

# New Emerging Learning Areas

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## Estratto

L'articolo descrive gli esiti di una ricerca ambientata nei contesti che stanno supportando lo sviluppo di nuove forme di apprendimento nel mondo della formazione e dell'educazione: esperienze di apprendimento emergenti che hanno inglobato gli attuali trend e trasformazioni socio-culturali e stimolato l'evoluzione delle organizzazioni educative e di lavoro. La diffusione dei network economici e sociali, lo sviluppo delle tecnologie digitali, nuove forme di comunicazione legata alle differenti forme di mobilità, richiedono alle persone di essere in grado di integrare nuovi punti di vista per leggere e interiorizzare il processo di cambiamento. Competenze diverse sono richieste per supportare percorsi imprenditoriali e di occupabilità, in cui abilità di problem solving, autonomia, iniziativa e collaborazione diventano centrali, e in cui la responsabilità dei singoli diventa cruciale per lo sviluppo dell'apprendimento. I casi studio esaminati, offrono al lettore dei punti di vista importanti sugli scenari futuri di integrazione dei sistemi educativi e di lavoro.

**Parole chiave:** esperienza di apprendimento, imprenditorialità, co-working, fablab, formazione terziaria, sostenibilità, cambiamenti economici.

## Abstract

The article illustrates the results of research done on the recent contexts which have helped develop new learning processes within the training and professional world: emerging learning experiences that have interpreted the current socio-cultural transformations and triggered the evolution of educational and professional organizations. The spread of economic and social exchange networks, the advancement of digital technologies, new forms of communication and networking linked to different social mobilities, require people that are capable of integrating new points of view to read and interiorize the processes of change. Different skills are required to support entrepreneurial paths and employability, in which problem-solving skills, autonomy, initiative, collaborative skills are increasingly important, and in which the subject's responsibility is crucial in designing its learning path. The case studies examined (in university contexts and innovative social and professional environments) offer the reader insights on important features regarding the new processes in educational and work systems.

**Key words:** learning experience, entrepreneurship, co-working, FabLab, university education, sustainability and economic transformations.

## Zusammenfassung

Der vorliegende Artikel beschreibt die Schlussfolgerungen einer Untersuchung zu den neueren Formen des Lernens in Ausbildung und Schule. Es geht dabei um neue Lernerfahrungen, die auf die neusten Trends und auf die sozioökonomischen Veränderungen abgerichtet sind und damit die Weiterentwicklung der Ausbildungs- und Arbeitseinrichtungen fördern. Die Verbreitung ökonomischer und sozialer Netzwerke, die Entwicklung digitaler Technologien, sowie neue Formen der Kommunikation im Zusammenhang mit verschiedenen Arten der Mobilität nötigen die Menschen dazu, neue Sichtweisen zu akzeptieren, um so den Veränderungsprozess zu verstehen und zu verinnerlichen. Unterschiedliche Kompetenzen sind erforderlich, um Unternehmertum und Arbeitsfähigkeit zu unterstützen, wobei die Fähigkeiten in den Bereichen Problemlösung, Selbständigkeit, Initiative und Zusammenarbeit von zentraler Bedeutung und die Verantwortung der Einzelnen zur Weiterentwicklung des Lernprozesses wesentlich sind. Die untersuchten Studienfälle geben Einsicht in die zukünftigen Szenarien der Ausbildungs- und Arbeitsstelle.

**Schlüsselwörter:** lernerfahrungen, unternehmergeist, co-working, FabLab, hochschulausbildung, nachhaltigkeit, ökonomischer umbruch.

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## 1. Objectives and methodologies

This article provides an interpretive framework of the changes taking place within the area of learning, with particular reference to the Italian context. The current socio-economic scenario reveals that knowledge is increasingly interdependent and interconnected, where incessant technological innovation and the continuous resort to digital devices pave the way for new possibilities. These are transformations that are outlining a new learning ecology that concurs in redefining an educational system mostly focused on empathy and cooperation. A contribution that pertains to those social policies which are dominated by employment and education topics, especially for a society that wishes to prosper and invest in the future, starting with the younger generations. In the light of this debate, the present feature highlights some challenges still present in the Italian educational system and in the implementation of a series of numerous reforms that have taken place in the field of education, which have only attended to marginal aspects of the issue, without taking into account a “Copernican revolution” concerning teaching methodologies and environments that facilitate learning.

These observations are the result of a qualitative survey conducted in Italy, where twelve case studies, related to innovative contexts which have contributed to reinventing the learning processes in training and the workplace, have been analysed: environments of Coworking, FabLab, and Universities. This is a contribution to the subject of support policies towards the development of the entrepreneurial spirit of young people, to facilitate the gradual entry into the professional life and reduce the existing gap between education, training, learning and the labour market. The case studies have been analysed with the aid of in-depth interviews with privileged witnesses and through the observation of work and learning processes on the field, using visual investigation techniques. This report, in this sense, finds in the visual language its creative and realistic partner that stimulates and communicates nimbly. Conversely, the audiovisual requires the elaboration of writing, with its aptitude for a more pondered and reflective study and evaluation. The current need to update the learning methods and processes urges us to examine also the reasons for this change in the economic and social scenes.

## 2. The mutation of the socio-economic scenario

Market globalization, massive employment of mobile technologies, international dynamics of consumption, and climate change are deeply affecting our daily lifestyles, including the ever-increasing mobility of individuals, goods, services, capital, and information (Elliott & Urry, 2013). Throughout the territories, protean organizations emerge, boosted by intensive flows of information originated from numerous and increasing networking activities that redefine their borders to activate research systems and constant innovation. What has characterized the past scenario, specifically the rhythms imposed by industrialization which has conditioned living and working time management, is now behind us and no longer offers valid interpretative elements about the major transformations that took place following the space-time redefinition of many territorial and organizational contexts.

The development of microelectronics and miniaturization of technologies, which have come to represent our “technological prostheses” of daily use, have crumbled our frail certitudes, opening up new perspectives related to an interconnected and global dynamic space which is restructuring consumption patterns, entertainment activities, working environments, social and family relationships. New opportunities emerge from this scenario, which arises however around increasing vulnerabilities and shared risks. It is a social and economic context in which the events seem to benefit more from “shocks” than from elements of imperturbability; advantages which can thrive the more we are exposed to volatility, chance, disorder and stress factors, a phenomenon known as “antifragile” (N. Taleb, 2013) as opposed to what prefers tranquillity instead. The antifragile goes beyond resilience and strength: that which is resilient withstands shocks and remains identical to itself, whereas the antifragile improves. This element – which favours chance, uncertainty and error – can, therefore, enable us to deal

with the unpredictability, the unknown, the imponderable (Taleb, 2009), all inevitable elements connatural to the human existence.

Now the global economy is based on risk, in which survival and the boosting of development evoke aspects more related to creating systems of trust, reciprocity, and cooperation rather than predominantly confrontational individualistic behaviours. The profile of a new generation that grows around a different global social space, determined by simultaneity, thanks to the use of the Internet and new communication technologies, emerges, defining a generation that, unlike in the past, endorses sharing creativity and experience in a collective situation, with the main objective of promoting the common welfare. This new generation, by way of the “Lateral Power” (Rifkin, 2011) – which claims the right to universal access over the right to exclusive ownership – is putting a strain on autocratic and centralized governments opposed to the emerging of living in an open, transparent world, which resorts to new communication methods for new aspirations.

This rapidly changing “landscape” requires reviewing new skills, knowledge, expertise to quickly assemble the resources necessary to develop, strengthen and update them constantly. Therefore, new network socialization structures emerge, characterized by “Weak Ties” (Granovetter, 1973) which help develop relationships with the outside world (beyond the confined friendly, familial and self-referential relations), necessary to increase a “social capital network”. A valuable resource generating new social experiences that are spent in different places, animated by frequent long-distance relations and facilitated by the continuous resort to the new means of communication. A capital that answers the question “who do you know?” (regarding circles of relationships, friendships, contacts, networks), distinguishing itself from the economic capital – which answers the question “what do you have?” (regarding capital, goods, equipment, patents; Hui, *et al.*, 2014), mainly because

accumulated by individuals keen on acquiring information, producing, transmitting and putting them into circulation through sharing processes.

### 3. The changing learning process

The common denominator among the latest teaching methods is focused on the idea of dynamic and personalized learning, not only more suited to a population that faces the world of employment but more fitting to the cognitive nourishment, to the care and integration of multiple aspects of knowledge: cognitive, emotional, creative and intellectual. In Italy, apart from isolated cases left to the individual teachers' initiative, there has not been a resolute stance in this direction, by now undeniably considered by many experts as beneficial for social growth and the community. Economic and civil growth are closely related to education and upbringing. The several reforms that have alternated in the world of education covered only the outlines and did not take into serious consideration the teaching methods and environments apt to facilitate more effective learning. In a teacher, human qualities and personal maturity are probably more instrumental than didactic preparation: getting to know one's students and promoting them through listening and empathy; stimulating their curiosity and desire for knowledge; evoking creativity, experimentation and spontaneity; encouraging responsibility and critical sense, by making them aware of the plurality of points of view.

Teachers need to know how to design experiential contexts where students solve problems and implement substance and sense of reality. Training, and Supervision of learning professionals, is as important as passing the competitive exam for being launched into the profession. A young man, a student, should be happy to go to school, because learning is a joy. Who would be unhappy to learn something? On this point we are in good company: Maria Montessori asserted

this with conviction and Novalis added that it the pinnacle of fun is in doing. One wonders why the majority of Italian students do not enjoy studying and going to school. It is not the failure of a slacker generation, but of the school system, of poorly prepared teachers and unsuccessful teaching methods. Identity is another facet of good teaching; if educating means "leading out" what we potentially are and can do, it is necessary for the learning process to assist us in knowing/identifying ourselves and to guide us towards achieving identity. A good training setting does not alienate but rather encourages spontaneity and better personal knowledge. It is in such an environment that one can increase the sense of responsibility and pursue authenticity: to giving answers and act with authority and proficiency. A key consideration is to examine the manipulation coefficient perpetrated by those who manage and devise the learning process. I believe this contemplative space is the watershed between an institution that wishes for free thinkers, responsible citizens with a capable and constructive critical sense and another that prefers to interact with an easily influenced mass.

An evolved institution sees culture, emancipation, autonomy and citizen responsibility as primary qualities and does not perceive as a threat the process of change. For these reasons, it is required to overcome the paternalistic approach still present in the Italian cultural model, a remnant of a feudal culture that believes to be the sole custodian of truth. Often one learns more by dissent than by always agreeing. The genius Albert Einstein said: «I have never taught anything to my students; I have always just tried to put them in the best possible conditions for learning».

### 4. Deliberations

We are facing a new way of learning that introduces important changes in the individual. A type of learning constantly open to experience, with strong personal involvement, both

cognitive and emotional, the result of a conscious choice, a pervasive, self-assessable process, inclined to the fulfilment of specific needs, which gives sense, value and meaning to the learner's experience (Rogers, 1986).

It is a self-realization path that essentially places the person at the centre, immersed in its context of relations, confronting no longer delegable responsibilities, becoming a person aware of his/her path of growth and development and who interprets and reads the change, to actuate those decision-making processes helpful in connecting what is with what does, necessary to strengthen his/her identity. It is, therefore, a preventive, holistic, contextual "life-design", that gives increasingly more importance to "life-wide-learning": a continuous learning process that occurs in many places and at various life stages, defined by interpretive activities crucial to forming, adjusting, maintaining and strengthening attitudes, beliefs, competences, created within less formal and conventional circumstances. Hence a path of evolutional and continued growth, where the responsibility of the learner who assimilates the use of social media and collective intelligence is central (real "distinctive social capital" of groups, organizations, and territories), by way of new shared and participated forms, exchanged in ever expansive networks, focusing on trust in the application of new technologies, useful for generating innovation, flexibility processes, retention and support of employability, and new social, professional, and business opportunities and adaptabilities.

The conventional one-way ex-cathedra learning form, which operates in the absence of relationships – still exercised in most of our national school and university systems – is opposed by an "ecological learning" form defined by lateral, shared and partaken relations. The emerging forms of learning tell us that intellectual and abstract knowledge, which mainly includes cognitive aspects, is juxtaposed by knowledge that, through experience, engages the whole body and soul of the learner, i.e. knowledge that involves indi-

viduals through intensive participation in social and professional life. This learning process, depicted by a complete emotional experience and involvement, implies a significant change in the person, precisely because it undermines the conventional learning certainties (of the notional type). Thus, a different type of learning, which develops a research attitude that is "confronted with the uncertainty and the unknown" (Blandino & Granieri, 1995), the basic condition on which to work, that is challenging for the learners, but also for the facilitators that are required to manage the complexity of the learning processes.

The effort must be directed well beyond the technological determinism that is too often presented as a panacea for all the damages of the educational system. As reported by a recent study conducted by the OECD (OECD, 2015), technologies, although they facilitate didactics, are not in themselves sufficient to improve learning. Instead, we need to reignite a greater impetus and a stronger motivation to teaching, overcoming the well-known set of problems inherent in the secondary and upper Italian education system. All this based on the strengthening of those competences/abilities needed for the resolution of problems, risk taking (therefore liability), proactivity, creativity and critical thinking. This is an investment that cannot disregard educational reinforcement programs especially for the teaching staff who must, first and foremost, acquire new relational skills and competences (active listening, empathy, unconditional acceptance of the learner), more useful in guiding learners to the rediscovery of their resources, thus obtaining greater awareness and cognitive autonomy. Furthermore, it is important to lead the change also through tools and methodologies oriented in transforming education spaces into "active learning laboratories", thus overcoming the traditional ergonomic approach that no longer seems to promote the growth and development of the "human capital". The OECD incisively defines the "human capital" as "the knowledge, skills, competences and other attributes of individuals that facilitate

the creation of personal, social and economic well-being". The human capital does not exclusively coincide with the individual's innate abilities, but it can be increased and improved during the span of a lifetime.

The social/human capital increases via formal, informal and non-formal education and vocational training (Cedefop, 2015). Learning and the human capital accumulation are concentrated in the juvenile phases, and then extend throughout a person's life and it has not only economic costs, which are supported at an individual and social level. A "lifelong learning" is emerging not only as element of individual empowerment, but also as a social demand for support for a new welfare system (Simenc & Kodolja, 2016). These are investments that a community sustains to plan and improve the collective welfare of its future. From this point of view, it is important to correctly identify learning and education objectives. It concerns improving one's personal well-being as much as the social and economic one; therefore improve one's knowledge, reinforce identity according to an increased quality of life and also ameliorate the social and economic aspects of the community. A vast scientific literature has claimed for the past decades that proactive, responsible and personalized learning greatly enhances the learning coefficient, which has repercussions not only on the individual but also on society in general and on the socio-economic aspects, as precisely asserted by the OECD. Failure to steer towards this direction means not to take into account the world of employment and avoid seeing the close relationship between human capital and labour. A society that perceives the education context – certainly necessary for personal growth – separated from the world of employment is more interested in self-preservation than in development and change.

## 5. Conclusions

In Italy, the current educational institutions, such as schools and universities, are largely the products of a "social infrastructure" of the past. This has fuelled abandonment, school dropouts and youth unemployment. The scenario has changed, and these institutions should find new ways of responding in the face of profoundly different and continuously evolving environments. The emerging models of learning are inclined at improving the integration and literacy of the new media. The exercise of critical thinking, individual responsibility and cognitive independence will have to be part of the educational project in the making. It is necessary to incentivize experiential learning to emphasize the ability of cooperation, group work, read the new signals coming from the social transformations and respond adaptively to the continuous changes. This change in the world of employment that has not been sufficiently supported by the institutions is taking place from the bottom, with the emergence of Coworking, FabLab, and through the personal initiative of enlightened teachers. A modern and responsible society must necessarily be founded on labour, so as to not fuel conflicts and social problems. There is no awareness of how work is a realization, motivation and identity. It is necessary to reconsider a social system where it is simple to acquire new skills and it is easy to reposition oneself in the professional world. Spaces are required to encourage dialogue and the initiative among individuals, where institutions, more than applying control, support and enhance the human capital in its design commitment and innovative ideas. To go beyond the exercise of patronage and the "logic of belonging" is a change in cultural perspective, focusing more on professional skills, maturity and the human qualities of the individual, which are essential to improving the workforce of the future. In this sense we must not settle on a preconceived idea of the world, ("Where all think alike, no one thinks

very much”, Walter Lippmann). We need the ability to embrace different ones, even more so in a world where interdisciplinary culture is

so important and that is appearing increasingly multiracial and globalized.

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