and reconstruct the instruments that allow him to enter and re-enter into the labor market. In the society of knowledge the fundamental category of professional experience is the ability to learn how to learn. Ability that implies a plurality of dimensions i.e cognitive, emotional, social and linguistic-narrative. This category, writes Aureliana Alberici, regards a fundamental, flexible and adaptive disposition, linked to individual relational ability, affective, of responsibility, orientations, planning and participation in the real one. In other words, it is the metaphor for the "tools of the profession for understanding and allowing participation in the *Knowledge Society* as social actors."¹⁹

¹⁹ Alberici, A. (2002), "Per una pratica riflessiva integrata. La progettazione curricolare orientata alle competenze nella dimensione del *lifelong learning*." In C. Montedoro, *Le dimensioni metacurricolari dell'agire formativo*, Franco Angeli, Milano.

The foundation of the competence concept does not seem represented as much by objective situations, but rather by a subject and his intention to put in an argument and to reconstruct his own competences. And it is in this sense that the metacompetences give sense and meaning to the category of learning to learn, as a fundamental group of *lifelong learning*. The strategic competences tend to shape themselves in terms of the ability of every individual to know continuously how to construct and to reconstruct professional and existential instruments in order to face the conditions of variability of a respective environment.

The metacompetence, writes Giuseppe Varchetta,²⁰ defines a territory 'beyond,' the one of a second degree, where women and men unfold higher abilities/dimensions, in the attempt to invent a sense for what is happening to them regarding the intrapsychic and interpsychic interactions, of which they are co-authors and, within a process of communication predefined by imposing procedures, but characterized by a strong availability to listening, to comparison and to attention.

In the institutional and corporate area, as well as in the training area, it becomes necessary to mobilize the very subject, his resources, abilities, energy and real possibilities to influence what regards him and his 'power.' In this case, the word 'power' does not refer to the power exercised by someone over someone else, but to the empowerment, the characteristic 'inner' power, of the inner world of a person. Different competences and metacompetences assume great importance in relation to the dimension of the individual and the strengthening of his inner sphere: the responsibility, the confidence in using competences, positive operating thought, the ability to know to estimate and to manage the resources available, the confidence towards the coming future and controllable and not controllable. Theoretical and applicative metacompetences occur within a strongly interactive logic. Some base competences are "feeders, not to say *conditio sine qua non*, of various applicative metacompetences, like the orientation to learn, the flexibility, the innovation, the responsibility and the proactive position."²¹ All this involves the definition of devices and active models of

²⁰ Varchetta, G. (2003), preface to AAVV, *Apprendimento di competenze strategiche*, Franco Angeli, Milano, p. 14.

²¹ Brusciaglioni, M. (2003), "La formazione dei formatori per l'acquisizione di metacompetenze," in AAVV, *Apprendimento di competenze strategiche, op. cit.*, pp. 282–283.

training where a central role is the individual in training and the very process of learning.

In the dominion of 'Professional Training,' the main motive of the question of metacompetences is represented by a need to acquire 'instruments of management of the uncertainty. It is the young, the unemployed people, and the disadvantaged categories, that exceed fifty years of age, who must face new transitions in the world of work to advance the demand for training for the metacompetences. The ability from individuals, to construct new competences during the training path, seems to draw its origin from an evolution of an individual process that allows us "to exceed the perception of a closed universe and a limited space and to delineate an open horizon where the individual becomes able to replace in play his own guideline abilities, the possibilities to reconstruct and to redefine his instruments of knowledge and action."²² "It is thanks to this path", as Leonardo Greens Vighetti and Irene Bertucci wrote, "that the individual arrives to a fundamental metacompetence: learning to learn. This metacompetence which represents a higher level of learning introduces however, under many aspects, a paradoxical and anomalous character since it speaks about uncertainty and crisis in a world, the one of training, which would be made up of certainties." But it is exactly the paradoxical nature of this metacompetence that allows us to go beyond and to plan for the future.

For, with regards to the domain of a continuous and advanced training, as credit to the metacompetence concept that it becomes possible to rethink and to redefine the relationship between the corporate evolution and the professional growth of the individual. It is to this possibility, from the side of the individual, to construct his own path of knowledge and assume the responsibility of his orientation, using at best the set of learning (formal, semi formal and informal), along the entire course of his existence, where the challenge of permanent learning is put into effect. The training path to metacompetences is translated thus into a path for the possibility to reconcile the empowerment of organizational plans with the expression of the individual autonomy.²³ The training path to the metacompetences must be placed in relation, on one side, with the institution and with the aim to identify those areas of corporate development that allow the very institution

²² Verdi Vighetti L. e Bertucci I., "Sperimentare il cambiamento tra riflessività e azione" in V. Infante e D. Pepe (a cura di) *Percorsi innovativi di formazione alle competenze strategiche*, in preparazione.

²³ Bertini, G. " (2003), "L'apprendimento autogestito" in *Sviluppo & organizzazione*, n. 96.

with the congruent realization of entrepreneurial plans in times and modalities and with change dynamics. From the other side, training to the competences must be turned to profile the competences of the individual, to trace the areas where it is possible to activate a support and to put in existence the processes of empowerment. So far, the logic of lifelong learning would allow people to remain in an employability condition and to insert their job and personal realization path within corporate and social contexts in a fast evolution.

“It is the challenge of *lifelong learning*. It is a paradigmatic, institutional and an operative challenge for organizations. Clearly, this is an improvement of the effectiveness of training actions. For people this is a secure improvement of the abilities to face the change, an increased possibility of durable occupation and a more balanced integration of professional activities in life plans...”²⁴ Many questions opened up from the possible redefinitions of concepts and the models of training inquiring a great variety and quantity of arguments. Within this great variety and quantity, a fundamental topic, a kind of ‘red thread’ that crosses the many codes comprised in the universe of training and the many dimensions towards which training moves.

This ‘red thread’ or this ‘blending’ element, is, no doubt, linked to the role and the centrality of the individual as a constructor of the worlds and meanings that he attributes to them. The discourse on *lifelong* training presupposes the centrality of active models of learning that gives value to the knowledge subject; in terms for many analogous aspects, as well as the topics and the concepts linked to *e-learning* call into question a knowledge subject who lives his role as central, motivated to learn, subject able to trace the threads to which he has tied the extension and the construction of his own knowledge. Within every discourse about knowledge the individual seems, after all, with the universe of his values and knowledge, as a foundation of a system of exchanges and relations, which he to a great extent creates.

It is exactly in this sense and within this perspective that the metacompetence concept acquires value and strong meaning. Each piece of knowledge ends in shaping itself in terms of meta-knowledge, or meta-competence, because it is a flexible, adaptive, strategic instrument, able to

²⁴ Ivi, p. 109.

allow every woman and every man to learn always, learning to learn in the different conditions of existence. The individual, with his ability to construct sense and meaning, is placed in the center of a network of knowledge that evolves, in the knowledge society, in a great variety of possible ways.

As for the comparison with the reference reality, the challenge that is placed today to the students of training and lifelong learning regards the possibility of being able to face the institutions with the universe of teaching and enterprise, with the aim to put in existence applicative processes for the innovation of the devices and the systems of training. In a perspective turned towards the future, theorizing and planning for the innovation of the training systems mean, in the first instance, to favor the development of the cooperation between training systems and other systems that produce or use knowledge; in the second place, to encourage the dimension of the reflectivity in all those systems that allow the insertion and the growth of a working man, like training and orientation, the organizations and the institutions, the territorial contexts engaged in a general perspective for the spread and the promotion of lifelong learning.

3. The training and the knowledge universe in a network

If, on one side, the postindustrial organizations are oriented towards diminishing the weight of the bureaucracies and emphasizing the local value of knowledge, on the other side, the reflection on training moves towards a meaningful review of its bundle of theories, techniques and methods of participation. “In the first place, the sense of the idea of ‘training’ is losing power in its essence of action oriented to ‘giving form,’ to mold, to promote after all the passive adaptation of individuals to carry out repetitive tasks and routines. In the second place, and in contrast with the practical and the traditional interpretations, a conception centered on the logic of learning is being asserted. The topic of corporate learning, as well as the topics linked to the competences, to the tacit knowledge, the value of the intuitive forms of the practical knowledge become among the dominant reasons of the renewal of the culture and the practice of training.”²⁵ The conviction that the sense of training does not reside only in the mere

²⁵ Lipari, D. (2005), Introduction to AAVV, La simulazione nella formazione a distanza: modelli di apprendimento nella knowledge society, op.cit., p. 13.

transmission of slight knowledge of *savoir faire* or of behaviors is asserted. The local experiences of learning are valued and the local forms of the generations of the competences will take to life meaningful perspective changes concerning the methodological land. The privileged places of training are not anymore the institutional and codified, but the various concrete and practical experiences spontaneously generated from the daily relations of working life. It is here that the actors discover the problems and invent the solutions deemed as appropriate, producing innovations and meaningful learning.

It is for this reason that, whether in methods or in models of training, there is a need for interventions that are in a position to join the concrete truths with flexible approaches, rich with operating abilities and hard reflecting characterization. Within this perspective, that privileges the centrality of learning, there are consolidating styles of participation and methodologies of a reflexive type among which some seem particularly important²⁶; those tied to the topics of corporate learning and in particular to the promotion and the cultivation of the community of practice; those deriving from a recovery in training the key tradition of the research-action in which observation, listening and searching are intimately linked to the context participation; those centered on the constructivist models of knowledge that, thanks also to the great spread of e-learning training models, express themselves in active methodologies of teaching and training.

“In recent years,” Boldizzoni and Nacamulli wrote,²⁷ “we assisted the decline of training realized mostly ‘in the classroom’ and a great proliferation of new methods ‘outside the classroom’ such as: *outdoor* and *indoor*, business games, theater of enterprise, *coaching*, *counseling* and *mentoring*, *e-learning*, scientific and literary analogy and cinema etc.” An ulterior phenomenon also closely linked to the influence of the information and communication technologies is a progressive hybridization between communication and training activity.” It is since the first years of the new century that it has collected, in the field of training, the challenge of new technologies, Internet and *e-learning*. The changes in knowledge and training processes, links to the introduction of the ICT and are substantial

²⁶ Ivi, pp. 14-15.

²⁷ Boldizzoni, E. e Nacamulli, R.C.D. (2004) Introduction to E. Boldizzoni e R.C.D. Nacamulli, *Oltre l’aula*, Apogeo, Milano, p. 1.

and profound. The concepts of knowledge, competence and metacompetence vanish in front of the abundance of the implications and the meanings connected to *e-competence* and the dynamics of *e-learning*; the training path of an individual in its globality redefines in a covered, real and virtual complex, and at the same time integral methodologies and instruments of various nature and where it becomes impossible to make a clean distinction between a worker and a person in learning since e-learning becomes an essential aspect of the working activity beyond that of lifelong learning. “Initially a great emphasis was attributed to the technological component... However, in a successive period, the importance is discovered to conjugate the opportunities offered by new technologies with new pedagogical philosophies, and this above all takes conscience that the possible strategies of training are not those based on pure e-learning, but those that are blended. More in particular, it attempts to give life to a relationship of collaboration and competition between the average traditional learning within and outside the classroom and those new ones connected to the net, influenced by social uses, cultural interpretations and emergent challenges... It becomes clear that the world of training can perform a quality jump, making systems between the wide fan of the methods of classroom available and that one equally wide and still more complex of the methodologies outside a classroom.”²⁸

E-learning appears, after all, an instrument destined not to replace the classroom, but to integrate with it, to upgrade the effectiveness, to increase the efficiency; to reduce the waste of the costs, to increase the benefits and to allow widening of 'purposeful and reasonable' interventions. The 'blended' training appears as a coherent realization, adapted to the same increase of the borders of training.²⁹

The topic of lifelong learning, thanks to the use of new technologies, becomes one of the topics more beloved to the policies of the Union even if, in this specific dominion, we are still at the beginning, given the difficulties tied to the schooling of masses on computer science plans and to the issues of accessibility for all citizens. In Public Administration, the new technologies are being diffused progressively, even if tending to be rooted more easily in environments with less bureaucracy, such as private

²⁸ Ivi, pp. 2–26.

²⁹ Capucci, U. (2005), “E-learning, un importante supporto del Knowledge management,” in *For*, year XIX, n. 63, pp. 5-7.

companies and schools of higher training or masters. In the short and medium term a modest growth of e-learning can be previewed in the schools, with models near the simple site of exchanging materials.

In the university, e-learning enters silently in the daily practices of the teachers who try to strengthen the courses held in the classrooms using the net in order to distribute didactic materials and in order to quickly and widely communicate with all students.³⁰ E-learning seems after all to acquire greater importance inside different studies and jobs as well as, on one side, the advanced scientific search that has an extreme urgency of communication and comparison and on the other, it allows the collaboration between students of far away countries or communication to schools with hospitalized or bedridden children.

This is in gratitude to the expansion and the more and more diffuse use of new technologies that are developed; in order to say it with the words of Ulderico Capucci, an area of 'invisible training' not part of the structured, garrisoned participations from the 'Training,' and does not re-enter in the traditional classification of the training investments. "It is a crawling evolution, but continuing and pervasive, that all the organizations are going through, towards the enrichment of the roles, facilitated and allowed by the technologies... This extraordinary evolution of the meaning of 'the work of knowledge' passes through technology, the data banks, its parameters, its comparisons, its micro knowledge management dedicated and managed from a single operator... This is indeed - in perspective for all the roles - the most important contribution to learning in a network."³¹ It is still within this general perspective that we can talk about training contaminations. The training becomes a place of growth and development, encountering and crashing between different types of knowledge, able to go beyond oral communication and the alphabetical culture, seen as the only educational technologies.³² The thematic in the society of knowledge and the centrality of learning are strongly tied, after all, to the discourse about lifelong learning. The computer, observes Domenico Parisi, represents a central element in the discourse on modernity and on the rationality of the western society in the measure in which it expresses in machines the rationality that

³⁰ Eletti, V. (2005). "Le metodologie e le tecniche efficaci al servizio dell'e-learning," in *For*, year XIX, n. 63, pp. 13-16.

³¹ Capucci, U. (2005), "E-learning, un importante supporto al knowledge management," in *For*, year XIX, n. 63, p. 7.

³² Boldizzoni, D. (2004), "Le contaminazioni formative," in E. Boldizzoni e R.C.D. Nacamulli, *op. cit.*, p. 87.

previously had been found only in the human mind and within the social organizations of human beings. “Perhaps three thousand years ago, the so-called art of the superior Paleolithic... had not only been a consequence, but also a widening of our cognitive abilities to imagine, to preview by themselves, to remember and to feel with others. Sure, the adoption of the alphabetical writing... had an important role in the emerging of the Greek civilization and therefore of the western one. The permanence and objectivity of the written words, regarding the volatility of those said, has increased the possibilities of the memory and accumulation of knowledge and... has contributed to the appearance of philosophy, science and the political democracy in classic Greece. Nearly a millennium after, the advent of the press made possible the creation of extended communities of investigators and scientists, distant in space and time, with facilitated and accelerated exchanges from the mechanical possibility to reproduce books.”³³

A computer represents a cognitive technology with the potential of being infinitely greater and more innovative in respect to other old and new technologies such as art, writing and the press as well as the telephone, radio and television. The computer constitutes a fundamental and innovative instrument of knowledge, in the measure in which it creates the first cognitive and communicative artifacts with which it is possible to interact. If the truth is this with which we interact, we can say that the computer increases and creates more mental and social truth, it introduces information and reacts to our actions as our minds do and in good measure other persons.³⁴ The revolutionary impact that the new technologies have, and will have in the future, on learning activities and on training and, more in general terms, on the activities of communication and cognitive elaboration of the truth, is linked to two innovations introduced from new technologies. The first innovation regarding the Internet and e-learning is learning within the environment constituted by the Internet. The second one regards the empowerment of non-oral communication such as learning and mass media and, in some ways, takes the place of oral communication that is traditionally the channel through which learning happens.³⁵

³³ Parisi, D. (2000), *Scuol@it*, Mondatori, Milano, p. 54.

³⁴ *Ivi*, p. 59.

³⁵ Parisi D. (2005), “Nuove competenze e nuove figure professionali per la produzione di materiali di apprendimento digitali,” in AAVV *La simulazione nella formazione a distanza: modelli di apprendimento nella knowledge society*, *op. cit.*, pp. 117-128.

The two innovations pose problems that still do not have a solution. The Internet means new ways to conserve, find, distribute, and use the information and new ways to interact with other people in common activities such as learning and training. The Internet places problems not resolved through validation of the information and these did not exist when the information was only conserved in books or scientific reviews or witnesses of the legitimized persons to possess the information, and place problems of freer use, in other words without external guides, the information from who learns, and of filtering and selection of great amounts of easy accessible information. The same one is worthy of the social dimension of learning through the Internet. The Internet can render collaborative and intercultural forms of learning possible whose importance is fundamental in the process of globalization of contemporary society.³⁶

From the point of view of the changes and the innovations that will interest unavoidably the developments of the training systems via e-learning, an ulterior innovation is that, for the first time in the history of education, the figure of the expert of the contents is separated from the figure of who is expert in the communication of the contents, and difficult questions on how to interact these two various figures are posed. The digital multimedia has new and complex problems and demands, in order to resolve them, competences and abilities who, different from linguistic abilities, cannot themselves be considered naturally present in people.

In the field of training, all this involves change, the consequence of which we still have not taken into account. First of all, it means that it has to be defined in concrete terms and with precision, by means of the instruments of analysis supplied from disciplines such as psychology, pedagogy, the sciences of communication and computer science, but above all through concrete experiences of production of multimedial materials, which are the new competences and the new professionalities. In the second place, to define in which ways these new competences and professionalities can be organized, which can be possessed by a single person or which instead can be distributed to different persons, in which ways and inside of which structures of training they can be acquired, with

³⁶ Pepe, D. (2005) "Temi e problemi della formazione nell'età della globalizzazione," in AAVV *La simulazione nella formazione a distanza: modelli di apprendimento nella knowledge society*, op. cit., pp. 134–140.

which courses and activities of training and within which disciplines can be recognized.

In this dominion, a series of problems is pondered, for example, to demand opportunity stresses that must produce the new materials of learning, a training base of cognitive, pedagogical or of graphical and artistic creativity, or a training base of computer science. The necessity of both kinds of sensibility and training is obvious, but this does not mean that to put them together in balanced and complementary ways that the two sensibilities and the two competences will turn out to be easy. “Another problem is how to put together in the production of new materials of learning experiences and competences that have been developed elsewhere, as an example in the field of computer games or in the field of publicity and marketing. Visualizations, interactive animations, interfaces and simulations, have a central role in the computer games, while the use of the visuality for communication and the modification goal sought by the ‘head’ of the persons characterized from the beginning as the head of publicity and marketing.”³⁷

Within a more general perspective if, on one side, the universe of training especially at the level of school and university and a little less at the level of the professional; business and managerial training, is substantially stable, on the other side, the universe of new technologies and of social communication is an innovative and above all an open world, in which every dominion crosses into others and intentionally tries not to see the borders between the different fields and the different applications, at least for economic reasons, that is in order to take better advantage of what has been invented applying it in different fields. The problem is therefore to be open to the innovation, the flexibility and the interaction between different applications to the world of training. Just think of the possible uses, for training purposes, various instruments of communication such as personal computers, the Internet, cellular phones in its different versions, the Playstation in its different versions, palm computers and, in the near future, televisions. Equally serious are the problems created from the progressive expansion of the non-oral ways to communicate and to learn that is made possible from new digital technologies. Oral language has

³⁷ Parisi D. (2005), “Nuove competenze e nuove figure professionali per la produzione di materiali di apprendimento digitali,” in AAVV *La simulazione nella formazione a distanza: modelli di apprendimento nella knowledge society*, op. cit., p. 127.

been for millennia the consolidated and practically exclusive way to learn. The computer can today make a new way possible to know the truth, through the creation of virtual truths, simplified copies and simulation models. All these instruments can become effective models of learning in various contexts: school, training, professional, managerial formation and re-qualification of adults. To learn through seeing and thanks to the simulation, observes Parisi,³⁸ it not only allows us to learn, but it also allows people who are not necessarily greatly familiar with the oral language to learn as well. This can concur with a large number of customers who will learn through observing and acting, with the result of understanding and from benefiting from motivational involvements which are not often obtainable using exclusively the channel of oral language.

With the Internet, the role of the instruction ex-cathedra and the transmission of the information from the teacher to the students is reorganized, the teacher loses importance as a source of information and acquires some guidance to the learning and in the two-way interaction with the students. E-learning places therefore new problems in the atmosphere of the management of learning from those traditional ones, which are the classroom and the lesson ex-cathedra, and problems of new roles and tasks to the persons involved in learning activities, with the passage from the traditional star structure of interaction between teachers and students, with the teacher at the center of the star, to new structures of interaction, between the same students and other figures such as experts and tutors. The places of training and the typologies of customers are multiplied; the figure of the traditional teacher is redefined and it articulates in a great plurality and diversity of figures that call into question the tutor and the e-tutor. “The networks, wrote Boldizzoni and Nacamulli, after all introduce a great diversity of training processes: not only the diversity of languages and disciplines in game, but also, and above all, the diversity of the experiences characterizing them regarding knowledge.”³⁹ In this phase of profound changes the training systems must deliver to the individuals not only instruments in order to learn an *in fieri* knowledge, but rather the ability to learn to learn, that is to re-invent themselves at any moment relative to the knowledge, the competences and even to the profession. Beyond the construction of new forms of interconnection and between forms of

³⁸ Parisi, D. (2001), *Simulazioni*, Il Mulino, Bologna.

³⁹ Boldizzoni, E. e Nacamulli, R.C.D. (2004). “Premessa” a E. Boldizzoni e R.C.D. Nacamulli, *op. cit.*, p. 3.

knowledge, keys of scientific creativity, it is necessary to educate the individuals in new forms of citizenship, beyond the borders of national, in a form of open and dynamic identity. And this inside of a universe in which working and professional paths appear and disappear, the competences evolve and become obsolete in a short time. Also in the professional context today it is a familiar difficulty to those who work in the scientific contexts. All can turn out to be pertinent, but not in the same way and not in the same moment. In the universe of knowledge and within the net of the borders of the competences there are not many rigid barriers. "They depend on objectives and transitory judgment, constructed and revocable and strategic. The individual not only needs wide and flexible cognitive maps; he also needs instruments in order to make these maps evolve, in order to increase them, in order to restructure them or in order to increase their power of discrimination."⁴⁰

The knowledge, emphasizes Roberto Maragliano,⁴¹ is introduced, outside and inside us, less and less like structure 'data' of fixed elements, and more and more as a space of 'n' dimensions, a fluid conglomerate that operates like an 'agent of intermediation' between equal and different individuals at a time. "The knowledge, in its actual state, lives by these diversities and at the same time by this unitarism, it lives by the logic of the pact and by the convention, grows for effect by dynamics of the exchange. More than a physical thing, it acts like 'a symbolic object,' an intermediary of rules, concepts, practical acts and languages which in turn generate rules, concepts and practical languages."

Some fundamental elements seem to characterize, according to Giorgio Olimpo, the universe of training in the society of knowledge and in relation to the development of new technologies. These elements substantially regard the expansion and accessibility of knowledge, the freedom of route on the sea of information, the familiarity with the dimensions of the knowledge and the structures of the information, the dimension of the learning within a group and the possibility to operate with the ideas.⁴² We could say after all that the universe of training is changed in the measure in

⁴⁰ Bocchi, G., Ceruti, M. (2004), *Educazione e globalizzazione*, Raffaello Cortina, Milano, p. 4.

⁴¹ Maragliano R. (1998), "Ripensare la formazione dentro la multimedialità," in *Tecnologie Didattiche- TD*, vol. 1, n. 13, p. 21.

⁴² Olimpo G. (1998), "Le componenti concettuali dei nuovi percorsi formativi," in *Tecnologie Didattiche- TD*, vol. I, n. 13, pp. 44-46.

which the elements are changed and that compose it, the existing relationship between them and the subject of knowledge. In specific terms, the universe of training has progressively been transformed in the attempt to answer and to adapt itself to the transformations that have taken part in the life of the man and to the requirements of knowing expressed from the man. Some fundamental factors have played an essential role in this change, some of which are: the historical and geographic factors; the processes of extension and globalization of communications; the enormous impact of new technologies; the redefinition of disciplinary knowledge; establishing itself as new and with more creative ties between the fields and the instruments of knowledge; the particular requirements for man to face, through instruments of personal and professional growth and the difficulties and ties of the society of knowledge. Drawing inspiration from a metaphor of the astronomy domain, we could say with Thomas Kuhn that this universe is changed as much as, in the history of humanity, the interpretations that man has given to the celestial universe. It cannot be said that the many interpretations of the cosmological structure, writes Kuhn, were true or false, all were reasonable in the measure in which they answered to the specific requirements of man to represent his own universe as it appeared in that moment and by a perspective detail. "In one of the principal forms of the Egyptian cosmology, the Earth was represented as an oblong plate. The greater dimension of the plate was parallel to the Nile... Clearly, this universe was modeled by the world as known by the Egyptians: they lived really in an oblong plate, limited by the water in a single direction they had explored; the sky observed in a day or a night without clouds, seemed and seems to form a cupola... The sun was Ra, the main Egyptian divinity... The stars painted on the cupola were a smaller divinity and they were reborn every night."⁴³ The combination between science and history is essential in order to understand the evolution of planetary astronomy and its great interpretations like the one linked to the Copernician revolution. The discovery and the revolution of Copernicus were determined in an essential way by factors unknown to astronomy. Among those were the medieval studies on meteorites, the travels through the Atlantic that had expanded the terrestrial horizons of man during the renaissance, a philosophical and psychological attitude that carried men to think that their terrestrial residence was only a planet among others and not any more the center of the divine creation.

⁴³ Kuhn Th. S. (1972), *La rivoluzione copernicana*, Einaudi, Torino, p. 9.

Talking about Metacompetences Concerning Training: How and Why

by Michele La Rosa

1. Introduction

What is summarized here comes obviously “from far away” and finds its reasons in macro and general motivations, apart from the specific character of the field of learning which we plan hereby to evoke and to introduce, legitimizing them briefly.

Our rational and logical passages will propose the following analytical path.

First of all, using our understanding of profound social changes, which we are still assessing and which, though not being able to deal with analytically hereby, put things in relief and intensity. Depth and rapidity of new conditions that unified in a dimension of the complexity seem to distort the customary and consolidated way of knowledge and learning. That, unified in the transformations (that we perceive even if perhaps we still do not succeed to estimate all its implications) brought by new technologies, change the scene of reference and departure of our analysis.

Therefore, competences and, more precisely, metacompetences or strategic competences (which we will explain later), are discussed because in our opinion, in such a perspective, it is impossible not to change *the objectives, the paths, the methodology and the instruments* that are being consolidated and were acquired in the field of training or learning. And this therefore represents the first field to be specified.

Secondarily, it is being changed, and we would assert without fear of refutation that it is already deeply changed, the audience of learners. And this not only concerns composition, as it could appear after an initial analysis, but it also concerns expectations and levels and typologies of socialization and therefore, languages and the possibility/modality of listening.

Consequently, that which was traditional training, to which the social system never dedicated extreme attention as the training models were infallible and immutable, today is imposed, urgently and as a priority to continuous and permanent training. Thus, not only the new university paths have been previewed, but more systematic and less “ritualistic” initiatives of modernization, regarding the past, are conceived. The issue of continuous and/or permanent training is posed not just as an engagement of the social-cultural subsystem, but also as a must of the self-training and self-updating subject.

However, in all the immense scenes of training and competences (today we speak about *competences* and we must be trained for *employability* and that is different from “classic” professionalism, “closed”, “predefined” and “plastered” - perhaps when a relatively static system allowed for it - but also limiting itself to the same competences approach) and from the new point of view that we believe has to assume training and to the new task which it must accomplish, in the relationship between the so-called *specific* competences, *specialist and/or “technical”* and the *strategic competences* (or metacompetences, as was defined in Isfol’s analysis and whose references theory-interpretation we will hereby reconstruct) we cannot help but favor these last ones, focusing therefore our attention on them. And in this case, the strategic competences seem to have to be approached both in transversal terms (as “common” competences - not identical - in our case to all management) and in distinctive terms for functional areas. We will see whether the definition or their “management” turn out to be profoundly diversified. We think thus more and more about *self training* processes which have to be referenced in a harder way in university centers, and *lifelong* in both cases, as processes equal to *internal training*, also in both cases, even if deeply different for the institutional modalities able/obliged to assume. But we think about different *updating processes* sufficiently wide, meant also in independent and self conducted ways, even if then it will have a periodic and incisive assessment role, let alone a function of stimulus and “service” in an implementation and operation seat left for the interested subjects and the relative base aggregations.

We do not plan to venture in operative analytic implications. Certainly, the question emerges of how, currently, *metacompetences* have to be understood. The ability to know the subjects with which we have a relation (collaborators or customers) which are so various for socialization, language and experiences and apparently are also “independent;” the ability

to transmit knowledge exalting the role of a “method” and the transmission of a methodology rather than specialist contents (to be transmitted, yes but as *major exemplifications*); the knowledge ability and mastering new technologies, means by mastering know independently and validly how to use the cognitive potentials of new technologie. In short it is not much more important to know how to browse the Internet in order to find the necessary sites as it is to be aware of the kind of knowledge that these sites can provide. Copying does not create knowledge nor its accumulation potential; the ability to comprehend the real relationship that must exist between frontal lessons, personal study and other assets (learning does not mean isolation but mastering one’s own being in the environment); the ability to innovate; the ability to know (and to know how to teach) “to formalize” learning (how to make a synthesis, how to organize a speech) which, moreover, means to personalize the very learning; the ability “to manage” one’s collaborators.

2. The ongoing changes in the society

The society of the third millennium is very different from that for which was planned as a teaching system that we are about to abandon (school) or that was abandoned (university). Globalization, *new economy*, financialization of the economy, societies of information and opening of the international markets are some of the elements that characterize a new model of society which the training system today has to face.

In order to make this possible, we will recall some terms that constitute presently the kind of map we need in order to read actual social transformations: to the topics of globalization and complexity, the individualization of the relationships between an individual and a society are added.

This historical phase is, in fact, more and more characterized by an emphasized separation between the subjective experience and the organization of the society. The trajectories traced from the points of contact between the individual and social experience are redesigned today; they change the space maps of social life, beyond the experience of national borders (Harvey, 1993), in order to leave space for new compositions: the economic and financial systems, supported by technological progress, in particular, in the field of new communication technologies, are organized on a worldwide basis, amplifying the interdependences, at the level of

consequences and with effects at the level of total economic system, but loosening partially, or reshaping the political and territorial roots and above all the possibility of people of flesh and blood to perceive “real” or “more realistic” the mechanisms that govern the processes that guard the government of the social and economic phenomena. Also, governments and civil services that guard the several spheres of activity move more and more according to “de-territorial” strategies (Wilke, 1999), evidencing links and constraints of a cognitive nature, that regard the use of specialist knowledge, the reference to determined symbolic contexts, the conformity to the action of international organisms and the spread of cultural styles.

The ideas, the information, the cultures that are supported by the technologies of data transmission, travel on a planetary level (Baraldi, 2003). As a result of this phenomenon, no unambiguous indications come out: approval vs. deficit of socialization, decomposition and resetting of the cultural platforms; what is stated is the vagueness and the autonomization of the individual paths regarding these aspects of social living: “Today an individual begins to demand with force [...] his oneness and his singularity, his simultaneous belonging to processes and nets of different interaction. In a word, more and more an individual places himself as an independent cultural unit, because as only as such can he become a subject in the wider circuits of dependency” (Bocchi, Ceruti, 2004). Internationalization of the economy, exponential growth of a system of telecommunications that restructures the constraints of space and time typical for the industrial society, represents factors of transformation that reflect on the training system, beginning from the pressure of demands for the spread of knowledge (linguistic, computer science and technological, etc.) indispensable in order to face the complexity and the relative necessity of finding the resources in order to diffuse as much as possible this knowledge.

The requirement to train people with high qualifications, with poor local culture, must be reconciled with the necessity to supply those necessary competences in order to refer to a society that does not have other borders than the planetarium ones. This is all in light of the main transformations of the labor market.

Another aspect of globalization that questions the training system is, in fact, the polarization of the labor market between qualified professions and others with lower qualification and relative differentiation at a *status* level,

protections (Rizza, 2003), etc. In fact, with the progressive restructuring of the labor market and the consequential relation between teaching and occupation entering into a crisis, even if on one side they decrease the risks of unemployment and work precariousness to increase the study titles, the other side will become unsure that education guarantees some determined occupation. In this perspective, education can be effectively interpreted as a chance. It represents *conditio sine qua non* for the desired working introduction, but at the same time it does not guarantee it. So it prolongs a phase of transition between school and work and in this grey area the acquired competences assume more and more importance, as well as resources in terms of social capital with the disparity that this involves.

The crisis of the Ford model and therefore of the standardized conception and accrediting of jobs, started new tendencies to plan and organize work. The ways in which we work are transformed because the technologies and the enterprises became more flexible, “slim” and more reactive to the stimuli of the market and workers are forced to become more flexible and reactive. Deep changes take place therefore in the ways of working, the places, the times, the contents of the job and therefore in the very worker himself. Change therefore also encompasses the characteristics expected from “new” workers: for them, it is not simply required general knowledge or specialist competences, but also and above all, an inclination to learn, ability to understand the signs of change and to react to the problems and the flexibility and mobility presented to him. To traditional competences, new competences of general and cross-sectional character (or metacompetences) are added today that make it possible for the worker to move in less and less regulated contexts.

3. From professionalism to employability

The radical change of the post-Fordist market of jobs and professions is, therefore, more and more flexible, diffused in the territory, changing and open.

This places the accent on the importance of the circulation of knowledge in the logic of the training of the individual, not only in its components tied to the work and the productive sphere, but also in respect to his personal and social growth. Central is the role of the individual as a resource, in which his professional identity recalls not technical ability alone, but on the human capital too to construct and to reconstruct along all the arc of his

existence. Learning for all the arc of life, the acquisition of transferable professional competences based on the necessary abilities in a flexible, mobile, fluid labor market in permitting passages from a job relationship to another, has placed in the center the topic of employability that implies, among the priority objectives, the predisposition of active policies of occupation with the aim to form a competent and qualified job force, able to act in a labor market in perpetual change. The policies of the job, in other words, today are centralized on some basic ideas mutually interlaced: the flexibilization of the relationships of employment, developed through incentives of mobility between one occupation and another, standard and not standard relationships (Samek Lodovici, Baici, 2001; Magatti, Rizza, 2003), the correlation between productive cycles and working hours and between the latter ones and the family caring charge, often concentrated on women (Saraceno, 1998), the professional training and the continuous one along all the arc of life (Rose, 2002), the tuning of services for employment that assure with continuity an adaptation of the characteristics of the work to the changes of the production and the technologies (Acconero, 2002). In this direction, the employability concept resolves the objective of a qualitative improvement of the labor market performance and of opportunity for individuals, offering the possibility of greater choice through processes of requalification (Tronti, 2001). The workers are not supported anymore by training centered on specific contents, but they are oriented towards the increase of the ability to learn, with the aim to put in relation the different professional contents learned with activated social relations.

The topic of employability is also one of the central issues which combine communitarian directives beginning with the review of the Treaty of the European Union realized in Amsterdam in 1998. Reaching full occupation represents the nucleus of the strategy of the European Union that assigns an important role to the improvement of the ability of professional engagement, while also boosting the entrepreneurial spirit, to job reorganization promoting the mutual ability, to adaptation of enterprises and workers and the strengthening of policies of equal opportunities. More specifically, the European Union has emphasized the following elements that represent guidelines which all Member States are invited to follow:

- To improve the employability, that is, the ability for professional engagement, through measures of active politics of

work aimed at training young and unemployed people over a long period.

- To develop entrepreneurship, favoring initiatives of enterprise creation, above all through the simplification of the market access from the economic actors and the reduction of the administrative and fiscal charge especially for the SMEs, the backbone of the European economy.
- To stimulate the flexibility of companies and workers, to succeed through negotiations among the social parts, the search of new forms of work organization and time management of work.
- To give new force to the policies of equal opportunities, whether by reducing discrimination between men and women, increasing, for example, the balance between professional and family life, or concerning the participation of disabled people in a job market.

Great emphasis is put on the strengthening of social cohesion, reached through an increase of participation in a job market. The central objective is to increase the employability of European citizens, selecting some large sectors that demand a specific impulse in consideration of their covered central role in pursuing long term objectives. Particular reference is made to:

- Strengthening of the policies towards full occupation from the point of view of the creation of new and better workplaces. Then attention is turned to the establishment of active policies, centralized on the employability of groups that do not approach often a labor market because of insufficient qualifications. Important, for this purpose, is *i*) the reduction of taxes at work in order to increase the demand and the occupation rate, *ii*) the improvement of the efficiency of the labor market, with the objective to avoid situations where high unemployment rates coincide with the labor shortage, *iii*) active aging, discouraging measures of pre-retirement, *iv*) the increase of women participating in the labor market, *v*) encouraging creation of a more favorable atmosphere for entrepreneurship.

- The promotion of competences and mobility by means of reducing the administrative obstacles to the professional acknowledgment of the qualifications. All in order to favor the spread of an economy based on knowledge.

From these considerations, we can understand that the employability concept, as Gallino (1998, p. 242) emphasizes, “is a personal characteristic that can be defined as a variable sum of competences, of practical know how, ability to work with others and of experiences in the field.” It can be crossed with the one of unemployment since a “great number of young people find it hard to find a job when they finish school, not because enterprises do not have a job to offer them, but because they do not consider them suitable for offering an occupation” (Gallino, 1998, pp. 242-243). The topic of employability, therefore, is closely interlaced with the world of school and work. The first one, as it is known, has constructed little relationships with the second that often erodes and consumes the employability of adults, crediting little importance to continuous training and professional modernization. In Gallino’s opinion (1998, pp. 244-245) a way to increase employment “would then consist in introducing (much) more work in training and (much) more training in work. Better, in interlacing closely one with the other.” Employability, seen under this lens, refers to the subjective aspects - the characteristics of a person, the abilities and competences he can use - or to the objective ones, of a context, relating to the institutional atmosphere of which the actor is part and at the same time which he contributes to construct (Scott, 1998). It is possible therefore to emphasize that employability can be reported as “the sum of conditions, constituted by individual elements, of the context of the subject’s belongings and the relation established between an individual and a context of belongings, that they can be introduced as concrete opportunities of work, made of modality and instruments of income and permanence at work, of resources that attribute certainty in an uncertain and temporary environment” (Gosetti, 2004, p. 14).

4. New learning objectives, instruments, methodologies and paths: the metacompetences

The third tendency regards the radical transformation of the organization system and transmission of knowledge. In our society, knowledge endures

a continuous transformation in any field, and new knowledge enters continuously and rapidly into the complex scene of knowledge. It is not possible anymore to continue to reproduce knowledge in traditional ways and if the education institutions (*in primis* schools and universities) do not adapt in organizing new ways of knowledge transmission, they will risk being neglected by new infrastructures of knowledge production.

The *learning concept* becomes the nucleus around which education formulation rotates today, to any level, in a perspective that emphasizes constructive character: every subject is engaged in construction of his own abilities, assuming knowledge from his own point of view, in a continuous process of organization and reorganization of his own knowledge, a process where a person assumes an active role, with a special emphasis on the way in which it is learned and in which learning is produced (Montedoro, 2003).

Contextually, the passage from an educational idea of knowledge transmission to the learning process, implies a journey from the importance of acquiring transmitted blocks of learning and knowledge, that gradually, on the educational path, consolidates professional profiles, and invests in the development of a *profession, duty of a role, idea of competence*; a concept that summarizes the inseparable link between knowledge and doing, not in a linear relationship, but a circular, reflexive one. In this sense, arguing about metacompetences and strategic competences assumes the merit of a methodological formulation (Alberici, 2003), based on which the same competences are redefined on the base of the metacompetences in the sense that the first are redefined, acquiring a different sense because the knowledge process changes, and it changes also the way of appropriating specialist contents, of knowledge which is, then, used in the action. In particular, the new way to know, first of all regards the reflectivity of a human thought and the self making aspect of the competence.

The *concept of competence* (and its articulations: strategic metacompetences, competences, etc.) then represents one possible *trait d'union* between the characteristics of present socioeconomic context and the world of education, from the point of view of a non-exclusive adaptation to the requirements of the economic sphere and promotion of the people.

It is a dynamic perspective that not only privileges the analysis of the *stocks* of knowledge that a person can store by acquiring one or more

training experiences, but the analysis of the learning flows which are not necessarily linear, but are melded in alternating moments of creativity, strengthening, reprocessing through which the subjects experience and act, reflecting competences able to restructure the stimuli arriving from the environment context, in a process of real construction (Pepper, 2003) and which allows the reading of individualism as “positive,” as a characteristic aspect of contemporary societies.

The use of the word competence, reflecting on *knowledge* and *know-how* has been for a long time the object of debate, because it is a concept with vanishing contours, used to express the ambivalence of cultural changes regarding the passage from the centrality of the *teaching* concept to that of one of *learning*, and, in reference to the social-productive system, the passage from Fordism to post-Fordism and the consequent crisis of the traditional categories used to categorize jobs and professions (Isfol, 2001; La Rosa 2002).

To train (in Italian “*formare*” NdT), in a wide etymologic definition, derives from “*form*” and means to mold, to model someone in order to make him take on the intended form, to educate with teaching. Therefore we observe that the action of training refers to that of one of educating: to guide someone, from the Latin *educere*, to *lead*, to *carry towards*, through “that set of activity/plans/participations/processes aiming, intentionally and in an organized way, at the facilitation of the process of learning, continuous and permanent, finalized by the acquisition of skill, ability and knowledge, to the consequent ability of usage, manipulation, production-creation of the same ones, to the ability to acquire and develop competences for and in the job” (Montedoro, 2001). If we adopt this perspective to reflect on training and educating, it means not only to dwell on the contents (single knowledge, disciplines), but also on the *way* in which a subject is prepared for learning.

In light of such elements and in order to conclude our present reflections, which attitudes must then offer “a good” trainer the concept of metacompetences? Morin traces a rather convincing *identikit* and to him therefore we return the answer.

He has to:

- Supply a knowledge that puts the subject in a condition to distinguish, contextualize, globalize and face the problems in multidimensional terms.

- Prepare the mind to face the challenges of the growing complexity and the problems that this complexity poses to the different forms of knowledge.
- Support the minds to face the uncertainty, favoring strategic intelligence and predisposing the consciences to challenge, in order to realize a better world.
- To educate towards human understanding between people and “teach” the feeling of affiliation (from one’s own village to the global village).
- Maintain a global citizenship as an *intended community* where all humans have to face the same life and death problems (Morin, 2000).

To develop a metacompetences mindset, in the sense that we have tried to illustrate is, we believe, one of the key stakes of contemporary education and the *society of knowledge* in its complexity. It is also an inner issue of democracy: to create the conditions in order to train citizens who are in a position to face and plan their personal and independent “paths” of social adaptation, so that they are able to take a look beyond themselves, towards the problems of their times, and in virtue of this, to accept to actively participate in their definition and social resolution. Social in that does not have to be lived as something intangible, unchangeable, natural and as such unknown to their acts, but as the background of an ethics challenge to face with passion, competence and knowledge.

5. Metacompetences and training institutions: the role of the university

Facing this scenario, what conclusions can we make about the role that institutional education will be able to have in answering the requirements of the world of production?

The creation of a more efficient connection between education, institutions and the professional world becomes a central topic and is an aspect which gains more attention also in the European context.

Let’s limit for a moment our analysis to what was planned by the university reform, already put into effect, besides the more or less

professional purposes of the previewed university training path from the new organization, there are at least three implicit attempts in the reform to constitute many innovations in the direction of the creation of a more tightened connection between training and the world of the occupation:

- The introduction of “lay” teaching.
- The flexibility of the curriculum.
- The consultation with the world of the occupation.

The inclusion of teachers from the business and production world opens the doors of the university to productive contexts; the curriculum forecast of training activities which develop the knowledge of the working contexts (apprenticeship and internship) could favor the introduction of the graduate; at last, the possibility that the athenaeums, in shaping their own training offer, activate moments of consultation with the representative organizations of production, the services and the professions representing a strong instrument in order to promote logics of encounter between the university and the social-economic system (art.11 codicil 4 of law 509/99 tries to clarify the delicate relationship between the university and enterprises previewing a consultation with the production world when an Athenaeum creates bachelor courses).

As for the effective outflow of new university titles in the labor market, once again, it is necessary to start from what the reform says. The bachelor degree has as an objective to match the mainly professionalizing general education with the quickly “usable” one in the labor market. On the other side, the specialist bachelor degree is addressed to supply a training of a “spendable” advanced level in qualified and highly specific professional contexts. To the two levels of advanced instruction then join the courses of specialization, having as an objective the supply of knowledge and the ability for functions demanded in the exercise of details of professional activities and the master degree. The master degree of the first level has the objective to provide knowledge and professional skills of an operating technical type. The master degree of the second level is aimed at further improvement of the acquired cultural education and at the learning of further useful competences in the project level in the world of work.

As we can see, in the indication of the aims of the different levels of advanced teaching lays a continuous interlacing between culture and professionalism, between education for knowledge and training for work. An interlacing, that answers fully the requirements expressed by a production context that is in continuous evolution. The world of work and professions, in fact, expresses a strong need for recruiting individuals endowed with knowledge and always more competences, and, as a consequence, it seems favorable and necessary to create the conditions so that the number of young people who continue their studies towards “higher” education is increased. From the other side, human resources that operate and will operate in the world of work are demanded more and more to maintain their own knowledge and keep it updated. Such guidelines towards continuous education stimulates individuals to develop a strong capacity of conceptualizing knowledge acquired at work, an attitude, the latter, easily possible for those who possess a bundle of methods and concepts that only “a superior” teaching can offer.

6. Conclusions

These briefly recalled elements fully correspond to the necessity to rely on learning for all the arc of life (*lifelong learning*) as a priority factor for acting towards economic development, the increase in social cohesion and for contesting unemployment. It is not logical anymore to train “professions” to “only” provide specialist and specific competences, but to allow young people (and also adults) to acquire the competences of employability, the ability to renew and to enrich their own global training, in order to satisfy always new working requirements. The competences we have defined as strategic and as metacompetences play a fundamental role in the named endeavor.

In truth, in the light of the transformation of the world of professions that render flexibility an unavoidable requirement, concepts like “qualification” and “duty” lose their meaning in favor of the ability of the subjects to develop, through continuous learning, utilize professionalizing strategic competences, cross-sectional, guaranteeing employability.

The school and the university possess infrastructures, competences and human capital at the optimal level (a more complex discourse would have to be made for what regards economic resources) that has the necessity of being improved through the introduction of these institutions in a total

“network” system that renders them less self-referring and open to the environment not only in the function of education of the young people, but also in order to become protagonists in a process of continuous education for all the arc of the life, including adults.

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A People-Oriented Training

by Gian Piero Quaglino

“The transformation is not at all over our shoulders.”

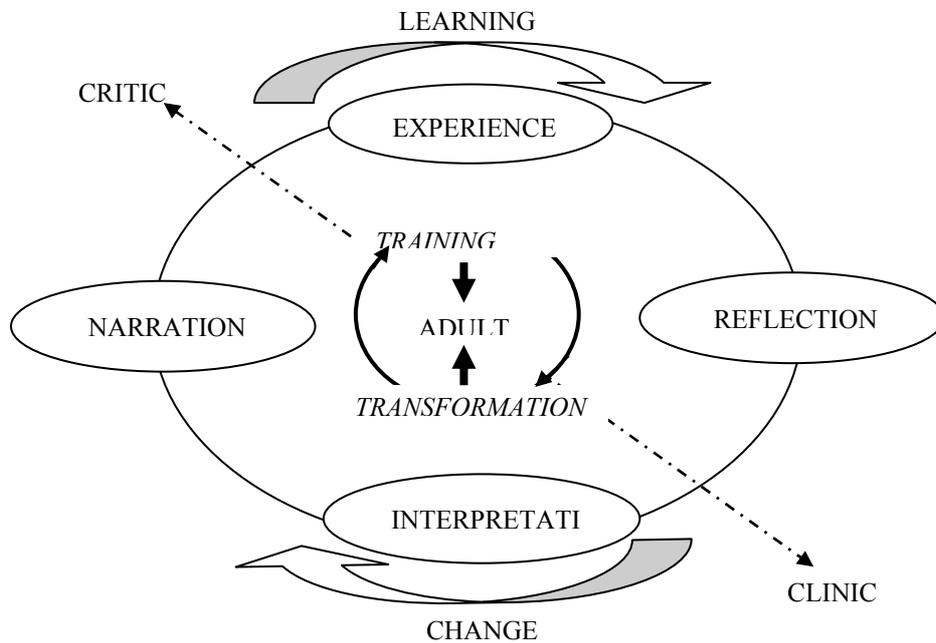
Murray Stein

Over the last thirty years, training acquired a full methodological and disciplinary statute, as well as a wide demand and a significant development of the professional community. If we had to estimate this path, we could assert that today a field of training has its own articulation and its own complexity. These elements which allow identifying plurality of dimensions and requests permit us to recognize different training for different spheres, objectives and projects. It is completely obvious, for example, the specificity that is shaped in the attention dedicated to the so-called distance training and in the consequent *e-learning*. Equally recognizable in the panorama of proposals of which training consists today, are those which go beyond the traditional setting of the classroom (*outdoor*), as well as requests for projects of individualized and personalized training, and the recent versions of trainers in the role of a tutor, a guide or an advisor. It is recorded, among others, as the necessity for training along the course of life (*lifelong learning*) and, with this, investments for the purpose of organizational learning, training is strongly tied to a corporate action, its logics and its challenges. Training appears to be more and more recognizable for its reference to the topic of self-training, that is, as training which starts from a subject and necessarily returns to him. Nevertheless, there are other issues appearing on the horizon, able to expand beyond the complexity of training; issues that move in the direction of an individualizing training apex, when not individualized: in other words, what identifies the space of knowledge and caring about oneself. On the panorama that these new tendencies delineate, above all on this latter one that we focus our attention on, convinced that it is necessary, before all, to think about this new training, this being the expression more authentic than this training can be in terms of a path to personal growth. This paper aims at providing a short delineation of this proposal - thus as already tried

in the postface to the new edition of *Fare formazione* (2005) - for training that is:

- Neither *for a company*: training that takes place in a short period for profiles of competences, ability and contents, meant to interact with a horizon of reference activities, better to say, for changing instructive requests oriented to professional qualifications.
- Nor *in companies*: training whose horizon of strategy and culture is for corporate development, for processes and medium term goals of consolidation of the belongings and the psychological contract, for a balance between individual change and institutional change, in a perspective of growth relation between an individual and a company.

What I want to delineate hereby is the design of training able to go *beyond a company* and towards horizons of full and authentic existence, for change of educational demands, for paths and trajectories over long periods, beyond content and processes, towards the reowning of the individuality of the project itself, which is in favor of personal development rather than the corporate system. The proposal characterizes ten cards, fundamental for the construction of the model of this new training, cards represented in the figure below are further briefly described.



1. **Training** is undoubtedly connected with the experience of perfecting forms, with all that, through conscious orientation or by means of the open exploration of the possibilities, by modeling leads to an improvement. This idea of improvement can be recalled also in reference to a wider field of meanings of practice that share a certain degree of superimposition with training, for instance: training (in order to acquire competence), training (in order to create skills), instructing (in order to accumulate knowledge) and educating (in order to achieve goals of personal development). Within these options, training gets a concrete form within an exercise of two: the twofold and master-student. In training these two are engaged in *going through* and in *proceeding side by side*. The training is able to assume forms now based on betrayal (in Italian *tradimento* suggested by the Latin *tradere*) of almost obsolete forms, now having tasks of modernization and reconstruction of a building (of the German *bildung*). The training does not have, therefore, merely instructive purposes. On the contrary, there are also traces of an attempt at giving origin and inaugurating it that are still not the present state of things, like an operation of maintenance and cure. The betrayal and the transformation, the generation and the cultivation coexist therefore as a deeper meaning of training action to new evidence of the plasticity - conceptual and practical - of the training. Thus, the image of the crossroads does not seem wrong, an evocative image of cruciality and criticality that training cannot deny or elude in any way. Training operates, in fact, in coincidence of articulating alternatives and in the presence of doubt and the complications that derive from a choice. In other words, it is trainer's task not only to oppose conservation, but to act in favor of a change, as a continually interminable travel. It is a path of a long period that addresses the subjects disposed to sustain hard work and the obstructions in exploration full of occasions to learn from himself and for himself. In a person's chasing of his own goals of development, training is instituted within a relation among adult subjects.

2. **The adult** the 'who', of this new training shapes the second important card to be taken into consideration. The essence of the training relation, the polarity, the equilibrium, the reciprocity and the compassion that finds positioning not simply making the adult the interlocutor and the addressee of a training event, but also refers to a series of issues and challenges that training cannot but deny. Continuously defied and reported as a mobile goal, being adult is a condition more than a being: one has the interminable task to repeat it always in new forms. As such, one would have to be the subject of training able not to fall for the mirage of the definitive conquest.

Becoming adult is a goal of the training that nourishes a need of constant redefinition. Perhaps, in terms of subjective disposition that gains truth (not renounceable subjective and partial) beginning from its own limit and from its own imperfection. This is the training that challenges the subjective identity search and as such can do parallel the existential-individual trajectories and the training paths. The training that chooses its center in the adult is therefore an occasion, a laboratory, in other words, an exercise of that equilibrium between multiple polarities that typically shape the adult challenge of integration of the opposites. The adult profile can integrate the ability of caring and the courage to pursue their own individuality, the control of the uncertainty (*negative ability*) and the ability of resolution, a pause of a thought and of an impulse for the action. This equilibrium remembers, at least in the label, the Lewinian as 'almost stationary.' Other challenges with which an adult is to be confronted, and of which the new training can become a scene, is enclosed in the idea of failing, of mortality and therefore of a limit: the adult does not renounce, but expresses an interest which is also made detached, maintaining itself active for the existence which is opposed to his mortal limit. In training terms, therefore, the adult profile is discovered to be correctly incarnated in the idea that the chosen form is nothing else but one among infinite possibilities. It could, thus, be agreed upon the fact that the training which operates in favor of the maintenance of the adult condition is training that does not resort to skillful crystallizations, but that it preserves the plasticity of the forms guaranteeing the renewal. The adult who betrays himself in the transformation is also the adult who is taking up the form of a link. Among the issues that regard him, there is also love. The adult discovers the thoroughness with his own partiality and a research of the other who plunges into love of caring and of connecting. Between his melancholic and solitary pace, this adult cannot but turn out as a being deeply and unavoidably emotional.

3. If all this is an adult who participates in an investment, first of all personal, in his own training path, sharing an objective not only of pure information but rather of knowledge and care of himself, the first stage of such a training process cannot be anything other than the **experience**.

The experience needs to be thought of in an articulated way, rich through referring, moving beyond 'doing' which easily risks being reduced. The experience, in fact, is not only a rigid sequence of ordered actions; neither has it always realized itself in protocols to be followed or in actions that are allowed without a precise destination. There are three other significant

areas that deserve to be evoked here. We can think of an experience as a test, a skill and an adventure. In fact, it establishes connections whether with the tightening procedure of the experiment, or with the de-structured condition of proceeding for attempts and errors: it chooses, on one side, to devote itself to the reasons of the method and, on the other, to re-propose the permanent and almost un-resolvable doubt. Within these polarities, there is experience in its multiple forms which, through tests and more or less improvised adventures, lead to new learning. This experience reveals the complex possibility between the certainty of the facts, the exercise prefigured in each of its passages and the inner challenge that brings about a perpetual search, of tests exposed to the risk. It is in this second modality that the training of the adult should more frequently be addressed. Compared with such duplicity of destinations and goals (evoked from the German version of the word: *erfahrung* and *erlebnis*) this experience leads always, and in any case to temporary learning; it in fact prepares, but it does not conclude, it never exhausts its task of the subject's approach to the territories which, if to become his, include facing the difficulty of its understanding and walking through it. This experience, thus indelibly tied and binding the subjective destinies, performing and susceptible to acquire form and to vary it, confronts the subject of training with the impossibility to eliminate the permanent doubt, with an exciting and liberating logic of the discovery, and with a goal which necessitates a planning- neither a tightened one nor a permissive one.

4. What safeguards the risk that the experience will fall into sterility of the technique is the **reflection**, the second transit in the transformation cycle that this new training describes. The supposed qualities and the necessary directions where the practice of reflecting can be exercised, where the experience gains practice on the contents connected to the crucial issue of oneself and this *new training*, finds expression in the definitions that signal the placid and deepened nature, its completing with tranquility and without haste. The reflection is an exercise of a thought unknown to acceleration dynamics and, instead, decided to the immersion in depth, able to inquire composedly and to penetrate to a bottom. It is, in other words, a thought that circumscribes, that exercises suspicion, the farsightedness and the acumen necessary to support a search of sense. The image and the metaphors that the physical phenomenon of the reflection (luminous) evokes can help to compose a picture of this training that, through reflection becomes a part within the logic of give-receive, similarly to a refraction that gives the crossing and the ricochet, the purchase and the

loss. Whereby the experience allows for an advance, the reflection approaches, it is advanced through those territories that the experience has approached. As contained also in the Latin etymology of *reflexiōne* (m), this disposition makes possible – by means of inclinations and bendings - the crossover and therefore opening wide new possible meanings. However, we have to avoid the error of charging the reflection with a task of complete and reassuring brightness: on the contrary, it opens, in this way to intimate depth, to the risk of the crossing of unknown territories. The reflection is also an exercise to an integration of the opposite or at least an occasion to meet them. Beyond an art of approaching, the reflection is an experience of conciliation and inclination towards oneself rather than a tension towards content. As such, the reflection contains the possibility of a confusion that follows the pursuit and the loss that is given, inevitably, when the task of training has to do with the ineffableness of the enigma of oneself.

5. It is the pursuit of lights and shadows favored by the reflection which allows that sinking and that gathering that are generative of a new impulse, of proceeding beyond a territory that is partially the same as the experience from which it started the path and partially the new one, a successive landing place: the **interpretation**. The access to this other territory of training contains the implicit character of preferred transformative goals to definitive acquisitions of knowledge. The interpretation is in fact an issue of a means and not of knowledge, of understanding rather than explanation. The double spirit of faithful translation and attribution of meaning renders the interpretation an occasion to recovery and invention. Like an issue of words which are chased, the interpretation offers an opportunity to a subject to trace the threads of his own personal history in an enrichment that goes through mutilations and losses. This practice, which for the subject is a modality of understanding his own inner nature, proceeds for long periods of time: the dissolution and a state of being weary turn out difficult, moreover as it nearly seems to condemn the subject to a job without destination. It goes moreover considering that a principle of the interpretation is nothing but the interpreter, so that the interpretation does not belong to anyone if not to the same subject who exercises it. This type of training moves in such a direction as to interpret itself daily, assuming that to progress in knowledge and take care of oneself by means of concept that are not the subject's, that is to say, searched and laboriously conquered. The authentic root of personal training cannot in fact be given in the form of an easy purchase of other people's truth, but it resides rather in the

recovery and the search (often laborious) of most personal motives. The subject, undertaking this interpretative path in a challenge that continuously suggests the doubt and the uncertainty, is disposed thus to a training the circularity of which (also hermeneutic) repeats itself without exhausting the research.

6. The safekeeping of the meanings which, from time to time, the interpreter renews is entrusted to the **narration**, the conclusive stage of the circle of the transformative training. Narrating, meant as an operation of collection and useful recovery in enriching the memory of the events, has the power to give back to the subject his role of a protagonist, of that interiority of himself that this training presumes as the object of returnable experience to the interpretable reflection and on the symbolic plan. The narration contains the possibility of “seize and hold” without which this operation connotes experiences, reflections and interpretations of the subject through some definite or ultimate sense. On the contrary, the narration has to be thought of as a phase of a training path that even if concluded by unfolding, then suspending only temporary, in reality does not close, but it prepares the resumption of the path. Stories contain an attempt of giving form and meaning, which the training would never renounce. Collecting and recomposing, the narration operation establishes a link of oneness between the author and the text: thus like the interpretation, and for the previous experience and reflection, the nodal point returns to being the subject. In every history there is the case, but also in every history there is a case. A so-called “good” form that this training would have to follow would necessitate moving from the understanding of being able to search the authenticity of one’s own training and observing some unavoidable rules. The first among these is a constraint of simplicity, since the training narration would have to know to express the experience in its simpler version. Secondly, every narration would have to admit spaces of ineffable, ambiguous implications, difficultly penetrable twilight zones: the narration leads straight to the complete ineffableness: if only for the fact that this remains the only way in order to allow the path to be continued. Finally, narrations would have to contain closely personal solutions rather than universal ones: the moral, in other words, rather than the history, is in what the author allows it to be to them.

The circularity of this new training that addresses an adult and that proposes a path which moves from the experience towards the reflection, in order to approach the interpretation and then to meet in the narration, needs

at last to be completed in each of its other components which - like satellites - configure its equipment and its goal.

7. For this training dedicated to cultivation, to knowledge and to the care for oneself, there could be no other instruments and methods or other 'weapons' and resources than those of criticism on one side and the clinic on the other. **Criticism** is not only considered to be a judgment, rigorous examination, disciplined and in-depth analysis, investigative tension and others, neither moreover, is it conceived in its pure and simple value of admonition, warning and blame. In the process of transformative training, in fact, condemning a mistake is not necessary, neither is the censorship or the shame. Rather the criticism should be considered as the art of voluntary disobedience, the non-docility and the unsubjectment. If it is moreover true that criticism and crisis are combined in root, it is to consider the training and its path as a process of advancing towards not being oneself the subject, but rather by being subjected.

On the other hand the **clinic** that shares the dimension of the crisis is recognized for its values of attention and care, of hurry and promptness, of treatment and therapy. It is, first of all, considered similar to a disposition towards the leniency that must accompany the transit from the experience to the reflection, the interpretation and at last to the narration: neither the therapeutic, nor the pedagogical fury. From the clinic/criticism polarity it does not remain but to complete the last passage in order to move towards the polarity learning/change that shapes the goal of this new training.

8. It cannot, in fact, be neglected that **learning** remains the issue for excellence and therefore also the point from which to start again for a reflection on training. Learning has to do, as indicated by the meaning of the word, with the adaptation that is given through joining, seizing and sinking. The experience of learning permeates emotional values: the passion (of who wishes and therefore stretches out to seize, to enter in possession of new knowledge) and the apprehension (of who is in apprenticeship and grasps to learn). The desire and the fear of what can be changed coexist, since learning is an operation that marks, traces, leaves tracks and prints itself (in English *learning*) and therefore in some measure starts a modification. What the criticism and the clinic suggest to the subject is a push, loaded with the transformative task inscribed in learning. On the other hand, to renounce the essence of the learning path would imply the sweetened choice in order to render it lighter, fundamentally

innocuous, therefore superficial, without weight or substance. It would be the road along which every possibility of training to reach its fulfillment or achieve its deeper goal to know in order to continue beyond until **the change**, that is until the transformation of knowledge into transformation of the subject, gets lost: this higher learning which the training would have instead to move. The tie between learning and change is therefore meant in the variety of references hereby made between training and transformation. If then this image of change is reported not to a generic universe of phenomena, but to the way of training, it will be possible to express it in that image of attainment of an adult being the one who corresponds to the fullness of oneself about which Jung spoke as *individuation*.

The training that has been hereby shaped in terms of crucial passages, stages, protagonists and destinations is, we repeat, only a single proposal among others. The reason it convinces us more than others do, at least in its intentions, is because of its engagement to give back training to its last task, to its more authentic goal that is the very subject, or better its supreme vocation that is expressed in the person, that is the image of oneself. Training is perhaps a rope, in other words, to a knot that imposes thinking about one's own transformation (of ways, times and destinations), so that in it, new possibilities for that fundamental task that is the trans-formation of man can be rediscovered.

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Empowerment Oriented Personal Microculture

by Massimo Brusaglioni

1. Self empowerment and the feeling of a person who is being the center of his/her own life

To feel as a protagonist of one's own life: this is on a synthetic and intuitive level the most incisive definition of a person's state of self empowerment.

In order to approach with greater concreteness the operability (that is to say, how the development of a person's self empowerment can take place and be facilitated), it is useful to resume and to emphasize in the definition of empowerment the root "power": as a verb (*the Italian word for power, "potere" means also, as a verb, "being able to"*), it means a possibility, opening of a possibility, a state of multiple possibilities (as will be illustrated in the successive, second paragraph "Stability, change and possibilitation").

Until recently, a single person was describable and largely predictable from meaningful behaviors that were, from a social point of view, formed on the basis of a series of objective parameters (for example: age, sex, type of job, geographic residence, marital status, socioeconomic level and being part of greater ideologically characterized groups, etc.). The inner part of a person, in particular the subjective part, was relegated to the so-called field of privacy and consequently considered not important socially.

Now the cruciality of the subject "person" tends to emerge (we do not deal here with the topic of "Why now?"): individualistic and describable and of predictable behaviors only by adding, to the previous, a series of other personalized and often at least partially subjective inner parameters

such as: motivations; aspirations; perceptions; conceptions about the quality of life; needs and desires; orientation towards the use of one's own personal resources and atmosphere. And above all, personalized experiences of those same "objective" elements that characterize the individual from the outside: living with his own work; his own structuring of the affections and relatives; his own eventual religiosity; his own guidelines and eventual political belongings; his own daily quality of life and his own aspirations regarding that life; the causes of his own socioeconomic situation; etc. In modern societies these aspects now characterize the so-called person not only, and as usual, in private life, but also in social meaningful behaviors (famous examples: extremely diminished predictability of a purchase behavior and use of money; or voting decisions at elections).

Emphasizing positive aspects of such a phenomenon of individualization, we could exclaim: "finally the person!" The person who is the carrier of his own integrity is also protagonist of his own life and his social one; legitimized and worthy of attention and efforts for his total well-being, his possibility to feel responsible, for his empowerment and feeling of being the center of his own life, for his possibility to feel like a contributor to the personal and collective well-being.

The study of self empowerment of a person, as stated in which a person is, or as an operating process, in order to reach such a state (empowerment is a twofold word, of both state and process, like other words such as achievement, realization and organization) it is part of this new approach: the one that has a person focus (without overflowing in the therapeutic approach) with one's integrity, one's feeling of being the center of attention, vitality, adult well-being, responsibility, being chosen and not just inherited sociality.

Stability, change and "possibilitation"

In this kind of society, where changes are visibly wide, frequent, pervasive and often fast, the author of this article believes that the main dynamic for a person is the one between stability and change: a person more and more often faces new problems and new opportunities that speed up this dynamics.

In my experience, over the last ten years, after conducting hundreds of in-depth individual counseling talks, I have confirmed this cruciality: people often ask themselves “do I change or not” work, structuring of my emotional life, my way to communicate and refer to, and above all, ways to understand and which capacities to focus on? Because, what formerly went well and was appreciated now is not acceptable anymore, so what do I have to change? I would like to continue in what I do and what I am, but should I also change something?

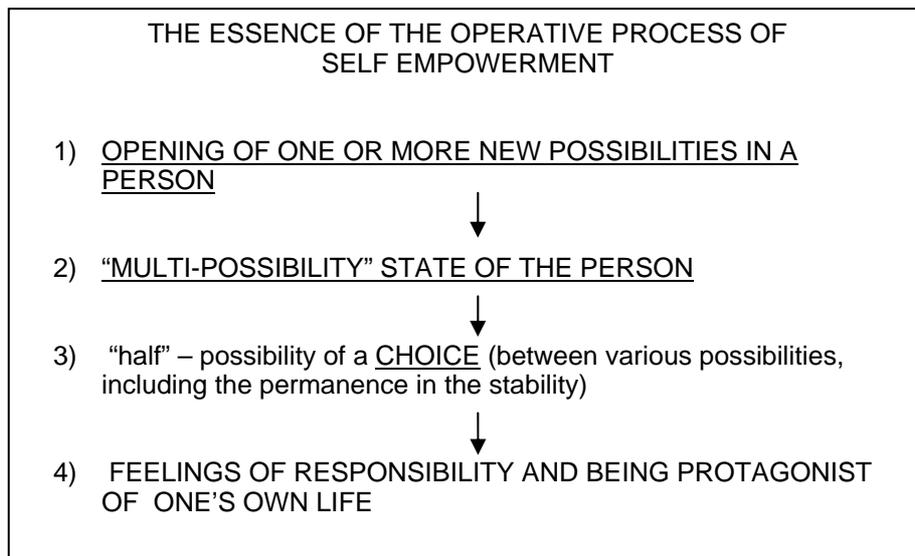
Here it is proposed that a third pole must be added to the bipolarity stability-change, on a conceptual theoretical plane and on a concrete plane (for example, in the intention of aiding a person): the opening of a person towards one or more new possibilities. New possibilities that, in addition to the previous stable situation and to other alternative possibilities, determine a situation of “multi-possibilities,” among which the subject can choose which one to implement in the operating process of putting in their relationship with the environment.

A situation where a person who is open to trying a “new possibility” (a concept that we will define with more precision later), is not the same/stable one, because a person can now choose and decide to take new roads; but the real change in the person and his/her situation has not even happened yet, because the new possibility has not yet been chosen and prosecuted by putting it into action actively.

The concept of “possibilitation” (synthetic denomination of the “operating process of opening towards new possibilities inside of the subject,” reaching a state of multi-possibilities) is important for at least two reasons that we emphasize here:

- 1) Because it allows an alternative to the state of paralysis which is sometimes created in the person, attracted and rejected from the stability or from the change, for reflecting reasons.
- 2) Because it focuses and it makes the nature of this important process visible and a preliminary path that often constitutes the first phase (barely visible from the outside) of the real change (when it successively happens in fact, as a final result).

The picture that follows reassumes and emphasizes how the process of possibilitation and the state of multi-possibility represent the essence of the process and the state of self empowerment:



1.1. Inner personal possibility

Speaking about a specific area of one's life, a person has in their individual baggage a new inner possibility coexisting with other alternative possibilities, when (s)he can truly (we will see later, what are the conditions) choose in order to begin and to try to realize the process of he/she putting themselves into interaction with the environment where (s)he lives.

Example of a state of inner multi-possibilities of a person in the workplace:

- To stay more satisfied (being aware that it is a choice) with their existing work configuration.
- To change their company they work for.
- To change the type of job in the same company.

- To change the way they work in the same role and the same company.
- To change the meaningful aspects of their psychological relationship with a person/job (motivations, expectations, increase of a pursued quality, conception of own current and wished for professionalism ...).

Example within the example: a person who for years does not attend new job interviews, does not respond to the calls for applications, does not look for new contacts, for years has not written and does not have a professional resume... that person probably does not have, inside of himself, any of the aforesaid possibilities. Even before facing the labor market, already within himself he feels he “can’t” and does not have “the power of” utilizing his possibilities.

The “inner possibility of the person” should not, on the other hand, be confused with some other concepts:

- It cannot be confused with “pure fantasy,” with mental flash, with an “instant image.” For being as such, “the possibility” demands in fact complex work, sometimes long and hard work.
- It cannot be confused with “concrete environment opportunity”. The mental possibility will become concrete opportunity only after the person chooses, develops and starts with succeeding in detail dealing with his environmental conditions (the person, in the example before, has decided to begin to work at a new job and through an operating process he finds the job he is looking for).
- It can’t be confused with “potentiality” (moreover cannot here influence the definition and the connotations given to the word potentiality): which already prefigure conditions of encounter between *the inner possibility of the person, the outcome of the created concrete distance from the person in his own development* as an example of new personal resources and *environment conditions* (as an example, the kind demanded by professional figures from the market).

The inner possibility is what allows a person to begin and to invest in a path without excluding the possibility of success, on which the entity will depend as well as from many environmental factors. For example, the inner possibility can be the one of becoming skilled, being a champion at one's maximum, in a field of sport; it is obvious that the level of concrete success will depend then subsequently on many things, beginning with the level of the competitors. In real life these external factors often affect, and modify partially, the realized path and the same goal pursued: with a useful process of adaptation that doesn't compromise the qualitative essence of the inner possibility.

We propose here a well-constructed definition of new inner possibilities of a person. Such a proposal comes, above all, from the observation of people's behaviors (of factors, inner and/or exterior that stimulate change, evolution, learning and increase) at work, and/or within a field of talk for individual counseling demanded from people and/or within laboratories in a small group for personal and professional self-development and development of metacompetences.

The new inner possibility in a person is constituted essentially of a new mental prefiguration, strongly experimented and positive, of oneself in a situation of the realized possibility, cohabiting in the person with others and various other possibilities, necessarily equipped with a series of crucial factors:

- 1) Nurturing wishing energy and not just needing energy (mobilization of a wished "I" in particular of the possibility in object).
- 2) Construction of oneself in the realized desire-plan, positive in the sense that the person mostly sees oneself in that manner and finds that image appealing.
- 3) Forecast of the maximum modalities through which the person will be able to procure the resources they currently lack, inner (ex. ability) and external (in the environment).
- 4) Positive vision of the path: that is, positive image of oneself not only regarding the final outcome, but also during the path, sometimes long and laborious, which the person has to face: as an example in order to procure the necessary resources.

5) Forecasting of the modalities through which the person will be able to succeed “to go around” his/her historical problems, in particular, of the new possibility. How to succeed in avoiding the block induced from one’s own problematic inner personal characteristics? In the specific one, not in general terms: not thinking about solving that problem at a personal global level; expecting this, eventually typical of therapeutic participation.

6) Availability to project the aforesaid positive way of thinking (point 2) on the reality plan, in particular with acceptability of various levels of success facing the real environment.

7) Hard “experimentation” of the mental prefiguration, keeping in mind that the experimentation:

- a) When possible, it is also concrete, through an operating experimentation of an initial reversible step (in fact, it is not yet a state of change) with personal appraisal of the outcome, outside and inside oneself.
- b) In any case at a mental level (with rational or emotional content) the experimentation is repeated and more and more detailed.
- c) The experimentation must however be made (above all when it is not realizable in a concrete way) also through “symbolic” actions. Actions that in concrete terms seem to have little importance but have great meaning for the specific person (examples: for a woman to change her hair style, to experience a new look; to move furniture; for everybody: to buy a strange object; meet somebody after a long period of time; to dialogue mentally with an important defunct idea; to do something unusual).

2. The empowerment oriented personal microculture

In an attempt to facilitate the first intuitive understanding of the concept of “personal microculture” some examples are hereby proposed:

- *Metaphorical examples:*

- *The two celebrated characters of Don Camillo and Peppone belong to different groups and various social cultures, opposite in some ways to the acclimatization of Emilia in the '50's. But they have something (which we will propose to call personal microculture empowerment oriented), that assimilates them a great deal: for example, they do not accept as impossible to find a solution compatible with the two alignments when talking about a child to safeguard, an economic value not to destroy and a deep emotion even if contradictory for the ideologies. So they meet at night, secretly from the respective groups, searching for new possibilities.*

- *Let's imagine that in a family, three brothers who are good converge and/or they will converge in a similar social culture. But when, every year during the same familiar anniversary, it's time to go to the restaurant: one prefers the usual small restaurant "in which we are so close to each other;" the second one wants to try a new one every year, even with typical food or from other countries; the third isn't interested in the choice, mumbling that the world and society must change, not even thinking about a restaurant.*

- *Realistic examples:*
 - *Two former school companions spent nearly an entire working life in the same company; but one looks around and he is always informed about other companies, people and jobs; he often says that he could change and go to work there or elsewhere; moreover he accepts and indeed he appreciates changes of roles in the same company. The other one says that he is fine where he is, except for always complaining about this or that; but he does not appreciate changes within the company and his working role.*

 - *Two sisters are both rather religious: one asks many questions, sometimes even "if there is indeed a God;" but she is always looking for priests and new voices. The other is devout and without caprices, she loves tradition and is a bit nostalgic about the time when the Holy Mass was recited in Latin.*

People with similar social cultures can in fact, on an absolutely personal level, have something really different, not with regard to things but to the

way of presenting them; something that we call a “personal microculture” and that we will describe here more systematically and within a typology.

The empowerment oriented personal microculture consists of the whole of orientations and tendencies to such orientations correlated with each other. They are applied cross-sectionally on various specific objects from time to time and can be very different: orientations that regard no great contents of social importance, but instead the ways in which the person lives them and relates with them; orientations that do not suffer from social and cultural groupings of persons, but are absolutely individual and suffer in a particular way from the subjectivity and inner dynamics of a single person.

Characterizing orientations and tendencies of the empowerment oriented personal microculture:

A) Consequent factors from the founding orientation to the process of “possibilization”:

A1) an orientation towards the opening of new inner possibilities of a person and towards the state of multi-possibility; microvalues orientation to the métapossibility of a choice, and the consequent psychological feelings of responsibility and of, at least relative, being the center of one’s own life.

This orientation differs from the one including a unique possibility: unique as actual (confirmation of stability), or unique as a wished for outcome of a radical process that replaces the current situation with a different one and is specified from the beginning.

B) Factors highlighted until the introduction of the concept of empowerment by its founding fathers:

B2) the tendency of a psychological investment in what the person “can” make because it depends on him/her (rather than invest psychologically in something he/she cannot do because it depends on others, or on the system, or on chance, or on fortune)

B3) the tendency of a psychological investment in available resources, inner and external (rather than in those unavailable)

B4) the tendency of an investment in self efficiency and, in particular, in the ability to know how to find and to mobilize the right resources among the available ones (rather than on the fear of not reaching them if there is a need)

B5) the tendency of a psychological investment, when the phenomenon is effectively totally outside of one's own control, in hope and confidence in positive "intervening" factors, and not only in fear from the negative ones

B6) an orientation towards valorization, referring to external or inner criteria, rather than towards a critic, even constructively

C) Factors highlighted by the study of stages and crucial aspects of the operating process which help a person to open him/herself to new inner possibilities and to develop his/her own self empowerment:

C1) the tendency towards mobilization of wished energy; tendency to try correspondence with the new possibility with the criteria of wishing rather than necessity; a tendency to distinguish between needs and desires

C2) the tendency towards constructing a new way of positive thinking of oneself in the situation of the new plan-possibility when what is imagined is realized

C3) an intentional orientation towards a release, a refusal of the paralysis, the encircling of the external obstacles and of historical subjective inner problems that would perceive the personal impossibility towards the wished goal

C4) an orientation towards reversible experimentation, to that passage of the action which has still not changed but which supplies the experience, the concrete beginning or only a symbolic psychological beginning

C5) an orientation towards a search of new (in the sense of "not well used") resources within oneself and new resources in the environment

C6) attention to the intervening things that are those environmental factors taking innovations that are not scheduled in particular, but are

statistically frequent: they could be positive and affect the passage from impossible to possible of what is pursued

C7) the tendency to invest the integrity of a person in different areas and situations, rather than segmenting the same person

D) Ulterior factors observed in people and correlated to previous factors (the fruit probably of the projection of personal factors inside the interaction with the external environment):

D1) the favorable orientation towards the increase of one's own experience, also in the absence of necessity or advantages, to the acquisition of new abilities, learning, continuing personal growth also into adulthood

D2) an attitude (on the emotional plan, previous to the analysis of the content) favorable to the factors of innovation coming from the outside

D3) the favorable orientation towards flexibility: as an example in behaviors, roles and organization

D4) the tendency to live psychologically with a feeling of responsibility and to appreciate the bigger responsibility

D5) the ease, in communication, to go beyond the confirmative repetition and also beyond the simple exchange in order to develop a new generative communication

D6) the orientation towards accepting contradictions, managing them, elaborating them generatively in order to create new truth; greater facility to go beyond the motivation to realize oneself and to perceive the generative motivation

2.1. Comparison of the three personal microcultures with focus on the axis stability-change

We propose the following typology and brief definitions:

- *Empowerment oriented personal micro culture*

The orientation towards the choice between more possible, and therefore the tendency to open new possibilities in order to have a personal state of multi-possibility

- *Personal microculture oriented to stability*

The orientation towards the confirmation of the possibility constituted from the current situation.

- *Personal microculture oriented to radical change*

The orientation towards the possibility constituted by a specified final configuration that is replaced, eliminating it, by the current configuration (the exact denomination would be in fact that of an oriented personal microculture to “the substitutive” change, in a “revolutionary” sense).

In fact, it is the personal empowerment oriented microculture that, in its statistical and probabilistic effects, turns out mainly favorable to the innovation and the change: these are not realized through a radical process of substitution, but through a progressive adding of new possibilities: which, once experimented as being positive, join the previous situation and modify it moving the cruciality. Rarely in fact within the evolved social systems (adult persons, evolved societies and solid organizations) did the change happen in a radical way, eliminating the old one and replacing it with the new one. In the evolved systems, the change happened through the progressive and continuous process of possibilitation. In adult people, the part of the culture oriented to the substitutive radical change paradoxically rarely determines processes of real change: often it determines unfortunately the division between “what I would like” and “what remains to be my reality” (example: I would like to be a poet on an island in the Indian ocean, but I am forced to be an accountant in this company).

Little recapitulation schedule of main characteristics from the three personal micro cultures on the stability-change axis:

STABILITY oriented personal microculture	Personal microculture oriented to RADICAL EQUIVALENT CHANGE	EMPOWERMENT oriented personal microculture
Orientation towards confirmation of the current situation (unique possibility: the current one)	Orientation towards a precise future situation that will eliminate and replace the current one (unique possibility: the future “revolutionary” one)	Orientation towards the multi-possibility state and towards new possibilities (multiple possibilities)
Self-perceived motivation, mainly of the needing kind: needing and duties	Motivation towards something different and of a superior order, where need, wish, necessity, duty are melded	Activation of motivation and wish energy, close to the needed one
Tendency towards respecting limits and bonds, inner or external	Orientation to use a different conceptual plan, where there will not be such limits and bonds	Orientation to outflank limitations, short comings or bonds. Orientation towards de-strengthening of inner or external blocks
Tendency towards management, making better the current situation, innovation seen as evolutionary improvement of the present	Orientation towards action that disrupts the current situation and starts the revolutionary one	Tendency towards continuous innovation, faith in quality increase and in the enriching progress (adding new things to old ones)
Tendency of self-perceiving as hetero determinate, to underline that which cannot be done as it depends on others	Orientation towards asking the others the determining force to overthrow the current situation and substitute it with a radically different one	Tendency towards a psychological investment in what can be done: underline self-determination possibility

STABILITY oriented personal microculture	Personal microculture oriented to RADICAL EQUIVALENT CHANGE	EMPOWERMENT oriented personal microculture

STABILITY oriented personal microculture	Personal microculture oriented to RADICAL SUBSTITUTE CHANGE	EMPOWERMENT oriented personal microculture
Orientation towards the optimal management of current resources	Investment in a prefiguration of a configuration of resources completely different from the current one, by nature and quantity	Orientation privileging search of new resources
Psychological motivation fundamental for reassurance and identity confirmation	Psychological motivation fundamental to the perception of being a minority, but on the right side, and being a forerunner of a future, better world	Psychological fundamental motivation, given by innovation: energetically extraordinary and, broadly speaking, erotic
Development of a coherent and compact unitary himself, acceptance of a risk of rigidity	Orientation towards a different self, projected on future assets	Development of the multiple self: coherence and unity are given by the complex, regulating "I"
Aspiration towards eliminating the contradictions; management through	Investment in only one side of the contradiction, to make it a future dominant model	Acceptance of contradictions, inner or external: attempt to integrate generating new self and new solutions

search of compromise and equilibrium		
Innovation as evolution, physiologically better than the current one	Innovation as a break from the past	Essence of innovation as an addition of new possibilities
Distrust in progress, if not as a natural increase	Faith in revolution	Faith in progress

2.2. The concept of personal microculture

We try hereby to define a bit more precisely the concept of “personal microculture” and some of its characteristics:

- “TRIAL-LIKE,” MORE THAN CONTENT oriented: orientation and typical tendencies of a personal microculture does not regard the great orientations, typical instead of the social culture of the individual (examples: value of solidarity, freedom, individual, duty, religion, work and family); but they regard the ways, individuals and subjective, the person then lives them, refers to them and is proceeded by “them.”

- “PERSONAL”: the microculture is absolutely individual - it can be characterized in many different ways as between brothers of the same family and twins, even if monozygotic. It regards dynamics in good part subjective and inner of the person: for this reason it is preferable to call it “personal” rather than “individual.” It can be similar between people who belong and/or they refer the same to social and cultural groups, thus it can be different between persons who have similar cultural objective characteristics and associations.

- “CROSS-SECTIONAL”: as it is deduced from the first two characteristics aforesaid (trial-like and personal) the personal microculture is cross-sectional in a twofold sense:

- 1) It is cross-sectional regarding the contents, as it does not regard the difference-similarity between them, but the way “to process them,” that is, to relate to them mutually.

2) It is cross-sectional regarding the social groups of belongings and to the various cultures (ideological, national, sociological, professional and organizational, of role...). It is probable that in realizing a systematic search that some meaningful correlation emerges also, but is observed that mainly the persons with the same kind of personal microculture can be systematically found on various depositors of the social and cultural groups.

- “MICRO”: it is a term that, at the level of intuitive effectiveness, summarizes some of the aforesaid characteristics: it is absolutely individual, it regards the inner personal world, it does not orient the great social contents but the psychological ways with which the person reports to its same own cultural contents, it is visible only if specific attention to the single person is given. It is not called “psychological,” even if this adjective would favor the intuitive conceptual understanding, in order not to confuse it (as we will see more ahead) with personality characteristics.

In order to clarify the concept of personal microculture, we can imagine metaphorically that an individual has two different kinds of cultural identity card (apart from obviously, the objective identity card, conceived as the identifying one with more details than that which was released from the Municipality):

- A kind of an identity card that reassumes one’s social culture, the typical tendencies of the social cultures of the individual; which as an example (in extreme simplification and in a little naïve language, and stirring typologies reported to different ones): religious or not religious culture, right or left, specialistic or managerial, laborer or clerical, technical scientific or humanistic; etc.
- A kind of individual identity card of one’s “personal microculture,” with the microcultural tendencies: as it has been said, more trial-like kind of content that, personal more than social belongings, has more roots in the individual subjectivity than in objective factors.

From this point of view, the person could be characterized on a rational-emotional axis or the authoritarian non-authoritarian axis (like the famous Adorno’s research using the scale F to find a correlation with anti-semitism and the orientation of a personality favorable to the dictatorship); or, as it

has been made up to here, on the axis stability-change, that it represents, in my opinion, the most meaningful dynamics in the person who lives in modern society.

The microculture of a person, given his/her connection with subjectivity and psychological variables, is often considered as personality data. The author of this text is disapproving of this conviction, waiting for systematic data deriving from rigorous research, on the basis of at least two elements of evidence, declined here by continuation on the typology of microcultures oriented to stability-change-empowerment:

1) People frequently express meaningfully various personal microcultures in various fields of life, such as: job, emotions, preferences for free time and socialization.

2) In the same life area, people frequently express different personal microcultures in different temporal periods of their life.

Moreover, in a focused homogenous typology of microcultures (and admittedly that it is complete), a person is a carrier of all three kinds: in amount and with various modalities and dynamics for every individual. To say that a person is characterized as a personal empowerment oriented microculture in reality means to say that a person is characterized by having greater tendency and facility and frequency of expression of that microculture regarding the other two (stability and change). And moreover it is probably correct to say that the person is characterized as having that microculture for a specific area of his/her life.

It is equally true, as it emerges from observations (still waiting for more knowledge and data of painstaking research) that personality factors are in the game (therefore, in first approximation, constants in several areas and several periods of life). We can probably talk about “factor P” (constant, general and cross-sectional areas of application and periods of life), which depends on the personality and which explains a greater probability and/or facility of expression of that kind of microculture; and a “factor V”: variable which can be influenced and which can determine differences between various fields and times of application. Factor P will probably turn out more interesting for this description in the sense that classification of the person and for applications as an example of selection; factor V is what mainly interests us, it is important because it allows some applications such as (as we will see in the next paragraph) training, in the location of

alliances and the cross-sectional microcultural groups, in the organizational cultures, the education of young people and the connection between social cultures and “socialized” personal microcultures.

2.3. In training

In the training of adults and the concepts of personal empowerment oriented microculture and the operating methodology of self empowerment as a possibilitation process opens up a new useful perspective for some formative crucial aspects:

- The training for the METACOMPETENCES. The development of self empowerment in fact permeates the development of some fundamental metacompetences, such as: psychology of the feeling of responsibility, flexibility, orientation towards learning, orientation for continuous growth, motivation at work and its regeneration, a positive operating way of thinking and orientation for confidence and hope. Moreover the development of self empowerment and the member empowerment oriented of the personal microculture, turns out to determine the update and expression of upgrades: which, admitted as fixed and stable in a person, is variable and affectable in its update and concrete expression, as an example in working within a specific organization:

- The empowerment oriented microculture of training and trainers, affects some CRUCIAL ASPECTS of the processes and the results are:
 - The ability to stimulate and to develop the motivation of the persons towards personal growth and learning.

 - The possibility and the methodology of encircling the subjective historical problems of each person, that otherwise would stop the process of learning since its beginning or at the first sign of difficulties.

 - The conception of the same objective of learning in operating terms: like opening up a new possibility inside of a person.

- The mobilization of an extraordinary energy (wished for, not only necessary and needed) for the estate in the process of learning, increase of professional personal quality.
- The involvement of the entire person (and not only of the limited professional segment of the role) with all of one's personal professional roles, in the process of learning and growth.

- SELF DEVELOPMENT TRAINING is that kind of training where a person is offered a training path through which everyone can develop new possibilities, in particular in terms of personal professional abilities, which he/she perceives as crucial for his/her growth and quality increase. Excellent results (for this aspect as well as in the development of metacompetences) are reached with relatively simple training paths (two workshops for three days, each with an intermediate and an ending counseling discussion): paths in which the desired microculture empowerment oriented and the self empowerment as a new possibility constitutes the objective of learning, the method and the culture of training work.

- THE ALLIANCE BETWEEN THE MORE VITAL PARTS OF THE PEOPLE IN THE GROUP AND THE ORGANIZATION.

The awareness of the concept and the sense of empowerment oriented personal microcultures, allows us to conceive and to perform the training participation such as development of the alliance between the more vital parts for the people in the organization. The empowerment oriented training is in fact much more effective in helping the convergence, of the more vital parts for the people at all levels and directions, in an innovative and generative psychological alliance.

Also, the passage from a group to a team, able to generate output and inner effectiveness, is preferred by the development of a pact of psychological alliances within the mutual internal and collective possibilitation and on the convergence of the internal components of the microculture empowerment oriented system.

It is hereby emphasized that the process of possibility opening proceeds (sometimes largely, sometimes with a short period of time, but however

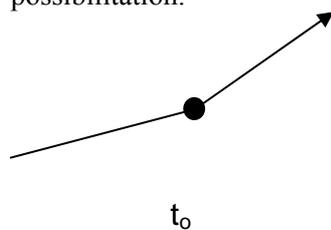
still proceeds) the process of observable change. The process is not very obvious and manifesting, but decisive and conditioning.

From this point of view, every process of change is above all the fruit of a process of opening and an increase of possibility and so of a process of addition.

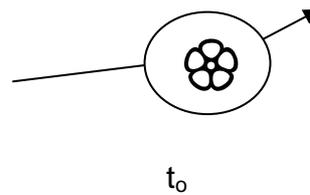
2.4. Change and the person

Here, below is proposed a reading model for the process of the change of a person, which evidences a preliminary crucial phase of the change process. Often a phase difficult to observe from the outside where specific attention to the person is lacking, on the concept of possibilitation, the personal microculture empowerment oriented system. We refer not only to the case, easier hereby to observe, of the change that matures mostly from inside of the person, but above all in “the more difficult” case of a change which is demanded as a consequence of external changes. The question is: what makes it possible that a person participates in the external change with his/her own harmonic, anticipated and active change, instead of offering resistance and not changing and/or with a passive or traumatic change?

The model proposed hereby assumes that a person only changes if “he/she can” change (obviously), and “he/she can” change only if the direction of the asked change coincides with one of their inner possibilities: a possibility which a person had or has constructed recently, stimulated from the external demand but however with their own personal process of possibilitation.



Traditional model or representation: it doesn't explain “how” a change can happen (if not in a compelled and passive way)



Model that evidences the state of multi-possibility of a person and therefore allows for that kind of change progress where a person participates or however, adheres to actively

2.5. The hypothesis of “cross-sectional microcultural groups”

A personal microculture is absolutely internal. In what sense, can we speak, of socialization of a personal empowerment oriented microculture? The answer is, in my opinion, positive in at least two senses. It is hereby proposed to define “cross-sectional empowerment oriented microcultural groups” as those ensembles of people who, though belonging to various cultural groups (sometimes quite contrasting), have a personal internal empowerment oriented microculture. People who on this basis perceive similarities and convergence between them and on this basis perceive a kind of possible psychological alliance. We can assume, for example, that this is the constituent factor of the real ruling class: a set of people who perceive a cross-sectional alliance, therefore a group, that always look for a new possibility, is faced with a new problem, even when they seem unsolvable. People who think of themselves, also in different situations, as vital, constructive and generative, who refuse the paralysis motives and who try to resolve these or at least to go around them; people, who try to resolve contradictions at the beginning and in their own favor, but later carry the contradiction to the principle of general of interest; people who live the feeling of responsibility because microculturally they are oriented to concentrate themselves on what can be done rather than what cannot be done.

In the face-to-face group, the concept of “team” is marked by this kind of pact. The “team of the strong ones” is constituted of people who are not objectively strong, but is characterized by a psychological alliance: based on a “pact” where everyone stimulates in the others, and vice versa, the expression of the personal empowerment oriented microculture.

It is assumed moreover here that empowerment oriented “social microculture” can be defined as a social system (as an example an organization, a social community, an entire society) where every individual receives from the society (and in particular from those who exercise leadership in the society) the stimulation and the facilitation of the expression and development of one’s individual element of empowerment oriented microculture. Then “Social” empowerment oriented microculture is perhaps that social culture which stimulates and facilitates every citizen, in his/her own personal way to try differentiated cultural contents, to orientations such as:

- Living with the feeling of responsibility, deriving from the investment in what can be made, individually and with others.
- Overcoming the “blocking” reasons, internal and external.
- Feeding a collective environment which is desired and not only the one that is necessary and needed.
- Tending towards an individual and collective growth and progress, conceived as an added possibility: and, in these same terms, towards having a positive tendency with regard to innovation and the change.
- Creating the exchange between individuals and collectively as an aid to increased possibilities, individual as a total social system.
- Nourishing confidence and hope and not fear.

We have dealt, as shown, with a social culture of a “microcultural type”, not regarding great goals and great values that much (that depends on social culture), but more on the orientation of the ways, the lived experiences and the processes.

Maybe it is with this plan, of the microculture and the “microvalues,” where the essence of a valued correspondence between the individual and the social system dwells, for example, between an individual and a company and an individual and an operating group of belongings. This is all true, above all, in the age when the crisis of the ideologies on one side and the wide convergence on some obvious principles of quality of life and society on the other, have weakened the force of the real traditional cultural and social belongings. Perhaps in the future, the social groups, of belongings and reference, will be more and more definable also on the basis of people’s microculture.

Self-Empowerment: How to Survive your Job

by Barbara Bertagni

1. Be operative!

We live in a society in which development has become a keyword, development at all costs, continuous growth, economic growth, professional development and purchasing power growth.

Magazines, surveys, books and manuals - not only of widespread distribution - are most often oriented defining a successful manager as a "skilled man," elegant, projecting the image of wellness, ever-moving and performing in every situation: at least 14 hours a day among meetings, work travels, interviews, phone calls, office activities; 20 days of holiday in a year in appealing places where, as advertising tells us, "you can have fun, relax and at the same time get back in top shape;" leave few days in a year that are dedicated to their training.¹

The manager role within organizations seems to become always more complex: acting in organizations where uncertainty rules, where flexibility has become a keyword, where everything is highly shifting and rough, and manager's leadership is often suggested as the solution to manage chaos.

Managers are expected to actively build their role, shaping and adjusting it day after day to their own company needs and to market upheaval. This process occurs within company realities that leave little or no space for personal choices, together with an agenda full of daily appointments often

¹ Training that hardly refers to anthropologies and to *Bildung* poetics, training intended as the deepest meaning of human building and transformation/enrichment (for example cf. Gennari, 2001), besides the image of the actor reduced to a *Über-marionette* in Gordon Craig's theater (1908, p. 5).

built by others, with targets to reach not always understandable and sharable, during a series of organizational rituals that, even if useful in order to keep anxiety down, require a role-playing game sometimes hard to manage.

What are some keywords? Action, velocity, pleasure, success, wellness, self-control, anxiety containment effort and annulment of any space for questions, as everyday life searches for answers towards prompt needs and ponders about the meaning of questions that might bring stagger and anguish.

There is no space for the rise of dreams, affections and projects not aligned with the company needs and rhythm. There is no time to protect the inner slowness, neither to feed ourselves with our fragility. We have to run to chase the promotion, the project success, the competitor company buyout, the purchase of the yacht and benefits improvement.

Meanwhile as time flows, "marketplaces" change and we have to run more than ever to remain at the same status, but at the same time we start to get old and, sometimes, a strong experience breaks into our life (birth, mourning, break up, love...) and it opens a reflection glimmer, letting us notice how much we have become strangers to our own selves, until the point when we know ourselves no more.

Success accomplished at this level becomes a weird dimension in which professional growth does not match with personal development but often in top managers' stories we find the feeling - or the awareness - about a life lived, but not chosen, lead by automatic pilot, without a real space for choices, captured by an ascending career vortex in which they "cannot say no."

2. Empowerment risks

The manager, as a post-modern subject, finds himself involved in a relationship web "more complex and mobile than ever"² and lost in the

² Lyotard (1979, p. 32). On the post-modern subjectivity development cf. Wood & Zurcher (1988).

daily theater illustrated by Goffman³ in which his identity is built on a continuous representation on a life stage.

Person and role blur one in the other; a man reduces himself to his role, feeding himself with organizations' rituals and myths in which he works. The subject feels uncomfortable in the "simulation," as he stands to play the game imposed by the roles with the ending immersed in it to the point of "being played with," therefore constantly left hanging in balance together with the risk of being overwhelmed by the same game that allows him to exist and represent himself.

It seems like the manager is reciting Laing's poem: "They are playing a game. They are playing by not playing a game. If I show them that I see them playing I will breach the rules and they will punish me. I have to play their game, not showing that I see them playing."⁴

It seems that reaching success implies a self-representation as a person of success, in order to allow someone else's look to give back the sense of our success, generating thus the feeling that we are successful persons for real.

Inside this logic self-empowerment is frequently required and often a consultant acts inside the same logic, proposing his action and answering the request.

There comes then the management adviser, the change agent, the coach, the tutor, the mentor, the counselor engaged in helping the manager by defining targets and strategic actions, finding solutions to his problems and developing his competencies.

Too often the acting logics follow the same "development at all cost" logic spreading in almost every sector of our society. These are very brief paths (because time, you know, is never enough), often managed exclusively by phone (because the time and costs that we are raising for travel is not reasonable) by professionals "certified" by a mass of new associations, that will verify if the management scheme of communicative interaction will be applied and the main deontological rules featuring every helping relationship followed. Are there any psychological competences? No, because it is not about the mind. Are there any philosophical

³ Goffman (1969).

⁴ Laing (1991, p. 5).

competences? No, because the approach is absolutely concrete and operative and its better not to lose time by chatting about philosophy.

I do not think this is a serious approach. Often for the modern manager the time for himself is dedicated to the strengthening of specific skills, physical exercises, refreshment of hedonistic senses, but hardly ever is it a reflective time. When the adviser agrees to this request without opening a space to analyze the question, but simply by working on the given target in order to supply the comforting answer, he acts inside the same weird and directive logic leading to the prevalence of the role for the person.

3. Self-empowerment strategies

A characteristic of our society is, indisputably, to interpret the reflection as not an action, but as being a waste of time.⁵

Nevertheless, only a deep reflection and a space of authentic relationship with oneself could grant to the manager that the life he is living is his own and not someone else's⁶ and only in this way is it possible to aim to live a life of excellence in which the roles we play will not become armors hiding us from ourselves, but dimensions that allow us to express, develop and achieve.

Working through an effective empowerment perspective means working together with a person in the role: improving his self-awareness, promoting a reflection about targets and values, ensuring an elaboration space for emotions and experiences.

The aim is to bring into question the answers taken for granted, trying to look at what we do, what we are and what we say, from a different

⁵ As Severino wrote, "we begin to pay attention to the abyssal powerlessness of power culture. We begin to discover the incurable disease. But who cares? The West is a sinking ship, where everyone ignores the leak and works diligently to make navigation more and more comfortable and where therefore no one wants to argue about anything except prompt problems, and where problems themselves have meaning only if it is possible to glimpse the specific solving techniques. But does the real wellness come if we are not able to discover the real illness?"

⁶ "If they will end looking back, the majority of people will discover that they have lived a life *ad interim*, and will marvel looking that what they left without considering and enjoying is exactly their life and that they lived exactly in waiting for that. Usually this is the path rule for the human life: a man mocked by hope ends dancing in death's arms" (Nozick, 1989, pp. 8ss.).

perspective. We must help the person to focus on himself, rediscovering and bringing to light his values; leading him to gain a better awareness over his role inside the negative and positive events of his life; reevaluating the priorities; planning the needed steps to reach his own objectives; pondering on his experience, emotion and conduct in order to revise his own behavioral modalities; finding space through the comparison in order to comprehend the behavioral schemes inside which he's used to working.

All this demands the adviser to know how to move at a “meta” level in order to attend the manager in reflecting into his own paradigms and let him clear the way he looks at things, at the world and therefore at himself. He will clarify his own meaning of success, self-fulfillment and happiness.

Moreover, the psychological competence is necessary to build the work alliance, in order to support the manager during this delicate path and to encourage the enactment of change.

Working in an empowerment perspective means looking at the future: the adviser does not search for a historical truth during the interviews, trying to match the manager's report with his bibliography, as he knows that we become the story we tell, regaining in a new way the ownership of our past experiences and looking at the present and future experiences through the light of a further determined perspective. “Things happen to people who know how to narrate things.”⁷

The comparison begins from concrete situations and from future targets, granting an equal relationship between the adviser and the manager aiming at the comparison, the support and self-fulfillment.

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Knowledge “Governance” and Corporate Training in the Foreseeable Future

by *Fernando Salvetti*

1. There is always too much governance going on

There is always too much governance going on, or, at least, we should suspect it. Therefore it is better to develop the art of managing in the least way possible.

Is it possible to consider liberalism as an action guideline within companies, for managing knowledge and, more in general, human and intellectual asset competences? Yes it is.

Being liberal – bearing in mind a definition of a scholar who is beyond suspicion and above the fray: Michel Foucault - means being progressive, in the sense of a continuous adaptation of the legal order (and, therefore, *governmental* and corporate) to the scientific discoveries, to the corporate progress and economics techniques, to the changes of social structure, to the most current demands.¹ Foucault did not directly deal with organizations' *knowledge governance*, but the perspectives that his studies open seem to me very interesting. In general on Foucault and the management cf. McKinlay & Starkey (1998), or about his liberalism analysis cf. the recent essay by Deschênes (2005). I am convinced that it is necessary to reflect critically on the “*pratique gouvernementale*.” In favor of the minimum governance, as a working principle of *knowledge governance* within companies and, in general, within companies investing in training, development of competencies, systems or tools to manage and develop human capital, *knowledge management* and those that are related.

Who governs (a country, a city, a company...) never realizes well enough a “risk of too much governance.” The minimum governance is the

¹ Foucault (2001, pp. 820ss.; 2005, pp. 135 and 262): “Je serais tenté de voir, dans le libéralisme, une forme de réflexion critique sur la pratique gouvernementale.”

art of managing the least possible, between maximum and minimum, aiming towards the minimum rather than the conceivable maximum.²

Why is this proposal for self-containment of “governance reason” needed in the field of *knowledge governance*, that is to say, management of human and intellectual capital? In the next paragraphs an answer possible and practicable, and from within the companies, will be provided.

2. Knowledge society and managerial work

In the *knowledge society* the efficiency and effectiveness peaks seem to belong to companies which operate having in their base reticular models the ability to anticipate the external environment changes with high creativity and flexibility. In the economy, predominantly immaterial, centralized on knowledge and information, we find among the most operative corporate (but also work) models, those structures that are similar to *collages, patchworks or networks*, where the hierarchy is reduced to a form of coordination and control, and where, instead, decentralized integration and the web become the principal corporate *drivers*.³

One of the most important competitive differentiation factors between companies lies in the capacity of cultivating and enhancing (famous but not necessarily widespread) the intangible assets: intelligence, experience, imagination and, more general, the soft skills, as well as the specialized and transversal competences, *know-how and know-what*.⁴

In the *knowledge & connected society* and in the *knowledge economy* scenarios, to name a few names which are often used in talking about our everyday life and our forthcoming future, the knowledge, the abilities and the imagination, as well as *networking* as a common factor of experience, abilities and knowledge sharing (or rather the skill of learning), have more

² Foucault (2005, pp. 29 and 36).

³ Cf. for example Drucker (1993), Hatch (1997), Hassard & Parker (1993), Borum & Strandagaard-Pedersen (1989, pp. 219ss.), Bell (1981), Linstead (2004), and also plenty of interesting ideas you can find in the number 100/2005 of “*Sociologia del lavoro*” dedicated to new paradigms and to new economic, organizational and work scenarios: in particular the essays by Bonazzi (2005, pp. 24ss.), Butera (2005, pp. 45ss.), De Masi (2005, pp. 81ss.) and La Rosa (2005, pp. 199ss.).

⁴ And the *intangibles* list can be continued: *brand equity and reputation, strategy execution, innovative culture, ideas and relationships*, professional qualifications, technological competences, talents, abilities, guide-values and behavioral rules sharing coming from the specialized and qualified professional communities’ membership and perhaps even a *peer to peer* relationship with the best members of the best practice international communities.

importance than physical, technological and financial assets, traditionally at the center of economic and organizational scenarios.

In current scenarios, the economic resources are no more (or not only) the financial capital or the work and even less so are the natural resources, but the relationships, the knowledge and the human and intellectual capital.⁵ Peter Drucker spoke about *knowledge work* in the early sixties (of the past millennium, mentioning it in order to emphasize a bit), but only in the last few years “the managers” started to consider knowledge and competences as strategic resources that are to be managed in the same way as they manage fund flows, human resources and raw materials. Especially for the organizations that aim to be *learning organizations*, in other words “cognitive systems”⁶ able to structure knowledge and behaviors of their members, the *knowledge governance* is a strategic (and therefore a critical) target.⁷ Sure enough, the *knowledge economy* requires flexible

⁵ For a general panorama on these themes cf. for example the works published by OECD (1999) and the studies of Lipparini (2002; 1998), Rullani (2004), Vittadini (2004), Cravera, Maglione & Ruggeri (2001), Rifkin (2000), Stewart (1997 and 2002), Michaud & Thoenig (2004), Guida & Berini (2000), Riboud (1978), Porter (1989), Prahalad & Hamel (1990), Stalk, Evans & Shulman (1992, pp. 57ss.), Eppler (2003), Davenport & Prusak (1998), Panzarani (2004), Bettiol (2005), Low & Cohen Kalafut (2002). In particular, many in the last few years are the works on the human and intellectual asset, but this is a theme already explored in the past along various lines: this is not the place for a bibliographical *excursus*, even if it seems proper to me to point out the Foucault treatment (2005, pp. 176ss.) during his course at *Collège de France*, 1979, about *la naissance de la biopolitique*, within which he dedicated specific attention to “the work intended as economic behavior” and to his “division into asset-competence and income,” to the *homo oeconomicus* redefinition “as entrepreneur of himself” and, therefore, to the “notion of ‘human capital’ together with his constitutional elements.” Along this line the comparison with the classic studies of Schultz (1958; 1960, pp. 571ss. 1962, pp. 1ss. 1981) and Becker (1962, pp. 9ss.; 1964; 1976) appears really interesting, as well as, on another plane, can be interesting reading the romance written on this theme by Amidon (2005).

⁶ Concerning this, the classic studies by Simon (1988), but considering the critique of Nonaka & Takeuchi (1995), according to them his “Cartesian” rationalism precluded him to understand important dimensions as the “behavioral knowledge” written by Barnard (1938) and the “tacit knowledge” by Polanyi (1966). For a recent panoramic on these themes cf. also North (2005) and Rizzello (2003). In general on *learning organization* Senge (1990 and 1992) can be particularly useful, Argyris & Schön (1978 and 1996), Tomassini (1993), Miggiani (1994). Equally useful also are the Nonaka & Takeuchi’s critiques and counterpoints (1995, pp. 30ss.).

⁷ On *knowledge management*, as well as *learning organizations*, voices and opinions are obviously manifold and sufficiently dissenting each other to feed a wide debate: for a quick synthesis cf. for example Daft (2001, pp. 271ss.), Quagli (2001), Garvin (1998, pp. 47ss.), Venzin, Von Krogh & Ross (1998). For an introduction of *knowledge development* cases and experiences achieved in Italian organizations cf. Montironi & Genova (2004), rather, for a systematic knowledge management in the organizations theme analysis that is very up-to-

organizational models of functioning, oriented towards the continuous interaction with customers and quality control, both based on an intense use of knowledge resources. Strong abilities of interaction with the “exterior,” of creation and reprocessing of knowledge, of a connection between cognitive and behavioral dimensions based on the acting of individuals and groups during operative situations, are needed.⁸

Especially in the scenarios characterized by rather non-durable products, by precarious consumer needs, by less and less defined regional and national markets, the competition is similar to a war of movement where the competitive advantage depends on the ability to anticipate the market tendencies and to answer quickly to the changing customers' needs. In fact, one of the criteria to detect the “*successful competitor*” is to look at the ones who are able to move most rapidly “inside and outside the products,” the markets and sometimes even in entire economic sectors. This means, in other words, that the center of the corporate strategy is not in the product or market structure, but in its dynamic abilities and, therefore, in the dynamism of a company's behavior.⁹

If we consider the corporate and management perspective, the critical points are the interdependence between knowledge and behaviors, between individual and collective knowledge, between *routine* and innovation. The forthcoming managerial work will be characterized, more than today, by a development of human and intellectual capital: creation of corporate knowledge, management and development of knowledge, capacities and skills in order to diffuse them within and outside the companies and translate them into products, services and systems.¹⁰

date and deep, even with a comparative Italian-French research built on event studies, the work by Minguzzi (2006) is interesting.

⁸ Tomassini (1993, p. 11).

⁹ Stalk, Evans & Schulman (1992, p. 62), Teece, Pisano & Shuen (1991), Nonaka & Takeuchi (1995).

¹⁰ Cf. for example Nonaka & Takeuchi (1995), in their opinion in the near future the top management will evaluate not only through economic performance criteria, but also through the knowledge *vision* quality able to offer to others both inside and outside the organization. As Quinn (1992) reminds us, the ability to manage “intellectual capital” has quickly become, in our time, the critical and distinctive manager ability.

3. Social construction of knowledge and abilities

The problem of how a knowledge system emerges is the same one as how is created any common good¹¹: in the words of Mary Douglas, the anthropologist committed to the exploration of connections among individual minds, cultures and societies. Knowing is one of the human activities subjected to social conditioning while the knowledge is a “social structure”¹² therefore, a common good.¹³

As men, we have a (very) limited rationality and as making part of companies, acquire, in the first place, we extend limits of our abilities to discover, elaborate and manage information. On the second level, by means of *organizing* we manage to “create” new information, knowledge, abilities and competences useful to find/redefine the solutions to our work related problems. On the third level, through these activities we go through paths that, if not interrupted, allow us to detect our *ways of worldmaking*¹⁴: that is to say, they allow us to discover the modes through which we “create” the same corporate or market related realities within areas of our action.

This is a key point: the intersubjective social “creation” of reality.¹⁵ In other words, the company delineates its own scenario, observes it using binoculars and tries to find a path in the landscape.¹⁶ It is enough to remember that even the most elementary idea of our logic, the similarity, depends on social interaction.¹⁷

¹¹ Douglas (1986).

¹² As an example: Fleck (1981). Obviously an unlimited theme: personally I find useful *knowledge* and *epistemology* definitions of Abbagnano (1988), the *anthropology of Knowledge* by Elkana (1981), the *sociology of culture* by Griswold (1997) and the *social story of knowledge* by Burke (2000) as maps to orient navigation. Concerning the corporate organization the synthesis on *knowledge management* by Daft (2001, pp. 271ss.) can be useful.

¹³ Douglas (1986).

¹⁴ On *ways of worldmaking* cf. Goodman (1978) and Douglas (1990, pp. 43ss.). Cf. also De Geus (1988).

¹⁵ It's a duty to mention at least a classic: Berger & Luckmann (1967).

¹⁶ Cf. Weick (1993, p. 193).

¹⁷ As pointed out by Douglas (1986), it is ingenuous to treat the identity characterizing members of a class as a quality concerning things or as a power of recognition concerning the mind. Comparisons among different cultures make clear that no superficial identity concerning qualities explains how the elements are assigned to a class.

Obviously, the fact that the meanings of “things” and, in general, the images of “reality” are collective, in other words shared with other people who are living in the same culture, and have been learned through social interaction, makes it difficult to understand because we are hung up in the web of meanings woven by ourselves.¹⁸

Knowledge systems, as webs of shared meanings, are a socially built reality: in particular, reflecting over companies we can say that “reality” is not represented that much by the physic or natural world conditions, but rather it is defined through interpersonal links and agreements. Therefore, socially built entities exist until their members think they exist and behave accordingly. Therefore, there is an explicit knowledge level in the companies that can find its numeric or verbal expression and can be easily communicated and shared in the form of procedures, patterns and axioms. There is also an important level of tacit knowledge, hard to formalize as reference values or as, simply, the whole lot of abilities expressed using the term *know-how*. Moreover, in tacit knowledge a meaningful cognitive dimension based on schemes, mental models, beliefs and subjective perception is implicit, so strengthened to the point of being “axiomatic” – because, even though they are difficult to explain, these implicit models determine our way of perceiving the surrounding world.

To understand dynamics that generate webs of shared meanings, norms and reference values, forms and practices through which beliefs, emotions, meanings, values and action principles are expressed, asserted, communicated and respected (or broken), tacit and implicit meanings must be considered - often unconsciously - contributing to structure the way in which organizations' members perceive, think and feel.¹⁹ Therefore, knowledge is a complex and multifaceted object: next to numeric or verbal (or anyway verbalized and told) knowledge, we find subjective *insights*, intuitions, mental models, beliefs, perceptions and different forms of what is usually defined as “tacit knowledge.”²⁰

¹⁸ Other classics: Geertz (1975) and Bruner (1990).

¹⁹ Cf. for example the *corporate culture survival guide* by Schein (1999).

²⁰ In addition to the classic Polanyi (1966), cf. Nonaka & Takeuchi (1995) that however support one of the most important representatives of the Austrian economic school, Hayek (1945), “pointed out as a pathfinder the importance of tacit knowledge, specific of the context and concerning the particular space-temporal circumstances,” even though not succeeding in fully understanding the importance of the conversion process of specific context knowledge, mostly “tacit”, into explicit knowledge. Cf. even Daft (2001, p. 273): the explicit knowledge (know “what”) is that kind of knowledge “which can be coded,

It reminds us that we can know and do more than we can express and, moreover, that most precious knowledge hardly can be taught and transmitted in direct ways belonging to the family of what we, Westerners, are used to referring to as “Cartesian rationalism.”

In any pyramid, the most important things are not on the top but must be looked for, following paths leading to the treasures hidden inside. The *knowledge economy* seems to prefer companies structured in a reticular model, as they are able to anticipate the volatility of the outer environment with high creativity and flexibility. Flexible companies can be operative and “proactive” in their respective markets, especially by developing that peculiar competitive factor symbolized by knowledge and related distinctive competencies of different corporate cultures. In order to let companies develop along this line, segmentation is needed in small and medium production units based on interfunctional self-managed teams,²¹ the implementation of integrated information *networks*, the ability to establish potentially stable relationships with the customer – thanks to *information technology* and digitalization – and, *last but not least*, the active use of the brains of the largest number of available people.

4. Cosmos and taxis

A company is not an absolute concept, just as organizing is never intended in one way alone because it implies the possibility of elaborating a strategy and a group of operation tactics, in order to guarantee the “productivity” (possibly not forgetting the “well-being”) of working people.

A unique and certainly efficient organizational prescription, useful in every context, does not exist. Above all, ideal companies do not exist. However, efficient companies do exist, able to elaborate and enact successful strategies in complex and always changing environments. Companies that are less and less “managed” by a management level with total control functions in the strategic direction and in organizational and

written and transmitted,” instead the implicit or tacit knowledge (know “how”) is often very difficult to translate in words as “it is built on personal experiences, on approximate rules, intuitions and subjective judgment,” practical competences and creative solutions.

²¹ On the group value and on the “group attitude” in the industrial society cf. the interesting pages written by Actis Perinetti (1956), which anticipate many themes that the specialized Italian literature will develop only later in time.

productive processes, are more and more “managed” by *leaders* able to influence, channel activities and processes, not only in inner workgroups, but also outside the traditional organizational borders in order to integrate - using varied cooperative strategies - operative *teams* of other structures connected and with which usually interests and targets are shared.

Companies are oriented to feed the entrepreneurial spirit, the continuous innovation and inner cultures characterized by change proneness.

Therefore, these are companies which must achieve motivating and satisfying working conditions, which must try to “treat people well” in order to motivate them exactly within the organization and not anywhere else. In other words, less and less *τάξις (taxis)*, are built through strict rational planning and a strict control of the management level, with more and more *κόσμος (cosmos)*, spontaneous, self-creating order as it emerges from the inner part of the same company system as “inventions” based on the company’s actors ability for creating organizational dynamics, which do not simply imply providing answers adapted to the environment, but which are specified in strategies and tactics worked out (consciously or not, tacitly or explicitly, depending on different cases) credit to a capacity to act in complex and disordered situations, restructuring possibly their own action model.²²

²² In these categories cf. the interesting study by Hayek (1993), that moves partly within the paradigm of the general theory of systems, but mostly within the perspective of methodological individualism, according to which the comprehension of social actors, actions and perspectives is the fundamental moment of every analysis. In particular Hayek affirms that Greeks of the classic period “were luckier” than us, because “they own two different words to point out the two kinds of order, that are *taxis* to indicate built order, as for example the order of a battle array, and *cosmos* for a spontaneous order. Albeit a working organization is structured as *taxis*, that is an “artificially built” order, to be more precise willfully planned “aiming to achieve concrete purposes,” in this article I suggest to extend the meaning of *cosmos* in order to include some auto-organizational dynamics evolving in the flattened and *knowledge driven* pyramids of the *net-economy*: these auto-organizational dynamics don't consist only of simple adapting answers to the environment (as could be argued being inside a traditional systemic vision), but they realize themselves into elaborate action strategies and tactics (consciously or not, tacitly explicitly depending on the instance) in specific situations by organizational actors. This circumstance implies for the corporate actors - as argued for example by Lanzara (1993, pp. 11ss.) – the possession of *negative capability*, that is the ability of “being” in the uncertainty, of acting in complex and messed up situations keeping themselves oriented towards the “activation of contexts and possible worlds.” *Negative capability* that represents the distinctive competence of the *man of achievement* and consists in the ability of managing moments of indefiniteness and of absence of direction, eventually reorganizing their own action model and developing new *routines* understanding the action potentiality disclosed in those moments. For a specific

If we consider organizations as machines, control is then essential. But machines generate rigid pyramids and monocular perspectives²³ or, at the most, binocular ones. Control as a priority management strategy, especially in the medium and the long term, generates traps: rigid role interpretations the ambiguity of communications, the pluralism of variables through which decisions must be confronted, the existence of (by the side of executives and managers, employees and workers as well) and usually unable to open to confrontation, closed and auto referential behavior systems, beliefs and thinking habits. Machines give rise to a disciplinary environment²⁴ where only the imperative way can exist as an organizational instance: a single-dimensional environment, in which the output is supposed to be determined by the input that assumes the control forms and contributes to building mental prisons and produce disciplined, demotivated and alienated subjects.

The multiperspectiveness belongs to another universe, where the hierarchic instance is not deleted, but mediated and weakened by other organizational principles (coordination and interfunctional teams, integration, negotiation in order to define targets and working load allocation, “budget accounts” and, therefore, negotiation of resources and their allocation criteria). It is where organizations are considered as *collage* cultures based on partial knowledge, provisional and contextual interpretations and, therefore, as evolving structures and processes,²⁵ in other words, unstable synthesis of *τάξις*, that opens its way to *κόσμος*: multiple, differed, contradictory connections, the occurrence of difficulties and denials and the arising of new needs, all of an organization's life cannot be seen, taken into consideration, taken into account”. For these people -

analysis dedicated to organization, enterprise and knowledge concerning Hayek cf. Fiori (2006) and Novarese (2006). For an analysis of static and dynamic orders in the complex society through the Hayek's perspective cf. Robilant (2006), moreover, for a deep dynamics examination of spontaneous social order concerning Hayek (but not only), cf. Moroni (2005).

²³ Moreover, as pointed out by Kaneklin and Olivetti Manoukian (1990, pp. 31-32), within work organizations we can often find people with the thought of the organization “as a strong, complete, mono-dimensional, flat idea:

²⁴ In this sense Foucault (1975) has masterfully explored in terms of prison, military, hospital, scholastic and industrial manufacturing disciplining.

²⁵ Considering Landier's (1988, pp. 63-70) contribution often considered almost “subversive” by many corporate specialists apparently inspired especially to Edgar Morin's epistemology, therefore, schemes, concepts and languages of organizational tradition are completely inadequate facing new conditions of world competition characterized by uncertainty, upheaval, globalism and interdependence of phenomena, while appropriate organizational answers can be supplied looking at complex scientific models: therefore, the organization must subdivide itself into cells following the systemic-cybernetic logic surpassing every recall to the pyramidal organization, the “centralized and arborescent”

using an effective Bion's expression (1961 and 1962) – words are things: those things that are supposed to be represented by words are for them undistinguishable from the name that designates them and vice versa. From here comes a sort of impossibility to switch from the specific case to a transversal generalization, to an abstraction, or also to conjugate a general principle with the determined situation.

5. Knowledge governance

The strengthening of an idea, as well as, more in general, the development and the management of knowledge and abilities, are social processes and must be taken into account very seriously and managed with equal attention and, especially, discretion. *Discretion* in the original sense of the term, deriving from the late Latin *discernere* means moderation, a sense for an opportunity and measure, ability to judge knowing how to distinguish and make things clear even in not clear and ambiguous situations.²⁶ In other words, the verb *knowledge* is tightly linked to the verbs “can” and “being able to,” in addition to the word “understand.”²⁷

How can we best govern knowledge, the human and intellectual capital and the cognitive and behavioral dynamics within companies? How the knowledge and abilities’ assets, characterizing a company, are built and managed in a flexible and dynamic way? That is to say, is it possible to plan companies so as to be flexible, elastic, and creative, as a well trained human mind?²⁸ Communication webs, the non-differentialized growth of different organizational parts and organizational joints, the lock up regarding the entrepreneurship or the inter-entrepreneurship among (inner or outer) cells of an organizational system are subdivided into auto-managed, independent and nimble groups.

The main challenge is to use dispersed knowledge, often incomplete or contradictory, owned by individuals and not belonging to anyone as a whole. Possible strategies and tactics, as well as supporting *tools*, are relatively well known among corporate specialists. Many of us, in fact, are

²⁶ As Dante reminds us, “the most beautiful branch that the rational root grows up is discretion.”

²⁷ As Wittgenstein said (1980), there is an evident use of the verb “know”: when we say “now I know!” meaning “now I can do it!” and “now I understand!” For an interesting journey into the fields of knowledge and management cf. also Nonaka & Takeuchi (1995).

²⁸ Morgan (1997, p. 96).

familiar with keywords such as *managing knowledge and intellectual capital, corporate learning and knowledge creation, knowledge generation and development* rather than *loosing knowledge, embedding knowledge in key-processes, knowledge codification and coordination, building knowledge-based products and services, assessing knowledge and human capital, linking knowledge across borders, networks and new organizational focus as a vehicle for knowledge building, knowledge transfer* and corresponding technologies, rather than debates concerning the possible creation of the *Chief Knowledge Officer* position. In the same way, many of us are associated with the *communities of practice* and may think of companies as cognitive systems, rather than different approaches to *knowledge management* which, depending on the case, is focused on mechanisms to manage explicit knowledge (*data warehousing, data mining, knowledge mapping, electronic libraries, intranets and networks*) or on mechanisms to manage tacit knowledge (dialogs as an access road to the collective intelligence, stories of learning and corporate narrations useful for spreading action models and reference and trend metaphors ...).

In essence, what is the purpose of all these mechanisms? And above all, why are there always more *managers* encouraging and supporting not only activities as *knowledge mapping*, but also corporate dialogs and stories? Today, successful companies generally are the ones that more than the others are able to efficiently carry out the activities of knowledge harvesting, storing, distributing, and using. Well aware that technologies, as themselves, cannot grant the optimal use of human and intellectual capital and that the most important key element for a complete use (or, in other words, for an efficient productive “utilization”) of knowledge and abilities involves the strengthening of a corporate culture dedicated to encourage and support the sharing of knowledge and competences.

To express it as a journal title: *learning to share!*²⁹ And to proceed with the same emphasis, in the very words of a journalist: “*No, selfishness is not dying, but more and more companies are seeing the profit and advantage in sharing knowledge.*”³⁰ In the same way, some companies over the last several years have introduced important internal communication and awareness campaigns. One of the *slogans* used in *Nokia Telecommunications* is that “knowledge is translated into power only when

²⁹ It is one of the titles in a special issue of “*Newsweek*” (December 2005 – February 2006) dedicated to the *knowledge revolution*.

³⁰ Cf. the special issue of “*Newsweek*” just quoted, p. 40.

divided,” while *Texas Instruments* gave life to corporate premium: “It-wasn’t-me-who-invented-it-but-I-did-it-anyway,” in order to encourage people to join in the knowledge.³¹ Avoiding emphasis and the “must be done,” can be useful to introduce an *ad hoc* concept representing an operative guideline: the one of the *epistemic drivers*, intended as factors (in first place subjects, then *drivers*,³² intended as factors (in first place subjects, then organizational processes) able to create shared values, beliefs and concepts, useful to assure a sufficient level of compactness and, at the same time, flexibility concerning the knowledge and abilities system within the organization. Subjects who have the necessary competences to ease the collective processes of *knowledge integration* and new knowledge, abilities and action perspectives³³ - especially through the expression of perceptions, emotional background, *insights* and subjective beliefs and, moreover, through the formalization at an organizational level of a mental model and cognitive schemes considered more effective.³⁴

³¹ Daft (2001).

³² By proposing the concept of the *epistemic driver*, I imply the reference to the *episteme* written by Foucault in *Les mots et les choses* (1966) which refers - given the intended differences - to the whole of the conceptual matrix, anonymous and unconscious, being the base of knowledge (and practices) of a certain epoch, forming the common background. The passage from an *episteme* to another one takes place through a series of enigmatic discontinuities, being in other words radical and unexplainable breakups by whom who lives them as he is dipped into them. Breakups cause things to be suddenly not perceived described, told, characterized classified and known in the same way.

³³ Cf. for example Reich (1991).

³⁴ Cf. once more Nonaka and Takeuchi (1995): the difficulty of Occidental observers to examine the issue of the creation of cognitive organizations has a fundament in the absolute adherence to the assumption by which the organization is a machine engaged in the elaboration of information. This concept is deeply rooted in the history of management in the West, from Frederick Taylor to Herbert Simon, and is explained in a vision of knowledge as a necessarily explicit and sometimes formal and systematic event. The explicit knowledge can find a numerical and verbal expression and can be easily communicated and shared in raw data, formulas, codified procedures and axioms. It is often assimilated into an informatics code, a chemical formula or a system of general rules. The representation of knowledge in Japanese companies is perhaps radically different. For them verbal and numerical knowledge is nothing but the tip of an *iceberg*, being knowledge *in primis* a tacit event, something difficult to catch and to express. The tacit knowledge is especially personal and not formalizable, features that complicate its communication or sharing with others. It's a comprehensive category in which subjective *insights*, intuitions and clues fall out. It, in the end, has its deepest roots in action and individual experience, in addition to ideals, values and personal emotions. In detail, two dimensions of tacit knowledge can be distinguished. The first is the technical one, including the whole of abilities and informal strengths summed up in the term *know-how* that are to be caught. In the meanwhile, in tacit knowledge a relevant cognitive dimension concerning, schemes, mental models, beliefs and perceptions are strengthened to the point that they have become axiomatic. This cognitive dimension of tacit knowledge reflects our representation of reality (the being) and our vision

In particular, an organizational subject that assumes the role of *epistemic driver* finds himself being some sort of inner entrepreneur equipped with a sufficient dose of “border spirit” (in addition to *commitment* and inner sponsorships with an important political-corporate value) enough to give him the possibility to generate dynamics of *knowledge sharing* as well as *knowledge development*,³⁵ and, in general, to coordinate and take care of interactive situations of different information, knowledge and abilities more than work methodologies, in order to support the development of new knowledge, abilities, *concepts*, projects or products, services and systems.

All of this, *ça va sans dire*, creating the conditions to directly govern the least possible and, therefore, to increase the rate of *κόσμος* reducing therefore the *τάξις*. The organization is a complex phenomenon, not reducible into resolving and final classifications: a phenomenon which can be understood through sophisticated knowledge but always approximate, partial, targets and interest oriented, only partially expressed and expressible.³⁶

In this perspective, *knowledge governance* means not only to build and guard processes and procedures, but also to learn to create and manage knowledge supplied with competitive value. In other terms, the organization based on knowledge and being *knowledge driven* is a space (perhaps physical, surely cultural) where people keep on discovering the ways through which they create their reality and the ones through which they can modify it³⁷ – by the recursive activation of *experience-sharing of knowledge-experience* virtuous circles, in which the shared knowledge at an organizational level becomes the base for new tools, new experiences and new knowledge.

The *knowledge driven* work organization is then configured as a cognitive and social dimension, characterized by processes in constant

of the future (has to be). Despite their difficult formulability, these implicit models determine our way of perceiving the surrounding world.

³⁵ Somehow it's an organizational figure similar to the *project leader* delineated by Nonaka & Takeuchi (1995), even if not necessarily under the subjective profile the *epistemic driver* has to find out the particular pleasure of experiencing new things and take risks. Cf. also, in very operative terms, Coulson-Thomas (2003).

³⁶ Cf. Kaneklin and Olivetti Manoukian (1990, p. 29). As Morin (1977) wrote, today we know that everything that ancient physics considered as a simple element is an organization; an atom is an organization, a molecule is an organization, a star is an organization, life is an organization and society is an organization. We completely ignore though the meaning of this term: organization.

³⁷ To learn to create and manage knowledge gifted with competitive value means not only being able to gather chances that appear and supply high quality services and products, but especially being able to create new opportunities, new services and new products.

evolution, where “to know” does not only mean “to recognize,” in other words, learning something given and “external for us,” rather than cross the various *ways of worldmaking* that give the chance to create and build not only new products but new ways of thinking and acting, meaning new horizons and sense scenarios – within the limits and the shapes and the forms allowed by the organizational structure in which we work. This kind of organization opens and generates, therefore, a dimension where people find themselves immersed into “worlds of thinking” and at the same time of action, that can generate new worlds: something like living in Heraclitus's *λόγος* (logos) where becoming and changing generates continuous innovation, very important for the ones who work in organizations based on knowledge, configuring itself as a process of “re-creation of the world” - in the light of an ideal of a particular vision, particular for a corporate culture in which it operates.

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Acceptance and Failure of E-learning in Organizations: A Map

by Lorenzo Cantoni & Chiara Succi

1. Introduction

E-learning in general can be defined as the use of Information and Communication Technologies (ICT) in education.

A more detailed definition – even if not unproblematic, due to the use of evaluation terms – is the one offered by the European Commission: “the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration” (CEC 2001: 2).

Furthermore, adopting the e-government definition of OECD (2003: 23), it is possible to define e-learning as

- 1) the use of the Internet in education and training;
- 2) the use of ICT in education and training;
- 3) the capacity to transform education and training through the use of ICT

As for the definition itself, the community that also studies e-learning is quite complex and articulated (Cantoni & Rega 2003 e 2004). There are researchers coming from very different fields such as philosophy, pedagogy, psychology, technology, sociology, communication sciences, economics and so on.

On one side, e-learning can be considered as the most recent step in which education integrates the new technologies of the world (Cantoni & Di Blas 2002; Cantoni & Esposito 2004); on the other side, it can be

considered as the result of the impact of the *knowledge economy* on education.

In fact, in a context in which the competitive advantage of organizations is knowledge (digitalized and rapidly changing), knowledge workers have to be able to acquire and integrate information more rapidly.

In this context, e-learning is an important dimension of *knowledge management* and becomes – *tout court* – the learning modality of the *knowledge society*.

The capacity of accessing and using digital contents through technological tools becomes a fundamental condition for people's employability. Workers are continuously required to fill the gap between what they know and what they perform; hence the strong relationships between e-learning and lifelong learning and between e-learning and digital literacy.

It is not a revolution of the learning and teaching processes, but rather their evolution in the context of ICT; it is possible to apply to e-learning the principles of mediamorphosis proposed by Fidler (2000; Cantoni & Tardini 2006):

- *Coevolution and coexistence*: different learning modalities – with or without the use of ICT – develop and coexist at the same time.
- *Metamorphosis*: e-learning emerges from previous learning traditions.
- *Propagation*: e-learning propagates dominant traits of previous learning practices.
- *Survival*: learning methodologies, which did not use ICT, tend to evolve and adapt for survival in a changing environment.
- *Opportunity and need*: e-learning develops in the social and economical context of the knowledge society, aimed at meeting real needs.
- *Delayed adoption*: diffusion and full integration of e-learning take longer than expected, usually the length of a generation.

The last principle of mediamorphosis refers explicitly to the issue of adoption and acceptance, also presupposed by the other five principles.

Under which conditions do teachers and learners integrate ICT in their teaching/learning experience? Under which conditions do schools, universities, companies and institutions become ready for e-learning?

These questions can be answered in quite different ways, and involve the experiences of each person in charge of learning or promoting learning; questions that the frequent e-learning failures (*dropouts*) make even more important and urgent.

This text intends to contribute to set the above questions in a more precise modality, drawing a map of the territory in which answers can be found. It is a map based on the research about diffusion of innovation, technologies acceptance, with a focus on e-learning acceptance.

An important contribution will be given by the semantic analysis of the term “acceptance” and by a reflection on the “pedagogical/didactical contract.”

2. A map of e-learning acceptance

Three approaches

The investigated issue can be referred to as the e-learning acceptance problem (Masie Center and ASTD 2001; Masie 2002). So far, three main approaches to e-learning acceptance are present in the literature (fig. 1).

- a) Innovation acceptance theories applied to every type of innovation, and also to e-learning.
- b) Technology acceptance research carried out originally to predict technology user acceptance and extended to e-learning.
- c) Learner acceptance studies developed to understand learners' choices in higher and distance education as well as in e-learning.

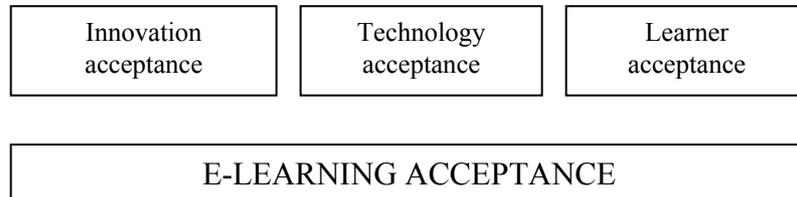


Figure 1: Theoretical framework overview.

a) Innovation Acceptance

Innovation Diffusion Theories (IDT) explore and help to explain the adoption of an innovation. In particular, Everett Rogers (1995) defines steps and outlines variables of the innovation's adoption process.

The Innovation Decision Process theory defines it as the process through which an individual moves from 1) first knowledge of an innovation, to 2) forming an attitude toward the innovation, to 3) a decision to adopt or reject, to 4) implementation of the new idea, up to 5) confirmation of this decision. The process can be influenced by prior conditions, individual characteristics and innovation perceived attributes, such as relative advantage, compatibility, complexity, trialability and observability (Rogers 1995). Surry and Farquhar (1996) have applied IDT to e-learning with a strong emphasis on contextual factors affecting the process (Burkman 1987; Stockdill & Morehouse 1992; Ely 1999).

Technology is a particular category of innovation, which shares several characteristics with it. Its peculiar features have been examined, among others, by the Technology Acceptance Model.

b) Technology Acceptance

The Technology Acceptance Model (TAM) is an information systems theory developed to predict the acceptance of a technology and it is based on the TRA (Theory of Reasoned Action) proposed by Fishbein and Ajzen (1975).

The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and

when they will use it. In particular, TAM states that two very specific beliefs, *perceived ease of use* (EOU) and *perceived usefulness* (U) directly influence a person's attitudes toward the use of the technology system (Davis *et alii* 1989).

The subsequent research has been aimed to integrate the TAM model with new variables (Szajna 1996; Veiga *et alii* 2001), or to further developments (Venkatesh & Davis 2000; Venkatesh, Morris, Davis & Davis 2003).

There are applications of TAM and its extensions to e-learning experiences (Dunn 2004; Gong & Yu 2004; Wagner & Flannery 2004).

Originally, e-learning problems were related to technology, and issues such as access, connection, Internet familiarity and lack of independent learning were included. As technology advanced, the problems shifted towards the learner's side and his/her acceptance and satisfaction (Cantoni & Succi 2002; Saadé & Bahli 2005; Wolski & Jackson 1999).

Investigating e-learning only as an innovative technological asset fails to consider all the factors which come into play and cannot fully explain its results, (Keller & Cernerud 2002; Bürg & Mandl 2005).

c) Learner Acceptance

Acceptance and abandonment (dropout) are strongly connected (Frankola 2001). Fifty years of research on the *dropout* issue have demonstrated that the reasons for students' dropout are mainly grounded in the acceptance phase.

The decision to persist or not to persist in distance education is a complex process involving a number of interrelated factors and variables peculiar to the individual's context (Morgan and Tam 1999). Tinto's Student Integration Model (SIM) (Tinto 1975) explains persistence and attrition through student-institution "fit" by looking at student, institutional, and environmental variables and specific areas such as the social integration of students into campus life.

The model has been applied to different learning fields and also to e-learning (Rovai 2003; Sweet 1986). Many authors tried to identify main variables affecting e-learning acceptance within organizations. Those

variables are focused on a variety of different aspects concerning e-learner characteristics and experiences, contents, technology assets or organizational environment.

What does “acceptance” mean?

It emerges in the literature that acceptance does not have a unique definition and that people could refer to the “acceptance concept” with different terms such as *use* (Davis 1989), *adoption* (Rogers 1995), or *persistence* (Tinto 1975).

According to a semantic analysis (Rigotti and Cigada 2004) of the term “acceptance,” we can identify its relevant components, such as *knowledge* and *commitment*, and three main steps of it: a) *preparation*, b) *action/start* and c) *persistence*.

In fact, a common definition of acceptance is “the positive answer to an offer.” One can, for instance, “accept a contract,” or one can “accept a marriage proposal.” In both cases one needs to know well the person s/he is interacting with and the object or the situation s/he is facing. To make the “acceptance” effective, an explicit action is required as a signature or – in the case of marriage – the utterance of “yes.” These actions belong to a particular set of verbal acts called commissive (Austin 1962), which imply a commitment by “who accepts” and presuppose a commitment by “who offers.” The possibility to achieve an objective and the willingness to persist in the action are also implied in the acceptance.

Moreover, referring again to the metaphor of the contract, in pedagogy, it is common to use the concept of “pedagogical/didactical contract” (Baruk 1985; Brousseau 1986; Filloux 1973) to indicate the negotiation, implicit or explicit, of objectives, methods and learning strategies that occurs at the beginning of every learning experience among the different stakeholders (teachers, learners, institutions etc.).

The Map of E-learning Acceptance (MELA)

In this article, a Map of E-learning Acceptance (MELA) is proposed as a synthesis of the research conducted on this issue, as a tool to design the integration of e-learning activities in organizations, and as an interpretation framework of the dropout phenomenon.

The scheme (fig. 2) presents three levels, which are the *phases of the process* of e-learning acceptance, the *relevant variables* and the *fundamental components*.

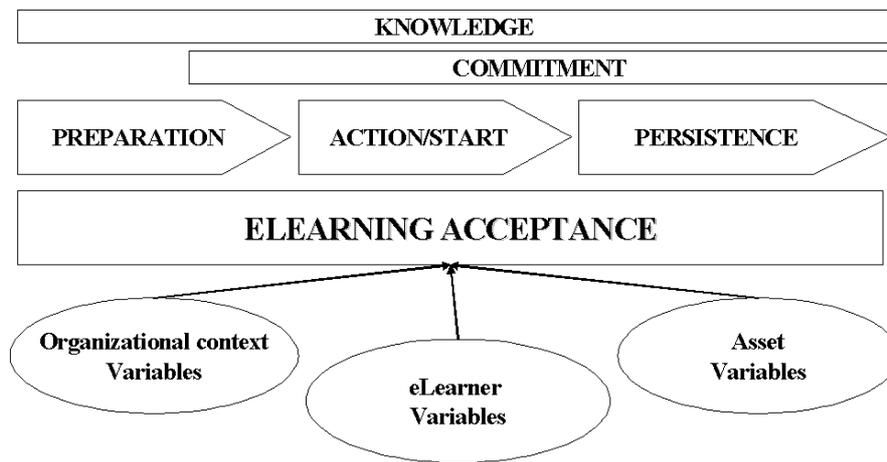


Figure 2: The Map of E-learning Acceptance (MELA).

a) The phases of the process.

Processes' stages and steps found in the literature can be gathered into three macro-phases emerged in the semantic analysis:

- *Preparation*: potential e-learners get information about e-learning activity; they are invited or requested to participate; they learn what e-learning means or remember some previous experiences; they shape their expectations about contents and instructions; they speak about this with colleagues etc.
- *Action/Start*: e-learners enter the online course (in the case of a blended course this could follow a starting presence session). Here they face all the main technical problems that may occur; they can ask for help (technical support), experience the new environment, adapt previous expectations etc.
- *Persistence*: the e-learners' persistence in the course depends mainly on how they judge the experience they are having. It is a continuous cost/benefit decision based on many factors. A healthy commitment,

grounded in the preparation phase, will lead e-learners to the end of the course.

b) Three types of variables.

A set of variables and key determinants are usually listed by authors who have studied innovation, technology and learning acceptance. It is possible to organize them in three general macro-areas of families:

- *E-learner*: several studies have been conducted to identify aptitudes, attitudes and skills of a good e-learner. In the learning research area it has been widely discussed if external factors such as age, gender or the socio-economical background determine or only partially determine learning results. Instead, it has been observed that some capabilities such as time management or digital literacy can be improved over time. Moreover, there are personal attitudes, which could affect learning performance; often the “good e-learner” has been described with a strong and independent personality.

- *Asset*: instructional design studies have found different parameters to ensure the quality of online contents, the organization of activities, and the usability of applications for e-learning. Moreover, technological tools have to fulfill some requirements such as velocity, reliability and respect of the conditions indicated by the theory of the perceived attributes (Rogers 1995). Variables related to an e-learning tool can range from the color of the background, to the accuracy of the bibliography, to the evaluation strategies (online tests, in presence essays etc.), to the offer of social software (chat, forum, whiteboard, instant messaging etc.).

- *Organizational context*: it emerged that the conditions of organizational and institutional context, strongly affect the acceptance of e-learning activities. A relevant element is the motivation of e-learners, which can be increased by the sharing of learning goals and purposes or by an incentive system. Moreover, e-learners’ preparation and what an organization can do to support and promote e-learning activities are crucial elements for acceptance. For example, the type of support provided to e-learners, physical conditions, internal sponsoring, involvement of top-management, introduction of *ad hoc* policies, are some of the variables included in this category.

c) Two main components.

Moreover there are two important components that constantly interact in the process:

- *Knowledge*: it starts forming at the very beginning of the acceptance process, where information and communication flows allow learners to build opinions and expectations about e-learning activities, and grow on the basis of direct experience.
- *Commitment*: motivation and involvement of e-learners start when they have received enough information to express a judgment about activities. It can grow/diminish all over the process being substantial in the decision of persisting or dropping out of an e-learning experience.

In particular, it has to be underlined that communication plays an important role in the promotion of *knowledge* and *commitment*: thus, the importance of the invitation phase in e-learning activities.

During the *preparation* phase, all pieces of information are collected from e-learners through different communication channels. Those can be personal conversations with managers, tutors, teachers, peers, emails, Intranet messages, newsletters and other formal or informal communications that occur in an organizational environment. Some research (Fuller 2000; Masie 2005) shows that better learning results occur when learners are called by their managers and personally invited to join the learning program.

Communication is an important dimension to be considered when an organization is interested in motivating, involving, triggering and preparing e-learners to participate in the best possible way in e-learning activities.

3. Conclusions

Pendulum movements happen quite frequently in the educational arena; a dynamic due to the “obscure” side of the Latin term *ludus*: from *illusion* – entering in a game that tries to substitute reality – up to *delusion* – the rejection of an alternative reality, which has shown to be inadequate and insufficient.

In fact, the communication of e-learning has been often led by marketing messages, offering unbelievable dream scenarios... Let us think, for

example, of the fascinating and quite over-used “learning whenever you want and wherever you want,” which had to leave space for a much less poetic reality: studying during night hours or very early in the morning, or during week-ends... This is a form of study that requires very high levels of motivation and commitment. Dropouts have often turned that claim into “never and nowhere,” or postponed the actual start to an indefinite tomorrow (*non drop-in*)...

Or let us think of astonishing calculations of cost reductions and ROI, which have yielded high costs, disappointments and delusions.

The solution does not rely, we believe, on moving the pendulum in the opposite direction, neither in simple “consolatory” mourning songs – “*as everybody did, we also were wrong, we’ll never touch e-learning again...*” – rather, we need to meet the complexity of e-learning, consider its many aspects and, in particular, its acceptance dimension; a dimension, we hope, this article contributed to providing a better focus and understanding of.

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The Place of Training for the Development of Communities of Practice

by Angelo Benozzo and Claudia Piccardo

1. Introduction

In a recent contribution, where numerous definitions that restore the debate of the last decade in respect to the theories of training that are analyzed, Quaglino (2005, p. 179) delineates the profiles of three approaches to training and distinguishes thus:

1) *Training for competences or for an organization*, thought in relation to referring activities, to *curricula* to be learned and which, therefore, delineates detailed profiles of knowledge, abilities and qualities on which are constructed purposes and objectives of learning, and are modeled training programs and defined didactic methods. It is of a mostly training and instructive character and it is placed in a perspective of the development of human resources or professional qualifications.

2) *Training for a change or within an organization*, planned with the aim to support processes of corporate development. It is conceived, above all, as a moment for a support of cultural and strategic change. It is training with a medium term temporal horizon and which is charged also with the elaboration of the relationship between an individual and an organization, in search of mutual growth possibilities.

3) *Training for personal development or beyond the organization*, the last reference of which is the subject “towards a horizon of full and authentic existence, for alteration of educational demands, for long term paths and trajectories, beyond contents and processes, towards re-appropriation of the individuality of the personal project towards

cultivating oneself, towards knowledge and care, with a perspective of permanence and autonomy”.

This division, in our opinion, does not represent an exhaustive report of the modalities that training can represent, above all, if it has as a reference context on an organization. On the basis of a contribution of Maggi (1991) the action “of training” coincides, from our point of view, with processes of decision and action, putting in existence all those who take care of well-being, of survival and development of an organization. “To train” for us, today, is equivalent to acting organizational because: “the training activity is always an organized activity. It is always a social system, it is an organization comprised in an immensely complex social system” (Maggi, 1991, p. 10). On the basis of these preliminary considerations we propose a fourth approach that we have labeled *training with the organization*, the characteristics of which are thus delineated as follows:

- The *purpose* is the evolution, the increase and the change at the same time of an organization and of a single person, in a hypothesis that is possible for the latter to find support in the process of specification even within a working reality.
- The *objectives* refer to the acquisition of knowledge around the processes of cultural construction, crystallized in time, the models used, the mixed theories and the theories in use.
- The *content* is represented by the processes of action and decision, the working activities of the subjects and the introduced “works” of the individuals in a community of practice, taken in charge in the short, but above all, in the long term.
- The *method* demands the co-construction of learning contexts, emancipated and participated, the fruit of processes of social research and a deep connection between a training professional and numerous corporate actors, placed at different power levels and holding various functions.

It is a modality of conceiving training that, on one side, rediscovered a contribution of the Russian pedagogist Vygotsky (Zucchermaglio, 2002), according to which learning, apart from being a cognitive phenomenon, is

also, and above all, a cultural phenomenon that must be included in social contexts and, on the other side, recovered and valued as an ancient concept: the one of “practical” or “praxis” (Gherardi 2000 a, b).

In the following paragraphs, we will deepen the constructs of the *community of practice*, of *legitimate and peripheral participation* (Lave, Wenger, 1991) and of *positioned curriculum*, central in the theory of learning as a social process (Gherardi, Nicolini, Odella, 1997; 1998). Thanks to these callbacks, we enter into the immense territory of the theories of *corporate learning*, where over the last decade appeared the linguistic artifact the *society of knowledge*, which indicates how contemporary society is globalized through knowledge.

The following considerations will turn out useful for the aim of making explicit exhaustively the idea of *training with the organization*. With these anchorages and in light of presenting a case of *training with the organization*, in the following conclusive pages we will reflect about the space of training for communities of practice and about the creation and spread of knowledge.

2. Learning as legitimate and peripheral participation in a community of practice

The idea of training with the organization presupposes a theory of learning as a social process that introduces a relatively new theoretical and interpretative point of view: the one of the community of practice. Such a construct, born within social psychology, reveals a promising look into the analysis of the processes of learning, thanks to numerous studies and researches (Brown, Duguid, 1991; Lave, Wenger, 1991; Orr, 1995; Wenger, 1998; Gherardi, 2000; Gherardi, Nicolini, 2004), the majority of which stopped on the processes of socialization of *novices*.

A community of practice is a form of sociality generated by practical activities (Gherardi, Nicolini, 2004); it is an aggregation of subjects that can adopt at least two configurations. In the first one, the community coincides with a group of people who work in the same organization and who carry out some activities together. The second refers to a group of individuals who, though operating in different contexts and belonging or not being part of the same occupational group, share working experiences together. In synthesis, a community of practice has characteristics of a set of people, who have constructed a network of relations and who defined, implicitly or explicitly, also the modalities, through which the people work,

act, interact and interpret events. It will not necessarily coincide with a group that possesses a precise formal positioning within an organization.¹ A doctor belongs to a community of practice not because he possesses some professional characteristics or because he carries out his working activity in a predefined place and space (as an example, at a laboratory of a hospital's transfusion center), but because he shares with other professionals an emotional engagement, a tension aimed at "things to do" and addressed by the enterprise which collaborates.

The construct is partially analogous to that one of *corporate culture* (Barley, 1983; Van Maanen and Barley, 1984; Kunda, 1991). What joins them is the emphasis of the importance of the processes of socialization of the new members and the idea of an organization as a cultural artifact, the fruit of negotiations and constructions of meanings. However, the scholars of the occupational cultures, focus attention on the products of the culture

The hypothesis of Zucchermaglio (2002), that we share, is that the community of practice proposes itself as a semantic alternative to a group, that it turns out connoted more modern and positive (values, rituals, myths, symbols and languages), circumscribing them inside a unique organization where they compete to delimit the borders. To make it simpler, these authors pay special attention to community dimensions. Vice versa, the theorists of the community of practice mainly emphasize the importance of "practical" activities, in the first place, the working activities, the meaning of which has been negotiated and shared.²

What the idea of "practical" has allowed us to focus on is that the competences of the individuals are formed and stabilized in virtù of the activities where they participate, of the intense work that they do and sharing of experiences. The "practice" is also described in terms of:

1) Practice as a work, in order to emphasize the transformation processes.

2) Practice as a language, to gather the linguistic elements within a specialistic character that allows the interaction for the development of a working process.

¹ Wenger, in his contribution of 1998, rarely employs the term group in order to designate a community of practice and it is the same in the founding article of Brown and Duguid (1991).

² Another difference refers to the fact that "corporate culture" sometimes can be considered a construct of a more general capacity: a culture can contain a community of practice.

3) Practice as morality, with an aim to emphasize the power of different groups that compete in realization of the process (Ehen, 1988, cited from Gherardi, Nicolini, Odella, 1998, p. 89). We add to this tripartite schema a characteristic fourth one that we define practice as emotional elaboration, neglected by contributions that we have visited, and referring to the emotional dynamics that always accompany and meet the subjects in the development of a working activity and in processes of socialization.

To become part of a community of practice means to become an expert in using a specific technology, not a simple mechanism that transforms an input into an output, but as a part of the working process involving other actors: a participated process. Activities, processes and competences become the patrimony of the community and they are translated in uses and customs which, for those who belong to the group, become understandable: in a simple expression “he has become an expert.” The learning here is not conceived as a transmission of knowledge deposited in texts so that these are read and, in virtue of a memorization process, they are accumulated in mind and they become the patrimony of individuals. Learning is socio-cultural and at the same time is an emotional phenomenon. To participate in the activities of the community is the way to acquire knowledge, to change, to learn in situations where knowledge is not different from doing. As Brown and Digid (1991) proved, learning is not an activity detached from working and organizing; learning is ingrained into the very working process.³ Continuing along these reflections, what appeared also is another hypothesis enclosed in the caption *learning-in-organizing*, which consolidates the idea that “to organize is to learn and that in learning there is an implicit organizing [...] [that is] the knowledge originates mainly from the action and not from the information diffusion or instruction” (Gherardi, Nicolini, 2004, p. 42).

The theorists, who developed the idea of learning as a social-cultural phenomenon within a community of practice, also developed another construct: the idea of *legitimate and peripheral participation* (Lave and Wenger, 1991; Wenger, 1998), which describes the socialization processes in the work of novices. Generally, the new ones are progressively put into contact with work, within intense relationships with other subjects and the

³ But at the same time learning is crossed and covered by strong emotional tensions of which the psychodynamic vision of organizational life has given a total account (Quaglino, 2004) and that these authors, in our opinion neglect.

problems of negotiation of the task to carry out. In particular, the expression *legitimate and peripheral participation* refers to the fact that the novice, when he is familiarized with a community of practice:

- He takes part in working activities at first carrying out simple tasks and gradually more complex ones that confront him with other persons. Such a process strives to construct his identity and in parallel, one of the groups of individuals, adding credit to the construction and negotiation of meanings.
- He is, consensually admitted to the community. His presence is not brought into question; he is accepted by the structures and the mechanisms of power existence. He possesses, that is to say, a social legitimacy.
- He takes part on a path with different degrees of intentionality and discretion. This is the meaning intended to be transmitted by the “peripheral” term. The novice arrives in time and gradually begins to cover central roles and then more complex ones, beginning from marginal positions (peripheral): thus passing from the condition of a novice to that of an expert, veteran.
- He comes into contact with an idiosyncratic language through which he comprises and learns how to execute the job, which are the behaviors deemed appropriate and with the social and power structure he must face.

The access of the novice will be always generative. It is probable that, while being a path, architecture, a pre-established or implicit plot, that addresses the entrance of the novice, the acceptance of new members, on one side, he perpetuates those old structures and, on the other, he introduces elements of innovation and chances that modify and model the community.

In other words, it seems that the novice enters in contact with a *learned curriculum* in the terms of Lave and Wenger (1991) or a *positioned curriculum*, using the expression proposed by Gherardi, Nicolini and Odella (1998), in order to try to explain peculiar circumstance in which the newly arrived novice finds himself in, when he is immersed in a new working situation and where there are proposed opportunities of learning: from observing the job of a head, to carrying out simple tasks, comprising

the working process in holistic terms to the execution of banal activities to the appearance of work (to answer the telephone, to deliver mail or to make photocopies), however transmit the social structure of the community. The idea of a positioned curriculum represents exactly this phase of the organizational socialization during which novices are offered *positioning learning opportunities*, that is to say, specificities of the space and the time. In the moment when the novice becomes the expert, but he changes an organization, he will meet another positioning curriculum and he will find new conditions of legitimate and peripheral participation.

In light of these conceptual references we now pass on to illustrate an initiative of planning training, used to redesign the process of learning into a process of art (Cook, Yanow, 1991; Colombo, 2002). We will, in what is to come, deal with the encounter between two communities of practice, on one side, that one of the specialists of training and, on the other, the one of “experienced at work,” who works together with the aim to redefine the architecture of a course. The activity led by the two communities, adopting the illustrated key, can be interpreted as an attempt to design and to improve a process of socialization of “novices.”

3. Training practices: an intervention of training planning

During a training intervention in an Italian theater we were invited to face a course, realized within the community of practice, constituted by the costume designers of the organization in question (Piccardo, Benozzo, 2004; Benozzo, Piccardo, 2005 in course of publication). The intervention started with a requirement to redesign a biennial course born in the seventies with a minimum of two, to a maximum of five students. The purpose of the course, as seen in the documents of the initial presentation, was to supply the participants with the competences demanded by the theatrical costume designers. These people analyze and interpret the little figures proposed by a host costume designer, generally a professional, chosen by a director and not belonging to the organizational structure. The costume designers of the theater are put into service of the external costume designer and prepare some samples for elaboration of the costume or decorations and, successively, collaborate in the realization of those parts of the costume that necessitate the detailed elaboration chosen among all those proposals, for example a color shade, a decoration or an aging process. These people can also be asked to create new materials (generally produced thanks to combining various types of material) or jewels.

The redesign process

The redesign process began with a precise request expressed by the theatrical costume designers (and the teacher of the course), who were deeply unsatisfied with the reached knowledge level of the students. They found out that at the end of the two years of the course the students proved to be slow, not independent and not mastering numerous artistic techniques of elaboration of the costume that they observed and experienced thanks to the training experience. This coincided with two years of apprenticeship, a “bath” in the practice, which to their eyes revealed numerous limits. The situation, moreover, had created tensions and a sense of frustration among students and costume designers, so that for years to come they put in question the continuation of the experience.

Beginning with understanding the situation, we started to collaborate with the community of practice which constituted of five costume designers (and teachers) progressively constructing an intervention the objectives of which were: 1) analyzing the culture of training, the practices of “doing training,” put in existence consciously or not 2) favoring a cultural change of the learning model of the theater costume designer profession; 3) creating an occasion for reflection and confrontation for the costume designers by whom we were asked for attention, engagement and involvement; 4) favoring, thanks to the process of redesign inspired from the principles of the Participatory Action Research (Reason, Bradbury, 2001), the empowerment of the natives.

In order to reach these objectives we undertook a process of participating research that utilized the following methods: 1) meeting with the costume designers similar to a *focus group*, that had as an aim, surveying the working process of the costume designer. The work done by the community, then, was regularly transcribed in always commented minutes with the people who participated in the reunions; 2) analysis of the content of the documents that illustrated the experience of the training course for costume designers; 3) observation in the field or of the training (long time intervals during which the students worked within the unit costumes) or in rare occasions of the training in the classroom; 4) ethnographic interviews with former participants of the course and the costume designers (and teacher), analyzed with the method of the Grounded Theory (Glaser and Strauss, 1967); p. 5) writing an auto-ethnography (Ellis, Bockner, 2000) by the training professionals, given

back (read and commented) to the protagonists of the event. Operating in this direction, we obtained four main results, hereby illustrated, that widened the training horizon and allowed us to delineate the profile of *training with the organization* that we intended to support.

The main results of the intervention

The first result concerns the shared description of the various activities (from the delivery of the little figures to coming out on a scene) that carry to the realization of a specific elaboration performed in a theater costume and of relative competences necessary in order to carry out in an expert way each one of them. With the five costume designers we analyzed how, beginning from a hand-made design by an external costume designer, how the clothes to be worn on stage were created and, as the show is concluded, how they proceeded with the techniques of washing and storing them. The production process, that represents the sequence of work and identifies ten steps that involve the community of practice, was reconstructed. For each one of them, the main activities were also made explicit, let alone the involved actors (the other professionals of the units of the theater). Through this way of proceeding numerous documents (materials used in the redesign, the typical artifacts of the formation) were created, employed in the encounter of successive planning and the costume designers revealed that it was a meaningful path in the first place for them. In fact, although all had worked together more than ten years, during the job with the training professionals, they realized that they have different ways of conceiving, thinking and proceeding in the work and referring to the other professional figures of reference. Some, as an example, in the phase of analysis of the little figures, defined themselves as “demystifying anarchists” while others, to the contrary, proposed the metaphor of the “faithful and dumb servant.”

After this first moment of “working on the work” the five costume designers were asked individually to exert an ulterior effort of reflection in order to indicate the competences (knowledge, abilities and qualities) necessary to complete each of the ten phases of the production process. We asked them to rethink about the professional history that marked them during these years, in order to understand what happened when they had learned something new. The interest was turned to explore which were the ways in order to support and to facilitate the learning that “worked in the past” and that could be re-proposed in the new project of the course.

Another important result, achieved on the basis of the analysis that was allowed to focus on the competences of the costume designers, is represented by a selection of the characteristic elements of an art work, which requires: 1) a planning and creation process; 2) the use of techniques which are transmissible, institutionalized but not standardized and employed in a virtuous way; 3) the production of an artifact that can be commercialized and that is realized on the basis of precise aesthetic criteria; 4) having interiorized the idea of being at the service of someone else. In the event taken under investigation, the customers whom the theater costume designers addressed were, according to the phases of the laid out working process, the external costume designer who collaborated with the director, in charge of the couture or an artist (as an example an actor, a singer or a dancer).

Thanks to this analysis and the reconstruction of the history of the course it was, then, possible to achieve the third result referring to the recovery of the historical roots and the description of the learning model of this community. We have understood and made explicit to our interlocutors that what was told by the theater workers or the former participants of the course coincided with the instruction method of the artisan corporations of the Middle Age and the handicraft shops of the Renaissance Age. In those times the transmission of the abilities took place within the walls of a shop, where the master directly showed the techniques that had to be used, while keeping faith in the maxim *discere laborando*. The school coincided with work, with the production in a shop and the young person grew by observing, imitating and often stealing the secrets of the craft. People we listened to and observed in existence described and acted as a model of learning situated towards the novices (the students), centered on seeing, trying to reproduce what someone else had realized as an example. Moreover, it was a learning model that privileged the aesthetic one and the visual and olfactory perception. The students were dipped in a “maze of auditory, visual, olfactory, tactile and sonorous feelings” (Martin, 2002) that were a learning source. As an example, during an interview, a costume designer asserted that he learned with his eyes. The affirmation “I learn with my eyes” expressed the progression to become an expert through observation. The looking was constantly concentrated and, progressively, he trained himself to understand the result of a technique, the aesthetic result of a decision that enclosed technical and artistic elements. To watch, to see and to understand what happened in a tailor’s laboratory (where the costumes were decorated) or at the stage (in innumerable tests) was a

learning vehicle. These premises allowed strengthening a typical organizational belief which we met often: “in order to learn it is necessary to practice!” that justified also the need of these people who “always wanted to belong to a community” in order to learn, attributing less value to the traditional learning process that takes place during a training path in a classroom.

Finally, the fourth result obtained through the redesign process has been the definition of the architecture of the new course for the costume designer. The project, that represented the product, also, of the work in the community of practice, was based on an articulated profile of competences, constructed. Thanks to the shared definition of the production process and the transmitted idea, that training would have been centered on the learning of the work processes that carry on to the creation of a costume. The training objectives of the course allowed individualization of five areas of learning: historical, organizational, technical-artistic and tailoring of the corporate behavior. Spaces for experiencing all were previewed with the numerous artistic techniques used within the laboratory for elaboration of a costume: aging of the costume, embroidery and false embroidery, coloring and creation of woven materials. The course was divided into moments of theoretical and practical training, in exercise and training directly at the work place. In brief, it was operated with an aim to evolve the learning model centered on a maxim of *discere laborando*, trying, and at the same time, to make it evolve the belief that “in order to learn it is necessary to practice.” This described experience can be interpreted as a history of learning of a community of practice, which interlaces two processes: the one of participation and reification (Wenger, 1998). The occasion to think about the course was a moment when the community, for the first time in its history, reflected about itself. Through the reconstruction of a working process it characterized the necessary competences for each phase of the process and it was interrogated on the modalities of learning, starting from the reflection on its own ways to learn. Also the memories recalled in reconstructing the origins of the course often tell individual histories, of people who often constructed their road in solitude, as if in the past there had never been moments of participation and sharing.

The community of practice, moreover, performed the work of planning, to merit the production of an artifact, the plan of the new course that also contained the “Attentions during the training path.” The new plan, in its materiality and objectivity was the tangible result of a learning history. It was a history that could have been forgotten or remembered, and if remembered, it would shape the future.

Planning the training has been operating therefore at four distinguished levels:

1. Making explicit the working process of the subjects. From our point of view, in fact, to make an analysis of needs and to plan training, it does not mean only “to see what is lacking,” of what the subjects are devoid of and consequently to articulate a training objective. The planning involves the in-depth understanding of what is possessed, “which are their own treasures,” and also what could be renounced.

2. Reconstructing the history of learning, shared within the community of practice, through a reflection on the working experience, the actual and past jobs, searching ways with which this work has been learned. The fundamental questions posed to five workers were: “What were the moments when you learned? What happened when you learned and what were the conditions that allowed the emergence of an episode of learning?”

3. Demanding a high degree of involvement coupled with the wish to spend oneself in first person, to assume the responsibility of what has gone to construct the future. The presence of external subjects, the training professionals, who did not belong to the specific community that was to be studied, facilitated the reconstruction of the learning processes.

4. Proposing to take part in the direction to make this model evolve, foreseeing the interlacing between moments of ‘bathing in the practice’ (also in order to not renounce the belief “in order to learn it is necessary to practice”) and traditional training (lessons and practices) a new way to support the growth of the resources. The experience of reconstructing the process of a theater costume production, for the redesign of the course, contributed also to the evolution of the identity of the subjects that belonged to this community of practice. If on one side is the individual and collective reflection, self-observation and sharing, it focused and supported the identity of the costume designer, because it allowed him to make explicit, to himself and to others, what were his tasks, with who he refers to, which activities he had to carry to an end and with which competences to operate, and then on the other side, it opened the road to the assumption of being more aware of an identity partially different, that of the master, the teacher. The identity of the subjects becomes rich when the new training course had begun and it had come to light that the topic of being at the same time a worker (costume designer) and a teacher⁴ was possible.

⁴ The topic of the identity of theater worker and at the same time master-teacher is emerged from the result of the search that led to the term of the first new edition of the course in order to estimate the learning of the students.

For these people, the stronger identity, we could say the principal one, was that of the costume designer which interlaced the weaker one, the teacher. The case that we illustrated exemplifies the idea of *training with the organization*, the task of which is not the one of transferring knowledge within a classroom, but an intervention aimed at questioning the processes of social construction of the truth, in this working case, in which it becomes a part. An intervention “that pokes the nose” in the course of history that brought the subject and its organization to what they are” (Converso, Piccardo, 2003, p. 141) and in the tissue of practical discoveries, learned and passed on, around which the form of sociality that we call the community of practice was constructed. It is the training that tends to favor the process of externalization of knowledge (Figure 1), from tacit to explicit, thus described by Nonaka and Takeuchi (1995, p. 64): “the externalization is a process of articulation of the tacit knowledge in explicit concepts. It is the quintessence of the process of creation of the knowledge through which the tacit knowledge becomes explicit assuming the form of metaphors, analogies, concepts and hypothesis or models. When we try to make a concept from an image, we express its essence through the language - writing is an action of conversion of the tacit knowledge into articulate knowledge [fig1]”.

	TACIT KNOWLEDGE	to	EXPLICIT KNOWLEDGE
TACIT KNOWLEDGE	Socialization		Externalization
From			
EXPLICIT KNOWLEDGE	Internalization		Combination

Figure 1 - The process of knowledge management.

4. Conclusive reflections: *training with the organization* for the promotion of learning in the communities of practice

Bringing to mind the theoretical references of the theory of situated learning and the experience that we hereby illustrated allow us to go back

to our starting point, and to deepen the topic of the space for the training of the communities of practice. To imagine a space means to trace the borders of our object and therefore we will now try to better trace the characteristics of the approach called *training with the organization* which was already pointed out in the opening.

Before proceeding, there is still a last consideration. To make *training with the organization* means to imagine projects that test the work, which questions the praxes. It will be a work on the work, a practical one on the practical one, a path of training (Lipari, 2002) declined through flexible modalities to realize a tightened integration, sometimes a coincidence, between training in a classroom and experiences of the subjects. It is in this sense that training is approached and sometimes coincides - paradoxically we are now invading another territory - with plans of Organizational Development, that is to say, with planned actions to support the change processes. In the illustrated event we have, in fact, worked on the processes of: 1) development of the resources; 2) production; 3) construction of identity. If the idea of *training with the organization* is conceived and assumed as a participation proposal, the remaining approaches (*in and for the organization*) difficultly turn out separable and distinguishable. In this perspective, that intends using training as a lever for organizational change (*training for the organization*) or for the development of personnel (*training in the organization*), to train, to organize and to learn, does overlap. Such characteristics tend to reduce the distance between the four classic phases of the training process: analysis of the needs, planning, participation and assessment of the results. The research on the needs of the production processes, in fact, is at the same time a training moment, in the sense of elaboration of his own working experience, thus like that of planning, for imprinting a new course into the praxis. At the same time it will be also the adequacy assessment of those practices regarding the context.

The way that we foresee is surely not simple. We wish that new research could supply ulterior material with respect to the learning processes. The students of the communities of practice, primarily, placed the accent on legitimate and peripheral participation, that is, on the training of the novices, analyzing, thanks to the ethnographic method, the processes of socialization in the work of the midshipman (Hutchins, 1993), tailors and butchers (Lave and Wenger, 1991), repairers of photocopiers (1996) and assistants in shipyards (Gherardi, Nicolini, 2001). Other professions requiring a high degree of specialization and qualification seem still

insufficiently inquired in, which is always approached through the practice of legitimate and peripheral participation, for example that of doctors. We also think that it has still not been taken into consideration, with due attention, the legitimate participation (but not more peripheral), that is, that of those who work for years within a community, being for them possible (and wished for) to still learn. What processes of knowledge construction do they put into existence, once they learn a profession and cover central positions inside the community? How do they unlearn? The proposal of *training with the organization* hereby described and conjugated along a profile of six adjectives, will be able to perhaps support answering these questions.

Proximal: This characteristic is developed on two fronts. On one side the training will be marked by an action for contact (Korzybski, 1958, cited from Cooper and Law, 1995), by a vicinity to the other, this can as an example happen in appreciation to the promotion of experiences of ethnographic search in the working contexts of participants (Piccardo, Benozzo, 1996). The analysis of the situated processes of learning, that is, of the ways with which the knowledge is produced, transmitted, conserved and transformed in ways to operate and to act, can be usefully carried out through the ethnographic observation of the practical ones of the individuals. Such researches will supply elements in support of the work on planning the training and the indication of lines for the improvement of the learning processes. From the other side, the training will be contextual to the working activity; that will happen in attached spatial environments, if not quite coinciding with the working places, neither in the traditional classrooms any more so then in their being neutral and aseptic communicating estrangement and abstractness.

Clinic: We refer to the re-discovery of the authentic Lewinian tradition of which, too often we state the absence of it in the training contexts. A proximal training cannot be but close to the problems and offer an answer of “treatment” and “therapy,” on one side, but it will be also disposed to the mercy and to listening, on the other. In recalling the contribution of Lewin we want also to emphasize the necessity of a training that searches with people, recovering here all the traditions of the research-action brought up-to-date in its different manifestations of *participatory action research*, rather than of *collaborative action research* (Reason, Bradbury, 2001). A process of knowledge co-construction, aimed at the emancipation and the involvement of the subjects (all the actors of the training), “to validate” the

local knowledge taken into the light, based on the fact that people are helped in giving a useful meaning to their experience.

Novellistic: This adjective emphasizes two dimensions. First of all, it has a methodological character, and the reference here is to histories, to the collection of histories on the subjects, with modality in order to work with the participants (Piccardo, 1998). The second one refers to the content of histories, because they are depositors of the wisdom just as of disturbance, of offenses, implicit or explicit that will constitute an object in which inquiring and reflecting is carried out. The narration coincides with the possibility of finding a sense, of giving a meaning and making order in the organizational experience of the subjects.

Reflecting: The narration will be the condition of the reflectivity in its various articulations of: 1) reflection on the action, that is retrospective thought separated from the training action; 2) reflection in the action, critical and generative conscience of new possibilities of action contextually; 3) critical reflection or *practical reflectivity* according to the definition of Cunliffe and Easterby-Smith (2004), referred to as understanding of the ways with which we construct our identity and the truth.⁵

Trustful: Confidence will be granted to the subjects because of the ability to know and to be able to take part in the working processes is attributed to them. Trustful but also reliable, facing the training professionals. This is the indispensable element for the construction of a fecund land for dialogue and comparison.

Recognizing: Finally, the recall is taking place, which is typical for a participated research. It is the process through which the often unconnected fragments of organizational life are brought back and offered (given back) in the form of interpretations, descriptions, observations with the aim to attribute an order, a new meaning to the experience. If the restitution is effective, then it will be in a position to mobilize the energies and to support the re-appropriation of its own being in the practical community and to contribute to its construction.

⁵ The critical reflectivity can happen during or after the action and is an exquisitely social process (Cunliffe and Easterby-Smith, 2004).

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Learning for Leadership: The “Engineering” and “Clinical” Approaches

by Gianpiero Petriglieri and Jack Denfeld Wood

1. Beneath the merchandising of leadership

Leadership makes money. Consider the economic situation over the past several years: despite a severe business downturn and a reduced demand for general management programs, the demand for leadership training has grown markedly. Why? Some argue that empowerment is “in” and autocracy is “out,” that enlightened management has grudgingly acknowledged leadership as part of everyone’s job, and that it no longer views leadership as the preserve of the executive suite. Others contend that the leadership trend is simply the most recent management fad. In either case, companies flood business school classrooms with managers seeking “leadership” — but what is it that they are really looking for? Overtly, the purpose of leadership training is the acquisition of tools and techniques to facilitate corporate goals. Covertly, the appeal of leadership training appears to be coming from somewhere else.

The dismantling of formal corporate structures and the disappearance of job stability has left today’s manager with an acute sense of anxiety and insecurity.¹ Traditional hierarchies, stable organizations, and life-long employment, however unfashionable and inefficient for the pace of modern business, used to satisfy the human need for structure² and provided a sense of security. The psychological function of much of organizational structure, as scholars at the British Tavistock Institute have pointed out, is to provide social defenses against unavoidable feelings of anxiety.³ The “contract”

¹ Miller, E.J. (1999) Dependency, Alienation, or Partnership? The changing relatedness of the individual to the enterprise. In: French, R. and Vince, R. *Group Relations, Management and Organization*. Oxford, UK: Oxford University Press. 98-111.

² Berne (1964) *Games People Play*. New York: Grove Press.

³ Jaques, E. (1953) On the dynamics of social structure. *Human Relations*, 6 (1), 3-24.
Menzies, I.E.P. (1960) A case-study in the functioning of social systems as a defense against anxiety. *Human Relations*, 13 (1), 95-121.

was clear: individuals joining an organization relinquished some of their freedom in exchange for protection. No longer is this true. When we ask executives what they want from a leadership program — what they are *really* looking for — the answer is unequivocal: tools to influence and manipulate others in order to regain some degree of control, over their direct reports, their bosses, their organizations, their careers and their lives.⁴

2. Looking for a leader

Every group, no matter how large, needs leadership and hope for a better future. Ambitious leaders owe their ascension less to their desire for power and visibility than to their ability to capitalize on their followers' needs for reassurance and to create a vaguely plausible plan of action rather than one that reflects an objective appraisal of the situation at hand.⁵

Social scientists and depth psychologists have long known that anxiety and uncertainty drive groups to select leaders who provide a simple and reassuring picture of reality, and within that “reality,” a simple vision of a goal and the means for achieving it. To remain in power, leaders and followers collude in denying the “chaotic complexity in which so much of human life is lived.”⁶ They insulate themselves from the dissonance of discordant views, in the process concealing or suppressing alternative perceptions of reality. Reality, however, has a habit of imposing itself on even the most creative collective fictions. Few leaders, especially in difficult historical moments, have built a fiction solid enough to last, and so they inevitably are found inadequate. When the gap between the shared fiction and the complexity of the real world becomes too wide, leaders fall from grace. At that point, their followers seldom engage in serious collective soul-searching about what went wrong, and instead take the simple way out — adopting a new leader who offers an alternative fiction. The “rise and fall of leaders” follows an archetypal template that repeats itself, from dependency and deification to disillusionment, demonization, and finally, replacement with few exceptions, of the superfluous.

⁴ Hirschhorn, L. (1988) *The workplace within: psychodynamics of organizational life*. Cambridge, MA: MIT Press.

⁵ Le Bon, G. (2002) *The crowd: a study of the popular mind*. Mineola, NY: Dover Publications. Original work published 1895; Freud, S. (1959) *Group psychology and the analysis of the ego*. London: W.W. Norton & Co.; Bion, W.R. (1961) *Experiences in groups and other papers*. London: Tavistock Publications.

⁶ Rice, A.K. (1999) *Learning for leadership. Interpersonal and intergroup relations*. London: Karnac books. Original work published 1965. P. 87.

If we temporarily lose our fascination with great leaders, we can never abandon our deep-seated need for the shared fictions that help us deal with the complexity and distress of contemporary life. Today, the idea of “leadership” has replaced the search for “great leaders” and “great corporations” that are no longer viewed as dependable or as offering sufficient protection against the anxiety of modern economic life.⁷ Managers feel increasingly vulnerable and seek “leadership skills” as a new means of protection. In other words, they are looking for hope — in the “leadership market,” and there is no shortage of dealers in hope.

Recently, the Sales Vice-President of a privately held conglomerate that distributes a wildly successful weight-loss product in the U.S. put it this way:

When I train sales-people, I say to them, ‘Do you know what people are calling you for? It isn’t the pill. They are calling you for hope. That is really what they want from you.’⁸

The company that produces the pill has no offices and no labs. Its name was created by the conglomerate’s marketing team because it sounded scientific⁹. It is not about testing chemicals or even about selling products that work — it is about marketing hope.

From a psychological standpoint, the leading industry also markets hope. It caters to the human tendency to invest in gifted individuals and seek magical solutions that offer the illusion that we can control our anxieties and our destiny. This tendency is the driver of the leading industry’s main “product lines” — the glorification of celebrity Chief Executives, the merchandising of “Great Leader” books, and the teaching of leadership “models” and “toolkits.”¹⁰ Merchandising leadership includes mass market “autobiographies,” one-minute cookbooks, leadership fables, inspirational lectures, and fun and games outdoor exercises of various sorts.¹¹ These products are seductive — and remarkably simplistic.

⁷ Gemmill, G., Oakley, J. (1992) Leadership: An alienating social myth? *Human Relations*, 45 (2), 113-129.

⁸ Specter, M. (2004) Miracle in a bottle. *The New Yorker*. February 2, 2004. 64-75. P. 66.

⁹ Specter, M. (2004) *Op. Cit.* P. 69.

¹⁰ Krantz, J., Gilmore, T. (1989) The splitting of leadership and management as a social defense. *Human Relations*, 43 (2), 183-204.

¹¹ Wood J.D., Petriglieri G. (2004) The Merchandising of Leadership. In Chowdhury S. (Ed.) *Next Generation Business Handbook*. Hoboken, NJ: John Wiley & Sons.

If managers seek to protect themselves against emotional uncertainty, corporations, in turn, try to manage their employees' turmoil by outsourcing the responsibility for emotional support to executive "coaches" and leadership programs. Once a kind of surrogate mother, organizations now hire business schools to function as surrogate nannies.

Today's business schools tackle the market demand for 'leadership programs' — to help manage the pressing emotional demands of their participants — with one of two approaches: engineering or clinical. In the engineering case, leadership faculty deploy an array of tools and techniques to fortify executives' defenses, so that their anxiety and emotional stress can be held at bay and their company's primary task can be accomplished. In the clinical case, leadership faculty provide a space where emotions can be explored and integrated, so that anxious energy can be transformed into energy for individual learning and personal and professional development. Both approaches are useful, but they are based on radically different psychological assumptions about human development.

3. The engineering approach to leadership training

According to Edgar Schein's pioneering work on corporate cultures, the basic assumptions of the "engineering culture" are the following: engineers are proactively optimistic and assume that they can and should master nature. They are stimulated by puzzles and problems. They are pragmatic perfectionists who prefer "people free" solutions; their ideal world is one of elegant machines and processes working in perfect precision and harmony without human intervention. "Engineers" are concerned with safety, and over-design for it; and they prefer linear, quantitative thinking with simple cause-and-effect solutions.¹² While the majority of management professors might not have engineering degrees, their approach to research and teaching leadership works from the same set of assumptions:

1) What makes us tick

The engineering approach to leadership training rests heavily on a rational and cognitive view. Leadership, in this view, is a collection of individual attributes or a set of skills; it is modern and changes with culture,

¹² Schein, E.H. (1996) *Three cultures of management: the key to organizational learning*. *Sloan Management Review*, Fall Issue, 9-20. P. 14.

century and civilization. Support for the engineering approach stems from the assumptions embedded in basic economics and cognitive psychology: people tend to behave in ways they associate with rewards, and avoid behaving in ways they associate with punishments. For example, if research indicated that certain behaviors would enhance their career advancement prospects, managers would naturally be motivated to learn and apply those behaviors to get ahead.

2) Learning to lead

Within this framework, leadership skills can be identified and learned through practice and emulation. The engineering approach describes a set of desirable leadership behaviors, and provides the related theories, models and tools to “train” participants through study, imitation, practice and feedback. For the individual, the effort to change and improve needs to be sustained by a conscious resolution to keep applying oneself and improving.

3) The value of self-reflection

The engineering approach encourages self-reflection for *diagnostic* purposes — to compare and contrast one’s self with desired (or “correct”) behaviors and with others. Self-reflection clarifies individual beliefs and values, increases awareness of one’s dominant leadership “style,” assesses one’s key strengths and weaknesses, focuses on desired areas for change and identifies potential internal and external obstacles to that change. After this initial “gap-analysis,” self-reflection becomes just a part of the review and feedback process as executives practice and gains proficiency in applying the necessary leadership “tools.” Executives are encouraged to reflect before and after they act, both to respond to their present context appropriately and to spot potential areas for further improvement.

4) The use of theory

Engineering-minded management faculty value theories, more in solving practical problems than as explanations of reality. For them, theory tends to be “normative” and “prescriptive” — the former in the sense that “this is the way things are” and the latter as in “this is what you should do about it.” For example, the recognition that storytelling and “mythic themes” inspire people more than spreadsheets and bar charts, led a popular screen-

writer to dispense advice on how to construct management stories with a mythological flavour.¹³

Similarly, a finding that many “accomplished leaders” suffered a major failure early in their career prompted some academics to suggest that young and arrogant executives with promising career prospects ought to be denied a promotion, in order to self-effacing them and pre-empt some “future failure” — an application of a “fail now, succeed later” strategy.¹⁴

5) Learning methods

Leadership faculty does every effort to maximize the *impact* of their courses — they have to be entertaining, inspirational and motivating. A central space is given to motivational speeches of former athletes and retired CEOs, breath-taking views of mountain-top walks, the thrill of helicopter rides, camps in the wilderness and similar amenities.

Role-playing and experiential activities provide a means to measure relative “success” and practice “new ways of behaving.” The emphasis is on the emulation of others. Smoothly enacted planned behavioral routines and the attempt to keep distressing feelings hidden and under control is viewed as a clear sign of progress. The quicker one appears to change, the better.

6) Faculty attitude

The engineering approach underpins the overwhelming majority of leadership programs. The underlying issue, of course, is control. Ideally, there is a tool for every problem, and the more tools one masters, the more control one should attain. The more control one believes one has, the more reassured both professor and participant should feel.

7) Managers’ reactions

Most managers exposed to this type of leadership training first experience great enthusiasm, only to lapse into disappointment later. Once back home, they sometimes feel worse than they did before — if nothing has

¹³ McKee, R. (2003) *Storytelling that moves people*. *Harvard Business Review*, June 2003, 51-55.

¹⁴ Bunker, K.A., Kram, K.E., Ting, S. (2002) *The Young and the clueless*. *Harvard Business Review*, March 2002, 80-87.

fundamentally changed despite their expensive training, they think something must be wrong with them. Nothing is, in our view, the reason for this mood-reversal. It is the same as the reason for the programs' initial popularity. The 'engineering' approach promises to get rid participants and faculty of discomfort. Convincingly, but only for a moment, it tries to leave the unconscious and emotional factors behind.

The engineering approach will always be needed and it will always have a central place in management education. Executives cannot hope to exercise leadership effectively without a grasp of their organization's primary task, and a solid base of knowledge and skill, both technical and strategic. When thoughtfully done, the engineering approach works brilliantly to enhance technical skills, even very complex ones, such as flying fighter aircraft, performing surgery or playing a good game of golf. These endeavors require dedicated study, strong focus, constant practice, good feedback and frequent performance review. Leadership, however, is not quite like a perfect golf swing.

4. The clinical approach to leadership development

By employing the word "clinical," we are not invoking emotionless doctors in white coats scribbling on clipboards — quite the opposite. The focus of the clinical approach is our humanity in all its emotional complexity. While the engineering approach focuses on assessment and judgment as a means for improvement, and provides strategies, techniques and tools to cope with, and control, behavior, the clinical approach focuses on exploring and deepening our working knowledge of natural human behavior so as to permit more autonomous, better informed, decisions.¹⁵ Working with a clinical approach means using *both* accumulated knowledge and present experience to understand what's *really* going on, at a given moment, in the social system in which we find ourselves — or that we are trying to change. It involves addressing situations facing us without excessive reliance on prescribed procedure and technique, working

¹⁵ Miller, E.J. (1993) Values and concepts. In: *From dependency to autonomy: studies in organization and change*. London: Free Association Books. 3-23; Campbell Quick, James; Gavin Johanne H. (interviewers) (2000) The next frontier: Edgar Schein on organizational therapy. *Academy of Management Executive*, 14 (1), 31-49; Van de Loo, Erik (interviewer) (2000) The clinical paradigm: Manfred Kets de Vries's reflections on Organizational therapy. An Interview by Eric van de Loo. *European Management Journal*, 18 (1), 2-22; Kets de Vries, M. Organizations on the Couch: A Clinical Perspective on Organizational Dynamics. *European Management Journal*, 22 (2), 183-200.

collaboratively with colleagues and clients, and considering the influence of elusive, emotional and unconscious aspects of human behavior.

1) What makes us tick

Individuals and groups are not simply manipulated by rewards and punishments presented by others in an overt social context. Covert unconscious forces play a central role in motivating individual and collective behavior. Leadership in this view is an interaction of psychological “energy” that includes both domains — conscious and unconscious — within any social system. Learning to recognize, understand, and work with these unconscious influences is the only way to avoid being inadvertently surprised, disturbed or unwittingly controlled by them.

2) Learning to lead

Leadership is a universal human phenomenon, and its essence has not changed over millennia. The leadership *training* of the engineering approach is not the same as leadership *development* of the clinical one. Within a clinical framework, managers are not complex machines in need of fixing and upgrading — they are human beings naturally seeking growth and integration. *Training* is about acquiring and practicing something new. *Development* is about exploring and dealing with things that we already have with us — growth works “from the inside out.” The integration of one’s “thinking” and “feeling,” for example, is an invaluable instrument for leading responsibly.

Leadership can’t be taught, but the capacity to lead can be learned and developed — less from academic study and imitation than from the experience of leading and following. Meaningful behavioral learning occurs only as a result of a strongly felt need and a personal decision. It is impossible to coerce somebody into leading. It would be equally impossible to develop leadership if executives are not truly allowed to be curious, experiment and make mistakes — i.e., if they are prevented from taking the lead in their own development.

3) The value of self-reflection

The clinical approach encourages the manager to reflect *as* they act, to develop what we call *reflective spontaneity* — the capacity to be one’s self and use one’s experience as data while engaged in action. To do so, this approach provides a space where one can explore and experiment in a relatively safe environment. One can learn, for example, that difficult feelings might not be as harmful as we often believe — on the contrary, they provide us with invaluable information. We measure success by the capacity to let ourselves experience, and then make sense of, an increasingly full range of emotions, behaviors, and reactions.

4) Use of theories

The clinical approach is more “pragmatic” and “descriptive” than it is normative and prescriptive. Rather than state, “this is what you should do,” it suggests that “this is how to understand what is happening, and here are some choices about what to do.” It uses whatever theory in a given case might provide a reasonable framework for understanding the meaning of people’s actions, so that one can choose how to act — or whether to act at all.

5) Learning methods

The clinical approach does not rely on inspiring stories or the emulation of celebrity executives for reassurance and comfort. Rather than practicing “new behaviors” and acquiring control tools, executives are encouraged to be themselves, experience what is happening and reflect upon the complex and conflicting emotions that they usually avoid. Role-plays and experiential activities are not used to demonstrate proficiency in imitating “how to do it right” but as data collection opportunities for later reflection on “how you do it.” The more naturally and spontaneously participants behave, the more learning material emerges. However, this is not a prescription for their behavior. Reluctance and defensiveness are as natural and spontaneous as are openness and enthusiasm. As long as one is willing to explore what provokes one’s behavior, one can learn from the program and further one’s leadership development.

6) Faculty attitude

The clinical approach strives to bring the unconscious back into play in the corporate classroom, in an effort to enhance the relevance, depth and meaning of leadership education. A central assumption is that the *primary responsibility* to learn is with the client. Whereas the engineering approach is centered on its models, the clinical approach is centered on its clients and it does not assume that the faculty knows best what managers should know in order to exercise leadership. Clinically-minded management faculty tend to be more curious about what participants will learn within the context provided. Their approach fosters interdependence between participant and faculty, but it is the participants who remain firmly in charge of their learning.

7) Managers' reactions

Unlike those exposed to the engineering approach, who often move from enthusiasm to disappointment, participants in a clinical program usually go through a different sequence — from an initial mixture of anxiety, suspicion and impatience with the faculty for lack of both clear-cut solutions and directive teaching, through a feeling of relief for not having to “fake it,” to a realization that they are already equipped to exercise leadership responsibly and wisely, and already have a sense of how to lead others in ways that increase health and foster growth for all concerned.

5. Which unconscious?

Some detractors of the clinical approach reject the concept of the unconscious altogether. Other critics, while not denying the unconscious, argue that working with it might open up “a can of worms” that is best left to the psychotherapist. This discomfort argues Insead’s psychoanalyst Manfred Kets de Vries, is a defense against the idea that our behavior will always elude our best intentions — the existence of an active unconscious sweeps away the illusion of being fully in control.¹⁶ However, depictions of the unconscious as a hidden puppeteer lends it a somewhat sinister

¹⁶ Coutu, D.L. (2004) Putting Leaders on the couch. A conversation with Manfred Kets de Vries. *Harvard Business Review*. January 2004, 64-71.

character that keeps us imprisoned in a repetitive loop of childhood behavioral patterns.¹⁷

Those either hostile or sympathetic to the reality of the unconscious both tend to pathologise it. We have come to see it differently. Our experience has made us somewhat skeptical of such a gloomy view. We put less emphasis on the unconscious as an obstacle that constantly threatens us than as a source of richness and vitality.

The unconscious that animates human life is not just the Freudian container of repressed memories and irrational wishes. To be sure, some psychic wounds are always present when one explores an individual's psychology, but the unconscious with which we are mostly concerned is the Jungian one of collective images and living archetypes. If we are scuba diving in the images of the unconscious, it is less to uncover emotional shipwrecks and more to explore the natural aquatic flora and fauna hidden from the surface. We assume that the enrichment of individual and collective experience comes from seriously engaging and playing with image and metaphor. Our goal is neither to harness unconscious processes to gain influence and control over the external environment, nor even to reduce immediate distress. Instead, it is to experience and become more familiar with archetypal images and patterns of behavior in an effort to gain a measure of lasting integration with our deeper selves — so that we can lead from our psychological center.

6. Working with feelings

Whereas both the engineering and clinical approaches acknowledge the primary importance of emotion in the exercise of leadership, their attitudes towards emotions are radically different. The engineering approach is geared to assess and adjust to a norm; the clinical approach is geared to understanding and developing uniquely individual capabilities.

A concrete example can illustrate the differences between the two approaches. Not long ago, during the debriefing of an inter-group competition in an IMD leadership program, one of the participants expressed extreme disappointment and anger at the behavior of the leader of another group, who had publicly dismissed and humiliated him. The

¹⁷ Kets de Vries, M.F.R. (1994) *The leadership mystique*. *Academy of Management Executive*, 8 (3), 73-89.

participant candidly admitted that he felt mounting aggression towards the leader, which reminded him of how he felt immediately before a fistfight, years before.

Working from an engineering approach, one of our colleagues instantly remarked, “Aggression is a primitive instinct...an animal reaction.” His air of disapproval was proportionate to his poise and self-righteousness. He then launched into a dual attempt to “help” the upset manager understand how “dysfunctional” his reaction was, and to “coach” him to explore “more appropriate” ways to respond. Shamed and disappointed with himself the participant nodded and listened dispiritedly to the defensive strategies that he should employ to suppress his aggressive impulses. From an engineering standpoint, the participant had exhibited a personal inadequacy that he needed to overcome through hard work, so that it wouldn’t happen again.

In contrast, from a clinical standpoint, a great learning opportunity was slipping by. The participant’s verbal expression of deeply rooted anger was an invitation for an extended exploration of authentic feelings, a chance to learn how to understand and resourcefully manage the complexity of all our reactions to everyday organizational behavior.

The clinical response was: “Aggression has helped humans survive for millennia, and I doubt we’ll eradicate it from our nature in a couple of weeks. So let’s try to understand *why* it manifested itself *on this particular occasion...*” As we de-pathologised aggressive feelings and legitimized their exploration, we were able to examine what happened. Archaic impulses have their own integrity and can be used diagnostically to reveal what is really going on within and between groups. An initial angry reaction is a natural response to being treated unfairly. In this case, its emergence was a strong signal that the interaction between the groups had turned into a confrontation. The anger wasn’t one participant’s personal failure, but rather a clue to managing an unconscious “power play” at work in the larger social system. In the debriefing, the class experimented with how to express feelings, reflect on them and wonder about their purpose at the same time. Later, another participant applied the same skill in a similarly heated exchange by pausing and asking herself, “I am noticing myself getting aggressive. I wonder if this negotiation is becoming a fight. Why would that be?” — a transaction that neither required suppression of her feelings, nor an attack on another individual, nor placing a fake smile on one’s face.

7. Conclusion

More than ever before, executives turn to schools of business administration for help in dealing with the mounting pressures of contemporary managerial life. The difficulty of modern corporations to satisfy dependency needs, and the failure of publicly acclaimed leaders to hold at bay the discomfort of reality, has led managers to invest their desires for reassurance, direction and structure in the acquisition of “leadership skills.” In the midst of overwhelming uncertainty, they turn to “leadership training” to regain some control and restore hope. The promise of hope abounds in the leadership mass market. However, the selling of “leadership as a happy pill” by educational and consulting organizations is questionable at best and irresponsible at worst.

Taken together, the engineering approach’s lure of reassurance, reliance on crude models for emulation and illusion of control undermine the goal of developing deeper leadership skills. Easy reassurance and superficial morale boosts are counterproductive when it comes to serious personal development and lasting behavioral change. If we are to provide conditions that help executives develop the capacity to lead effectively and responsibly in turbulent times, such simplistic expedients are best avoided.

Leadership is a *social-psychological* phenomenon, and its roots reach deeply into individual and collective psychological terrain. Meaningful leadership development — whether individual or organizational—requires a deeper and more fundamental approach than is usually employed in university classrooms and corporate training centers. It needs to incorporate difficult emotions and unconscious forces, and provide a safe space for their exploration and integration. Uncertainty, discomfort and anxiety can be unpleasant but they are necessary and useful; the effort to control or suppress them, via the engineering approach, is a diversion from genuine development.

In order to foster leadership development, the clinical approach creates a safe space to take risks and switches focus from action to reflection, from short-term reassurance to long-term change, from emulation to experimentation, and from self-control to self-discovery. A shift in attitude from avoidance and rationalization to engagement and integration of emotions requires a willingness to accept them, recognize their value and explore their implications — for the individual, the group and the

organization. With a more generous acceptance, ambivalent feelings are useful and reliable aids for leadership development. Welcoming their exploration is not easy. Nor is it meant to be. But it can be immensely rewarding.

Key Take-aways

- An “engineering” approach to leadership training relies on teaching individuals with tools and techniques for influencing others and controlling individual behavior.
 - The engineering approach gives the illusion of control but is ultimately ineffective in developing deeper leadership skills.
 - A “clinical” approach focuses on leadership *development*, where emotions and the unconscious aspects of human behavior are explored and integrated.
 - Meaningful leadership development is a process of self-discovery and development and requires elements such as risk-taking, reflection, recognition and acceptance of one’s own feelings.
 - Those exposed to a clinical program are more likely to develop authentic and responsible leadership.

Table 1
An engineering” versus clinical” approach to leadership development.

Engineering Approach	Clinical Approach
Prescriptive — normative use of theories.	Descriptive — pragmatic use of theories.
Focuses primarily on visible behavior and external reality.	Focuses primarily on the interaction between external and internal reality.
Works well for technical and cognitive skills.	Works well for behavioral and emotional skills.
Orientation is on “performance.”	Orientation is on “meaning.”
Focus is on adding skills.	Focus is on making sense of things.
Primary reliance on <i>training</i> cognitive and rational analytical skills.	Primary reliance on <i>development</i> and integration of rational and emotional capacities.
Individuals are motivated by external rewards and punishments.	Individuals are motivated by instinctual drives and socialized desires.
Operating metaphor is electro-mechanical: the individual is like a networked computer.	Operating metaphor is ecological: the individual is a living organism in a fluid system.
One “upgrades” by fixing or adding.	One “upgrades” by exploring and integrating.
Learning is a teaching process that happens from the “outside in.”	Learning is a developmental process that happens from the “inside out.”
Encourages emulation of role models and smoother enactment of “appropriate” feelings and behaviors.	Encourages “reflective spontaneity” and familiarity with a range of feelings and behaviors.
Leaves the unconscious out of the dialogue.	Includes the unconscious as part of the dialogue.
Pathologises “bad” emotions.	Accepts all emotions as normal.
Learning is the acquisition and application of objective tools.	Learning is the recognition and calibration of the “self-as-instrument.”
Aim is “progressive” and future-oriented.	Aim is the integration of past, present and future.
Leadership is a collection of individual attributes or a set of skills.	Leadership is an interaction of psychological “energy” that occurs within a larger social system.
Leadership is modern and changes with culture, century and civilization.	Leadership is a timeless and universal human phenomenon.
Leadership can be taught and imitated — process is “teacher-centric.”	Leadership can be learned and developed—process is “learner-centric.”

Learning and Knowledge Sharing in Virtual 3D Environments: A Classification of Collaboration Patterns in Second Life

by Martin J. Eppler and Andreas Schmeil

1. Introduction

Modern organizations have realized that information and knowledge is essential for their success. The increasing use of electronic information systems in work processes is the foundation of the development of the concept of organization memory and the driving motor in the research field of knowledge management.

Tomek states that the information capturing part of a knowledge management system should include a Collaborative Virtual Environment (CVE) (Tomek, 01). He defines a CVE as a software environment that creates a configurable universe which emulates a number of serviceable aspects of physical reality, such as the concept of space, movable objects, navigation, and communication between (representations of) humans. The most relevant of the several reasons Tomek gives for his claim are:

- The emulation of physical topology as a natural metaphor, a prerequisite for successful groupware.
- CVE allows for organizing both people and information spatially.
- Awareness of co-workers, usage policies for tools and objects is enhanced.

- Allocated space can be separated to allow privacy and group restrictions.
- Computer-mediated communication between disjointed places provides a good basis for recording in context (as all communication can be logged instantly).

Collaborative Virtual Environments can thus enhance sharing and integration of knowledge. We agree on this point and further believe that the use of a three-dimensional CVE can upgrade current knowledge management even more substantially, also in situations that go beyond visualizing data or reviewing spatial models in applications like architecture and design. Our systematic description and classification of group interaction scripts in 3D collaborative environments aims to help facilitate and enhance team collaboration and knowledge management by providing reusable patterns that leverage the ample possibilities only three-dimensional virtual environments offer.

So far it is unclear what enhancements are needed to make a CVE a really good environment for serious distributed collaborations (Bainbridge, 07). Among other benefits, a classification like the one we propose in this chapter could form a first step in the process of formalizing collaboration in virtual environments by providing an overview of so far implemented patterns, could help in the research regarding theories that underlie 3D interaction for collaboration, and could initiate a collection of reusable best practice patterns and templates.

The remainder of this chapter starts with giving reasons why 3D collaborative environments in general and the online virtual world Second Life in particular can improve collaboration, knowledge sharing and learning. In section 3 we then first discuss previous work that relates to our proposal of a formalization of 3D collaboration patterns. In succession to that we introduce our systematic description structure, show it applied on four model key patterns, and propose our classification. Section 4 presents conclusions we could draw, suggests implications of the presented work, and outlines some directions of our future work.

2. Why Second Life?

The vague definition of CVE in a general sense comprises systems spanning from text-based environments (Hayes, 98) through environments with simple two-dimensional graphical representations (Vitero, 08) to systems based on Virtual Reality (VR). As mentioned in stating our motivation, our research focuses on the latter, regarding solely three-dimensional graphical CVE that are rich in representation and support embodied avatars and 3D objects in spatial relation to each other. Some major advantages in comparison to the former types of CVE are given in the following section; after that, the characteristics of Second Life that distinguish this online virtual world from other 3D collaborative virtual environments.

2.1. 3D collaborative virtual environments

Compared to text-based and two-dimensional ‘flat’ graphical CVE, an environment fully based on three dimensions can enhance the functionality in a number of respects. Most importantly, 3D environments provide ways to experience and view information that is *dynamic and interactive* (Krange, 02). A more accurate *approximation of physical reality* can be provided, which can ease first access to the system and improve overall usability. In the same sense, a “feeling of immersion, a perceptual and psychological sense of *being in the digital environment*” is evoked (McLellan, 96). Also the feeling of *presence* is enhanced, by the sense of orientation and position in space. People and information can be *organized* in a more natural way in three dimensions, also making available more real space instead of small corners on flat screens. McLellan states that three-dimensional CVE are proclaimed to be appropriate for model building and problem solving (McLellan, 96).

Casanueva et al. presented experiment results showing that the *awareness* of collaborators and their actions can be significantly enhanced by more realistic representations of persons (Casanueva, 01). Furthermore, *usage policies* for tools and objects can be illustrated more clearly and in a more natural way employing the theory of affordances (Norman, 88). And finally, the level of *privacy* of allocated spaces is continuously adjustable in a natural way (cmp. the office design metaphor: open office vs. combo office vs. private office).

A disadvantage of three-dimensional virtual environments mentioned in the literature describes the opinion that 3D models are more difficult to use than 2D data or text and could thus distract a user from communication. We take this issue into account by regarding the design effort of the particular collaboration patterns in our classification. This is explained in more detail in section 4. A differentiation in defining CVE is made concerning the accessibility of 3D virtual environments. Immersive collaborative VR systems are in most cases locally installed, while some desktop-based three-dimensional CVE are online virtual worlds with persistent world states, and are thus accessible virtually around the clock (with regards to system downtime). The fact that all data is being held online is an important distinction to other CVE, yet the acronym MUVE has been established for these *online* Multi-User Virtual Environments.

For these said reasons, we also believe that 3D collaborative environments help make sense of complex data, help develop a common understanding in a collaborative mindset and engage people through appealing and memorable experiences. The latter can lead to an increased involvement, can focus attention of the participants and provide a good basis for creativity.

2.2. Relevant characteristics of second life

Second Life is an online Multi-User Virtual Environment (MUVE), i.e. a special type of CVE (Second Life, 08). Using viewer software, everyone can access this virtual world, from anywhere, at any time. The status of the world is persistent; no data is lost, nor has massive data to be uploaded or downloaded at login. Users are represented by extremely customizable avatars that have a unique name and can resemble strong individual identities. Targeting businesses and entrepreneurs, Second Life is often advertised as “a place where there are no real-world manufacturing or service costs and few barriers to what’s possible.” Second Life was launched in 2003. After a massive hype in 2007, the statistics of April 2008 state that over 13 million users had registered in total, and about 1 million users had signed in during the preceding 60 days (SL Stats, 08). Characteristics of SL relevant for knowledge management and collaboration are:

- ❖ Content is produced by residents of the world; developers provide powerful tools designed to be used by everyone (Ondrejka, 08).

- ❖ In-world spaces are thus easily reconfigurable and extendable at any time.
- ❖ Avatars can present valuable identity information solely by appearance.
- ❖ Group and private chat functionality, as well as object sharing provide inherent collaboration possibilities.

For education research as well as education practice, Second Life has become a rich and promising new environment. Learners can be addressed in an entirely novel way, and modern education paradigms and learning theories as the following have been implemented successfully:

- ❖ Situated learning – learners are immersed in the context environment where they study (Hayes, 06).
- ❖ Constructivist learning – playing or creating objects and in so creating correlations and knowledge from current structures is inherent in Second Life (Antonacci, 05).
- ❖ Social/collaborative learning – inherent collaboration between avatars.
- ❖ Resource-based learning – a variety of virtual objects and human resources are possible in Second Life.
- ❖ Problem-based learning – solving of problems collaboratively with several avatars is supported in Second Life (PREVIEW, 08).

3. Patterns for knowledge sharing and learning

A pattern is a description of a known solution to a specific type of problem (Gottesdiener, 01). The theory of patterns, originally developed for architecture (Alexander, 99), but in practice more commonly used in software development (Gamma, 95), can be usefully applied to the domains of collaboration and learning.

Collaboration patterns can be understood in terms of how users act in dialogues and in the usage of artifacts (Krange, 02). Gottesdiener defines them as techniques, behaviors and activities for people who share a common goal of working together in a group (Gottesdiener, 01). For our proposed formalization and classification of different collaboration situations, through the use of patterns (cmp. (Zigurs, 08)), we use this definition and extend it by the requirements for the creation of the virtual experience. This is explained in more detail in section 3.2.

The education community has long identified three-dimensional CVE and Second Life in particular as a novel environment for education. As stated in the previous section, especially modern learning and teaching paradigms have been successfully implemented. As of now (2008), a number of conferences on education in Second Life have emerged, such as SLEDcc, Metaverse08, the Second Life Education Workshop, at SLCC. Also, there are some very active mailing lists, of which the most popular is SLED (SLED mailing list, 08). Baggetun et al. composed a good introduction to patterns for collaborative learning, including remarks on pattern mining (Baggetun et al., 2004). For an explanation of our use and description of learning patterns, see section 3.3.

We believe that the pattern concept offers the right type of granularity and reproducibility to capture and *envision* collaboration and learning possibilities in Second Life. This seems feasible as the pattern approach has been applied to similar endeavors such as e-learning (Caeiro et al., 2004, and Retalis et al., 2006), web design and programming.

3.1. Related work

The MG Taylor Corporation developed a modeling language, introducing patterns for collaboration and organization in enterprises (MGTaylor, 96). Whyte et al. investigates visual practices – practices around visual materials, i.e. artifacts that embody the current status of a design or act as mediating devices to develop understanding (Whyte, 07). Visual materials play a significant role in knowledge practices within organizations. Krange investigated collaboration patterns for learning in Second Life, but only to a certain extent (Krange, 02). Since that research strongly focused on learning, i.e. on knowledge construction, the analysis of the interrelations between actors, especially vocal interaction were investigated.

3.2. Description of collaboration patterns

In the subsequent portion, we introduce a systematic description structure which we developed as a means to formalize collaboration patterns in 3D virtual environments. We applied this description structure on the various patterns that emerged in our research in Second Life. To exemplify, this chapter presents in detail the descriptions of two key collaboration patterns and two key learning patterns of the 13 patterns we found and classified. Figure 1 shows two screenshots of within Second Life: a virtual meeting (a) and a virtual design studio (b). The latter facilitates the collaborative design and implementation of functionality of a door with a security panel – rapid prototyping at its best: door and panel can be tested already during the creation and design process.



Table 1 shows our description structure, applied on the two shown collaboration patterns. We describe such a pattern among other criteria through its usage situation, i.e. the context in which the virtual environment is used, the aim of the usage, the level of intensity of the participants' interaction as well as common actions of the avatars, what artifacts are required in general, risks or caveats of the pattern and the design effort: the amount of effort required to develop the environment for the collaboration pattern.

(a)

(b)

Figure 1: Screenshots of (a) a Virtual Meeting and (b) a Virtual Design Studio in Second Life.

Pattern Name	Virtual Meeting	Virtual Design Studio
Usage Situations	Project meeting, team meeting	Product development/design, architectural design
Objective	Knowledge transfer and decision making	Design of a physical (or virtual) object
# Participants	< 15	< 5
Interaction Intensity	Low to medium	High
Typical Duration	Up to 1 hour	Up to 4 hours
Required Artifacts	Places to sit, information displays	Designing tools, sketching tools, plans
Avatar Actions	Chatting, showing	Modeling, designing, sketching
Risks	Not making use of 3D features	Design influenced by limited functionality of design studio
Design Effort	Medium: room design and projections	Very high: design tools, sketching tools; interaction design

Table 1: Description structure for collaboration patterns in Second Life, applied to two example patterns.

3.3. Description of learning patterns

Figure 2 shows screenshots of two exemplary learning patterns, a scavenger hunt (a) and a role play (b). In a scavenger hunt, groups of users follow a track comprised of several locations with learning content on their way through a virtual world. Each location of knowledge in the hunt contains one or more hints on how to find the next spot. In a well designed scavenger hunt, the search for the locations itself is also informal learning, designed e.g. as riddles that have to be solved by working together as a group. The role play pattern however provides an opportunity to immerse oneself in historic periods of time and play historic characters. Real historic

events can be replicated or imaginary get-togethers can be arranged; also political role plays are imaginable, with learners acting as if they were the particular politicians they play. Table 2 shows our description structure applied to these two patterns, whereby here the usage motives are of an educational nature.



Figure 2: Screenshots of (a) a Scavenger Hunt (from) and (b) educational Role Play in Second Life.

Pattern Name	Scavenger Hunt (Virtual Quest)	Role Play
Usage Situations	Learn spatially distributed content	Experience a period of history, while acting as historic characters
Objective	Informal learning: creating knowledge by finding learning content	Informal learning: experience a historic period, learn about historic or political persons
# Participants	< 5 in group	< 10
Interaction Intensity	Low to medium	High
Typical Duration	Up to 2 hours	Up to 2 hours

Required Artifacts	Learning content, hints	Scene, costumes, artifacts
Avatar Actions	Interacting with environment, navigating	Talking (also monologues), moving, gesticulating
Risks	Getting lost, neglecting the learning content	Not rightly playing the particular historic character.
Design Effort	Low to medium: learning content design, hints design and placement	Medium: scenography, animations

Table 2: Description structure for learning patterns in Second Life, applied to two example patterns.

3.4. A classification of learning and collaboration patterns

We propose a classification of collaboration and learning patterns in 3D virtual environments by arranging them in two dimensions according to their design effort and their 3D added value. By design effort we mean the amount of work that is necessary to stage the particular collaboration pattern; 3D added value can be seen as a compound measurement comprising the increase in efficiency, cost, and quality of the collaboration and its outcomes or quality of learning and its learning outcomes, for learning patterns. We chose these dimensions to put into relation the effort of designing a virtual 3D experience with the outcome gained from it. The design effort could be gauged in measuring the time and manpower required to prepare the collaboration setting and functionality. In the final setting this is expressed by the array of interaction functions and the quantity of sophisticated interactive objects that were created.

The compound axis of 3D added value, however, is more complex to measure. To position the patterns in the diagram in figure 3 we looked at the added value in terms of how the spatial character can give additional information or hints, e.g. is it possible to remember locations, offices or people and find them even without any names, just by coming back to the place. Other forms of 3D added value would be the obvious benefit of

seeing 3D data in three dimensions, the generation of an additional communication layer by moving around with avatars, and the very important characteristic of being immersed in a virtual world. All these interpretations of 3D added value and thus the compound axis should not be understood as measurable and comparable quantitative values, but as tendencies. Especially in this early stage of research, both measurements are operationalized qualitatively.

Choosing these criteria allows us to distinguish real value adding collaboration and learning patterns from merely cosmetic ones. The principal research methods used are participant observation in Second Life and subsequent classification and documentation. The classification showing the first 13 emergent patterns is shown in figure 3. Elliptic elements in the figure make clear that there can be different occurrences of one pattern. In fact, most ellipses could span across the whole diagram, but for readability we chose to depict their most common use and thus keep the ellipses within a certain size range. Ellipses with dotted outlines resemble learning patterns; the ones with straight outlines show collaboration patterns.

To exemplify the two axes, the upper extreme in added value would be a collaboration pattern that is time-efficient (e.g. product modeling and reviewing/testing at the same time), saves costs (e.g. in physical prototype production) and can result in a higher quality (by e.g. seeing a product in its designated usage context), like the earlier described *Virtual Design Studio* pattern. The design effort in this case is high, due to the necessary a-priori implementation of design and modeling functionalities and tools.

The *Virtual Workplace* pattern describes the mirroring of ongoing work and workplaces in the real world into the CVE, e.g. casting the computer screens of employees while they are working (called ‘screencasting’) onto walls or other in-world projections. Co-workers can thus get an overview of what everybody is currently working on by wandering through the virtual workplace and can give help in particular cases. Another example pattern of collaborative work is *Knowledge Map Co-Construction*. Collaborators construct and modify a knowledge map in the CVE. The 3D added value here is based around collaborative interaction as well as viewing and editing multiple designs of a knowledge map in context. Obviously, many of the classified patterns share the fact that putting more design effort into the collaboration pattern leads to more added value; this can be seen both

by the orientation of some ellipses from the left-lower corner to the right-upper corner and by the concentration of the patterns on the diagonal between said corners in the diagram.

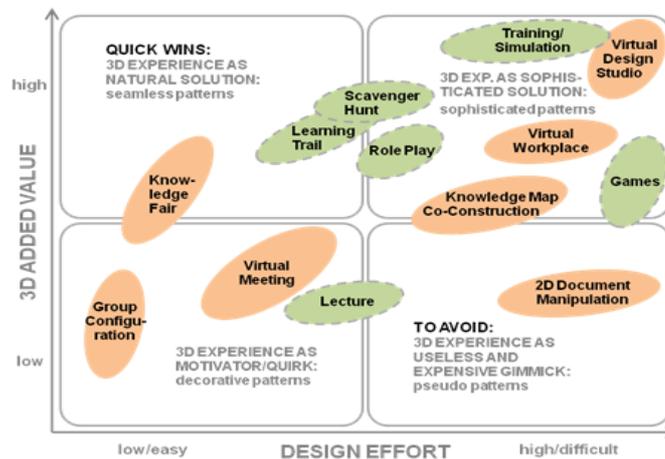


Figure 3: A classification of collaboration patterns and learning patterns by design effort and 3D added value.

For the learning patterns, the most sophisticated one is most likely to be *Training/Simulation*, which might also be the most widely used 3D interaction pattern. It is used in a broad range, spanning from the training of employees to operate machines or vehicles (or planes), through architectural simulations, combat training, the simulation of and training for emergency situations, to the treatment of phobias by systematic desensitization, where patients are put into controlled fear situations. The design effort, if sophisticated virtual objects and interfaces are required, ranges from medium, focusing more on collaboration and avatars to high.

Games are more and more used for education, with collaboration often playing a big role. One major argument for using 3D virtual environments and games for education is that today's youth should be addressed by settings familiar to them, rather than only confronted with traditional learning methods and materials. *Role Playing* can be seen as a special kind of educational game. This earlier described pattern gives the opportunity to immerse in historic or political settings and lets the learners experience circumstances and personated characters. Collaboratively they learn from each other. The earlier described *Scavenger Hunt* is, also, another form of

informal learning, where learners have to find items and thus pick up learning content in a playing way. A *Learning Trail* is a means for providing stepwise knowledge acquisition by positioning objects of any complexity as learning content along a trail in the virtual world. People share and perceive common interests implicitly by meeting in front of the same objects. This concept of premeditated serendipity is also applied in the *Knowledge Fair* pattern, which differs from the learning trail in terms of time scheduling. Knowledge fair is an event, while a learning trail is more of a persistent exposition. The two patterns are different also in terms of complexity of the presented objects, as at knowledge fairs mostly simple elements like posters and video/slideshow presentations are on display. We called this class, which comprises 3D experiences as a natural solution to problems, “Quick Wins” to emphasize the great 3D added value compared to a rather low designing effort required.

Descending the axis of 3D added value, three patterns emerged that use the 3D experience primarily as a means for motivating collaborators to participate and for higher engagement; we called them “decorative patterns.” The *Virtual Meeting* pattern in the simplest form merely constitutes the staging of a meeting room where collaborators can chat and talk to each other and hold presentations. Also in this case, as illustrated in figure 3, adding more functionality to get a higher added value comes with an increase in implementation effort. The *Lecture* learning pattern seeks to describe all settings that include a lecturer and an audience. Collaboration is implemented in group discussions and the possible collaborative work on a learning object. The *Group Configuration* pattern comprises all group activities that follow the “voting by feet” principle, i.e. using localization, navigation and other spatial cues as an indication of personal preference. For example, a group of people can divide into disjointed subgroups for voting or to answer a question; the results and tendencies are visualized.

An example of a 3D experience as a useless and expensive gimmick we have come across is the creation and editing of a PowerPoint presentation on a Second Life collaborative design screen. In the classification this is represented by the pseudo pattern *2D Document Manipulation*. The complex user interface of enabling several people to work on a 2D document together could be done easily and more conveniently in a 2D collaborative environment, for example in Google Docs (GoogleDocs, 08).

4. Guidelines for the use and deployment of Second Life

If you think about creating a collaboration space or learning environment in a 3D virtual environment like Second Life, we believe it is wise to consider our following compilation of reflective questions, in order to avoid creating an experience that is not worth the effort (and the money). In the end, we consider a 3D experience worthwhile if it could be positioned on or above the diagonal from the lower left to the upper right corner in our presented classification diagram. If you can answer yes to one or more of the following questions, your plan of creating a 3D space might be worth the effort:

- Does my intended 3D experience harness the spatial character of the 3D environment to help users remember locations in order to find spots repeatedly where they have been to?
- Does it make use of the additional communication layer that arises by using avatar movement and positioning, or by using gestures?
- Can the immersion in a 3D environment improve the interaction/experience that is intended for the users?
- Do three-dimensional objects play a role in the setting, so viewing or manipulating them in a 3D space brings a clear benefit?
- Is the target group for using my intended 3D space ready for it, i.e. would the users understand how to use it without feeling too intimidated?

The following questions help to reflect on how the 3D experience should be designed and created:

- Do I want to develop the 3D experience internally or should I contract outside specialists for the job (depending on the available time and know-how and the required development effort of the environment)?
- Do I want to include the users in the design or creation of the 3D experience?

- Should we work in a consortium with partners who have similar needs or do we require an individual solution?
- Can we make sure that our solution is scalable and easily modifiable to meet future training and collaboration needs or changes in the relevant content?

5. Conclusions and future work

The presented classification should sensitize designers and users to the fact that not all collaboration and learning scenarios envisioned for use in Second Life may generate the added value that the amount of effort put in might promise. The classification can furthermore be used to empirically test which features lead to high-value patterns and which quadrant patterns are used in which constellations or for which motives. As such the current classification is subject to on-going revisions. It is early work; scientific proof is still to be developed. Nevertheless already its current form can help researchers, designers and practitioners to assess a 3D collaboration or learning setting in terms of its scope and benefits.

Further steps will include the definition of additional patterns, different classification approaches, and also the development of well-grounded guidelines for the creation of effective experiences for virtual environments. Future work could furthermore include an experimental comparison of collaboration tasks in three-dimensional CVE against corresponding tasks in text-based CVE and real-life collaboration, which could be evaluated by performance. Furthermore, to go deeper into collaboration, investigating the question of which theories help to explain 3D interaction for collaboration and learning would be useful and interesting; for example, the actor-network theory, Gibson's theory of affordances, and the cognitive scaffolding theory might be applied to 3D environments.

Our research has focused on Second Life so far because of its availability, the great opportunity to conduct research due to a huge number of events and participants, and its convenience of use, but we are not excluding other virtual worlds and collaborative online environments.

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Why Knowledge Exchange Occurs: The Role of Social Networks, Homophily and Proximity

by Gabriele Gabrielli, Silvia Profili, Roberto Dandi , and Mario Losito¹

1. Introduction

An aspect of working relations that remains problematic is the exchange of knowledge between members of an organization. There is an increasing need for organizations that want to succeed in today's competitive environment to develop a virtuous circle of cooperation and internal collaboration that goes beyond the prescribed "fordist" job description to increase the efficiency of the organization (Rico et al., 2008; Grandi and Tagliaventi, 2003). The opportunity to benefit from "emerging" and spontaneous coordination mechanisms between players within the organization allows individual contributions to be combined in a more effective manner, maximizing the final output (Oh, Chung and Labianca, 2004; Burt, 2004; Reagans, Zuckerman and McEvily, 2004). While the expected benefits of knowledge exchange are clear for organizations (key skills are spread, there is no "reinventing of the wheel", problems are resolved quicker, the quality of products/services improves in tandem with customer satisfaction), the motivations that prompt individuals to exchange knowledge within the organization, however, are less studied. The fact that there are many knowledge exchange projects that do not succeed, calls for an analysis that is more focused on the motivations that prompt members of an organization to exchange knowledge and also the factors that may

¹ An earlier version of this work was presented at the 8th Workshop of *Docenti e dei Ricercatori di Organizzazione Aziendale*, on "Work relations and organizational forms", held in Reggio Emilia (Italy) on the 7th and 8th of February 2007. Although this study is the result of a joint collaboration, sections 1 and 8 can be attributed to Gabriele Gabrielli, sections 6.2 and 7 to Silvia Profili; sections 2, 4 and 6.1 to Roberto Dandi; and sections 3 and 5 to Mario Losito.

impede this choice (Gherardi, 2003). The need for an empirical study to be carried out in order to illustrate the process of cooperation between members of an organization is therefore substantial (Smith, Carroll and Ashford, 1995).

Literature on knowledge management was initially focused on the study of appropriate technologies for supporting knowledge exchange. It was only afterwards that some authors decided to shift the emphasis onto incentives for establishing inter-personal exchange relations; however the motivation behind these collaborations was rarely taken into account during knowledge management studies (Andriessen, 2006). More recently, Social Network Analysis scholars (Contractor and Monge, 2002; Monge and Contractor, 2003; Borgatti and Cross, 2003; Wong, 2007, to name but a few) have begun to apply their analytical tools and theories to the study of these problems.

In order to explain the motivations behind knowledge exchange in a knowledge-intensive organization, this work focuses on network analysis theories. The study, in addition to testing network analysis theories, also applies to relational methodology. The main advantage of this approach stems from the consideration that knowledge exchange is an inherently relational phenomenon that requires interaction between players (Hansen, 1999; Reagans and McEvily, 2003). A methodology that focuses on the study of relations is therefore potentially very effective for the study of knowledge exchange processes. A second and equally important advantage is the stringency of network analysis as a quantitative method. Based on a tradition of research that is now well-established, this effectively exists alongside traditional methods of investigation in many areas of social and organizational studies.

The idea behind this contribution is to enhance certain potential implications of work outcomes on organizational development and, in particular, on the management of people in knowledge-intensive organizations. In this way we aim to make certain areas of managerial practice more perceptible, particularly in the design of systems and tools used for human resources management, where relational methodology can be profitably used.

2. Theoretical framework

Work is becoming increasingly interdependent within organizations, requiring staff to interact and collaborate. When tasks are highly interdependent, members wish to share the work (information, knowledge and resources) in order to coordinate their individual inputs, and ultimately maximize the end result (Rico et al., 2008). This especially occurs in organizations that are particularly knowledge-intensive, in which the individual members' tasks are strongly correlated.

In order to analyze the emergence and the unfolding of interpersonal interactions, it must be viewed from the correct angle. Social Network Analysis, rather than analyzing individual behavior, focuses on the interaction and connection between players, who form the analytical framework (Wasserman and Faust, 1994).

In network analysis literature, various theories have been developed that explain the motivation behind connecting with other people (for an exhaustive review of the social network-based theoretical mechanisms: Monge and Contractor, 2003). The social embeddedness theory (Granovetter, 1985), for example, argues that individual behavior depends on pre-existing social structures and on established communication relations. In the case of knowledge exchange, individual A will be inclined to share knowledge with individual B, if B is an acquaintance or friend of A. According to this theory, an individual will also be more inclined to ask others for advice, information, and knowledge if the individual already has a relationship with these people through admiration, work or friendship. This mechanism is found in the so-called *communities of practice* (Lave and Wenger, 1991; Wenger, 1998), or groups of individuals "*who share a concern or a passion for something they do and learn how to do it better as they interact regularly*" (Wenger, 2006). In essence, the structure of informal and communication relations influences how the knowledge exchange network is structured.

Homophily is another "classic" approach explaining the motivation behind creating a working relationship (Monge and Contractor, 2003). According to this approach, people are more inclined to establish social relations with people who are similar to them in terms of social attributes such as age, education, gender (Ibarra, 1992), especially if these similarities are strong. As summarized by McPherson et al. (2001: 416), homophily

theories suggest that "*contact between similar people occurs at a higher rate than among dissimilar people.*"

Individuals who are similar because of age, gender, seniority within the organization, position within the organization, education, personality or social class, tend to relate with each other (in terms of friendship, communication, but also in knowledge exchange) more than they would do with individuals to whom they are dissimilar. An example of this is provided by the *Social Identity Theory* (Ashforth and Mael, 1989), which suggests that people categorize others on the basis of salient similarities (or dissimilarities) to themselves to activate pro-social behavior towards the in-group and anti-social behavior towards the out-group.

In terms of knowledge exchange, this phenomenon also reflects the fact that the trading of knowledge is more immediate and easier among people who have the same professional background and can therefore easily transfer or learn specific informative content. Homophily (particularly if it concerns similarities in activities and types of knowledge) is also one of the main communities of practice mechanisms, as knowledge exchange takes place between people with similar skills and who perform similar roles, i.e. the same "practice" (Lave and Wenger, 1991; Wenger, 1998).

Another theory (Monge and Contractor, 2003) that explains the motivation behind creating social relations (particularly friendships and communication relations) is that of *physical proximity* (Borgatti and Cross, 2003; Kraut et al., 2002). Several studies (Allen, 1977; Oldham and Brass, 1979; Monge et al., 1985) have long shown that the physical structure of work spaces affect communication within a group and between different groups in the same organization. Pinto et al. (1993) have confirmed that physical proximity has a significant impact on the cooperation between team members involved in cross-functional projects, and as such, on the outcome of the project. The basic idea is that sharing a physical work space facilitates interaction (even accidental) and exchange, because it increases the probability of communication between players (Monge et al., 1985), or put simply, it increases the chance (and lowers the cost) of accessing the person the player wants to speak to (Borgatti and Cross, 2003). The fact that it is easier to meet the people who work in the same building every day increases the likelihood of creating communication networks (Kraut et al., 2002). Furthermore, the arrangement of furniture and infrastructures in the

workplace may or may not encourage interaction and communication (Peters, 1990).

The mechanism that leads to an increase in knowledge exchange through *proximity* is, however, indirect (Borgatti and Cross, 2003: 436): "*we suggest that for purposeful information-seeking the effect of proximity is indirect. Proximity leads to chance meetings in which people gradually come to learn about each other, become comfortable with each other, and develop bonds that enable future access.*" In essence, proximity allows people to meet and exchange information and thus create social networks such as friendships and relations based on communication. These are the networks that form the foundations for knowledge exchange.

Knowledge exchange would be particularly facilitated, especially with regards to complex or tacit knowledge that is not easily transferable long-distance. In knowledge management literature, geographical distance is often interpreted as a barrier to knowledge exchange. In Computer-Mediated Communication literature, anti-determinist approaches emphasize the importance of the local social setting for the activation of information technology in organizations. These studies have often revealed how technologies (such as e-mail), which could potentially break down geographical barriers, are, in fact, largely used to communicate with colleagues who are in close physical proximity (Bikson, Eveland and Gutek, 1989).

In short, all the theories we have briefly described attempt to answer the following questions: why should an individual establish working relations that are neither prescribed nor imposed by organizational policy? Why does the individual ask B for advice instead of A? Why is the individual motivated to release knowledge and information to A, but not to C?

This work aims to test the various theoretical approaches that are herein summarized in order to answer these questions and offer some conclusions, particularly in the field of human resources management.

3. The setting

Universities have always been the main breeding ground for knowledge, however, in the current competitive climate, these organizations have had to assume a new role: the university is now not only delegated to produce

knowledge through academic teaching (knowledge diffusion) and research (knowledge creation) (Gibbons et al., 1994), but it has become a privileged locus in which different stakeholders connect, both public and private (for example, public institutions, enterprises, research centers, etc.) (Starkey and Tempest, 2005; Delanty, 2001; Nowotny, Scott and Gibbons, 2001) and where academia meets business (Starkey and Tempest, 2005; Starkey, Hatchuel and Tempest, 2004; Starkey and Madan, 2001; Tranfield and Starkey, 1998). A “new social bond” (Delanty, 2001) between universities and enterprises has emerged, through which the knowledge needed to address real issues is produced (Adler, Shani and Styhre, 2004) and the sustainable development of managerial practices is ensured (Starkey and Tempest, 2005; Starkey, Hatchuel and Tempest, 2004).

In this setting, Business Schools - positioning themselves mid-way between theory and practice, between social sciences and business - embody the role of knowledge broker that is of knowledge intermediary between academia and business. Beginning with academic forms of knowledge, they are in the position to generate new knowledge, through the integration and development of different players and settings.

This work analyses a Business School which is a division of an Italian University, embedded within the academic and business landscape, both at national and international levels. Thanks to relations with the major players in the academic, corporate and institutional fields, the Business School is in a favorable position to obtaining knowledge from multiple sources. The Business School also represents a knowledge-intensive setting because it combines educational goals (university and post-university) for research and for assisting enterprise and public institution initiatives.

Various factors make this setting particularly appropriate for testing the hypotheses that this work presents. At the heart of the Business School, knowledge is the result of the personal and tacit knowledge of several players being combined, and is also its key strategic resource. Also the actors in the Business School bring different technical-scientific areas of expertise including marketing, finance, business organization, strategy, legal matters, and taxation. In addition, alongside the individual who has chosen an academic career, there are other players involved in teaching coordination and support (respectively, course coordinators and so called “tutors”). When the survey was carried out, academic staff made up around half of a total of 41 workers.

The setting for this study is therefore multi-disciplinary, thus increasing the importance of relations between members, being the main vehicle through which personal and tacit knowledge is transferred and shared. This setting allows us to effectively test the validity of homophily theories, operationalised in terms of skills.

The Business School is split into two separate locations, although both are found in the same metropolitan area. In this way, the hypothesis that sharing a physical work space (physical proximity) facilitates direct interaction between people and consequently knowledge exchange can be put to test.

Finally, the organizational setting of the Business School is characterized by the absence of formal procedures that "regulate" knowledge exchange, by the almost total absence of a clear hierarchic structure and by a strong decision-making decentralization. These characteristics are reflected in the presence of "fuzzy" borders between organizational departments and between the roles played by the different organizational actors. The informal networks that emerge from the organizational structure are therefore key tools in that they enable the players to exchange knowledge. In this informal organizational setting it is interesting to test the role of social embeddedness.

4. The model

Figure 1 summarizes the mechanisms we have taken into account to explain knowledge exchange. The model is based on the following hypotheses:

Hp. 1: Role homophily: people who hold the same position (academic or non-academic) and who therefore perform similar activities, are more likely to communicate, establish friendly relations and exchange knowledge with each other.

Hp. 2: Type of knowledge homophily (expertise): people who hold similar knowledge (in the same disciplinary field) are more likely to communicate, establish friendly relations and exchange knowledge with each other.

These first two hypotheses aim to test the basic mechanisms of the formation of *communities of practice* (Lave and Wenger, 1991; Wenger, 1998). Whether the role is academic or non-academic is of particular relevance in a Business School, an organization where there exists a relationship of mutual interdependence between scientific research, and where the design and delivery of training programs.

Hp. 3: Demographic homophily: people who are similar in terms of age, gender or organizational seniority are more likely to communicate, establish friendly relations and exchange knowledge with each other.

This third hypothesis tests the basic mechanism of the *Social Identity Theory* (Ashforth and Mael, 1989) where social relations occurs because of the feeling of belonging to the same social group, while the first three hypotheses in general test the *homophily* theories (Monge and Contractor, 2003).

Hp. 4: Physical proximity: people working in close physical contact (same building, same floor and same room) are more likely to establish relations based on communication and friendships.

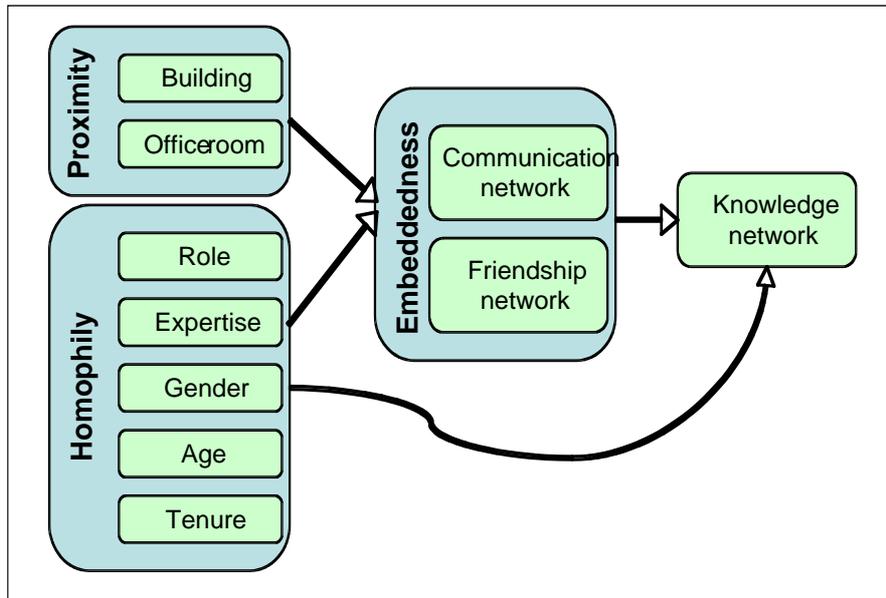
The fourth hypothesis tests the effect of *proximity* on social embeddedness (Monge et al., 1985).

Hp. 5: Communication relationships: people who communicate more with each other will also be more inclined to exchange knowledge.

Hp. 6: Friendship relationships: people who are connected through friendship ties will be more inclined to establish knowledge exchange relations too.

Hypotheses 5 and 6 test the *social embeddedness* theoretical mechanism (Granovetter, 1985), distinguishing between working and friendship relationships. Working relationships enable individuals to know who possesses what knowledge, thus facilitating knowledge exchange. Friendship relationships increase people's confidence and the likelihood of accessing the other person's knowledge.

Fig. 1 – Motivational mechanisms for knowledge exchange between individuals.



5. Method

The analysis of networks involves the study of organizations and social contexts, viewed as a system of players - individuals, groups, organizations – who are connected to one another through a series of relations. The *social network analysis* is the methodology that enables the study of the formation and structure of these relations in order to explain their causes and consequences (Tichy, 1981). This perspective of analysis, which has its roots in anthropology, social psychology and sociology, can effectively interpret the dynamics of knowledge diffusion in organizational settings as it enables the reconstruction of the map of informal relations that connect the players to each other, "observing" over time their development and the impact they have on knowledge diffusion and learning processes. The analysis of networks also provides a link between the micro and macro level, considering the different levels in a progressive order of aggregation (embedded). In this way, the SNA binds several elements that are interdependent from one another in order to understand how changes at one level will also affect higher levels.

The social network analysis, in short, has the advantage of representing a methodology of rigorous analysis, as it is based on a set of consolidated mathematical techniques; at the same time, the network of relations that are created within the organizational setting and that "hide" behind the formal organization chart can be measured, bringing to light all those relations that can facilitate, or impede, the sharing of knowledge. It therefore allows the organization to become aware of the informal networks and their effect on the organization, and as such, it becomes an effective tool for organizational diagnosis and the ongoing improvement of business processes.

In order to test the hypotheses that emerge from the research, in this work we have decided to consider the individual as a unit of observation. In particular, the sample is made up of players employed within the Business School at the time of the data collection, with the exception of administrative staff. In the test sample, we have included professors, researchers, research fellows, doctoral research students, teaching assistants and training coordinators, in other words, the key professions within high-knowledge intensity Business School.

The data used in the analysis were collected through the distribution of a questionnaire. The questionnaire was sent by e-mail, using personal e-mail addresses, at the beginning of October 2006. One week after the first batch was sent, we went on to send a second. The response rate was 83%. The questionnaire was primarily tested on certain players, in order to assess its validity and timing of completion.

The purpose of the questionnaire is to test the three theoretical models described (*homophily*, *social embeddedness* and *proximity*). It is made up of two sections. The first section deals with the attributes of the players: the demographic attributes (age and gender), organizational seniority (in terms of years working within the Business School), role within the organization, type of expertise and physical proximity in terms of co-tenancy in the same building and office room. The second section focuses on the relations between the players: the knowledge exchange network (the dependent variable), the communications and friendships network. The questions on relations (on a scale from 0 to 5) are followed by a complete list of network players; this is to avoid omissions, taking the difficulty in remembering the names of each and every colleague into consideration. It took around 20 minutes to complete the questionnaire.

To test our hypotheses, we applied a consolidated network analysis tool, the multiple regression between matrices. It should be noted that it has not been possible to apply the classical statistical regression rules to the relational matrix because the observations are not independent. To overcome this problem, we analyzed the data on a dyadic level using the MRQAP (*Multiple Regression Quadratic Assignment Procedures*) technique, as suggested by Krackhardt (1988). The MRQAP is a non-parametric statistical algorithm that carries out the regression of the dependent matrix on the basis of one or more independent matrices. The algorithm proceeds in two distinct stages. Initially, a standard/multiple regression is carried out that compares the cells of the dependent matrix with the corresponding cells of the independent matrix (each cell corresponds to a dyad). Then, the rows and columns of the dependent matrix are exchanged randomly and the regression model is recalculated. The algorithm repeats the permutation process several times (in our case 2,000) to assess the significance of the regression model. The randomized MRQAP permutation technique (Edgington, 1969; Noreen, 1989) allows you to obtain reliable estimates, despite the dyadic data the autocorrelations between the rows and columns of the matrix that are different (Krackhardt, 1988).

Through UCINET VI (Borgatti, Everett and Freeman, 2002), we used the MRQAP algorithm to examine:

- Model 1: the impact of the homophily variables (age, gender, tenure, role, type of expertise and non-academic/academic career) and physical proximity (building and office room) on network communications;
- Model 2: the impact of the same homophily variables and proximity to the friendships network;
- Model 3: the impact of homophily variables, communications network and friendships network on the knowledge exchange network.

All the vector variables have been converted into matrices in order to apply MRQAP. Through the affiliation of UCINET we have created matrices of people with the same role, same age, same tenure, the same expertise, same gender, same building, same office room and same career path. For example, with regards to the workplace, if player i works in

locations A and B, player j works in location A and player z works in locations A and B, then cell ij is equal to 1 (sharing of workplace) while cell iz is equal to 2 (sharing of both workplaces).

The communications and friendships network should be, by definition, symmetrical (if A communicates with B, then B also communicates with A). In fact, for every pair of nodes there are always deviations of opinion on the degree of friendship and frequency of communication. These deviations were eliminated by symmetrization using the least squares method. So if i claims to be a grade 2 friend of j , and j claims not to be a friend of i , then - using the least squares method - the relationship between i and j does not exist. Only the knowledge exchange network is asymmetrical in which the survey question asked who the respondent would approach to obtain certain knowledge.

6. Results

6.1. Descriptive statistics

The sample studied (34 out of 41 individuals who represent 83% of the population) is made up of 11 males and 23 females. In addition, 18 of the respondents are academics, i.e. they have begun or have finished a doctorate or are university professors, while 16 of the respondents are not academic. The average age is low (31 years, standard deviation = 7.2) as is the organizational seniority (4.4 years, standard deviation = 4.0). Their work stations are located in two buildings that are far apart. The first building has 3 office rooms for the Business School, and is spread out over 2 floors, while the second has 5 office rooms spread out over 4 floors.

The following figures (2, 3 and 4), obtained by NetDraw II (Borgatti, 2002), show the communications, friendships, and knowledge exchange networks respectively. Only the friendships network (given the low density) has been shown in full, while the other two shows the strongest relations only (≥ 4 on a scale from 0 to 5).

The nodes represent the people, the color of the nodes represents whether they are academics (blue) or non-academics (red), the arrows in the knowledge exchange network represent requests for knowledge ($i \rightarrow j$ means that i requests knowledge from j)

Table 1 summarizes the salient characteristics of each network:

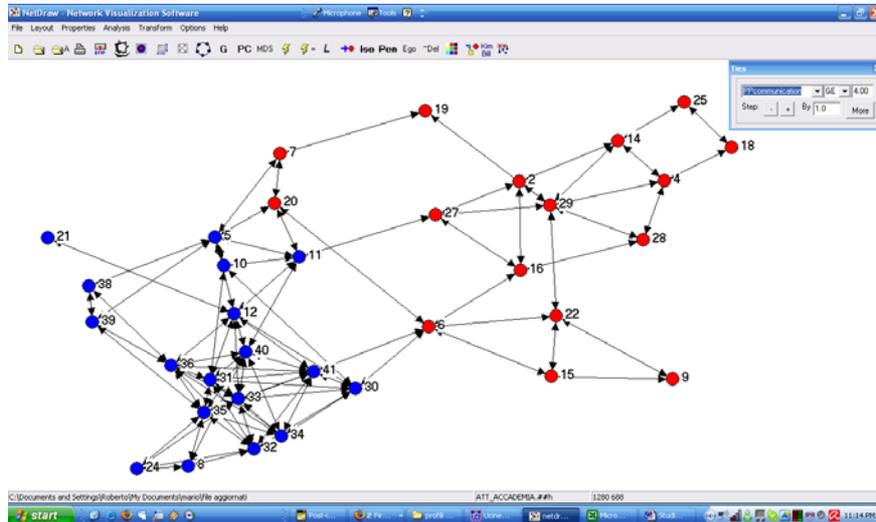
Table 1 - Synthesis of model networks.

	Communication	Friendship	Knowledge
Number of nodes	34	34	34
Density*	0.60	0.12	0.29
# of components	1	10	1
Clustering coefficient*	0.71	0.58	0.48
Average geodetic distance	1.40	2.06	1.91
Fragmentation	0.20	0.77	0.42

* On the dichotomized network for all values ≥ 0

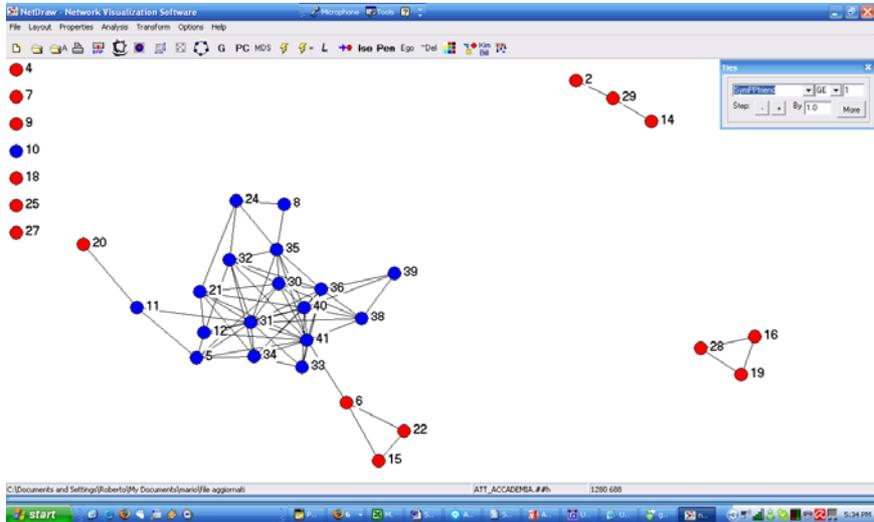
The communications network presents a high degree of cohesion in terms of both density as well as degree of fragmentation (to fragment the network - creating disconnected components - around 80% of its nodes should be removed). Moreover, this network presents a very high average clustering coefficient (0.70). This means that, on average, each egonet (a node and its direct neighbors) is missing only 30% of the relations it would require to create a clique (a highly-connected sub-network). It must also be noted that the geodetic average is low: 1.40. This means that each node must make less than one-and-a-half steps to reach all the other nodes. Finally, as shown in Figure 2, the communications network has a higher density of blue knots (academics), and generally speaking, communications between academics and non-academics are less frequent than when they are within the same category.

Fig. 2: Communications Network (relations ≥ 4 ; blue nodes = academics).



The friendships network, on the contrary, presents a very low degree of cohesion. The density is low and the fragmentation is high. It would be enough to eliminate around 23% of the nodes to completely disconnect the network. In addition, the network is already disconnected because it presents a major component that includes most of the nodes, two other small components with 3 nodes each, and another 7 isolated nodes (a total of 10 components). Not surprisingly, the clustering coefficient is low (for each egonet, the relations would have to be almost double in order to create cliques) and the geodetic average is high (each node, in order to reach the others, must make an average of 2 steps). Finally, as shown in Figure 3, the friendships network also presents a greater density among academics than among the rest of the staff. In addition, it would appear that friendships respect belonging to either category.

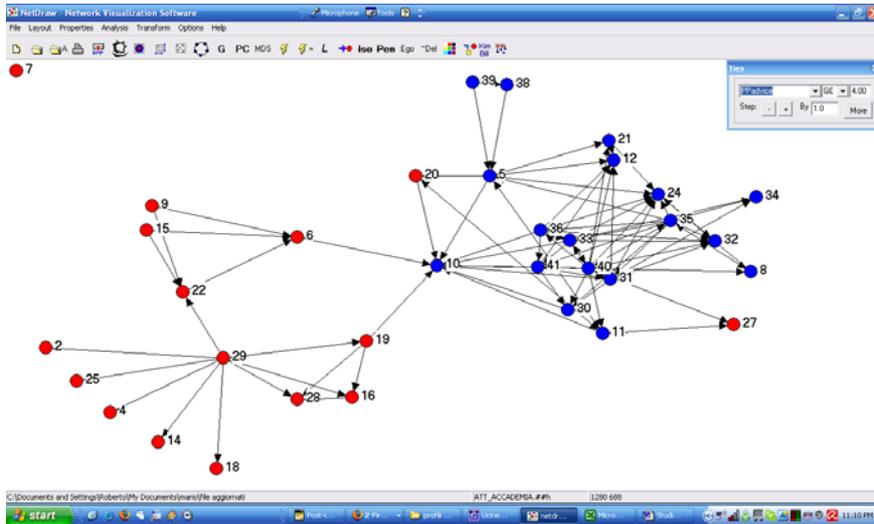
Fig. 3: Friendships network (relations > 0; blue nodes = academics).



Finally, the knowledge exchange network presents an average degree of cohesion. The total density of the dichotomized network is 0.29. Connectivity is at its greatest (there are no isolated nodes) but the average clustering coefficient is 0.47 (so for each egonetwork around 50% of relations would be needed to form a clique) and the average geodetic distance is 1.9 (so each node, in order to reach all the others, needs, on average, a minimum of 2 steps).

Looking at figure 4, the most striking result is that only one blue node (10) holds together two distinct parts of the network: the blues (academics) and the reds (non-academics). Again, the academics present a higher degree of connection than the non-academics.

Fig. 4: Knowledge exchange network (relations ≥ 4 ; blue nodes = academics).



6.2. Test of hypotheses

In table 2 the results of the multiple regression (standardized coefficients) is shown.

Table 2 - Knowledge Exchange: Multiple Regression QAP Results.

VARIABLE	Model 1	Model 2	Model 3
Role	0.34***	0,20**	Ns
Expertise	ns	ns	Ns
Age	0.12**	0.12**	ns
Gender	ns	ns	ns
Tenure	ns	ns	ns
Proximity (building)	ns	ns	-
Proximity (office room)	0.37***	0.38***	-
Communication	Dependent variable	-	0.48***

Friendship	-	Dependent variable	0.18**
Knowledge exchange	-	-	Dependent variable
Adjusted R ²	0.44***	0.23***	0.38***
N	34	34	34

*** p < 0.001

** p < 0.01

* p < 0.05

Values based on 2000 permutations.

In *model 1*, we measured the impact of the following independent variables on the communication network: the attribute variables that affect the homophily (role, type of knowledge, age, gender and organizational seniority) and the variables that measure the physical proximity (building and office room). The results show that, when considered together, these variables account for a fairly high variance percentage ($R^2 = 0.44^{***}$). In particular, physical proximity as co-presence in the same office room ($\beta = 0.37^{***}$) and homophily in terms of role ($\beta = 0.34^{***}$) have a particularly high impact on communications between players. Even age homophily ($\beta = 0.12^{**}$) exercises a positive, albeit low, influence.

In *model 2* we tested the same variables as the friendships network. The model, overall, is less effective ($R^2 = 0.23^{***}$). The office room proximity ($\beta = 0.38^{***}$) and role variables ($\beta = 0.20^{**}$) are again the most important. The age homophily ($\beta = 0.12^{**}$) is significant, but low.

In *model 3*, we measured the impact of the relational variables (friendship and communication networks) and homophily (in terms of role, expertise, age, tenure and gender) on knowledge exchange. The model explains 38% of the variance, with an exclusive impact on relations based on communication ($\beta = 0.48^{***}$) and friendships ($\beta = 0.18^{**}$).

Hypothesis 1 is partially verified. The similarity of the players in terms of role (academic or non-academic) has a positive effect on the communications and friendships network but not on knowledge exchange.

Hypotheses 2 (type of knowledge homophily) and 3 (demographic homophily: age, tenure and gender) are not confirmed. These variables have no influence on the networks of communication and friendship or on the knowledge exchange network.

On the other hand, hypothesis 4, concerning physical proximity, is totally confirmed. In particular, working in the same office room increases the likelihood of creating relations based on communication and friendship. However, being present in the same location does not affect communication between the players.

The results of the analysis finally confirm hypothesis 5 (the communications network has an important influence on the knowledge exchange network) and partly confirm hypothesis 6 (the friendships network has a low but significant role in the formation of knowledge trading).

7. Conclusions and discussion

This work aims to analyze ways in which knowledge is exchanged within a complex and knowledge-intensive organization. Literature widely acknowledges that processes of learning and the formation of collective skills have a major relational component and that knowledge creation is a social process. The aim of this work was that of contemporaneously testing several theoretical approaches that may complementarily explain the phenomena of knowledge exchange in organized settings.

The results of the survey, conducted in an Italian University Business School, show that when there are pre-existing social ties between players, particularly if strong, founded on frequency of communication and friendship, the probability that they transfer knowledge and information increases.

These results confirm, first of all, the importance of social relationships for knowledge exchange that can break down motivational barriers, leading to the sharing of critical resources such as knowledge.

This invites reflection on the need for organizations to facilitate the emergence of informal knowledge networks and communities of practice

(Lave and Wenger, 1991), because learning and new knowledge generation frequently emerge from the redundancy of information, knowledge and relations, through which these resources flow. Knowledge networks, therefore, make knowledge accessible that would otherwise be too "expensive" to share: consider, for example, the time needed to acquire it, the risk associated with admitting a certain "ignorance" on a matter and subsequent loss of reputation (Lee, 1997), and the "obligation" that emerges when the help of others is requested to solve a particular problem (Fisk, 1991).

These findings suggest the need for the organization to encourage people to share their skills, rather than detain them, establishing development policies and incentives that are consistent with this purpose (group and organizational incentives rather than individual) and creating a work climate that supports the formation of informal communities.

Physical proximity (specifically, co-presence in the same office room) also has a role, albeit indirect, in promoting knowledge exchange. Our results confirm what literature (Monge et al., 1985) has already suggested: that physical proximity between players makes the formation of social relationships (communications and friendships) more likely. These are the social relationships that foster knowledge exchange, as demonstrated by Borgatti and Cross (2003). In essence, just sharing the same office room is not enough to exchange and share knowledge; the players must create a working relationship based on frequency of communication if not on establishing a relationship of trust and friendship.

These results are particularly relevant at a time when new information and communication technologies, globalization processes, production relocations and the spatial and temporal destructuring of workplaces in general, mean that sharing a physical work "space" and forming relational settings based on shared knowledge become more difficult.

From a managerial point of view, therefore, an important implication is that where strong interdependencies and strong needs for coordination exist between two people, for which co-presence in the same office room is desirable. Our data shows that even short distances (such as those between one floor and another in the same building) may create a negative effect on collaboration and this is to the detriment of knowledge exchange.

Out of all the *homophily* measures adopted in this study, it is only the similarities of the players in terms of role, or being academic or not, that is relevant to the formation of communication and friendship networks. Furthermore, in no circumstance does homophily appear to have a direct and significant impact on the knowledge exchange network.

In particular, the homophily of expertise, or type of knowledge, was not significant in explaining the three networks (friendship, communication and knowledge exchange). This result is certainly positive because it involves a multidisciplinary collaboration especially among academics.

Another result worth noting is that gender, age and tenure have no impact on all of the networks examined. The Business School under analysis is, in fact, relatively "young-person" oriented and balanced in terms of gender, and there are no collaboration barriers based on these demographics.

Only *role homophily* (being an academic or not) has a significant and important impact on the formation of friendship and communication networks. The very nature of the Business School, "halfway" between theory and practice, research and consulting/training, is reflected in these social networks. This variable, just like physical proximity, also only indirectly affects knowledge exchange.

Before generalizing these results, we aim to test the same hypotheses in different organizational frameworks, preferably characterized by a high intensity of knowledge and skills. We also propose carrying out a longitudinal analysis to investigate ways in which relational networks co-evolve, influencing each other. The results emerging from this first study prompt us to continue in this direction.

8. Implications for human resources management

The results of the work and the relational methodology used to test the formulated hypotheses allow us to reflect on the use of this approach in support of managerial practice in organizations, and in particular, people management philosophy and tools. So we will resume the conclusions of the work in order to integrate them with some reflections and discuss possible implications for people management.

The survey results show that embeddedness, namely the pre-existing social relationships, especially if characterized by high intensity and based on the frequency of communications and on friendships, increases the likelihood of knowledge exchange.

This invites managers to reflect on the need to facilitate the emergence of informal knowledge networks and communities of practice (Lave and Wenger, 1991). An important management indication also emerges, to be used not only in the creation of working groups - or in any case, occasional teams with a specific task and a target to be achieved - but also in a more general standard for implementing the staffing processes of stable structures and organizations.

As such, the findings of the work suggest the importance of all those policies that encourage the construction of informal networks. So this reflection goes towards supporting the articulated initiatives of organizations that intend to use, while enhancing their potential, the opportunities offered by more advanced information technologies and Internet-based communication in the Web.2.0 field, of mass collaboration and peer production (Tapscott and Williams, 2007).

The work also supports the theory that physical proximity is a factor that makes the creation of social relations more likely, particularly those of communication and friendship. The survey conclusions also reinforce the hypothesis that "proximity" alone is not enough; proximity acting as an indirect mechanism of increased knowledge exchange. The implications for human resources management may be diverse. It appears that the prevailing implication is that which "relativises" the single adoption of organizational policies for lay-out design as an effective response to the need for greater knowledge exchange; the conclusions, in fact, seem to support the theory of the "indirect" value of this factor and therefore the need to accompany the careful design of spaces with policies and management styles that encourage the creation of trust between people.

There are also outcomes of the work that concern the theories of homophily, according to which the motivation to create working relations is explained by the fact that people are more inclined to establish social relations with people who are similar to themselves in terms of role, expertise, or other demographic characteristics such as age, gender or

seniority. The findings tell us that only the role homophily is relevant in the formation of communication and friendship networks.

This result invites us to reflect on the importance of identifying with a community in the formation of social relations that constitute an important vehicle for the organizational learning processes. It would seem that belonging to a professional community - that of academics for the purposes of our research - and the implications that this belonging entails (in terms of sharing explicit and "implicit" norms of behavior, career goals, interests connected to the type of path chosen rather than the guarded area of knowledge) help to explain the formation of social networks and, in this way, the motivation behind knowledge exchange. Observing the communication network between academics, there is a very positive heightened relational intensity that does not feature between academics and other members of the organization.

The effectiveness of a Business School as a motor for change, learning and innovation, in our opinion is highly dependent on the ability to exploit the interrelations not only between researchers, but also between researchers and trainers, between theory and practice, between business and university education. These interrelations can be effectively enhanced through the genuine collaboration between people who, while belonging to different settings and having taken different career paths, must share work processes, information, challenges and goals.

It is therefore important to foster the communication between professionals belonging to the academic community and the rest of the organization, initially through the management's commitment to defining an adequate organizational model that facilitates the processes of communication and exchange, and later, by implementing a rewarding system that measures and values the contribution of each, respecting the system of preference of each professional community, and that, at the same time, is able to recognize those who are committed to fostering communication and exchange.

It therefore appears obvious how belonging to the same community is an important identification factor for knowledge exchange, and this consideration may well extend beyond the context, albeit specific, of a Business School. This evidence invites us not to underestimate the potential implications of closure and self-referentiality mechanisms of the

communities based on role homophily. These are outcomes that may produce negative consequences on the processes of communication, on the corporate culture and also on career mechanisms. The strongest area of reflection seems to be that of the possible effects of this factor on the "permeability" of organizations, on the criteria of human resources development and on the effectiveness of communication.

Finally, the results of the work, as anticipated, did not assign particular importance, for the purposes of knowledge exchange, to the other two types of homophily (expertise homophily and demographic homophily). As such, this result seems to support the *diversity management* route that is now taken by many "virtuous" organizations; indeed, it would appear that there is no evidence to "justify" management that considers organizational frameworks made of social groups of similar age, gender and seniority, to promote knowledge exchange.

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Quantitative Evaluation of Management Education: from Economic and Financial Ratio to Balanced Scorecard

by Emilio Rago

1. Assessing the training value

By *evaluation* we mean the process of assessing the material and immaterial (symbolic, moral) value of an object. This process can be either formally performed, following a well-defined succession of logical and physical phases, or informally done by an implicit and subjective value appraisal.

So, by *training evaluation* we mean the process (more or less formalized) of acknowledging and attributing value to training interventions. Strictly speaking, we refer to all the investments in business education or rather to the intentional facilitation of organizational learning by events, programs and interventions that in a workplace are able to develop the competences required to accomplish the job.

In order to evaluate training we must refer to the concept of *added value* and to the related process of *value analysis*. The added value construct encompasses all material and immaterial benefits produced at the advantage of those who participate directly or indirectly in organizational activities.

The rethinking of the value concept in the education field enlarges and better defines the set of training actors, introducing the concept of *training stakeholders*, i.e. all institutional and non-institutional actors positively or negatively influenced by training processes.

The focus on the training subjects amplifies the subjective interpretation of value, extending the concept of value to that of *valence*. In these terms, a training intervention adds value if it tends to satisfy the real needs of the persons who participate in it and to make sense of their personal conditions.

Following this perspective, the “value” frees itself from the intrinsic characteristics of the service and the product (quality, costs and timing), from the process that generates it (efficiency, equity and proficiency), and from the value of production factors employed (work, relations, capitals, material and immaterial goods). In this way the value is appreciated considering the subjective and contingent conditions of people, the effective utility and usability of products/services, the social responsibility that they promote, the individual transformation that they facilitate and, finally, the long term relationships that they produce (market capital, customer loyalty and processes integration).

We are still psychologically entrapped by the mechanisms of human perception. We usually say that something has value only if we *perceive* so. Being aware of the importance of perception in the informal evaluation process has moved the attention from the *actual* utility of a good/service to its *apparent* utility, from *operational* abilities to the ability of *reframing* perceptions and impressions.

Even in the training market you can face manipulations of *pushing training*. If you are able to modify the sense making process of your potential customer, if you are able to produce a sensitivity, to elicit a need towards your training services, if you are able to empower your external communication competence, then you will succeed in differentiating your offer on the market and in gaining your market share.

Evaluating training activities and services correctly means also giving them back their real value. In order to consider education as being good for a person it is necessary that it meets his/her specific needs, at the moment or for the future. It must go beyond the individual perception of value, looking for its actual value for the subject. The customer satisfaction increases when the trainer or educator is able to disengage education from the explicit demand addressing it on the implicit but real need of the trainee.

The value of the training activity is higher also when we deliver in the best way what the trainee really needs, helping him in his process of personal development and growth.

Such a model of *training value* stems from a long term relational orientation, inside and outside of the organization. If a business wants to survive to its founders it is necessary (and ethical) to produce a real value for its stakeholders. Value generation must integrate a short term approach, based on tangibles and immediate gains, with a long term approach, based on intangibles assets and sustainable relationships.

Evaluating education management then means: (a) identifying, monitoring and measuring costs and benefits (tangibles and intangibles); (b) integrating short and long term evaluation orientations; (c) exploring subjective and objective dimensions of value.

The objective dimensions of value may be essentially re-conducted to the *key performance areas* of organizational processes: cost, timing, and quality. In these terms evaluating education management can stand for analyzing the training *efficiency* (to reach the maximum outcome with the minimum effort), the training *effectiveness* (to realize the planned learning objectives maximizing the quality of training processes) and the training *economical balance* (minimizing the training costs and maximizing the returns).

Another important issue of evaluating management education is the *ethical* concern of training actors and the many other elements of *qualitative evaluation* of training programs and processes. In this work we will deal only with the quantitative methods of measuring the economical and financial ratios of training investments and the balanced assessment of training processes outcomes and effectiveness.

2. Economical and financial evaluation of training investments: the *benefit-cost ratio (BCR)* and the *return on training investment (ROTI)*

Training culture is still influenced by an old paradigm that considers training as a *cost* to minimize or as an expense to eliminate in case of negative economical contingencies. In spite of this, the demand for education management is growing more and more exacting, requiring high levels of customization.

Even though human resources are regarded as the first strategic asset of a business, the training departments have been experiencing continuous reductions of their budgets. Following this short term cost orientation, training investments are viewed as a cost to reduce and to focus only on tangible and urgent issues, this way losing their development and strategic scopes.

Paradoxically, growing attention to human development is paired up with a decreasing investment in human resources and with strong pressures on results. Accepting that training investments are strategic for human capital implies that it must be assessed by either the training process quality or the impact of learning on individual performance or the improvement of the overall business performance.

In order to measure the profitability of training investments, some ratios on time, cost and quality of management education have been introduced in the training field.

Different factors have been driving this accounting innovation in corporate universities and big firms:

- (a) The increased attention to the measurement of performance process, inspired by the movements of *Total Quality Management* (TQM) and *Continuous Process Improvement* (CPI), and by the interventions of *Business Process Reengineering* (BPR). If you consider training as an organizational process, engineered in phases and activities, then you will be able to assess and measure its *key performance indicators* (KPI).
- (b) The threats of *outsourcing training*, and the resulting need to exhibit the efficiency and the effectiveness of training functions.
- (c) The *managerial evolution* of HR functions that are discovering the managerial value of HR metrics, financial ratios and balanced indicators, to appraise the investments in human capital.
- (d) The need to show quantitative measures with the aim of evaluating the *role of staff functions* to the overall organizational performance.

Training has now to reveal its significance among the other business investments. A training department can decide and manage its training activities assessing the performance of training investments by two ratios:

- (1) The *benefit-cost ratio* (BCR).
- (2) The *return on training investment* (ROTI).

Both ratios assume that the evaluation of education management programs needs to analyze and assess the total of costs and benefits of training interventions. The BCR ratio shows the relation between the total value of all training benefits and the total value of all training costs.

$$\text{BCR} = \frac{\text{Value of Total Training Benefits}}{\text{Value of Total Training Costs}}$$

For example: if the BCR ratio is 3,7 it means that each euro invested in training produces 3,7 € of benefits.

Differently, the ROTI ratio explains the relation between the *net value* of benefits produced by training investments and the total value of training costs.

$$\text{ROTI} = \left[\frac{\text{Value of Total Benefits} - \text{Value of Total Costs}}{\text{Value of Total Training Costs}} \right] \times 100$$

In this case, the ratio shows the *net benefit* after the coverage of training costs. This proportion is helpful to compare investment options within the company. Thanks to ROTI, the training manager has indeed an objective and quantitative basis to negotiate the allocation of organizational resources.

The return on training investment (ROTI) is a performance ratio able to synthesize the effectiveness and the efficiency of training decisions. In order to increase the ratio it is necessary to reengineer your training processes and to change your way of managing the training resources.

3. The return on training investment (ROTI): the methodology

The methodology of ROTI assumes as a starting point the fourth level of the Kirkpatrick's model of training evaluation: the evaluation of *individual* and *organizational results*.

The level 3 of *performance improvement* entails - *caeteris paribus* - that performers have really learned and developed the *competences* they needed (level 2) in an *effective* way (level 1) (fig.1).

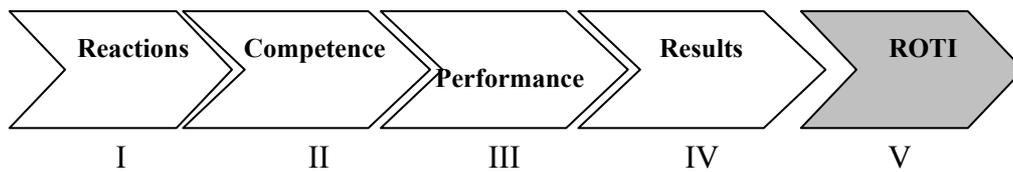


Fig. 1 - The *chain effect* of training activities and ROTI.

The *chain effect* correlates the different levels of the Kirkpatrick's model. Therefore, levels are not always good predictors of their previous level. That is the reason why, in order to evaluate the impact on business of training interventions, you need to assess all the preceding levels. Then ROTI can be treated as the fifth level of the Kirkpatrick's model, expressing the economical and financial net value of training results. The first levels of evaluation involve need analysis, training design and development, and the implementation of training activities. Levels 4 and 5 are evaluated by the training director and the other training managers.

The ROTI methodology can be formulated as follows (fig. 2):

- A. Training *Cost Analysis*.²
- B. Training *Benefits Analysis*.
- C. Economical and financial assessment of training benefits.
- D. Ratio construction.

² It is possible to make different cost analysis: *cost-benefit analysis* (CBA), *cost-efficacy analysis* (CEA), *cost-utility analysis* (CUA), *cost-opportunity analysis* (COA) and *cost-feasibility analysis* (CFA). In this case we assume the cost-benefit analysis.

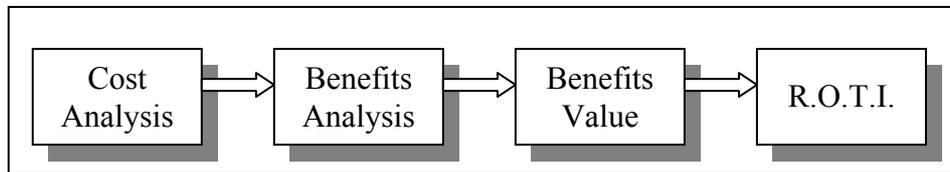


Fig. 2 - ROTI methodology.

Since ROTI evaluation is expensive and difficult, before proceeding with the assessment you must choose the training programs to evaluate. In order to pick up the most critical or strategic training programs to evaluate you can consider:

- (1) *Program size and extent*: how many people are involved in the program? How many organizational departments and functions are interested in?
- (2) *Economical and financial value of the program*: which training programs absorb most of organizational resources (adopting the full costing method)?
- (3) *Program complexity*: it is preferable to evaluate the most exacting and challenging programs.
- (4) *Program length*: the more they last, the more is useful to evaluate them.
- (5) *Political weight of organizational stakeholder*: it's better to evaluate training programs supported by the key organizational actors.

Only a few training programs must be evaluated following the ROTI method, especially those you want to measure the impact of on the bottom line. Adopting the method of ROTI requires a strong *top-down commitment* and a significant initial effort to *change organizational culture* and to develop the needed *operational HR competences*. Moreover, it is necessary to foster *cross-functional collaboration* within the organization with the purpose of obtaining the data and information required to compute the ratio.

4. Training cost analysis

The assessment of training costs is carried out adopting the *full costing* method, including direct and indirect costs of training processes. Some training costs can be easily collected during the evaluation process because they are directly and indirectly related to training.

The *visible costs* of management education are:

- a) Salaries and fees of staff and consultants: analysts, instructors, program managers, tutors, support staff and training director.
- b) Costs of course development (design and creation of blueprint, writing and validating and revising, producing and reproducing) and teaching materials (notebooks, handouts, tests, DVD, films, PC software, overheads, etc.).
- c) Off-site expenses: travel, hotel overnights, meals, breaks and shipping of materials.
- d) Fees of outside training programs (courses, seminars and workshops) and interventions (coaching, mentoring and counseling).
- e) Facilities costs: rental of equipment (projectors, computers, flip charts and training aids) or allocated fair share usage of classrooms.

The *hidden* component of training costs, usually neglected by evaluators, concerns:

- a) Salaries of participants (cost of “un-working”): no. hours of instruction X average hourly rate.
- b) Costs of lost productivity: production rate losses or material losses.
- c) Costs of poor quality of training processes: ineffective needs analysis, poor quality of training design and development; unsuccessful enlisting of participants; errors in delivering and training transfer.

- d) Costs of vendor rating and controlling.
- e) Opportunity costs: customers untimely satisfied; unproductive workload re-assignment; orders untreated; lower process efficiency and effectiveness (see fig. 3).

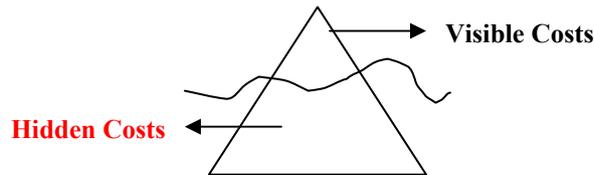


Fig. 3 The iceberg of training costs.

The assessment of training costs must consider the standard unit of costing: per *participant*, per *offering* or *one-time costs*. The survey conducted in 2000 – 2002 by the *Permanent Observatory on Management Education* of Bocconi School of Management, (Organization & Personnel Department) shows that training costs of full time employees of 88 businesses are divided this way (tab. 1):

These costs have been pooled into four different analytical categories:

Training Costs of Employees	100 – 499	500 - 999	> 1000	Aver.
Hours “un-worked”	46.8%	84.2%	59.0%	63.3%
Travelling, overnights, meals	4.6%	1.7%	3.5%	3.3%
Staff and internal instructors	13.9%	3.2%	12.2%	9.8%
Instructional materials	2.3%	0.6%	1.4%	1.4%
Equipment	2.5%	0.8%	1.6%	1.6%
Facilities	3.5%	1.4%	6.4%	3.8%
Outside seminars and workshops	23.6%	6.7%	10.5%	13.6%
Consultants	2.8%	1.4%	5.3%	3.2%
Financial Aids	1.1%	1.6%	0.8%	1.2%
Net Cost	98.9%	98.4%	99.2%	98.8%

Table 1 – Training costs of sample year 2000 / no. of employees.

- i) **Direct costs:** off-site expenses, instructional materials, equipment and facilities.
- ii) **External fees:** outside seminars, workshops, courses; external consultants and instructors.
- iii) **Cost of “un-working”:** no. hours of instruction X average hourly rate X no. of participants.
- iv) **Salaries** of internal training staff, instructors and director.

The analysis (per number of employees) illustrates that in small businesses (100 – 499 employees) the financial weight of external fees is very high when compared to other firms (26.4% of training costs)(fig. 4). In the average class of businesses, from 500 up to 999 employees, the cost of “un-working” is the main part of training costs (84.2%).

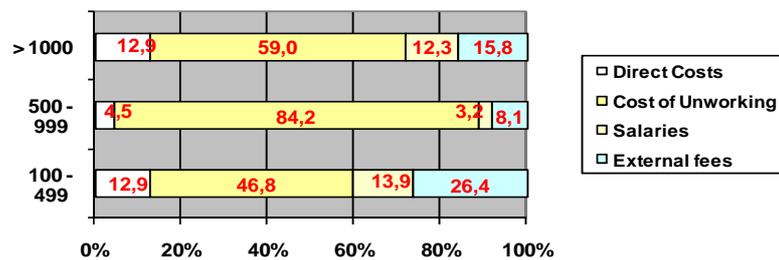


Fig. 4 - Training costs categories per no. of employees.

The weights of different categories of costs specify the critical dimensions of training management. For example: if the cost of “un-working” accounts for 84.2% of total costs, the training manager should pay much attention on enlisting “right” participants, that means people who really need that training program. Another important focus is the trade-off between the right *sizing* of training department (13.9% of total cost in small businesses) and the options to *make or buy* (26.4% in small businesses). How effective and efficient are small businesses in training transactions

and in vendor rating? On the other side, in large businesses (more than 1000 employees) the cost of facilities amounts to 6.4% of training costs (approximately two times the sum in other firms). In this case the training manager has to consider if the large part of this cost is due to the existence of a corporate university, a training center that is oversized, to a wrong costing methodology or to the absence of economies of scale. A suitable option could be *selling* training courses on the external non-captive market supply chain.

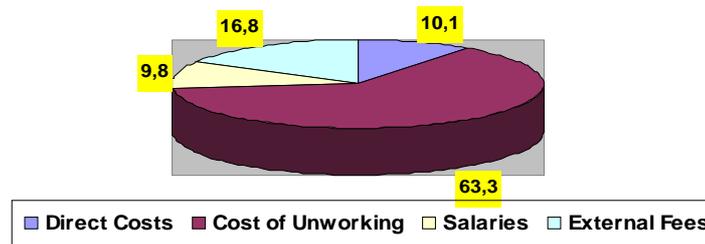


Fig. 5 – Total mean of training costs.

In the analysis of the total mean of training costs (fig. 5) the cost of “un-working” explains the main factor of training costs (63.3%). The amount of non-working hours of participants is the critical variable of training planning and management. In order to minimize costs the training manager should think about some critical points:

- a) How to align training offers to the real needs of people and, consequently, how to choose persons with needs consistent to the competence baseline of training courses.
- b) How to engage supervisors and managers in their trainee’s instructional activities with the aim to improve the training transfer to the workplace.
- c) How to homogenize classrooms and to develop a good relational climate among participants.

and finally,

- d) How to choose the right training methodology to obtain the best learning.

5. Training benefit analysis

The benefit analysis helps determine benefits resulting by the transfer of learning to the workplace. Some benefits are tangible, traceable and easily convertible into financial value (*hard* benefits); these benefits are measured by the traditional key performance indicators such as *cost, quality and timing*. Other benefits refer to subjective, behavioral and abstract dimensions of performance; these benefits are very hard to convert into financial values and are called *soft benefits*.

Some hard benefits are:

- a) *Better productivity*: faster work rate, measured by the monetary value of additional units produced or processed (number of units assembled, orders carried out and units produced).
- b) *Improved quality*: fewer rejects (measured by the monetary value of smaller scraps, lost sales and returns); the value added to output (bigger sales and smoother castings), reduced accidents and legal costs and the improvement of competitiveness.
- c) *Time savings*: shorter lead time to reach proficiency, short time required to perform an operation, less supervision needed, better time management, time saved by not having to wait for help and less down time.

Soft benefits in some extent attributable to training could refer to positive changes in:

- a) *Working habits*: less absenteeism and tardiness, reduced grievances, claims, job actions and savings on medical and lost time.
- b) *Attitudes*: more commitment, job satisfaction, loyalty, equity and responsibility.
- c) *Skills*: number of decisions made, problems solved and conflicts managed or avoided.

- d) *Development*: number of promotions, career advancements, rises in salary and requests for job transfers;
- e) *Initiative*: number of new ideas generated, proposals and projected goals and better implementation of self-management and goal setting.

It is quite difficult to convert some soft benefits into financial value, and that is the reason why many training managers tend to evaluate only hard benefits, trying to describe soft benefits either in a qualitative way or using only some quantitative indicators.

Before estimating monetary value of benefits it is important to isolate the effects of training on performance from other possible organizational or environmental causes. Many times training follows organizational redesigns and changes, strategic repositioning or contingent crises, and individual performance might be influenced by several other factors. Moreover, it might be necessary to evaluate the period of *pay-off* of training effect.

Several assessment methods might help us to control these variables:

- a) *Training experimentation with control groups*: one or more groups of people, randomly composed, with the same initial conditions, and exposed to the same environmental field forces, are trained (they are called *experimental groups*). Their individual performance is appraised before and after training and is compared with the performance of the *control groups*, having the same characteristics of the experimental groups. The difference in performance could be caused by training intervention.
- b) *Mathematical forecasting models*: with simple performances a linear equation might be built and performance improvement could be considered as a function of one critical variable. Complex performances require static models with many and correlated variables and sophisticated and accurate methods of data collection and elaboration.
- c) *Learner's assessment*: it is possible to ask directly the learner to assess how training improved his performance. This method seems

quite reliable because learners are requested to transfer and apply training to their job, so they know practically how it might be useful.

- d) *Supervisor's assessment*: in many cases supervisors know better the greater picture of a job, the main factors that affect it; so they are in a good position to assess the improvements due to training.
- e) *Manager's assessment*: managers who sponsor and fund training initiatives usually are the first assessors, because they are accountable for those investments and they know, more than others, the real impact of other contingent factors (organizational process and technology on training).
- f) *Expert's assessment*: an external consultant could have the needed competence and expertise to evaluate the impact of training, but his assessment could be as unreliable as the appraisal of an internal expert, a best performer who knows well organizational culture and relational dynamics.
- g) *Customer's assessment*: the external customer of an organizational service, for example, could better assess the quality of the service and in this way appreciate the performance improvement effect of training. The assessment of customer satisfaction might be useful in some cases even to evaluate training.
- h) *Peer's and subordinate's appraisal*: peers and subordinates are direct witnesses of trainees' behavior and performance; so they could judge more precisely than others *how* and *to what extent* training affected performance.
- i) *Assessment of external factors*: when the data on external contingencies are available it could be the case to find out which factors affect performance and how much, assessing the impact of training residually.

Anyone can argue that appraisals and assessments are not trustworthy methods of training evaluation, but even in the "profits and losses" of a balance sheet they are used to determine the bottom line. Once hard and soft benefits of training have been founded and cut off from other factors, it is

necessary to switch them into monetary values in order to compare them with costs and to build the ROTI ratio.

In order to convert training benefits in Euros you have to pick up each single performance indicator for each class and determine its monetary value per single unit. In turn this value has to be multiplied by the number of units increased or improved by training. For example: an increase in output of 10 units per day, due to the improvement of a production skill, has to be converted in monetary value multiplying the cost of a single unit by the increased number of units produced.

Each performance improvement may be converted into monetary value, but it is necessary to adopt a consistent standard. For example, to evaluate an increase in output you have to assess process productivity and efficiency: units of input/units of output. To assess quality, the value of improvement can be measured by eliminating cost of poor quality. Time savings can be valued using the average cost per hour of learners multiplied by the number of hours saved due to training. The conversion of soft benefits such as less absenteeism, savings in medical costs and insurances, is more difficult and it may be preferable to adopt external standards and benchmarks.

The rating of ROTI can result in a very high percentage (many times over a hundred per cent). This does not mean that you failed to evaluate it. The assessment of hard benefits of training alone can produce high returns on investment in human capital. If soft benefits are very hard to assess, it could be better to show them as intangible effects, underlining the decrease of negative effects or the increase of positive effects.

In any case, in order to improve the consistency and reliability of ROTI it is advisable to follow some basic assessment rules:

- 1) Adopting a conservative approach in assessment.
- 2) Using reliable sources to get the information and data needed.
- 3) Explaining approaches and methods used in the monetary conversion.

- 4) If results seem to be overrated, consider lowering ratings until a prudent result is achieved.
- 5) Using only or mainly hard data when possible.

Even when these devices are applied, the ROTI ratio results can be very high. It will not be wrong, but reasonable and realistic; nevertheless this methodology did not find the right favor with training specialists. It may be useful to understand why.

6. Why not using ROTI

Evaluating training investments by ROTI is not easy; moreover there are some mental barriers, false negative myths that limit its implementation. Let's verify them.

- To facilitate the evaluation of training investments using an economic and financial method, you need to implement a complex database of personnel, analytical plans, evaluation and measurement policies, and to build performance indicators the performance appraisal sheets. It is true, but it is a starting-up cost that does not exceed 5 to 10 % of the training budget of an average business. Instead, it is higher than the cultural cost of changing business policies and procedures.
- Managers do not render explicit the need to evaluate training investments using an economical-financial ratio. It is true, but this depends on the excuse that it is impossible or very hard to do that and by the assumption that training benefits are not convertible into monetary values. Therefore, it is necessary to evolve the culture of training evaluation bringing in and legitimizing such methods, useful to increase the value of training in organizations.
- The methodology of ROTI requires specific skills and competencies. It is partially true. But this difficulty can be solved encouraging cross-functional communication and relations, promoting training programs addressed to HR specialists. Benefits expected would exceed costs.

- The method of ROTI is quite complicated. That assumption is false. A controller would be able to do this because he is already accustomed to using ratios, indicators, economical and financial measures. ROTI is the *return on training investment*, which means the ROI of training investments. The main difficulty is cultural and psychological because the training department could fear a managerial assessment and prefer not to be evaluated.
- It is possible to measure only hard benefits; soft benefits are not measurable by quantitative indicators. It is true to some extent; however in many cases behavioral training influences and produces results appraisable by output, quality, cost and time indicators. Let us think about the development of skills needed to manage meetings: if training intervention produces efficiency and efficacy in facilitating meetings, the meeting time saved can be rated assessing the average cost per hour saved for each person. Instead the appraisal of the period of pay-off of the training benefit could pose a problem.

The state of the art suggests that the method of ROTI is generally oriented to past standards, assessed ex post and it does not meet a widespread agreement on its usefulness. This mustn't be an excuse for non-implementation and innovation, because ROTI methodology can be useful in the evaluation of training investments.³

7. A quali-quantitative approach: the balanced scorecard of training

Over the last few decades, the evaluation of training has adopted different quantitative or qualitative models: starting from the Kirkpatrick's model and arriving at ROTI, EVA methods, and adopting methods of evaluation research or ethnographical intelligence. At the moment, a quali-quantitative approach is emerging that is aimed at integrating different dimensions of training assessment.

Introducing the *balanced scorecard* in the process of training evaluation allows this methodological balancing because the building of indicators is

³ More recently the methodology of ROTI has been corrected introducing the cost of capital in the procedure. The EVA (*economic value added*), by this, is considered a more reliable ratio of the measurement of investments in human capital.

made considering strategic objectives, economical and financial impacts, and the efficacy of learning and growth processes.

The balanced scorecard integrates key strategic perspectives of business: a) value generation for economical and social stakeholders; b) continuous re-orientation and realignment to market and environment conditions; c) effectiveness and efficiency of organizational structures and processes; d) involvement and development of human resources. The balanced scorecard is an integrative and dynamic tool of strategic control. It synthesizes effectively past approaches to management such as the *total quality management* (oriented to measures and continuous improvement), the *activity based costing* and the *economic added value* (oriented to value), and the *business process reengineering* and the *enterprise resources planning* (oriented on processes and data).

The process underlying the functioning of a balanced scorecard (BSC) influences simultaneously the quality of strategic decisions and their organizational implementation. This way managers can access balanced and updated information, simulate future actions and be more focused on results and on performance drivers. By goal deployment, moreover, they may link strategic objectives with individual performance. The alignment between objectives, actions and incentives reduces process time, assures cross-functional integration and allows more transparency and sharing of data and practices. In this fashion the gap between strategy elaboration and implementation is tapped: a) vision and mission are clearly established and translated in business strategies; b) each strategy is implemented in terms of performance and operational objectives; c) each objective is supported by the attribution of needed resources. To help BSC in its functioning many reporting systems are programmed.

Put in this way, the BSC is either a management system or a process of change management. In fact, its objectives and measures can be conceived either as *lead indicator*, addressing and leading performances towards results, or as *lag indicator*, i.e. measures of results. In order to effectively adopt a BSC it is necessary to be quite familiar with information and communication technologies, to be able to feed and manage constantly databases, and to be oriented to strategic control of business processes. In doing this a manager must recognize the critical function of human resources in building the competitive advantage of the organization and endorse the effective incentive systems.

Following Kaplan and Norton's perspective, it is possible to resume the real objective of a BSC in the ability of translating business mission and strategy into "a comprehensive set of performance measures," helpful to verify managerial efficacy and efficiency.

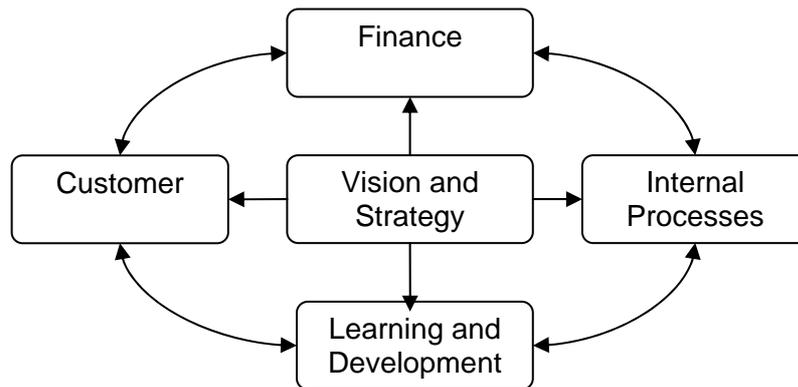


Fig. 6 – Strategic perspectives of a BSC.

A training department may be motivated in implementing a BSC because it integrates and balances different strategic perspectives (Fig. 6), quantitative and qualitative indicators, internal and external data. Especially for the corporate university this performance measurement system is fairly useful to manage and control training processes and outcomes.

The implementation of a BSC in a training department starts with the clear definition of the training *mission*. Some possible explanations are: a) to manage and develop the intellectual capital of business, its key competences that produce competitive advantage; b) to align training products and services to strategic objectives of business and to promote change; c) to improve organizational processes by developing professional and managerial competences of people; d) to produce and add value by training in the short and long run; e) to increase quality of training services and instructional materials, maximizing the impact on learning.

The second step could be the formulation of strategies needed to fulfill the mission statements. Among these: a) to design and develop innovative training initiatives for each contents and instructional technologies; b) to design and develop learning processes consistent to strategic objectives and

market trends; c) to evaluate and review continuous training processes, with the purpose of optimizing resource allocation; d) to enlarge and enrich the offer of a training department, either selling services on the external and captive market, or providing performance consultancy; e) to enact and hold high quality training programs, improving the relationships with internal and external training customers.

Each strategy, in turn, can be operationalized in strategic objectives. For example, if you want to optimize the usage of resources in training processes you could decide to improve the efficiency of needs analysis by 10% or to increase the application of information and communication technology by 30%, digitalizing instructional materials for instance. Otherwise you could decide to limit to 75% the ratio between training costs and returns. The strategy of enlargement of the training offer could be implemented establishing the 10% increase of the number of internal courses implemented in one year or by the raise of 20% of turnover on consulting services within three years. In order to increase quality of the training processes the strategic objective could be to reach 100% customer satisfaction within two years at the higher grade of scale satisfaction or to lower to 0% the costs of training reworking (course redesign and program redeveloping). The other strategy of training innovation could be deployed in the objective of redesign for 30% of training courses within two years using experiential learning technologies such as a business theater, circus theater, outdoor simulations, sportive and adventure training initiatives and so on. The same strategy could be carried out, otherwise, by changing and innovating each year at least the 15% of catalogue programs.

Finally, each strategic objective could be monitored by some *performance indicators* that can support the training manager in the implementation of a planned strategy.

For example, the objective of improving the process of needs analysis by 10% could be monitored observing indicators such as:

- n° of hours for needs analysis/total hours of course;
- n° of days per year for needs analysis/n° of analysts;
- n° of analysts/n° courses;
- n° of analysts/total n° of training specialists;
- Total internal cost of one analyst/external fee of one analyst.

In the same way, the increase of 30% in using information and communication technologies in training processes could be monitored measuring:

- n° of instructional materials digitalized/total n° of instructional materials;
- n° of blended programs/total n° of programs;
- n° of computers/n° of learners per year;
- n° of training days delivered by Internet/n° courses deliverable by Internet.

The increase of internal courses by 10% could be observed by the following indicators:

- n° of days of professional training/n° days of management education;
- n° of participants/total n° of employees;
- n° of participants/total n° of executives, managers and operatives;
- n° of days or n° of interviews for needs analysis/total n° courses delivered.

The last strategic objective of redesigning and innovating the 30% of training courses within two years could be, in turn, monitored observing:

- n° of participants to innovative programs/n° participants to traditional programs;
- n° of days used to experiment new technologies/total n° of training days;
- n° of days used to train and develop trainers on new technologies;
- n° of external consultants on innovative programs/n° of internal experts.

In brief, following the perspective of BSC, each strategy can be deployed in strategic objectives and these, in turn, can be observed and measured using quali-quantitative indicators. If used properly, these indicators can monitor efficiency and efficacy of training processes. Table 2 shows some possible indicators for each strategic perspective of BSC.

Tab. 2 – Indicators for a balanced scorecard of training.

Strategic Perspectives - BSC	Training Indicators
FINANCIAL	Investments in new technologies
	Investments in research activities
	Investments in ICT/Total investments
	Returns by new programs/Total returns
	Investments for developing of new programs
	UE financial aids/Total investments
	Total external returns/Total returns
	Returns on training activities/Total returns
	Returns on consultancy activities/Total returns
	Mean value external offers/Total value
INTERNAL PROCESSES	Faculty/Staff
	Internal instructors/Total instructors
	Internal instructors/Total instructors
	N° days of internal instructors/Total n° days of instruction
	N° days in internal buildings/Total n° days of instruction
	N° participants per offer
	N° of days for needs analysis/Total n° of training days
	N° of days for designing/N° of days for delivering
	N° of days for developing new programs
	N° of new programs proposed/Total n° of programs
LEARNING/GROWTH	N° of days of personal instruction and education
	N° of days internal evidences/Total n° of training days

	N° of days for research/Total n° of training days
	N° of days co-conducted/Total n° of training days
	N° of days of assessment activities/Total n° of employees
	N° of new programs/Total n° of programs
	N° of days of self-directed learning/Total n° of training days
	N° of partnerships with other training centers and associations
	N° of training days delivered in partnership with universities
	N° of programs in partnership/Total n° of programs
CUSTOMER	N° of training days for executives/Total n° of training days
	N° of seminars, workshops for managers/Total n° seminars
	N° training courses/Total n° of development initiatives
	N° participants to external initiatives/Total n° of participants
	N° of drop-outs/Total n° of participants
	N° of participants to innovative courses/Total n° participants
	N° of training days/N° of consultancy days
	N° days of internal training/Total n° of training days
	N° participants high satisfied/Total n° of participants
	N° of strategic programs/Total n° of training programs

The implementation of a BSC to manage training processes helps training departments regain legitimacy and reliability in the assessment of training investments. The BSC could also assist managers in running

training activities in a managerial way, aligning training activities and management education with the strategic objectives of the business.

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Competences without Nightmares

by Trevor Boutall

For more than a generation now the UK's system of Vocational Education and Training (VET) has been based on National Occupational Standards¹ (NOS). In the 1980s, at the zenith of the Thatcher government's powers, there were four key drivers for radical reform of VET. In first place was competitiveness, the need to increase efficiency and productivity to match international competitors such as Germany, France, the USA and Japan as well as recent upstarts such as Taiwan, India and Indonesia. The second driver was quality. The British public would no longer accept products and services of inferior quality like those on offer from British Leyland Motors (now extinct) and many public service providers; instead people were demanding high quality products such as those from German car manufacturers and standards of service to match those they received on holiday in French or American hotel chains. The third force for change was safety. A series of disasters on the railways, on North Sea oil rigs, in hospitals and social services – all came down to human error in the final analysis – clearly demonstrated the need to properly train and supervise all workers and guarantee their professional competence.

The last driver was the fundamental change in the economy, from an economy based on coal, steel and oil to a post-industrial paradigm relying on knowledge, innovation and customer service. Lifelong employability in this brave new world demanded, as it still does today, flexibility, transparency and commitment to a system of lifelong learning.²

¹ National Occupational Standards www.themsc.org/standards/nos.html.

² Leitch Review of Skills "Prosperity for all in a global economy – world class skills" www.hm-treasury.gov.uk/media/6/4/leitch_finalreport051206.pdf.

Certainly, National Occupational Standards have not solved all the UK's problems. We still have safety issues – train crashes, scandals in health and social services, unethical practices in banks and financial services – due, at least in part, to liberalization of markets, privatization of government agencies and increasing pressure to deliver shareholder value, a pressure which tends to put service quality at risk in the medium to long term and, above all, compromises safety. On the plus side, however, the quality of public services – and those from private companies – has increased markedly, the UK's competitive position in the global marketplace has remained intact, notwithstanding the advance of the tiger economies, and unemployment rates are amongst the lowest in Europe. The most visible impact of the new VET system in the UK can be seen in a more flexible approach from both employers and employees. The marketplace – the external environment – is continuously changing which demands a prompt response – or better still, anticipation – adjusting organizational objectives, business processes, work behaviors and renewing the knowledge and skills of the whole workforce.

The objective of the National Occupational Standards system is to make all workers at all levels competent to carry out their roles and autonomous in making decisions within the limits of their responsibility. This objective demands a rigorous, detailed and agreed on analysis in order to specify what is meant by competent performance in a particular role. This *functional analysis* is normally carried out for a whole sector – for health, agriculture, finance, retail etc. – or for a professional grouping – such as managers, salespeople, accountants or administrators. The analysis starts by defining the *key purpose* of the sector or professional group. This key purpose is a phrase which concisely yet comprehensively defines why the sector or profession exists. Let's take the example of the functional analysis of Management and Leadership.³ Why do we have managers/leaders? Their key purpose is *to provide direction, gain commitment, facilitate change and achieve results through the efficient, effective and responsible use of resources*, a rich phrase which expresses the essence of the role of managers/leaders at any level in any context. It is important that the key purpose describes both the key activities of the managers/leaders (provide direction, gain commitment, facilitate change and achieve results) and the constraints within which they have to work (through the efficient, effective

³ Management and Leadership Standards:
www.management-standards.org/content_1.aspx?id=10:1917.

and responsible use of resources). It also describes a model of management and leadership agreed to by all the key stakeholders (government, employers, management associations, etc.) based on common values.

Functional analysis seeks to define, at different levels of detail, what needs to happen to achieve the key purpose. In the case of the functional analysis of Management and Leadership, there are six *key areas* at the first level of analysis. They are:

- Provide direction.
- Facilitate change.
- Achieve results.
- Work with people.
- Use resources.
- Manage self and personal skills.

The functional analysis methodology uses further levels of analysis to define, very concretely, the different activities managers/leaders need to carry out and the competences they need to achieve satisfactory results. The key areas that *Facilitate Change*, for example, are further divided into four *activities*:

- Encourage innovation.
- Lead change.
- Plan change.
- Implement change.

Not all managers/leaders carry out all these activities; it depends on the context and their level in the organization. In modern contexts, most managers/leaders are expected to promote innovation; however, some managers/leaders promote organizational changes, others carry out the detailed planning, while still others implement changes. In a large, hierarchical organization, these activities may be carried out by three

different people. In a small or medium enterprise (SME), these are probably all activities carried out by the entrepreneur. Functional analysis has two major benefits:

1. It identifies all the activities that have to be carried out to achieve the key purpose (in business-speak, the "mission" or "strategic objectives" of the organization).
2. It allows responsibilities and activities to be delegated clearly and transparently to individuals.

In the methodical British system, all these activities are specified precisely in the units of the National Occupational Standards. The units describe the quality of performance required from those to whom the activities have been delegated; they also define the knowledge, skills and personal qualities (described as behaviors) that are necessary to consistently deliver competent performance. In the unit *Lead Change*, for example, there are eight performance criterias that can be used to plan the activity and assess whether the activity has been competently carried out:

1. Communicate your vision of the future, the reasons for the change and associated benefits to everyone involved.
2. Encourage everyone to welcome change as an opportunity.
3. Make sure that the people responsible for planning and implementing change understand their responsibilities and have the necessary influence and power.
4. Set and prioritize objectives for change.
5. Identify strategies for achieving the vision and communicate them clearly to everyone involved.
6. Support people through the change process.
7. Communicate progress to everyone involved and celebrate achievement.

8. Identify and deal with obstacles to change.

This quality of performance is only achievable by those who possess the necessary knowledge (models of leadership, principles and methods of risk management, problem-solving techniques etc.), skills (communication, persuasion, delegation etc.) and personal qualities (assertiveness, courage, concern for others etc.). All these knowledge skills and personal qualities are described in detail in each unit of the National Occupational Standards.

This level of detail in the UK standards allows performance management to be carried out in a uniquely clear and transparent way. A boss can explain very clearly to a co-worker the purpose of their role, the extent of their responsibility and autonomy, the activities that they must carry out and the level of performance required. The boss can check that the co-worker has the necessary knowledge, skills and personal qualities and provide training, supervision or coaching to address any shortcomings. The standards provide an objective tool for assessing whether the co-worker's performance is satisfactory, diagnose any problems and deliver specific feedback and support designed to help the co-workers adapt their behaviors and improve their performance.

The standards also support training and development processes. The repertoire of knowledge, skills and personal qualities translate easily into the program and learning objectives to prepare new recruits to fulfill their roles. However, it is important also to recognize that, when a person applies for a position, they already have experience of work and life which provides them with a reservoir of valuable knowledge, skills and personal qualities. The standards can be used to make an accurate analysis of the person's strengths and development needs. The results of such an analysis allows for the preparation of a personal development plan which focuses on the real needs and priorities of the individual and avoids any repetition of areas which have already been studied and learned. This focalization helps the individual to appreciate the importance of their personal development and reinforces their motivation to learn. Naturally, learning can occur through a wide diversity of means, from traditional classroom lessons to research and targeted reading, from distance learning to project work and action learning. The standards also provide the yardstick against which to measure the efficiency and effectiveness of the learning. The definitions of knowledge and skills can be used to assess the efficiency of the learning: has the student learned these facts, can they use these tools and techniques,

can they demonstrate the skills required? The performance criteria, on the other hand, can be used to assess the effectiveness of the learning (return on investment): does the co-worker now apply his new knowledge and skills to achieve the behaviors and results required?⁴

National Occupational Standards have stimulated a new training market in the UK. Major publishing houses now publish text books structured along the lines of the standards. Distance learning and e-learning courses are modularized to meet the demands of students who need concise, targeted and effective learning packages. Universities, colleges and private training providers use the standards as the basis for planning and preparing new courses for the labor market. There are also National Vocational Qualifications (NVQs)⁵ at different levels which do not assess what the student has learned but certify that the worker is competent, i.e. that they carry out their duties in line with the standards. NVQs do not require candidates to follow prescribed courses, but allow each worker to learn knowledge and skills and develop their competence in the workplace following their own personal development plan. To be awarded an NVQ, a worker has to show that they can work autonomously (without close supervision), guaranteeing the quality of their work and the safety of their actions. They must also be responsible for their own continuing professional development and be proactive in the face of contingencies and change.

For more than ten years, government ministers, companies, public authorities, professional and trade associations and training organizations in Italy have been studying the UK system, but it is only in the last five years or so that serious investment has begun to be made, perhaps stimulated by activities at the European level such as ECVET (European Credit system for Vocational Education and Training)⁶ and the EQF (European Qualifications Framework),⁷ adopted by the European Parliament in April 2008. It is, however, worth reviewing some of the pioneering work taking place today in Italy to create learning and accreditation frameworks built on the National Occupational Standards approach.

SCOA,⁸ the School of Coaching, was established in Milan in 2002 with the mission to develop people who already have extensive experience in

⁴ Using National Occupational Standards www.localandcharges.info/using_home.asp.

⁵ National Vocational Qualifications www.qca.org.uk/14-19/qualifications/index_nvqs.htm.

⁶ ECVET http://ec.europa.eu/education/ecvt/work_en.pdf.

⁷ EQF http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm.

⁸ SCOA www.coachingscoa.com.

business or in training to become executive coaches. SCOA offers a Master in Executive Coaching program lasting two years, the first year in the classroom learning the principles and techniques of coaching and the second year of supervised practice to apply the knowledge and skills learned and reach the required level of competence. This allows SCOA to make the decision as to whether students have attained all the required competences and thus award them the Master in Executive Coaching.

In order to provide a rigorous structure to the curriculum of the course and guarantee the quality of its alumni, SCOA decided to adopt the National Occupational Standards methodology. Executive coaching is a new profession, not only in Italy but in the world, and it was very difficult to clearly define the key purpose and functions of an executive coach. After extensive research into international best practices and careful consideration of SCOA's core values, the scientific committee defined the key purpose of executive coaching as *to work on a one-to-one basis with coachees, to help them use their resources to meet the demands and opportunities of the work context and continuously develop their competences and behavioral strategies to maximize their impact* (Aiutare i protagonisti aziendali o i propri collaboratori in una relazione di fiducia one-to-one a focalizzare i propri obiettivi e le proprie risorse rispetto alle opportunità e richieste del contesto organizzativo e a sviluppare le proprie competenze e le proprie strategie di comportamento per massimizzarne l'efficacia).

Through functional analysis, three key areas were identified:

- a. Manage one 's self (Gestire se stesso).
- b. Manage relationships involved in executive coaching (Gestire le relazioni connesse con il lavoro di executive coaching).
- c. Help coachees develop their competences and behavioral strategies (Facilitare lo sviluppo delle competenze e strategie di comportamento del cliente).

At the end of the functional analysis, seven activities were specified:

A.1. Manage and develop your own resources as a coach (Gestire e sviluppare le tue risorse di coach).

B.1. Manage relationships with clients (Gestire le relazioni con i committenti).

B.2. Establish, develop and conclude relationships with coachees (Stabilire, sviluppare e concludere i rapporti con i clienti).

C.1. Help the coachee to identify their own values, objectives and resources in relation to the demands and opportunities in the work context (Aiutare il cliente a identificare i propri valori, obiettivi e risorse rispetto alle opportunita' e richieste dell'ambiente di lavoro).

C.2. Help the coachee decide their development priorities and plan their development program (Aiutare il cliente a decidere le proprie priorita' di sviluppo e progettare un percorso).

C.3. Help the coachee develop their own resources and behavioral strategies (Aiutare il cliente a sviluppare le proprie risorse e strategie di comportamento).

C.4. Help the coachee evaluate the results of their development program (Aiutare il cliente a verificare i risultati del percorso di sviluppo e cambiamento).

Following the National Occupational Standards methodology, for each of these seven activities a list of performance criteria was developed to assess whether the activity is carried out competently, together with a repertoire of knowledge, skills and personal qualities essential for competent performance.

This repertoire of knowledge, skills and personal qualities forms the basis for the curriculum of the first year of the Master in Executive Coaching course. At the beginning of the course, the students undergo an assessment to identify their strengths and development needs. Since they come from different backgrounds, each student has a unique profile; they have invaluable experience to share with other students during the course and they also have gaps to be addressed with the support of SCOA trainers and their peers. While each student has their own personal development plan, they follow the same program in the first year, learning from their own and others' successes and failures, guided by the trainers.

The Executive Coaching Standards provide a tool for reflective learning that can be used at any point during the course and also as a yardstick to measure the progress of the participants. At the end of the first year, the students carry out a self-assessment in which they check whether they have already achieved the level of performance demanded and where they need to focus during the following year. They undergo a simulated test in which they conduct a coaching session with a fellow student and receive feedback from the other students, from the trainers and from an external assessor. This feedback helps them fine-tune their self-assessments and define a more precise development plan for the second year. In the second year they practice executive coaching with real clients and bring their experiences to regular supervision sessions where they are discussed, always using the standards as a benchmark. At the end of the second year they face a second test, this time with a real client, which allows the external assessor to decide – supported by a thesis and the reports of the trainers – whether the student has achieved the required level of performance or whether they need further supervised practice. For SCOA, therefore, the standards provide the structure for the course, tools for reflection and assessment and a guarantee that SCOA's alumni are truly professional executive coaches. Building on the success of its Master in Executive Coaching program, SCOA has recently begun developing bespoke versions of the Executive Coaching Standards for Italian companies to use for coaching managers and other staff internally.

A major bank in the north of Italy decided to experiment using the National Occupational Standards approach in 2005. As is the case in many banks, the main challenge for the human resources director is to identify and prepare people to take on the role of *branch manager*. The functional analysis methodology allowed the bank to clarify the role and responsibilities of this key figure, establish criteria which distinguish satisfactory performance in the role and define the requirements in terms of know-how, skills and behaviors. The *role profile* of the branch manager helps identify people – from either inside or outside the bank – with the potential to fulfill this role through the use of specially designed assessment centers. The newly-appointed branch managers undergo six and a half days of workshops, facilitated by trainers, senior managers from the bank and specialists, to get to know the requirements of the role as defined in the standards, familiarize themselves with the *tool box* that they need to apply in their new role, identify their own strengths and weaknesses vis-a-vis the role, and define their personal development plan for the following six months. Targeted workshops and individual coaching are the methods used

to develop their skills and competences and experiment with the application of the tools which are unique to the bank. The performance criteria clearly show what is expected of the new branch managers and provide tools for area managers to use when monitoring and assessing the performance of the branch managers in their territories.

As might be expected, the bank is interested in numbers, money, profit and return on investment. Each branch has a set of targets reflecting both the overall bank's strategic objectives and the branch's own unique context. Measuring the results of the first group of branch managers to be prepared in this way against a control group of branches where the managers never had the benefit of training found that within their first year in the role, nearly 90% of those trained under the new system were hitting their targets (some were well above target) against only 75% in the control group, and that the new managers who trained using standards were hitting their targets much earlier than those in the control group. This represents millions of Euros of extra profit for the bank and a significant return on the modest investment in the training. Furthermore, when they got to hear of the innovation, many existing branch managers started asking for training of a similar quality to help them meet their targets, so the bank has designed and launched a "School for Branch Managers" with a three-year program based on the standards to prepare potential candidates for the role. At the time of this writing, 10 groups of about a dozen branch managers have been through this standards-based induction program and 70 potential candidates have completed the first program of the School, allowing the bank to open new branches at a fast rate and also to grow through acquiring a number of smaller banks. The standards, the tool box and the training program are continuously reviewed and revised, but standards are set to be the cultural basis of their retail banking division for many years to come.

Commitment to standards-based human resource development is also growing in the public sector in Italy. In January 2007, the *Provincial Health Service Agency* (Azienda Provinciale per i Servizi Sanitari or APSS)⁹ in Trento launched its initiative to "put the individual at the center of the system" and provide its staff with personalized development opportunities, based on a functional analysis of the requirements of the role and a personal analysis of how effective individuals were at meeting these requirements. The first two groups addressed in the experimental phase

⁹ APSS Trento www.apss.tn.it.

were the *clinical directors* (primari) and the *nurse managers* (capo sala). With input from representatives of these two groups, heads of department, the nursing director and training and human resources staff, standards of competence were defined for these groups, comprising the usual performance criteria, knowledge and skills.

Based on these standards, tools were prepared which allowed the clinical directors and nurse managers to assess their own strengths and needs for developing their competences to meet the challenges of their roles. These were then translated into personal development plans involving a wide variety of learning methods, amongst the most popular being training sessions based on case studies simulating real-life situations likely to arise in their work, individual coaching sessions, working in project teams to address common problems and briefings by senior medical or managerial staff on hot topics. The standards provided both a common understanding of the roles of the two groups as a whole and quickly focused on the few critical areas where improvements in individual competence could have a significant positive impact. The experimental phase completed and positively evaluated, the program is now being made available to all clinical directors and nurse managers, while phase complementary programs are being developed for heads of technical disciplines (e.g. laboratory testing, radiology, psychology and occupational health), all medical staff and senior managerial staff. Although return on investment is less easy to measure than in the banking case, the impact on the organizational climate is tangible. As one – at first skeptical – as clinical director puts it: "If only I'd had this program at the beginning of my career, I would have avoided no end of mistakes."

Interest in the UK system of National Occupational Standards is rapidly increasing in Italy, both in the public and private sectors. One of the biggest local authorities in Italy is considering adopting a similar system for the training and continuing development of its 15,000+ employees. An insurance company is planning to use the standards to train its 3,000 agents and ensure they comply with the company's procedures and the requirements of the Basel II accord. Having studied the success in Trento, another health authority in the North East of Italy is beginning to use standards methodology as part of a major restructuring and recruiting internally for people with the right qualities to fill the new posts created. A new democratic movement is experimenting with the UK approach to help its young members develop their skills in communication, persuasion,

negotiation, lobbying and team working. Two economic and social development projects – one in Calabria and the other in Campania – are using the principles of the standards to develop the competences of project managers, learning facilitators and business advisers. After two years of research and experimentation, in October 2008, ManagerItalia (Federazione Nazionale Dirigenti, Quadri e Professional del Commercio, Trasporti, Turismo, Servizi, Terziario Avanzato),¹⁰ in collaboration with CFMT (Centro di Formazione Manageriale nel Terziario)¹¹ and EXEO Consulting¹² will launch its self-assessment, training, professional development and certification system which is aligned with the European Qualification Framework and uses Italian Management Standards, based on the UK model, but sensitive to the Italian context.

In the next five to ten years we can expect a significant increase in the use of human resource management and development systems based on the UK's National Occupational Standards, adapted naturally to the local context. The beauty of the British system is that it is highly structured, detailed and focused on the achievement of objectives. In the past, the level of detail was itself an obstacle to the use of the system; one risked getting lost in the sheer volume of information it contained. Information technology can mitigate this risk (in fact, ManagerItalia's system is delivered online) and allow those responsible for training and human resources to tame this data, using it to improve the management of their businesses. An organization which has completed a careful functional analysis and continuously develops its people to acquire the necessary competences finds itself in a strong competitive position. Quality and safety are guaranteed. Its human resource director can sleep soundly without fear of nightmares.

¹⁰ ManagerItalia www.manageritalia.it.

¹¹ CMFT www.cfmt.it.

¹² EXEO Consulting www.exeoconsulting.com.

Personal training: a case study

by Barbara Bertagni and Fernando Salvetti

One of the most effective and efficient interventions of action learning for managerial development is obtained combining and integrating traditional methodologies with experimental activities, during the course of training and development planned according to the requirements of each single entrepreneur, manager or professional.

In fact, the flexibility of personal training reflects itself in the possibility to structure short courses on the occasion of important changes or as support in critical or stressful moments rather than long courses to accompany the career development or personal growth. The supervision, the support and the confrontation with expert consultants, takes place respecting privacy and in full compliance with a client's agenda, with the purpose to create the best conditions for personal development. The targets of personal training range from the improvement of the regular characteristic situations to the development of the distinctive competences as well as to the attainment of a personal wellbeing condition.

To this purpose, the planning of the managerial development course (or *empowerment*) is supported by:

- ❖ *A personal trainer*, who is the only interface with the client, coordinator and responsible for the whole process.
- ❖ *An interdisciplinary team of professionals*, formed to measure according to client's specific requirements.

The personal training activities are lead by experts of personal resource development and of professional competences, of career development, psychological and philosophical counseling, of personal communication and marketing, of organization and management, of business administration, economy and law. Tendentiously, the structure of a personal training course is flexible and modular ,and includes interviews on coaching and counseling, self-empowerment sessions and one-to-one personalized training, evaluation moments and development of potential, “invisible” assistance to a client during his most important work activities, strategic and operational consulting.

In fact, in the *personal training* courses the training takes place starting from direct experience, shaped according to it, continuously evaluated by direct observance, feedback conversations or a self-evaluation test. Both, the work instruments and the evaluation grids or the psycho aptitude tests are personalized according to the peculiarities of the individual requirement. Besides, the *personal trainer* plans and coordinates the *learning environment* of the person, aggregating resources (didactic notes, cases serving as guides, presentations, articles, books, electronic resources, video clips, picture extracts and work instruments) and relations, (professional networking, seminars and meetings of the relevant sector) thus as a whole, useful to professional empowerment and likely to be activated in the task, namely on the specific request by the self-formated subject (*resources on demand*).

Finally, by intervening in presence and at distance, the team will supply the necessary support to clear up the essential points of the various interventions, to help morally and psychologically during the course of the change and to verify, through *the project tutorship*, the effective application of the knowledge acquired to the specific organizational projects.

Case: An entrepreneur’s managerial empowerment course

Target: The managerial empowerment of the entrepreneur, Mr. X

Personal Trainer: Business Management Senior Consultant

Team: Career Counselor, Business Management Senior Consultant, Expert of Marketing and Sales Technique, Psychologist

Duration: 20 sessions (4 hours each) in presence, alternatively with one or two consulting + 60 hours of tutorship and online and telephone assistance.

Meetings: Once a week with days and timetables fixed according to the client's requirements.

The course is structured in three stages:

- I. Development of the *communicative, relational and decisional* competences. Period: November – February.
- II. Development of the *organizational and managerial* competences. Period: March – May.
- III. Development of the *sales and clients management* competences. Period: June – July.

For the first session, the development program foresees an initial meeting for drawing up *the balance of the individual competences*, by handing over tests for psycho aptitudes, proofs of knowledge and of operational capacity.

The two following meetings will be used for defining strategies for personal and professional empowerment concerning task management in the company.

Then, two training sessions will be used for the development of the *communicative, relational and decisional competences*.

A third training session foresees also working on the *management of the personal and professional image*.

At the end of the first training stage there will be a development session for the evaluation and individual feedback on the first training stage.

The second training stage is meant for the company organization and the company management instruments.

Two training sessions will be oriented towards the development of business process and of the most effective marketing actions in the company context and the specific relevant market.

At the end of this second training stage there will be another moment of empowerment, coordinated by the personal trainer in order to ascertain development.

In the third stage, after the first training session for the *management of clients and the sales techniques*, there will be an *on site support* during a commercial action. Downstream from the intervention, the program

foresees another meeting for returning the feedback on the activity and for the *management of the professional image with clients*.

At the end of this training stage, there will be a meeting for professional development and a second meeting dedicated to a further development of *managerial competences* and *organizational behavior*.

Finally, the course includes an *on site support* during a whole working day and a meeting for the final evaluation with regard to closing the first year of activity.

During the stages between the room and support sessions, some material for self-empowerment will be distributed, specially planned and prepared for the personal training in order to allow a constant monitoring during the daily activities.

According to the analysis of the competences, the structures will be introduced to measure: action plans, tests to verify the level of learning, grids for the self-evaluation and the monitoring of improvements, guiding cases and reports on the best business experiences achieved in organizational contexts similar to the entrepreneur's and literature and other didactic material which will be distributed from time to time.

There will be in moments between the stages a remote tutoring of the consultants and of the personal trainer.

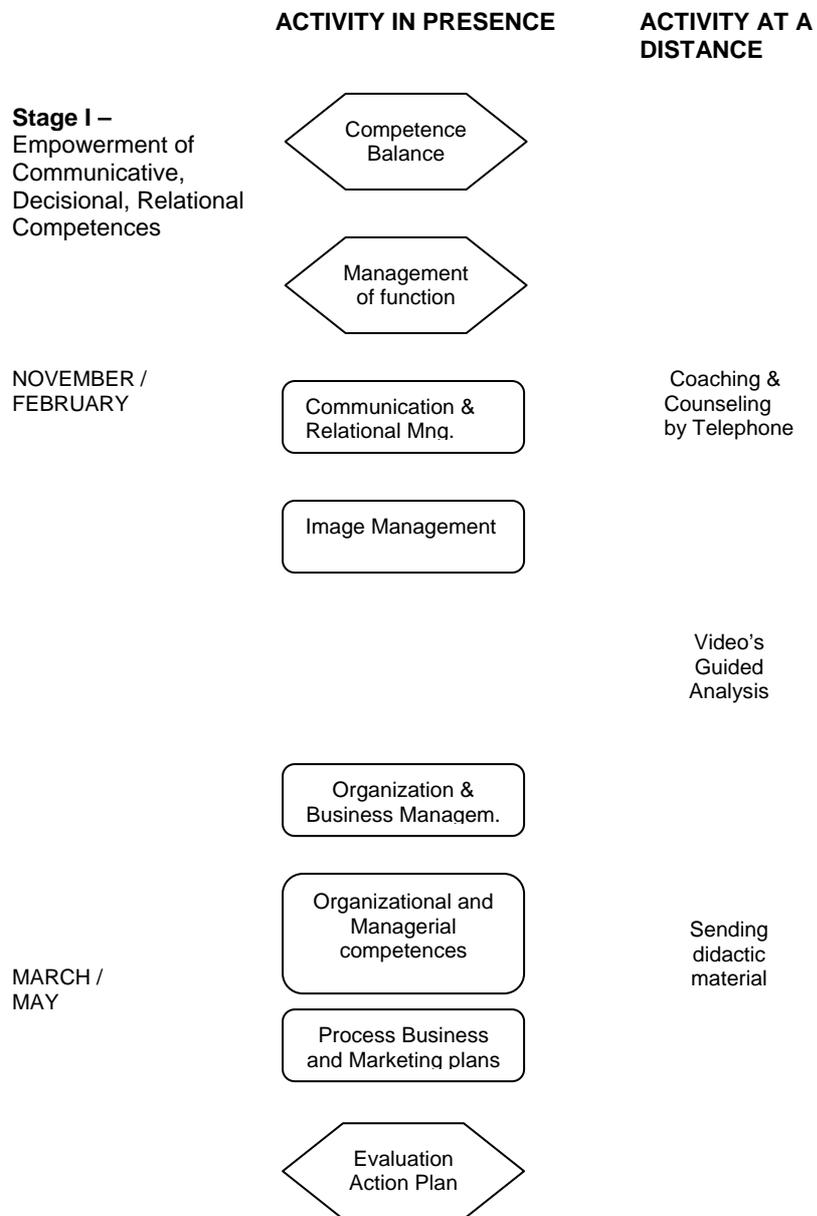


Fig. 3.a. The process of personal training.

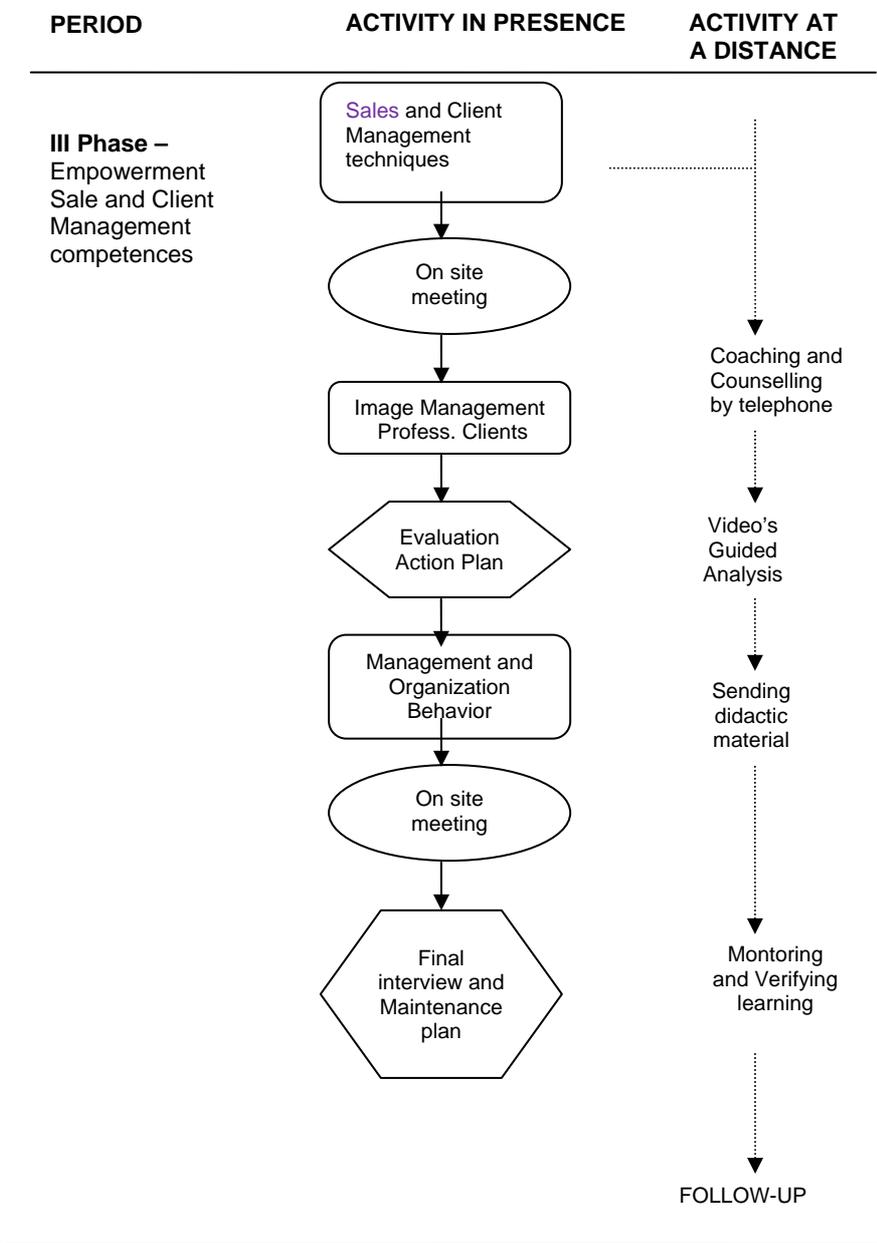


Fig. 3.b. The process of personal training.

Philosophy in Business

by Barbara Bertagni and Fernando Salvetti

Living within the organization requires sharing goals and values, confrontation between cultures and action strategy and reflections on our personal role and professional identity. Philosophical counseling is one of the most effective methods to bring out and explore the personal tacit assumptions which heavily condition the life of organizations, opening a space for confrontation and query on what is the basis of individual behavior and of organizational praxis.

Philosophy is neither a subject to be taught nor a discipline like many others. It is an approach to life and to situations, a “meta” level to be dealt with in order to view every day life through different categories. Philosophizing implies exploring the space of questions, and listening to both ourselves and others. Making philosophy means questioning ourselves on well-known propositions, trying to observe what we do, what we are and what we say, from a different perspective.

Philosophical questions allow us to explore the tacit assumptions which guide our actions, opening spaces to reflect over them and to question them. Philosophical counseling, reflections on epistemology and theory of knowledge, cultural and organizational anthropology, dialogues on ethics and professional codes of conduct, sessions of practical philosophy in businesses and labor organizations are among the most effective actions in terms of soft strategies for organizational development, to explore new ways of doing things, producing and planning.

Businesses use philosophy to give a perspective to things, in order to try to understand what is happening within the company and in the outside

context, or to share new strategies of thought and action, rather than redefining their identity in periods of heavy change or to intervene in the organizational wealth.

For some organizations, philosophy is a random intervention, for others a recurring engagement. In both cases it is always a way to invest in human potential and to work on knowledge management.

1. A case of philosophical counseling

Given the delicate problem we are being faced with, for privacy reasons, we will re-name the client company “Zed.”

Zed is a very dynamic multinational company which is growing quickly. The great expansion it has been subject to over the past years, and the opening of new plants in South East Asia and Eastern Europe, has generated a series of problems in terms of local microcultures and peaks of tension within the organization, as well as an effect on public opinion. An analysis of the work atmosphere conducted at the end of 2002 indicated uneasiness within the management due to the difficulties faced in accepting the accusations made to the business by the local press. This moved the attention of the managers to themes of corporate social responsibility.

In 2003 the interest for working on corporate values arose. Until then, these values had only been partially codified in a corporate card and lived as being in contradiction with the results of the primary production processes, at both a personal and a social level. Specifically, many people within the business felt an increasing discomfort towards the social problems generated in some local contexts, where the company was present with its manufacture plants. In March 2003 we, that is Centro Studi Logos, were contacted with the objective to carry out an intervention in order to improve the atmosphere within the organization and favor the confrontation on the key values of the business.

We proposed an intervention of philosophical counseling focused on:

- Helping to identify and giving space to the exploration of the uneasiness.

- Providing keys of interpretation to understand the local systems of thought: on one side by reconstructing the local systems of belief, thought and values which characterize the social micro contexts where the business operates, and on the other, by investigating and distinguishing the main principles, in terms of values, of the company's vision.
- Creating spaces for cultural mediation between the principle values of the business and the local cultural values of reference.

The group of managers met for three days of confrontation in a hotel and Spa in Switzerland, in the Engadina Mountains, and a month later, for two more days, in a hotel in the Marche region countryside, on the hills surrounding Urbino.

These were two very evocative locations in two contexts which favor a good contact with nature and which provide very comfortable arrangements.

Two full immersions were conducted using methodology of philosophical counseling, searching together for the strategies which can help identify the main axis of the problem examined.

Specifically, the groups of Zed had the goal of intertwining two levels of reason:

- On one hand, the level of external survival of the company with a declined mission, strategy, objectives, means and processes.
- On the other hand, the more profound propositions: the relation between the organization and its environment, the nature of human relations and responsibility and cultural homogeneity versus diversity.

Facing the problem in philosophical terms means maintaining the confrontation on crucial focuses such as that of power and submission, of global and local and of utilitarian and altruistic. The thought process was ignited by a particularly significant statement made by one of the

participants: “Those who come from a superior culture are morally obliged to help those who come from a more backward culture!” This was how the thought process started and was aimed neither at confronting different theoretical knowledge, nor trying to change the person’s mind, but at exploring the meaning of the words used in the question: “Are there really superior cultures?” “What is the moral? Is there only one moral or are there many?” “What makes us feel we are part of a superior culture?”

The questions were not brought up by the philosopher, but by the participants. The philosopher facilitates the dialogue, shifts the level of conversation, suggests strategies to explore problems, but never provides answers to solve them.

Communicating through Artistic Set-ups: The Experience of Colletta di Castebianco

by Fernando Salvetti and Barbara Bertagni

The artistic set-ups constitute an efficient form of communication, involving an innovative modality of communication and management of the image of a company or of a territory.

To fit out a space means to create a climate, generate a frame favoring and stimulating the reflection and confrontation, to metacommunicate values and vision, to surprise with a captivating management of the picture, to involve not only at a cognitive level, but also at an emotional level.

To fit out a target is to draw attention and interest, to communicate, to amaze, to involve, to welcome, to invite and to reflect at a strictly cognitive level the discovery proceeding through imaginative thought.

The fit outs are usually realized within the organizations:

- As an inner communication instrument in order to catalyze the attention on themes requiring a strong involvement such as knowledge management, change management, the development of leadership models, the motivation processes, the total quality, intercultural management and the internationalization processes.
- As an external communication instrument for interfacing with interlocutors in an original and involving manner.
- In order to promote particularly prominent projects.

The utilized instruments: scenography, projections, plays of light, art pictures, cartoons, photographs, short written texts, sculptures, suggestions of music and colors and literary and poetic hints.

Each fit out is designed to measure, starting from a careful analysis of the client's organization, his tacit and explicit culture, the customs and myths characterizing his history, the shared paradigms and the changes being made, the targets to be reached and the person it is aimed at.

Each fit out is individual and can be provisional or of a longer duration.

1. Case: The setting up of the medieval village of Colletta di Castelbianco

Colletta di Castelbianco is quite a charming medieval village: a bunch of stone houses with colored windows, castled in the Ligurian hinterland of Albenga (SV) in a thick cobweb of alleys and "carrugi" (typical Ligurian narrow streets).

Restored lately by the architect Giancarlo De Carlo and entirely cabled, the village presents an ancient heart with a hyper-technological soul.

The initiative belongs to an ample project of territorial marketing:

- In order to promote the image of the village as a place for reflection and research.
- In order to communicate the choice of investing in Colletta as a village dedicated to training.
- In order to bring out the landscape and the architecture as well as its high technological potentiality.

The difficulty was in being able to involve a much differentiated target of people with an initiative that utilized the language of training, but remained lucid and amusing at the same time.

The firm that runs the village of Colletta has been chosen as a consulting firm Logos Knowledge Network which has fitted out the village and transformed, for one day, the whole little town into a magic labyrinth straight out of theatrical suggestions, music, colors, pictures and works of

art, poems, philosophical meditations, light and shade, mirrors, optical illusions, perfumes and flavors, plays, ability tests and problem solving.

A way of discovery sanctioned by Proust's phrase "The true discovery of travel does not consist in discovering new lands, but to have new eyes." The fit out was focused on mechanisms of imagination and representations characterizing the evolving research on oneself, to remind us of the fact that Colletta is a laboratory where different ways to see and re-construct the world are sought, and new ways of doing things, to produce and plan, communicate and develop personal competences happen.

The whole fit out has been realized by combining reality and representation together: passing between actual objects and painted objects, more or less real identities and pictures reflected by mirrors, conjuring-tricks and optical illusions. A fit out has many physical and mental levels with incitation and suggestions intersecting with as many levels of the village as possible, almost like climbing the stairs appearing in the famous Escher's opera (in the fitting out it is proposed under the shape of a huge puzzle to be built as a group).

Many hundreds of visitors have penetrated the labyrinth of the lanes of Colletta, under a gallery of pictures in the open air, challenged by scornful puzzles, enraptured by the dialogues with the poet, incited to reflect, also through psychological plays, on the many levels of the reality that our eyes do not know or always perceive, searching the inner polyphony that exists even by means of psychological games, on numerous levels of reality, that our eyes cannot always catch, looking for an internal polyphony that inhabits us. As a background: a piano, violoncello, saxophone, contrabass and a voice reciting:

Pessoa: *"My soul is a mysterious orchestra; I don't know what instruments play and squeal it."*

Pictures, Music and Movies

by Fernando Salvetti and Barbara Bertagni

1. Case: The introduction of a new corporate leadership model

The organizational context of reference is a multinational company providing services to banks. The described case has been dedicated to the top management of the firm and characterized, first, by an initial phase of “Socratic dialogue,” a philosophic method used to explore the characteristics of efficient leadership. A dialogue which took place in a particular way called “maieutics” and which requires from the educationalist to be silent as much as possible, just to facilitate wide and tight confrontation between the interlocutors, starting from their experiences and their personal beliefs.

In this case, the dialogue was focused on the efficient leadership and, with the purpose to raise the discussion, the instruments utilized were a series of particularly evocative pictures of history and news (from David’s Napoleon to a few representations of Jesus Christ), from a few pieces of music containing a lot of variations on the same theme (most of them performed by Gidon Kraemer and by his orchestra, the Kremerata Baltica) and by short movie strips with characters facing moments of particularly intense work life (from *Wolf* with Jack Nicholson and Michelle Pfeiffer, from *Presumed Guiltless* with Harrison Ford and from *Mediterranean* with Diego Abatantuono).

The interpretation and re-interpretation in a group of art pictures and photographs, as well as listening to the selected musical themes and sharing of some rules of interpretation of “musical” speech, or else some raid in the plots and in the montage of a few movie strips, a bit within the movies and

much outside, searching analogies with the firm reality... all these are “metaphorology” exercises, facilitating a quite open confrontation and an analysis of the organizational context of reference with the instruments of aesthetics and of cultural anthropology, average and adapted due to the knowledge of the organization of the firm by the educationalist himself. In fact, through the exercises of “metaphorology” it is easier to explore not just “one” reality, but “the realities” we live in. Not “one” world or “the” world, but “a world of possible worlds”: in other words, we live in a firm world, but not only that, in many worlds characterized by their specific constellations of important meanings, values and criteria.

Meanings, values and criteria that the exercises of listening to the music and of visual analysis of representations and movies enhance rather easily and thanks to which, therefore, the educationalist can start the confrontation, the deconstruction and re-construction work which opens lot of *ways of world-making*.

The discussions in the screened pictures and the behaviors in the movies as well as within the pieces of music, listened and compared with each other to find out similarities and differences, created new conditions to start a preventive deconstruction of many individual models of efficient leadership, as proposed by the various participants and then another conceptual re-definition of a leadership model as shared by means of the discussion on 37 possible attributes of the efficient leader and aiming at finding out 8 distinctive characteristics. And thus at the end of a hard day of work characterized by a climate of very lively and stimulating confrontation and discussions. To sum up, this is what came from it: the skill to make the most of people by developing their capacity, assertiveness, capacity to motivate for reaching targets, a decision-making capacity especially as to problem setting and solving, as well as in regard to the tendency to activate business transactions, the capacity to assimilate and be able to share various cultural experiences, orientation towards results, orientation towards innovation, especially meant as mental flexibility and tendency to delegate.

After this first day, more than two months have elapsed, during which the educationalist could re-elaborate the acquired information and “listen” to a few significant voices within the organizational context. This is in order to face another 3 days’ work meant for the discussion of the leadership model emerging from the new internal document dedicated to the *Performance Announcement Process* (drawn up in the States at the level

of multinational groups and then propagated to the various national corporate entities).

The P.A.P. contains a list of 13 fundamental competences, subdivided into 3 macro areas:

- *People*, namely the capacity to build relations, to communicate efficiently, to practice a leadership which, especially at the managerial level, is strongly orientated towards coaching and the empowerment of the members of the team.
- *Work*, which especially pertains to time management and flexibility, and also the mutual respect and other leading values as to the ethicality area.
- *Information*, implying his capacity to have a wide, systemic and multi perspective horizon, and problem solving.

The P.A.P. implications have been the object of a deep analysis as a consequence of either direct situations of life spent in the company, experienced and related by the participants in working groups, or else referring to the main topics coming from the Socratic dialogue at the beginning, or the projection of a series of *post-modern* designed pictures with provocative, breaking off slogans, especially planned to raise (through a strong visual representation, based on a style, unusual for that cultural context) resistance, “unsaid” and gossip, in order to bring in and discuss anew the main topics coming out during the said days.

The whole of it with the aim to find good reasons to share the new leadership model: a target reached by facing the leadership themes not with an approach of *how to* by presenting more advanced and sophisticated models and used in more important organizational environments, but considering it from the *why* point of view, therefore inviting the firm leaders to improve their competences in this environment through a better grasp of why they act as they do. The *why* point of view that the exercises of musical “metaphorology,” both artistic and cinematographic, help a lot.

Form and Transformation. Training... True Change for People and Organizational Structures

by Laura Tucci

Why is training for companies still often considered only as a cost?

Why do plans for organizational change, which are really needed, elaborated from prestigious advisor societies, have difficulty in succeeding when being applied?

The answer is linked to the fact that within companies themselves, there is a great distance between the processes and the people, between the organizational designs and the individuals who have to “give life” to these designs, in a way that is always more difficult.

Very conveniently today, the competitiveness of Italian enterprises is bound to greater investments in the research fields, but are we sure that it is mostly the technical knowledge that is lacking?

I think, in fact, that the observation can be extended if we think how many people live within the companies as “outsiders,” with their mind partially somewhere else, because the atmosphere, created mainly by the behavioral competences of inhabitants, is filled with mutual hostility or indifference. It is often mentioned separately concerning “human capital” and the budget of the competences, but from my point of view it would be more useful to write the “budget of the competences really used” and not of those “possessed” by the people, considering that they are of two very different dimensions.

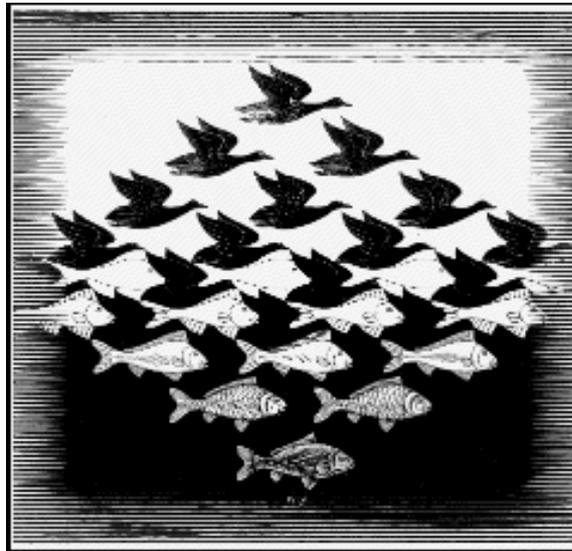
In this sense, the training processes (I will refer above all to behavioral dimensions) can be “reviewed,” they have to be seen with new eyes, transforming them from single “participations” to “processes” that succeed

in promoting, in a mutual and harmonic way, the evolution of people and organizations.

“We do not know space, we do not see it, do not listen to it, and do not perceive it. We are in the middle of it, we are part of it, but know nothing about it.” (Escher)

And so the Dutch illustrator, starting with this deep feeling, began to observe the world with new eyes, to play with perspectives, figures, lights and shadows, thus discovering that all can become transformed.

We explore the training processes and, thinking about the various forms it can assume, we succeed in picking the shadings that allow with training to become true exchanges between the growth of the individual and the transformation of the organization, opportunities for the people and for companies.



Escher, Sky and Water 1938.

Along our path, we will begin with designing the contours of a training that succeeds, first of all, in favoring the evolution and the growth of people.

We will then reflect on the reasons why this growth, in case it happens, fails in becoming a change, for the companies that suggest and want it, at least allegedly.

And thus, what happened to that “fish” that managed to transform itself into a “bird?”

Its form is either crystallized in a not fully defined state or it has decided to fly to other parts or reverts, losing also its motivation and the certainty of being able to do that again.

But there are situations where the growth of people is accompanied by a positive transformation of the organization that continues to support the same evolution of people. The sea becomes sky and the birds can truly succeed in flying.

I think that these are the situations in which training assumes a different substance and increases the depth of its meaning and the sense of its effectiveness.

1. The evolution and the growth of people

In my view and my experience, the borders of training that achieve this objective are designed in a particular way and take on successively, and not always linearly, the form of a discovery, a renunciation and a successive conquest.

The discovery

“In the immobile world and a darkness where I dwelled there were no strong feelings, not a sign of tenderness... Someone was pouring water and my teacher placed my hand under the stream. As the cool stream gushed over one hand, she spelled onto the other hand the word water, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten — a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that "w-a-t-e-r" meant the wonderful cool something that was flowing over my hand. That word stirred my soul, brought it to light, hope, joy set it free! There were barriers still, it is true, but barriers that could in time be swept away... Everything had a name, and each name gave birth to a new thought. As we returned to the house every object which I touched seemed to quiver with life. That was because I saw everything with the strange, new sight that had come to me.” (Helen Keller)

The discovery should be the beginning of every process of training. It is the moment when someone makes us perceive a truth that exists independently from us but only when we see it, name it, and begin to know it, it acquires a meaning for us and it enriches us.

But the adult is not so ready to discover and therefore, in order to carry him to a true desire to live the discovery, it is always necessary to start from his reality, obviously not only from its positive aspects but also from the limits that it introduces. And thus the discovery becomes motivating because a person convinces himself that, owing to new learning, he will be in a position to exceed the borders of his own truth, of his own way to be and to work. I have participated in a lot of training courses and I have assisted many of them, but the emotion at the beginning is always the same one.

“The objective of our training path is to share a new model of relational marketing...” says for example the teacher and the people watching, they watch the reporter and the sense and reason of this sharing vanishes. Much more effective are those ways that start, for example, from how people do marketing and manage the sales of their own products and services and from the limits or lacked opportunity of this modality; it is necessary also to observe, to work with them or to create in the training processes an initial moment when the truth is reproduced in order to bring into focus limits that could be overcome.

“The images-thought of Escher introduces systematic constructive principles that seem to have very little in common with the laws of aesthetics... its images manifest an obstinate stubbornness to inquire about the true space-temporal reality that makes us face the limits of our senses and in particular the limits of our eyes.” (J-L Loacher, Director of the Gemenntmuseum, The Aja).

Therefore, the new model that is introduced is not a content to be added to many already proposed ones, but the discovery of a solution that widens the borders of our actions, rendering them more effective.

The renunciation

This is the second step of an effective training. It is the moment when everyone verifies what must be left from one's own previous way of being, in order to become something new and different. It is obvious, in fact, that

the learning process for adults demands a new way of being, simply because it could not have been an empty space before and something to which there is no more resemblance.

And then, as it is not possible to have many forms, risking then not having any, it is necessary to define it again and this transformation usually, brings with itself a renunciation that has the appeal or the fear of verification and it is different for everyone.

This phase has to be guided inside a training path, because there are many resistances: the easiest one to understand is fear, the most difficult, I think, is the lack of “knowledge of one’s self” that characterizes a lot of people today, being generally focused on tendencies of extroversion and appearance that sacrifice the intimacy and the reflection over one’s self. Very often this reflection and this verification on the renunciation is left to the individual, to a moment that is outside of the training path, but, in my opinion, it should be a part of it, because for the adult, reality is what he succeeds in conceptualizing and to speaking to someone else in a clear way.

“Language in fact attributes an order to the conceptual representation, the emotions, the instinctive and spontaneous feelings and it becomes itself a form of knowledge.” (Mario De Pasquale)

I also think that lightness and irony are true secrets of this renunciation and perhaps that is the reason why some organizations are discovering the ironic and satiric training-theater as well: nothing is better for adults than to succeed in living the renunciation not as a heavy sense of the separation or defeat, but as the happiness of one who can ironize about his own limitations while being happy in his new possibilities.

The conquest

It is the moment when every person succeeds in elaborating learning and transforming it into a new way of being, of thinking and of communicating. Acquisition of a new model of “Project Management” modifies our way to structure data and information and influences our management of truth.

To discover the secrets of non-verbal communication make us more expressive and also more receptive. The discovery of the model of “transformational leadership” mobilizes our energies and stimulates us to become chiefs who know how to activate changes and to develop talents.

These transformations are not only an external aspect, they do not change only “what” one knows to do, “in which time,” and contexts; what evolves is the individual system with its own convictions, its own motivations and its own way to represent itself and reality.

It is a path different for everyone, it involves a step ahead regarding the new personal evolution learnt and towards thinking, experimenting and recreating. And thus the true training is the one which gives people the desire for a continuous discovery, a method and the borders in order to become true growth and true victory. My greater satisfaction is when today, at a distance of seven years from a communication training path I have managed, a participant calls me in order to continue to share with me his studies above all on communication and the various ways to apply it, because he has now dedicated himself to university teaching.

So, the training is making knowledge take a singular form for the person who will receive it, and continues to receive from this person new contents, new forms, because the person has received from the training the ability and the wish to continue to follow the developments and the evolutions of his new way of knowing.

The victory then is not simply a new content but knowing how to develop the more curious part of one’s self in order to progress in knowing and transforming one’s self.

The importance of time

Time becomes an important director of training that wants to produce true results. Carrying out the trainer and advisor activities, I am surprised every time I receive a demand for a course of three days, about communication and leadership...

Obviously if the objective is merely informative, it could work, but if the objective, as often happens is “*We want more professional people able to manage customer relationships, we want heads who know better how to manage people,*” we have to consider that the change needs time and given the fact that the protagonist of these processes are the adults themselves, I think that with time we have to face always having the ability to optimize them but not to ignore them.

It is a time that is necessary for those who don't have learning as their only work, dedicated to making a correspondence between requirements and motivations of his own with those of the company where he works. It is also the time for those who do not choose training in which they participate, but feel "summoned" to and they employ a great deal of their time and energy to understanding "why" and "where it is necessary to arrive" above all others.

If it is, in fact, true that time, as a subjective dimension, has a different flow, and then an hour of training is not subjective for who, within himself, is dedicating his time to something else.

An effective training path, therefore, needs time, which is one of the transformations that an adult undertakes who succeeds in learning only if he truly takes advantage of his efforts, if he succeeds in harmonizing learning with his knowledge and life and also if the time of the refusal is granted.

The refusal is an absolutely normal process that often I, myself, have lived with: if training is a conflict, the first and instinctive reaction is to destroy the content of new learning in order to succeed in circumscribing and reducing anxiety, in order to nourish the concept of one's self, being a little needy of the new in order to unload the anger also accumulated in other situations where we felt inadequate, in order to underrate and to denigrate something that someone else successfully created instead of us, for a process of discouraging the intellectual curiosity that silently takes hold of us.

And then it is necessary to contemplate also the time of the conflict, to know whether it is the case to speed it up, through specific methods of surveying and argument, because adult learning that does not have in itself a shade tied to refusal or criticism is surely of little meaning. It will be a silent conflict, suffocated, denied but however existing and if not present it is often the other face of indifference.

Another time that is important to be considered, is the time of the individual elaboration, which an adult needs. It is the inner reflection that can take place only in a time of "reflecting re-observation," when, beyond what we want to appear, we confront what we are learning with ourselves (experiences, points of view and aspirations), decoding the knowledge in a

constructive way. And the true art is to know how to incorporate these different times in a training path.

Many times I hear repeatedly “at the beginning of a course it is necessary to make people relax, it is necessary that people take outside all their criticisms regarding the company” and thus the classrooms are more and more often transformed into often exhausting “listening centers.” There cannot be, in my opinion, a prescribed time, for example, “to criticize,” but the time must follow its natural evolution of the process and has to find in reasonable ways its spaces. But, suppose that a true training process succeeds in promoting positive growth of the people, what happens in reality? Do people live their change and diffuse it inside the organization? The answer is so obvious, but it is useless if we do not want to understand the causes of this failure. We enter then into contradictions that characterize training today and perhaps whole companies.

2. The difficulties of change

The context

Unfortunately, companies are not free from fashion and thus today the fashion is “the competences” and all rotates around them. They endure thus the training path centered on the management competence, on the relational competence; it is a pity that people participate, for example, in a course about leadership while the managerial systems are absolutely inadequate: the appraisal of the performances is not discussed between managers and collaborators, the system of the quantitative objectives is not linked to the strategies and to the business values, the motivation system is not structured on self-remuneration criteria...

Can leadership succeed in expressing itself in a similar context? A fundamental principle of learning is the importance of a positive reinforcement from the external environment. There cannot be a competence without a coherent context in which this can be expressed, maintained and developed.

All the literature about the competences insists, moreover, on the fact that the competence, like evolution of the attitude, is such as it is because it

succeeds in being externalized in a result. The competence in itself has therefore the dimensions of externalization, visibility and objectification because it produces something tangible and in this production process continuously grows and strengthens. The principle of externalization has, in fact, in itself also the consequence of the feedback that the environment sends back and in the elaboration of this feedback there is a source of creativity, innovation, problem solving and continuous improvement. But what results can we expect to see in contexts that seem planned independently from the competences that then, in a bit of a schizophrenic way, are aimed at being developed?

The change “in layers”

And thus what is becoming another task is the one of professional families (the family of heads, the family of project managers and the family of businessmen).

It is a typology of people aggregation, nowadays very diffused and on the basis of which are implanted communication processes, training paths and virtual communities. I believe that to maintain only this foundation is absolutely unrealistic. In reality, in daily work, within various business fields, the plans, the functions or the processes (it depends obviously on the kind of structure the organization has chosen) shows that people do not work for professional families but as a team, everyone in his own role, and the acquired knowledge on a training path between “similar” team members becomes difficult to apply and the difficulties are of various natures: the others do not succeed in understanding, everyone tries to assert his “own” competences that become their “own reasons;” the methods, so convincing in theory, in practice thus become constraints.

And so the vision of professional families seems to me to be a unilateral vision of training very different from the multifaceted vision that reality presents to us.

What is then the direction?

“In a survey on personality, taken as a unit and as a system rather than as a sum of separated parts, what is above all important, according to Rotter, are the goals, the expectations, the directions of the conducted ones, regarding which the explanation principle of the necessity reduction

appears completely inadequate. It is only a system of goals and expectations that can make reason of a variety of management irreducible to the simple research on pleasure and to the simple elimination of the displeasure in a connection with specific needs” (G.V. Caprara, A.Gennaro).

Here emerges an important element regarding the motivation of an adult, which is: the project and the direction. Every type of behavior of an adult is stimulating if it moves him towards one of his goals. But why apply what is learned during the training? What is the goal? And above all, who decides it? Would it be possible for the people that participate in training to also give a contribution in defining some objectives? Unfortunately what continues to persist in the realization of the training paths is a process characterized by a purchase (that is often constituted of the heads of the participants) from an organizing entity (that is often the Head of Staff) and from a participant who continues to be the object of a process without succeeding in becoming the true subject. And thus perpetuates this strange mechanism where the organizations expect people to behave in a mature and adult way while they manage them according to relational outlines that reflect children and their irresponsible ways, since they prescribe in a unilateral way their objectives if not sometimes tasks, strengthening behaviors that carry them into insufficient autonomy and conformism. And thus while the trainers propose (coaching, counseling, mentoring, action learning and outdoor training) that people continue being involved in training interventions, they are often not inserted into a plan, but are made part of an objective that has the duration of the same year of the budget from which the economic resources are reached in order to finance it.

It is completely evident that when today we speak about projects we are not thinking about career plans, since the depth of the change makes roles and their contents subject to extreme changes. We speak about projects bound to the possibility that the competences developed in training are connected to a result that can be developed in the course of time and engage the energies of people in a direction that is remunerative of the energies invested in the change.

The spread of easy alibis

If training paths continue to be created in a way that cut the organization horizontally (run by the heads and run by the assigned call centers...) there

will always be a big alibi used in order not to put into effect the changes that training has succeeded in promoting, *“the one who manages me does not behave as I have been taught.”*

There is always a reference to the absent “third party” without being able to express who this third party is and why he is so easily charged with faults and responsibility, while making passive and neutralizing any effort in applying the change. And then all the training is transformed in speeches on proactivity, on being the first supporters of the active change, but realistically, is it possible for an adult to change if he has already rationalized that the person who should change is someone else?

Certainly then there is always a question that I often ask myself when facing behavioral training: which growth are we speaking about? What can truly evolve? I have never believed, in fact, in training that succeeds in changing people; I believe instead in training that succeeds “in changing” people in the direction of their own attitudes and their own competences, increasing the abilities of “what” do people realize, “how” and “when” do they succeed in using their own competences in visible ways.

The competence is a deep characteristic of an individual, connected to emotional characteristics, symbolization, intentionality, motivation and personal inclination. I find it a little conflicting that sometimes companies delegate to training, the repairing of some mistaken decisions, the changing of some heads that are not leaders or of some vendors who are not traders. I think that abilities can be the object of learning but certainly not the competences and more in an induced way and directed by external ways. Abilities can be refined; the fields of their application, the complexity of their effectiveness and the diversity of their application can be expanded.

The competences are tied to the attitudes, and are instead a source of identity for individuals and it is probably in the phase of this selection (or in all the phases of potential evaluation) that companies would have to develop a greater conscience and competence in knowing how to choose people. This is however a reflection at the top of the training process that is a sort of reflection about these facts and that the system of training often tends to oscillate.

We continue however in our analysis sharing that we could still continue for a long time focusing on the limits that prevent people from activating the processes of growth in existence thanks to their very training. It is not,

however, on these limits that we want to stop, only to prove that this critical analysis stimulates us to find a more effective training form that has in itself the potential of evolution, for individuals and for organizations.

To such an aim it is necessary to widen the perspective and for some aspects to turn it over, because it is not about making possible that “school-like” organizations form new individuals for new and various ways of being, but that the individuals contribute with their own resources to form new organizations.

The stimulus is not anymore in looking for new methodologies of training but in designing new borders that are coherent with the result that the organization wants to achieve and at the same time they convoke the individuals to participate in processes of learning and transformation while being involved in a responsible way.

3. The form in motion

It seemed like a training context similar to many others, but the involved people were different, from Vice General Manager to the employees. It was not the course about the management of human resources, it was not the course about the leadership; the objective was more ambitious but also more involving: the new system of management and the appraisal of the people in the company. And thus together, we as advisers, offered the method and the people indicated the direction, their own direction.

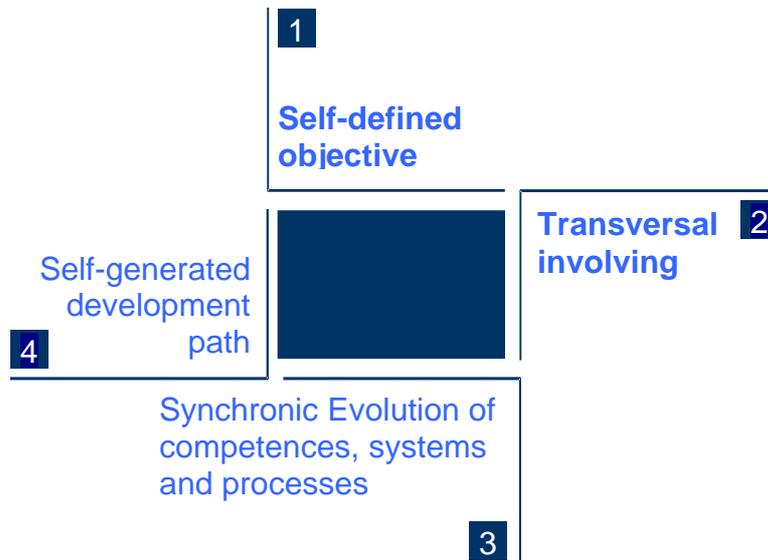
The progressive and not simply the linear steps became rich with the sharing of values and the strategies of the company for the identification of the key competences and from there to the translation in behaviors that could annually become the basis of the appraisal of the performances. Obviously this had been the planning of the system that then demanded the sharing of some behaviors for being able to be effective and working together, always the heads with the collaborators, on the modalities of making evaluation objective, on ways of communicating them and setting up individual plans of development.

Guides and handbooks written together, competences developed together, trying and trying again also through simulations and then always progressive adjustments of the system from the same people who used it. A great turmoil and great energy moved the people, motivated them and

continued to make the depth emerge: every year the analysis and the comparison between the appraisals in the various business areas, the planning of a motivation system coherent with the appraisal methodology. And then successively a further step was made, the comparison between the appraisals within the areas had become a system of mutual appraisal between the various business areas in terms of service to the inner customer and all this also demanded the formulation of an inner process of articulated communication that previewed an exchange between all the staff and the business heads through the creation of specific figures called “facilitators.”

And so what are the borders and the limits of the improvement? Its signs are unmistakable and its possibilities are tied mainly to the energy that it can activate. But the energy has its specific sources, in the individual, which are not constituted from easy collective euphemisms, to which the training was granted, but are tied to three dimensions: the possibility to create something, the possibility to change one’s own truth, the possibility to live within the movement and the continuous, spontaneous and positive transformation of one’s self and the context.

This training, that activates real energy, exceeds the limits of the more diffused one.



The context is favorable

The context is favorable because the involvement is at all levels. It can be a new system of management and appraisal of the staff or it can be the new organization of Contact Management. The competences that are developed are exactly those of the new processes because all the actors have been involved in defining the new organizational form or the new process and through training strengthen the competences so they will be able to work within the new context.

In a dynamic way, there is not a before and an after but, through an expert direction, the two actions become contemporary.

The change is of the team

The logic of change is in layers, or for professional families, is overcome. It is the team in reality that is involved together. There is no learning place between similar and successive moments in which putting the acquired competences to work practically, meeting with those of the others. Something is learnt, something constructed together, playing quickly the

respective roles. Obviously, specific expansions can be previewed, as in a hypertext system, putting them there for someone, but the entire path is shared.

The direction is clear

The direction and the objective are not defined by who is “outside.” It is true that sometimes only a few have the correct vision and that is why they have management positions, but it is also true that the manager cannot always make training happen somewhere else. The direction becomes clear because it becomes shared and in some cases the object of training. This is also a greater responsibility for all, but surely more coherent within the context of adults who learn also through the difficulty and have to be summoned to the role of protagonist in their own training and improvement.

The alibis become difficult

A mysterious and far ranging presence that does not allow us “to do well” disappears. I have always perceived a lot of fear in companies to put people of different levels in learning contexts, the heads and the collaborators. But could it be that the legitimation of some roles is so fragile as to feel exposed to a minimal comparison? I found that the advantage of this kind of training would be enormous also for the organizations. It would reduce, in fact, the implementation of systems planned from the outside that never work.

It would avoid establishing training plans on mere competences. The systems and the processes would be necessarily effective because they would be designed “according to a measure” of the people who live them. It would be an escape from an easy mode of method (for example outdoor training) or of a content (for example the NLP) that are often funnier for the creators than for the participants.

It would be an exit from a training set up for courses that then has the problem of succeeding in estimating one, in order to succeed in legitimizing other: the approval, the performance of the individuals, always turned out to be limited regarding the possibility to become the agent of true transformation. And now, facing this possibility, another necessary transformation is that of the Management of Staff that works hard to

improve those of others. The competence to develop is the vision, it is the know how to become colleagues of your own colleagues, to be in line (of product or service) and to put oneself in place not only as an expert interlocutor of a process, but also of contents. It is a kind of role that claims energy, courage and tenacity; the ability to create without reproducing easy schemas and rigor in governing participations and processes.

Obviously the change is not only for those dealing with human resources. It is a new vision of training, of changing internal perspectives in companies. Training is not any more an instrument to develop the competences of the people approaching them in a context that someone else decided, but the place where people opportunely combine and construct their microcontext or an aspect of the macrocontext of the company, forming them and transforming the atmosphere.

It is obvious that this conception of training creates within companies a new dialogue between the HR Direction and other functions where the systemic and synchronic vision of the change exceeds the trial-like and linear one. There is not first and after, there is no “before” when it is decided about systems, processes, plans, definition of roles and “after” when the change of the people is ordered; there is a conscious and harmonic contemporaneity.

Too difficult?

To those who continue to reply with the easy alibis and render them unconsciously in their own mental form, I will not stop quoting Paul Bourget, “*As a result of not living as we think, we end in thinking how we live.*”

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ABSTRACTS

Education for the New Century - by Howard Gardner.

This article explains the “Five Minds for the Future,” where the author delineates the capacities that he thinks are the most crucial for the 21st century. The task is both descriptive and prescriptive: these are the five minds that we need to survive; these are the five minds that we should nurture in order to thrive. The Five Minds encompass: The Disciplined Mind, the Synthesizing Mind, the Creating Mind, the Respectful Mind and the Ethical Mind.

Probably the most important thing that we can do, as educators, whether at school or in the workplace, is to have leaders who themselves embody the five kinds of minds. We need to create an atmosphere that rewards those who exhibit these minds, nurtures those who can be helped and removes those who continue to behave in unethical or disrespectful ways.

Europe 2025: Investments in Education and Training - by Odile Quintin.

This article covers the prospective visions that will become obsolete quicker than expected. Whatever the future, it will not be as we imagine it. We cannot draw the precise line of our future.

Though, we know it already, some fundamental trends will have a higher impact on the Europe of 2025. The sustainable development will be a determining variable in the lay-out of the world of tomorrow. The same goes for demographic aging, for globalization – in spite of the financial crisis shaking it today. Finally, the importance and the rhythm of the change which went on accelerating these last few years *via* technological progress will not change the tempo. On the contrary, an amplification of the process itself, of the social, economical and political changes, will certainly come out. Through the analysis of these said trends, we can envisage the most probable *scenarii*. A matter of fact appears for each of them: the near and distant future of the Europeans will be prosperous if it relies on an active political training.

Education and Europe: How to Grasp Global and Interconnected Problems - by Fernando Salvetti and Barbara Bertagni.

This article concerns governments that are seeking policies to make education more effective, while searching for additional resources to meet the increasing demand for education. It is not possible anymore to continue offering education in the traditional way. If the educational institutions (schools and universities first of all) do not adjust their methods, they will run the risk of being marginalized by the new trends of knowledge production and sharing: from peer to peer production to experiential learning, without omitting the home-schooling experience.

The question of skills is vital. And the question of efficiency in education is equally important.

Educational Change: A Global Challenge - by Philippe Herzog.

Changes in technology and globalization are calling for deep-seated transformations in our national education systems. Education has become of major significance in economic competition. At the same time, and to live their lives freely and responsibly, individuals must be equipped with substantially improved skills and knowledge. How can we find a balance between competitive forces, which select excellence, and a renewed perspective on the public good in order to combat exclusion and to restore social advancement? This dilemma permeates around thoughts about the nature of the knowledge society as a challenge of civilization, about the reforms in which stress is for the crucial importance of educational content and, finally, about the role of the European Union as a catalyst and driving force, which should be considerably reinforced, in bringing about a new cultural and educational Renaissance.

Intangibles, Research and Innovation Processes - by Roberto Panzarani.

Competences and social networks have become the strategic assets to produce value in organization. The moving engine of the modern enterprise is knowledge, which represents the “visible advantage.” But it is on the intangible assets that firms build a sustainable advantage. It is necessary to start from the triangulation between research, training and innovation. This

is a paradigm based on three interdependent areas. During the years that have anticipated great technological euphoria, also thanks to a certain measure of market stability, multinational companies felt the need to engage in advanced training activities, connected with research laboratories and experimentation centers. Today training activities and study curriculum should never be excluded by the innovation value chain.

Emotions are intangibles; creativity and ingenuity are intangibles too. These elements were important in the past, but today they are attracting a lot of attention and concern. This concern starts from the new focus on *human capital*. This last metaphor has its importance in a networked world in which the connection among people, intelligences and brains is the key. Organizational life is characterized by a new and delicate relationship among tangibles and intangibles. The creative relationship between these two dimensions will determine firm capabilities to produce value. Secondly, the weight of intangibles will always be greater than tangibles, forcing the passage from the production based economy to a service base economy. For this reason knowledge investments, research & development and technological innovation have and will have higher returns than those on material assets.

Training in the Society of Knowledge - by Ulderico Capucci.

In the society of knowledge, in knowledge arrangement, corporate learning is more important than individual learning. In the web structured society and in the processual organization, all the remarkable achievements do not result from a single subject but from integrative relations.

In the society of knowledge, the training process, even if with all the relevance we want and we must assign, plays a modest role within a wider range of studies, tools and paths, with which organizations learn. The training contributes to the creation of collective and individual competencies, both within and among the corporations, in as much as it operates together with real concrete "professional families" or communities. It stands to reason that training itself is not enough.

If training wants to contribute to knowledge arrangement, it must enlarge the perimeter of its intervention, exit the "classroom" and contribute by governing the "knowledge management" process in its various steps and its multiple applications and tools, undertaking the role of process "supporter."

Training and education today: role and perspectives - by Claudia Montedoro, Dunia Pepe and Francesca Serra.

Technology's development and globalization contribute by characterizing a society as a knowledge society. Learning is very important as economic and social complexity requires an acquisition of new information as well as an ability to produce and to develop new knowledge. Lifelong learning becomes a right to an active citizenship and it is very important for individual and human resources development.

Knowledge becomes "meta-knowledge or meta-competency," a flexible and strategic tool used by men and women in learning to learn in everyday life. The learning concept takes the shape of a "meta-competency," the ability to adapt and orient in a dynamical professional system, and be able to be competitive in the labor market.

A further and essential phenomenon having an enormous impact on training concerns the progressive decline of traditional training, and the proliferation of new methods, already emerged in the last few years. Among these methods are those linked to the challenges of the new technologies, the Internet and e-learning are the most remarkable. The concepts of knowledge and skills vanish in the implications of e-learning dynamics; the whole training path is redefined as a complex path, both real and virtual, integrating different natural tools. In this context e-learning is an essential feature of work as well as of itself.

Talking about Metacompetences Concerning Training: How and Why – by Michele La Rosa.

This article describes transformations that took place at specific professional levels concerning new working methods characterized by the consequences of the introduction of new technologies. It is not about personalities and professionalisms, rather it is about competencies. In this change of perspective, the essay develops the increasingly important role undertaken by the general and transversal competencies, therefore called "metacompetences." Metacompetences, themselves, are able to ensure both mobility (among corporations and within the same company) and a lifelong learning process for the subjects.

A People-Oriented Training, by Gian Piero Quaglino.

This article intends to delineate and suggest a training plan that is able to look beyond a corporation. Training that is able to lead towards full and authentic horizons of existence and towards regaining the self-construction individuality plan in order to promote, first of all, a personal development and then one for the corporate system. The ten fundamental key-words quoted by the author are: training, adult, experience, reflection, interpretation, narration, criticism, clinical, to learn, and change.

This approach to the training process is more persuasive than the others as it tries to set the training back to its original purpose, to its purest target: the subject itself, in other words, it is a supreme vocation that expresses itself in the *subject*, being the *image of one's self*.

Empowerment Oriented Personal Microculture – by Massimo Brusaglioni.

The feeling that you are the main character in your own life: this is, at a synthetic and intuitive level, the most incisive definition of the self empowerment status of a person.

A modern description of a person must not be limited to objective or objectivable parameters, but it must consider personal subjective and socially relevant behaviors. You reach therefore on an individualization process where the person is a carrier of his own integrity, examining also his self-empowerment in its double meaning of status and process.

The empowerment oriented personal microculture is a gathering of correlated orientation concerning the individual bygone of the people founded on their subjectivity and their inner dynamics.

A complete analysis of the factors related to the process of possibilities and empowerment includes various orientations focalized on the stability - change - empowerment axis and on the microculture subtending them.

The peculiarities of the microculture are summarized in a procedural character, in the transversality and in the absolute individuality of the microculture. The applicative ambits of the concept of microculture are in the individual and group training fields, implementing the processes of possibilities and competencies development.

Self-empowerment: How to Survive your Job – by Barbara Bertagni.

In our society "development" became one of the keywords: development at all costs, continuous growth, economic growth, professional development, purchasing power growth. In particular, concerning the most prevalent managers' representations, the main keywords are action, pleasure, success, wellness and self-control. It would, though, be suitable to add a couple of words that are a little less "noble": anxiety containment effort and annulment of any space for questions, as everyday life searches for answers towards prompt needs and ponders about the meaning of questions that might bring about stagger and anguish.

Managers are expected to actively build their role, shaping and adjusting it day after day, following their own company's needs and market upheaval. This process occurs within company realities that leaves little or no space for personal choices, together with an agenda full of daily appointments, often built by others, with targets to reach not always understandable and sharable, during a series of organizational rituals that, even if useful in order to keep anxiety down, require a role-playing game sometimes difficult to manage.

There is no space for the rise of dreams, affections and projects not aligned with the company's needs and rhythm. There is no time to protect the inner slowness, neither to feed ourselves with our fragility. We have to run to chase the promotion, the project success, the competitor company buyout, the purchase of a yacht and the benefit improvement. Meanwhile, as time flows, we start to get old and, sometimes, a strong experience breaks into our life (birth, mourning, break-up, love...) and opens a reflective glimmer letting us notice how much we have become a stranger to ourselves, until we know/recognize ourselves no more.

Success accomplished at this level becomes a weird dimension where professional growth does not match personal development but often in top managers' stories we find the feeling - or the awareness - about a life lived, but not chosen, followed on automatic pilot, without a real space for choices, captured by an ascending career vortex to which they "cannot say no."

Inside this logic, self-empowerment frequently requires that a consultant act inside the same logic, proposing actions and answering requests. Too often, the acting logic follows the same "development at all cost" logic,

spreading in almost every sector of our society. When the adviser agrees to this request without opening a space to analyze the question, but simply working on the given target in order to supply a comforting answer, he acts inside the same weird and directive logic leading to the prevalence of the role describing the person.

Working through an effective empowerment perspective means working together with the person in the role: improving one's self-awareness, promoting a reflection on targets and values, ensuring an elaboration space for emotions and experiences. The aim is to bring into question answers taken for granted, trying to look at it from a different perspective about what we do, what we are and what we say. We must help a person to focus on himself, rediscovering and bringing to light his values; leaving him to gain a better awareness over his role inside the negative and positive events of his life; reevaluating the priorities; planning the needed steps to reach his own objectives; pondering over his experience, emotion and conduct in order to revise his own behavioral modalities; finding space through comparison, in order to comprehend the behavioral schemes within which he is used to working.

Knowledge “Governance” and Corporate Training in the Foreseeable Future – by Fernando Salvetti.

How can we manage knowledge, human and intellectual resources, cognitive and behavioral dynamics at their best within corporations? Why are there always more *managers* encouraging and promoting not only activities such as *knowledge mapping*, but also organizational dialogs and narrations? How do we create and manage, in a flexible and dynamic way, corporation knowledge and specific resources? In other words, is it possible to plan a corporation that is able to be flexible, elastic and creative as well as a well-trained human mind?

The main challenge is to use missing knowledge, often incomplete and contradictory, owned by a single man and globally not available to anyone. Nowadays, successful corporations generally are the ones that are able to perform with more effectiveness than others gathering, storing, distributing and using information. We know that technology unassisted cannot grant the best use of human and intellectual resources and that the main key factor for full knowledge and abilities employment is the strengthening of

an organizational culture, which is useful to promote and support knowledge and competences sharing.

The *knowledge economy* asks for flexible organizational functioning models, always customer and quality control oriented, founded on an intense use of knowledge. The oncoming managerial work will increasingly imply the human and intellectual resources development: the creation of an organizational knowledge, abilities, competencies and knowledge development and management in order to spread them inside/outside the corporations and translate them into products, services and systems.

This article is a critical reflection on "*pratique gouvernementale*," in favor of minimal governance, as a functioning principle of *knowledge governance* within corporations investing in training, competencies development, human resources development management system and tools, *knowledge management* and surroundings. The *knowledge driven* corporation is a cognitive and social dimension qualified by continuously evolving processes, where "to know" does not mean "to recognize," knowing that learning is something that is given "outside of us," but rather covering the multiple *ways of worldmaking* which allow us to create and build not only new products, but new ways of acting and thinking, therefore, new horizons and awareness possibilities - within limits and shapes granted by the organizational structure in which we are working.

Acceptance and Failure of E-learning in Organizations: A Map – by Lorenzo Cantoni and Chiara Succi.

This article presents the e-learning acceptance and rejection theme placing it in the wider context of theories of innovation diffusion and technologies acceptance. In the light of these theoretical contributions, as well as those newly dedicated expressively to e-learning and its failures (*dropouts*), an E-learning Acceptance interpretative model is proposed (MELA: Model of E-learning Acceptance) which distinguishes different factors, steps and variables. Key words: e-learning, training, innovation acceptance and theories of diffusion.

**The Place of Training for the Development of Communities of Practice
– by Angelo Benozzo and Claudia Piccardo.**

This paper explores the place of training for the development of communities of practice. In particular, it focuses on an approach we labeled *management learning with the organization* and some theoretical concepts of learning as a community of practice participation. We, then, present a training intervention inspired by the idea of *management learning with the organization*. In conclusion, we describe a profile of this approach that is useful in order to design training actions able to create, spread and transmit knowledge and meet communities of practice in an authentically critical and clinical way.

**Learning for Leadership: The “Engineering” and “Clinical”
Approaches – by Gianpiero Petriglieri and Jack Denfeld Wood.**

Meaningful leadership development requires a deeper and more fundamental approach that usually deployed in university classrooms and corporate training centers. It needs to incorporate difficult emotions and unconscious forces, and provide a safe place for their investigation and integration. While the typical “engineering” approach has a valuable contribution to make in leadership development, it is limited by the heavy reliance placed on a rational and cognitive view. In contrast, a “clinical” approach emphasizes working with the individual’s existing natural patterns of behavior, with the aim of understanding and managing the multiple forces that motivate individual and collective behavior. A real-life example from a leadership program highlights the substantially different approaches and the different results that can be produced depending on the method employed.

**Learning and Knowledge Sharing in Virtual 3D Environments:
Classification of Collaboration Patterns in Second Life – by Martin J.
Eppler and Andreas Schmeil.**

In this article we propose a classification and systematic description structure based on the pattern paradigm for interaction scripts in Second Life that aim at facilitating on the one side knowledge sharing and knowledge integration in groups, and on the other side knowledge creation

in formal and informal ways. We present 13 examples of interaction patterns, a description structure to formalize them and classify them into four classes according to their design effort and added value. Based on this classification we distinguish among sophisticated 3D collaboration patterns, seamless patterns, decorative patterns and pseudo patterns.

Why Knowledge Exchange Occurs: The Role of Social Networks, Homophily and Proximity – By Gabriele Gabrielli, Silvia Profili, Roberto Dandi and Mario Losito.

This study focuses on the motivational aspects behind the emergence of knowledge exchange networks in organizational settings. So why do knowledge exchange relations occur? Why do they form in the way that they do? What are the main variables to take into account? By integrating two traditions, literature on organizational motivations and literature on knowledge networks, we tested three theoretical mechanisms that may answer these questions: homophily, social embeddedness and physical proximity. We used social network analysis to measure and analyze the social networks within an Italian Business School. Results show that these measures have different impacts on knowledge exchange relations. The resulting model increases the understanding of the emergence of informal social networks and suggests interesting managerial implications for practitioners, especially in human resources management.

Quantitative Evaluation of Management Education from Economic and Financial Ratios to Balanced Scorecard – By Emilio Rago.

Speaking about evaluation means pointing out the definition process of both, material and immaterial values of an object. The training evaluation represents that process, more or less formalized, concurring to the value recognition and attribution concerning training intervention.

Unfortunately, the *value perception* trap has not yet totally been overcome; often we face a situation where something has a value only if it is perceived as it is.

Training must profitably respond to an exact present or future subject's need in order to be considered a benefit. In other words, we must look beyond the value perception and search for the real training activity's value

gained by a subject. A training evaluation cannot be one of a trainer's (or a trainer supervisor's) roles. It is a specialized profession: an evaluator, an expert in training.

Wisdom, practice, humility, listening skills, devotion and wish to exceed oneself are required.

Competences without Nightmares – by Trevor Boutall.

For a generation the professional training system in England was based on the National Occupational Standards. The target of the National Occupational Standards system is to render workers at all levels able to carry out their roles and act independently in making decisions within the limits of their responsibilities. This system has definitely not solved all the problems of the United Kingdom. There are still a lot of safety problems - railway accidents, scandals in social security services and in the medical assistance program, non-ethical habits in banks and insurance companies - due in part to market liberalization, the state agency privatization and the shareholders' pressure to increase profit, an insistence that endangers the medium-long range service quality, especially compromising safety. On the bright side, however, the quality of public and private service has consistently increased, the competitive role of the United Kingdom within the global market has been left untouched despite the progress of the new economies and the unemployment rate is one of the lowest in Europe. The most remarkable impact of the new English training system can be noticed in a more flexible approach both by the employer and his employees. The market - the external context - is constantly changing, and there is the need to promptly respond - or better prevent - changing company's targets, the work processes and the behaviors, renewing the knowledge and the skills of all the human resources.

Personal Training: A Case Study – by Barbara Bertagni and Fernando Salvetti.

This article covers one of the most effective and efficient interventions of action learning for managerial development which is obtained by combining and integrating traditional methodologies with experimental activities, during the course of training and development, planned

according to the requirements of each single entrepreneur, manager or professional.

In fact, the flexibility of personal training reflects itself in the possibility to structure short courses on the occasion of important changes or as support in critical or stressful moments rather than long courses to accompany career development or personal growth.

Philosophy in Business – by Barbara Bertagni and Fernando Salvetti.

This article covers living within the organization which requires sharing goals and values, confrontation between cultures and action strategy, and reflections on our personal role and professional identity.

Philosophical counseling is one of the most effective methods to bring out and explore the personal tacit assumptions which heavily condition the life of organizations, opening a space for confrontation and query on what is the basis of individual behavior and of organizational praxis.

Communicating Through Artistic Set-Ups: The Experience of Colletta Di Castelbianco – by Fernando Salvetti and Barbara Bertagni.

This article covers the artistic set-ups which constitute an efficient form of communication, involving an innovative modality of communication and management of the image of a company or of a territory.

To fit out a space means to create a climate, generate a frame favoring and stimulating the reflection and confrontation, to metacommunicate values and vision, to surprise with a captivating management of picture, to involve not only at a cognitive level, but also at an emotional level.

And so was it with Colletta di Castelbianco which is quite a charming medieval village: a bunch of stone houses with colored windows, castled in the Ligurian hinterland of Albenga (SV) in a thick cobweb of alleys and “carrugi” (typical Ligurian narrow streets). Restored lately by the architect Giancarlo De Carlo and entirely cabled, the village presents an ancient heart with a hyper-technological soul.

Pictures, Music and Movies – By Fernando Salvetti And Barbara Bertagni.

This article covers a case that has been dedicated to the top management of the firm and characterized, first, by an initial phase of “Socratic dialogue,” a philosophic method that used to explore the characteristics of efficient leadership. A dialogue which took place in a particular way called “maieutics” and which requires from the educationalist to be silent as much as possible, just to facilitate wide and tight confrontation between the interlocutors, starting from their experiences and their personal beliefs.

In this case, the dialogue was focused on the efficient leadership and, with the purpose to raise the discussion, the instruments utilized were a series of particularly evocative pictures of history and news (from David’s Napoleon to a few representations of Jesus Christ), from a few pieces of music containing a lot of variations on the same theme (most of them performed by Gidon Kraemer and by his orchestra, the Kremerata Baltica) and by short movie strips with characters facing moments of particularly intense work life (from Wolf with Jack Nicholson and Michelle Pfeiffer, from Presumed Guiltless with Harrison Ford and from Mediterranean with Diego Abatantuono).

Form and Transformation. Training... True Change for People and Organizational Structures – by Laura Tucci.

Why is training often perceived by companies only as a cost?

Why do change management projects, designed by prestigious consultants and with huge change expectations, fail so often?

We have to observe the world with new eyes, play with different perspectives, with figures, with lights and shadows, as Escher did, and discover that everything can transform one’s self.

For this purpose we have to widen the frame of training and for some topics completely reverse the situation, because it is not just a matter of making companies train people to become different, people have to contribute with their own resources to build new organizations.

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