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Using Social Networks at school. A case study

Usare i social network a scuola. Un caso di studio

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Abstract

With the advent of the web, the way we produce and manage knowledge has been profoundly changed. This technological development makes available ever more versatile instruments that are able to access and manage increasing quantities of diversified

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information. It is important to observe these new spaces of socialization in order to understand the way in which: new forms of sociability develop; different types of communities can interact within the new techno-social spaces and the incorporation process of new technologies in teaching and social practices in education. The essay focuses on the use of social network at school, with the intent of reconstructing the latest trends in the use of new and old mass-media methodologies applied to teaching, at the same time, observing the more interesting professional practices and experiences which emerge from the viewpoint of study and critical reflection.

Keywords: Social network, e-community, new forms of sociability, new technologies, teaching, learning.

Abstract

Con l'avvento del web, il nostro modo di produrre e gestire la conoscenza è profondamente mutato. Lo sviluppo tecnologico degli ultimi venti anni mette a disposizione strumenti sempre più versatili, in grado di accedere e gestire crescenti quantità di informazioni diversificate. Non si tratta solo di strumenti tecnologici ma di nuovi spazi di socializzazione, che danno vita a nuove espressioni di socialità, a diverse forme di comunità. E' interessante quindi osservare le ricadute di questi nuovi spazi tecno-sociali nella didattica e nelle pratiche sociali in materia di istruzione. Il saggio si concentra sull'uso di alcuni social network nella scuola, con l'intento di ricostruire le ultime tendenze nell'uso di nuove e vecchie tecnologie massmediali applicate alla didattica, con l'intento di osservare le esperienze più interessanti che emergono dalle pratiche professionali di docenti che si misurano con la sfida delle nuove tecnologie.

Parole chiave: Social network, comunità, socialità, nuove tecnologie, insegnamento, apprendimento.

1. Introduction

In the post-industrial society, variously defined as the risk society (Beck, 2000), the late-modern society (Giddens, 1990), the post-industrial society (Touraine, 1998), (each of which highlights different features of the changes taking place), we can observe a re-definition of living spaces, social flows and division of the labour market. According to Levy (2005), the new central social actor in the mutation taking place in the 21st century is a cyborg, who moves with confidence in the new space-time dimension brought about by the introduction of the Internet, a dimension where *time is timeless* (Castells, 2001). As stated elsewhere (Capogna, 2010), the web has become a new space for living and

socializing where all is co-present and where opportunities for personal development are multiplying access and selection mechanisms, thus creating new inequalities.

The birth of the web, accompanied by the development of modern communication technologies and by the resulting process of technology hybridization (Marinelli, 2004), has brought about a radical change in social processes and relational systems, laying the basis for new forms of relationship and different ways of creating community through the use of techno-social environments (Vespignani, 2009), where social and technological dimensions are increasingly interdependent. With the advent of the web, the way through which we produce and manage knowledge has been profoundly changed, thanks to an extraordinary technological development which makes available ever more versatile instruments, which are able to access and manage increasing quantities of diversified information (audio, video, writing, etc.). For all these reasons, it is important to observe these new spaces of socialization in order to understand the way in which:

- new forms of sociability develop;
- different types of communities can interact within the new techno-social spaces;
- the incorporation process of new technologies in teaching and social practices in education.

The essay shows the result of a case study² realized on the “*Innovation at School Project*” sponsored by an Italian society which offers a range of advanced technological tools (interactive whiteboards, object learning, learning environments E-learning, training and technical assistance to teachers, etc.) for educational systems. This company offers a professional course on using social networking in education to teachers and education experts which is available only through the web.

The aim of this case study is to:

- a) reconstruct the way in which social networks are used in Italian classes to promote learning; in young;
- b) individuate different types of community that the web makes possible through its diverse techno-social environments;
- c) observe the way through which people become capable in the use of social networks.

The initial hypothesis is that we can distinguish different types of e-community³ in relation to the variety of possible environments. The question that guides the work is: *what is the*

² The research, which is of an exploratory nature, adopts a composite qualitative methodology in which we made use of different analytical tools: focused interviews, participant *observation* and *non-participant observation*.

³ The *e* suffix indicates that this is a special type of community, one that develops in the techno-social environments made possible by ICT development, and differs from the traditional community.

subjective maturing process that leads the subject to take an active and responsible role in the new techno-social environment?

The essay begins with a reflection on the concept of *communities of practice* that seems to inspire the general construction of the pathway as a whole. Through practice, we attempt to reconstruct the relational network of the actors involved in this process by defining the *thematic field of interest*, *community* involvement and *practices* that characterize it (§ 2). In presenting the case study, we focus on the use of social networks⁴ in education (§ 3). The work concludes with a reflection on the new space of socialization offered by these techno-social environment (§ 4). and the reconstruction of the process that leads the subject from being a simple, passive spectator to becoming an active member of the community and content producer (§ 4).

2. Communities of practice and networking

The concept of community takes on very strong meanings in sociology. Generally, to define membership of a community we identify characteristics which create an identity of belonging and are defined by a common history made up of shared ideals, traditions and/or customs. Sometimes language is the identifying element in belonging to a community. In this sense, the word "community" is linked to associations that refer to a common ideology and, in some respects, may be seen as an extension of the family. A community life dimension implies sharing a system of meanings such as behavioural rules, values, religion, shared history and the production of artefacts. With the advent of the Internet, we have seen that physical contact or geographical proximity are no longer necessary in creating community identity: virtual communities, made possible by the proliferation of techno-social environments where people can meet and interact in a variety of ways, are an example of this. The fundamental difference between these and the community in the traditional sense is that virtual ones are the result of a definite choice on the part of the participants, who may come and go as they please across the community borders and be part of other communities without any particular problems and in brief lapses of time. This distinction means that the rules applicable to the study of 'material' communities (traceable on the basis of territorial belonging) are not transferable to the new community. More generally, what unites the different types of communities (tangible or intangible) is that its participants have common characteristics.

A particular kind of community is one that refers to the concept of *practice* defined in the late '80s in a research program on learning (Lave, Wenger, 1991) and which later found

⁴ On social network analysis see, among others: Wellman (1988).

applications in the organizational field, giving rise to several initiatives (including managerial ones) directed at the exploitation of knowledge generated within organizations. In general, the community of practice⁵ can be conceived as an aggregation of informal actors that organize themselves around common working practices where they develop a sense of solidarity with regard to organizational problems and share knowledge, meanings and language (Lipari, 2007). These are groups that spring up in the presence of shared work interests. They are fuelled by reciprocal contributions and a commitment linked to the knowledge that they are part of a common enterprise; they have a shared agenda; they define individual and collective identity (i.e. negotiated experience, community membership, learning path, global and local relationships) through participation in practice; they continue as long as they have interests in common. One of the major contributions which Wenger has provided to these studies can be summarized as going beyond a vision of learning as an individual activity which promotes a social, decentralized perspective. In this sense, the actors are constantly immersed in a pre-existing historical reality that is proposed to them in all its objectivity (ibid. 2007:13). According to this view, learning is the result of the process by which individuals enter into a relationship with the physical and social world in which they are immersed.

Another important consideration arises from recognizing that learning is not a mere mental activity, but regards experiential, emotional and cognitive dimensions simultaneously. Briefly, we can say that the foundation of learning lies in social participation in a practice which can be summarized as "the totality of the social actors engaged in disparate activities relating to the world/context" (ibid., 2007:15). Thus, the concept of practice moves the focus to doing, giving structure and meaning to our actions. In this sense "practice is always social practice". As Wenger points out (2007), it represents the foundation of learning processes and the incorporating and structuring reference point of a social community, as well as being the primary social production source of meaning and knowledge.

From this perspective, "practice" constitutes "a focal point for a description of learning processes, knowledge building and the social configurations that make them possible: as it is socially produced through action and the negotiation of meaning, practice makes learning possible and creates a space for the participation of the actors involved in it" (Lipari, 2007:18). According to Wenger and colleagues (2007), the representative aspects of a community of practice are: recognition of the *thematic field* that defines the identity, values and objectives of its members, the *community* as the social context of learning and a place for relational exchange and *practice* that embraces all the knowledge that the community develops, maintains and shares.

Based on these considerations, this case study seems particularly interesting as it represents

⁵ On communities of practice and communities of interest see, among others: Jones, Preece (2006).

an experience of communities of practice that develop *in* the web, *for* the web and *with* the web, giving teachers access to the many new social and technological environment opportunities offered by the web, as well as new forms of community and learning. Social-networks appear as an opportunity through which *communities of practice* (Wenger, McDermott, Snyder, 2007) can be elaborated in schools, with the intent of reconstructing the latest trends in the use of new and old mass-media methodologies applied to teaching, and, at the same time, observing the more interesting professional practices and experiences which emerge from the viewpoint of study and critical reflection.

3. Case Study: Innovation at school

The *Innovation at school* experience offers a privileged opportunity for observing the relationship between the different social technology environments made possible by technological development and how they shape and maintain various types of community and identity online.

The Garamond experience begins with a small community of professionals, scholars and experts in the most advanced web technology that defines its thematic field in two primary objectives: promoting the spread of the Web and the various opportunities it offers at different levels and types of school; and fostering critical knowledge free from ideological visions based on excessive enthusiasm or worrying alarmism. The whole experience can be summed up as being a constructivist approach producing value and new knowledge through practice and the recognition and appreciation of all relative experiences. 300 teachers and trainers from all over the country who were interested in using web technologies in their professional capacities took part in the first edition of the course.

The course is articulated according to 15 different themes, each oriented towards conveying knowledge and skills to be used in a particular multimedia application and its opportunities for teaching. The courses, conducted exclusively online, last for three months, and allow those taking part to enrol in one, more or all 15 tracks. Given this choice, the teachers who participated in the initiative were distributed as follows:

1. Face Book	173
2. Wiki-Wikipedia	144
3. Tunes Podcast	142
4. Twitter	134
5. Skype	137
6. Google Earth-G	137
7. E-Portfolio	135
8. E-book	145

9. Learning Objects	167
10. My space	133
11. Slide Share	147
12. Second Life	133
13. You tube	142
14. Blogs and RSS	139
15. Ning	136

It is interesting to note that the majority of them preferred Face Book, clearly driven by its popularity among the young.

The first information and content activity is always the starting point for each theme and is carried out through the proprietary e-learning platform Kairos which contains the courses⁶. This platform offers a variety of management and communication tools, both synchronous and asynchronous and can incorporate a variety of codes of communication (audio, video, text, ebooks). It is therefore an activity of codified socialization knowledge, essential to beginners in navigating the new virtual world they have chosen to get acquainted with. However, this very basic knowledge concerns the use and management of the tool for educational purposes.

The second activity can be likened to a laboratory because, after supplying the initial guidelines, information and references necessary for familiarizing oneself with the new environment of choice, the tutor opens a new online space for the group. It is an open space where people can register and attend even if they are not enrolled. Here the newcomers begin to visit the virtual space and learn about the general structure, objectives, functions, services and possible applications. This is a "journey" in a strange land and the feelings that may accompany this experience are those of disorientation, awe, confusion, fear. Depending on the complexity of the login page (very different depending on the social network of reference) you can run the real risk of "becoming lost" and be unable to find the reference group. In this environment, specifically activated by the expert to accompany users in exploring the opportunities associated with it, participants are still in a sort of protected space where community members gather under the guidance of the tutor who makes proposals and suggestions, or stimulates and encourages them. We are in the phase of experimentation in which neo-users can slowly acquire greater self-confidence and mastery of the various options. In this space, the objective of the expert-facilitator is to create a stimulating environment within trusting, warm and participatory relationships

⁶ The Kairos e-learning platform, can be viewed at: <http://www.garamond.it/index.php?pagina=21>.

based on a community of practice logic, where learning takes place hands-on, peer to peer, in a process of continuous dialogue.

The third activity is practice. This requires active and creative individual action on the part of the participants in order to incorporate the professional skills and knowledge acquired into their professional routines. This is certainly a very delicate step, and the teacher who wants to rise to this challenge and find the best method of incorporating the social space and methodology learned into teaching practice requires a certain amount of autonomy, planning capacity and curiosity. The teacher therefore makes a free choice in which the desire to "get involved" and a strong intrinsic motivation towards experimenting outside the traditional classroom safety net come into play. The fact that even today those who devote their efforts to these innovative practices, thus improving the service to students and the quality of their learning, receive no form of recognition should not be overlooked.. The various modules are not organized according to strict temporal logic and sequence. In fact, the entire program is on the Internet, so everything is present at all times and each different component of the project reinforces the others. However, this requires a considerable capacity for selection and focus, otherwise there is a high risk of disorientation and demotivation.

The fourth activity is aimed at supporting and accompanying the process of reflection (Shon, 1993) that each professional should always be able to activate in order to bring to light the set of tacit, implicit and situated skills which are being experienced. This moment is preparatory to the encoding of new knowledge so that it can become explicit, shared and replicated. Thus, the experience can be likened to a community of practice, where reflective professionals learn through acting, in a comparison with their peers. The multidimensional character of the learning process which involves the experiential, cognitive and emotional spheres simultaneously within a framework of multifaceted relationships and regards both the interpersonal relations (Lipari, 2007) and the objects/artefacts and materials (Latour, 2002) that inhabit these social/technological environments therefore becomes self-evident. However, it also highlights the social, situated and experiential practice of learning in these environments, which are strongly characterized by the narrative dimension.

However, not all participants are able to progress from being passive users to producers in the three months of the course. This depends on individual learning rates and the interest, effort and time they invest in a very demanding process which involves all dimensions of being and knowing. The thematic experts and the project team therefore represent an opportunity and a starting-point for "cultivating a community of practice" (Wenger, 2007) for teachers involved and interested in using the web and social networking in education. The experience gained outside of the institutional context is particularly interesting.

3.1 New techno-social spaces

The e-learning platform Kairos is only one of the places of interaction and relationship-building promoted by the Community, and aims to accompany newcomers towards new areas of sociability through immersion in techno-social environments as mentioned above. Different types of "community" evolve in the relational spaces offered by the web, depending on the socio-technical context in which we move.

From a reconnaissance of the most popular social media structures observed in the course of the survey, we can identify different ways of relating, which correspond to three different types of e-community. They can be activated depending on the uses allowed by the different environments. Every techno-social environment presents specific access and behaviour rules according to the type of user and what the platform itself offers and provides. Furthermore, like any other social environment, the users embark on a socialization path that leads them from being an outsider to being a member of the community.

The specific value of the Garamond experience is to have formalized a path accompanying newcomers to this variety of environments, through which they are introduced to the specifics and, little by little, the rules and behaviour relevant to each of them. These rules are mostly informal and tacit and can only be understood by "diving in" to different environments, each of which encourages certain types of behaviour and not others, certain kinds of relationships and not others, thus creating different kind of community dynamic. It is through this social dimension of learning and practice that newcomers can learn and be introduced to what the web offers, through a community of people who work a sort of intermediary with respect to these new environments. Observation in the web shows that interaction in these environments becomes easier where you can recognize specific, although not necessarily formally defined, roles. It shows that in situations when there is a recognizable promoter, people try to present themselves more frequently in an authentic way, while in open and informal networks it is easier to meet people who project a different image of themselves. This mystifying behaviour is not always in bad faith. Sometimes the idea of "invisibility" divests a person of responsibility, facilitating their tendency to disguise themselves. Although the rules may be more or less formal (all structures have regulations which must be accepted on enrolment), every techno-social environment poses constraints and provides indications for appropriate behaviour. Given these considerations, it might be interesting to see how they are experienced or perceived, according to the various social media options that enable orientation of social relationship.

Firstly, we can distinguish environments dominated by informal socialization and freedom. Among this type of social network in Italy, Face Book is certainly the best known and widespread, especially among children and young people. It is considered to be very friendly and informal, a place you go to "make friends". Because of its characteristics and

the scope of its business, this environment can be considered to be a device for:

- *social* appearance, in that it is perceived as a socialization tool;
- *successful*, so that not being on Facebook is often considered a sign of cultural and technological backwardness;
- *persuasive*, "in that it induces in users automatic behaviour and standards";
- *approval*, it induces people to adopt "serial" identity structures through interactive and narrative default modes, such as the system of links and sharing that severely limits the freedom of creative expression of the user;
- *rigid*, as the discursive regime which regulates status is binding "everyone is led to respond continuously to the same question that constantly regenerates itself: "What are you thinking now? "
- *clustering*, it foresees suggesting possible friends based on predefined membership (school, college, work, hometown, etc.) thus helping to extend our sociability on the basis of predetermined affinity.

Moreover, the fact that the groups are based on common interests increases the risk of *compliance* because "they provide a mirror image of their own identity, while in real life one becomes part of randomly selected groups (territory, district, etc.) and we encounter the plurality and diversity that exists between people. We must learn to deal with each other and our differences. If not balanced by other experiences, the risk involved in this socialization process is believing that all agree according to their specific mentality, group, political ideals, social level.

From this point of view, it is a type of social network that aims to enhance the quantitative dimension of sociality - how many friends you have on your network, how many friends have your contact details, how many links and/or photos, etc. you share - rather than a qualitative dimension, what kind of relationship you build with other terminals of your network, what and how you can share with them and with what aims. In other words, it presents itself as a social network which hardly offers the new social actor the opportunity to assert themselves in a creative and expressive sense.

At another level, there is LinkedIn, which allows members to develop their network based on shared interests, unlike open networks where the only important factor is the number of contacts you have. Here the target is to build a mainly professional e-community, and there is a selection mechanism which increases its chances of success. We are in the presence of an instrumental approach based on professional affinity, therefore quality and not quantity guide the selection process. In this sense, the network is perceived as an instrument for personal development that contributes to identity and professional credibility. In these environments, a pertinent conduct must be adopted, "otherwise you are marginalized." Furthermore, the range of opportunities for contact can result in opportunities of a professional nature. This approach to social networks may have some influence on social

capital (Coleman, 1990) of origin "because it offers endless possibilities for relationships that you don't have physically." However, this requires the recognition of a status of seriousness with regard to the network. However, that of social capital is an ambiguous problem. We can imagine how the starting point of network users influences the use they make of it. In other words, the social background of the subject affects the way in which he takes advantage of the opportunities the network provides. Often the web is used to learn or enhance professional knowledge, and also individual productivity as well as socialization, knowledge development, learning languages, etc. can be powered by the tools currently available on the Internet. All this may create new opportunities, but this depends on the active and responsible attitude on the part of the participants. In this way, the new network can also help change the sense of belonging, as well as help build their own digital identity. The experience gained through the Internet can become skills to be applied in professional contexts, but this can only happen within a personal development project. Within this type of social network, Twitter and Friend Feed create e-communities grouped around specific thematic areas. These environments permit the finalization and selection of an e-community that can take on the traits of communities of practice, where interaction of dialogue is the main vehicle for learning from oneself and from one's peers through an open and continuous process of reflection. "The network is the main tool for professional development." This does not mean that it can replace 'real' space, but is rather an extension of it. Only a healthy and balanced relationship with the tool may allow the cyborg to appreciate its full potential without being overwhelmed.

Sharing environments such as Flickr or YouTube⁷ (to name two of the best-known), favours an experiential aggregation where you can file the memory of events considered relevant extending the time they are made available and, at the same time, creating a bridge between people. This can prolong the short-term memory⁸ that characterizes information technology and further shared interests made up of common ideas and experiences with regard to shared practices. Sites of this kind constitute an interesting opportunity for growing and/or following experiences and issues of particular interest.

As you can see, these techno-social environments allow the creation of three different types of community⁹. In the first case, we may have a *presential relationship* such as that allowed on Face Book, where "ideas about what we're thinking, about what we did, the opportunity

⁷ An example of this can be found at the following web address: <http://fisica.decapoa.altervista.org/fisica>.

⁸ With regard to this, it may be useful to recall that in the web we have a short-term memory that does not exceed 36 h.

⁹ For a discussion on this issue see, among others, Rotta, *There are or there are not*: <http://www.slideshare.net/solstizio/esserci-o-non-esserci>.

of being present at an event on the basis of absolutely free and informal interaction where everyone is their own animator" are exchanged. In this case the impact on *social capital* is very weak, because this social network does not allow the storage and diversification of contacts and contents.

In the case of *issues, or conversational community* (such as Twitter or Friend Feed), we can observe combined approaches aimed at communities of interest, where the relationship is built by the subject and no longer based on default but rather in relation to specific purposes and driven by personal motivations. The prevailing logic is not so much the quantity of contacts but the quality.

Finally, in environments that allow the sharing of practice and experience, we can find *communities of practice* where participants tend to share resources, tools, ideas, etc., in a context of peer relations, aimed at the discovery and understanding of their professional practices.

Learning environments and/or communities oriented by a predefined educational project are different. This type of community is guided by an expert-tutor, who does not necessarily represent the teacher. In a community like this, (as observed in the case study), the primary purpose is to help people learn some knowledge/skills through technology and comparison. In this case, the techno-social environment becomes a privileged space in which "to cultivate communities of practice" (Wenger, 2007), enhancing the same social space skills that have been dispersed and often isolated in the territory, as in the case of teachers and trainers. This community of learning can spring up in different environments and constitutes a community that tends to incorporate all three modes of socialization outlined above; it "changes the way we look at the network completely", both in terms of personal investment and self-representation. "If we may engage in free conduct or codes of expression in informal conditions, with the increase of commitment and recognition in the community, we tend to increase the level of attention with which we introduce ourselves. This makes us more likely to be honest, because unwelcome conduct can be sanctioned by the group (from a simple reminder or dissent e-mail to exclusion from the group). In a space oriented towards promoting reflection and the construction of professional knowledge and routines, the most common tendency we can observe is for users to represent themselves with a professional integrity that is recognized by their peers and affects their overall relations. In this group, we can imagine that the implications in terms of social capital are of major interest thanks to the legitimacy gained within the e-community of reference.

In the experience observed, the promoter-facilitator does not adopt the role of the traditional teacher but places himself alongside or in the midst of the group with the aim of facilitating the exchange of comparisons and experiences and promoting reflection. The role of the animator in this case seems to be to guide and orient the group's narrative, which

represents the primary opportunity for the learning and sedimentation of professional practices and routines. At the same time, he promotes the improvisation/experimentation of new practices and solutions while encouraging cooperation based on solidarity and mutual support regarding common problems arising from the context and/or the practice.

If a limitation is to be noted with regard to this project, it is surely the difficulty experienced to a greater or lesser extent according to the various themes, in the systemization, feedback and diffusion of the entire experience, both of the different groups and the project as a whole, at the end of the experiment.

3.2 Learning through Social Network

The teaching practices promoted by the overall experience are aimed at renewing the traditional conception of education based on a passive and notional view of teaching instead of a vision of learning that places the subject at the centre of a concrete historical and social reality. Indeed, the educational process conveyed and conveyable through the use of these environments brings about radical change, and introduces the logic of learning in place of traditional teaching. “circular and horizontal communication” and sharing made possible due to these environments is based on a constructivist perspective, where each subject is called on to contribute creatively¹⁰. In this system, teachers must change their vision of teaching. "First, they must agree that their authority may be inferior to that of their students. Then they must accept the existence of an area of knowledge that does not come from them, and which they can indicate as being the arrival point of a research pathway. Mediated communication develops between partners promoting mutual commitments and reciprocal role definitions.

Some observers¹¹ believe that there are at least five good reasons for using social networks in education:

1. learning with others;
2. serving students;
3. accessing a dynamic resource;
4. broadening one's learning base;
5. remaining actively engaged in education.

¹⁰ For a debate on the relationship and communication dynamics that develop in a virtual classroom, see, among others, Capogna, 2008 and 2009.

¹¹ For a debate, see Roscordla: <http://www.convergemag.com/workforce/5-Reasons-Why-Educators-Should-Network.html>

In Italy, we can observe a situation of serious and widespread delay that coincides with peaks of excellence representing a significant boost to innovation. The most pressing issue to be addressed, however, it is not linked to the technological dimension, but to the methodology. If we don't think about how to reform the learning process, how to develop the necessary skills to guide this process, we risk repeating obsolete patterns in a new form. "We must not fall into the trap of limiting our focus to the technological aspects. It is not just the use of these tools that determines their value" but the way in which we can conceive and plan a possible educational project.

At present, two fundamental tendencies with regard to the use of these techno-social tools in teaching can be noted at different levels within the school environment. The first is the attitude of those who believe this way of interacting to be dispersive, and who try to confine the educational process to a formal scheme, thus showing their fear of innovation. Just as Plato feared that the invention of writing might cause memory loss, they fear that the spread of these technologies might impact on writing. The other faction, that of the enthusiasts, is oriented in the opposite direction. Uncritically, they consider interaction to be a process of liberation from conditioning and limitations. We, however, believe that the use of social media within the educational experience must foresee a balanced and critical approach.

Therefore, to avoid the risks of overloading information and standardizing as mentioned above, it is necessary to guide people towards a balanced and rational use of the web. The school should be able to train the subject (the teachers before the students) to evaluate the use they make of it.

So that this may become possible, the school must overcome the prejudice resulting from a tradition in which the culture of the network is simplistically identified with the computer. Information technology is a science which studies the ability to plan, while those who use social networks do not necessarily need to have this capability". Computer skills were the main vehicle through which the use of PCs was introduced in schools in the '80s and '90s. Now we need communicative competence of a sociological, linguistic and cultural nature in the broadest sense". As Castells says (2001), we need Internet competences.

The ability to navigate the various options experimented by those attending the Garamond courses, pioneers of teaching devoted to the use of social networks in a logic of promotion and "cultivation of communities of practice" (Wenger, 2007), allowed us to observe different applications and creative solutions elaborated by the teachers¹², all united by some basic intentions:

- communicating with the students through the use of an instrument familiar to them, with the intention of establishing a better and more intense dialogue;

¹² For more details, see, among others: <http://videodidattica.ning.com/>

- stimulating their motivation;
- recuperating an element of play in learning;
- recognizing the value of the informal learning component, conveyed and conveyable through free socialization processes among peers and adopting it to the best advantage;
- testing new applications for renewing the approach to teaching and discipline.

Different environments offer a variety of tools. We can therefore find different applications in different disciplines, as we have observed from the experience in question.

For example, Face Book was easily applicable to language teaching as it permitted the circulation of a large quantity of material/resources/tools/audio/video in original language for the benefit of students and teachers¹³ through a system of shared links. Perhaps for this reason the community observed became an open community, much larger and more structured than the initial group class. Even the blog appears suited to language teaching, as "it functions as an online diary open to feedback, suggestions, guidelines and reflections as well as permitting the compilation of lists of links where teaching materials to be used in thematic analysis can be found. It may represent a starting point for consulting one dictionary after another and discovering further definitions, synonyms, checking pronunciation, accessing idioms, etc."

Blogs are also particularly suitable in teaching literacy competence because they can help learners to progress beyond the passive reading required for passing tests and enter into a space where they can experiment diverse roles (reader, author, co-author, editor, webmaster, etc.)¹⁴. After having experienced these environments as places of techno-social interaction, teachers can capitalize this expertise more easily and translate it into a new and more engaging teaching method. Thus the students' motivation and curiosity, essential prerequisites for learning, are increased. In this social-technical context, teaching is no longer, or rather not only, imparted through the mere transmission of content and concepts, but takes shape within areas of socialization, sharing and discovery.

The more complex Second Life experience¹⁵ demonstrates its wide applicability even in the laboratory. In fact, it permits the creation of virtual simulations whose full value in terms of involvement and anticipation of the experience becomes evident, to the benefit of that practical/experiential dimension which is often underestimated in schools, especially in an Italian context typified by a distinctly humanistic vocation. Too often in schools, at

¹³ For more details, see the Face Book page of IV E:

<http://www.facebook.com/home.php?#!/group.php?gid=219331665534>

¹⁴ An interesting application of this can be accessed at: <http://parolefantasiose.blogspot.com/>

¹⁵ A useful reference site for approaching Second Life for educational use: <http://www.scuola3d.eu/index.php>

different levels, we are unable to conceive what the necessary synergy between teaching and training should be, while training, the *ausbildung* dear to the German philosophers, should always be an enriching environment in which all teaching is incorporated. "Education without training is blind, just as training without education is empty".

The application of these instruments is therefore limited only by the creativity and imaginative capacity of the teachers and students who live the web and social networking sites as an extension of their real actions and, as such, opportunities for personal, professional and community growth.

One of the most important innovations these environments have introduced to teaching is the recognition and enhancement of the socializing dimension that distinguishes every educational context, something which the traditional model of transmission failed to consider. "In my experience, communication between peers is the dividing line that determines the success or otherwise of an e-learning initiative, as the more you can emotionally involve the participants, the higher the probability that the course will be effective. The more the collaboration between students, not only in relation to the specific context but rather as a friendly socialization, is positive, the better the results will be".

Contrary to the widely-held prejudice that online interaction represents a source of detachment, as it is conveyed by a cold medium, "for us there is nothing hotter than what's on line". If you can transmit the materials, activities, communication, in order to "exploit the heat that is intrinsic on line more than in other environments" you can enhance the emotional dimension and foster collaborative learning in groups.

Another aspect we cannot underestimate is represented by the recuperation of a playful approach to learning. In fact, unlike traditional structures, these techno-social environments make it possible. Moreover, children between the ages of 0 and 6 learn everything they need to know about the world through play, a dimension that is gradually lost as the years go by and studies progress.

For all these reasons, educational systems today cannot avoid reflecting on the risks and opportunities offered by these new technological systems, which are so widely adopted by young people and which radically change their approach to information, learning and sociality.

4. New spaces for Socialization

Those opposed to the spread of social media often criticize the ease with which we can distort (or extort) data or personal and non-personal information. Indeed, the viscous and imperceptible nature of the relational games that characterize these environments may induce users to dissemble behaviour. The paradoxical experiences of people who completely change their way of being and appearing are to be found frequently, due to the

fact that the web can greatly increase the subjective opportunity of belonging to multiple communities which are synchronically and diachronically present on the Web. "When you get on the web you find total confusion. This is a process of self-socialization that takes time, commitment and effort to build up a network of good relationships. "Adding a friend onto Facebook, rather than to Friendfeed, or subscribing to Sladeshare is a commitment that I take on based on the quality of report contents that I will get later." However, the transition from being a spectator to becoming part of a virtual or online community of practice requires a "leap", a change in one's perspective in accessing the web from simple passive user to active co-builder. The sum of all these experiences confers very different characteristics to people's biographical paths because the circumstances surrounding their stories are varied, and therefore the effects at personal and individual level will also be diverse. The way in which each one approaches the web and social media is very subjective and requires commitment in order to change from a condition of *serendipity* to one of well-organized planning (Capogna, 2010). Motivation, commitment and a suitable approach to the use of technology are necessary for emancipating oneself from the tendency to homologation and building a portfolio of contacts.

The approach to social media and the finalization and selection processes that we can activate represent the main characteristics of the digital cyborg that each of us builds for himself.

Humanity has grown up facing the issue of the extension of self online, namely the capacity we have acquired of having one or more online identities other than the original, independently of our physical presence, thus overcoming the original misconception that anonymity prevails in the web (Granelli, 2006). It is an extension of identity; the individual can decide whether to use these tools for worthy purposes or to deceive others. Normally, applications for enrolment in social media are strictly supervised, making it increasingly difficult to conceal identity. Furthermore, communication online can transcend some forms of bias regarding physical attractiveness related to gender, age or being more or less able-bodied.

All the virtual environments present on the web help to reconstruct a subject's personal and professional self-representation. This online growth process is difficult to individuate. These tools are a way of presenting oneself, mechanisms for networking and informal contacts through which self-representation can be elaborated through the use of specific devices such the *portfolio*¹⁶. This is a tool for telling one's story online, for documenting one's professional and cultural skills. In the web these interactions are mediated by presence, consistency, quality content and quality of writing. "It's a commitment that

¹⁶ For further reading see: <http://www.e-portfolio.it/>

ultimately creates value, but to understand that our pathway has been enriched takes years."

Achieving the evolution of a mature digital self, able to take an active part and share responsibility for life in an online community, requires a critical spirit that embraces the following prerequisites:

- *the motivational learning dimension*, the web offers an almost infinite patrimony of knowledge that will allow the person to reach high-level objectives. The web can become an indispensable daily companion for social, professional and individual improvement, because everything is equally accessible, "there is no need to mobilize more or less onerous resources to approach a theme, content or person. You just know where to look for things";
- *the playful dimension* necessary in "shaking the conviction that studying is boring, while you go on the Internet to have fun and chat";
- *the willingness to cooperate*, necessary in sharing information, experiences, ideas and projects.

Educational systems at all levels should recuperate these mandatory learning components, which are prerequisites for building communities of practice able to make the most of and exploit the full potential of the web.

This finalized strategic use of the web, however, it is not an automatic and predictable process, but can take shape through the transformation that leads the individual from being an uninformed user to becoming an informed and responsible participant who selects web opportunities, search tools and environments for growth, learning and improvement. This represents a real literacy process with regard to the use of social networks.

5. The socialization process through new techno-social environments

The access to and the use of new techno-social environments evolves through a socialization process that appears to develop on two levels: the acquisition of a growing mastery of *Internet Competencies* (Castell, 2001) and the maturation of a *critical spirit* that leads subjects to assume an active and responsible role within the network and the communities visited. The extension of sociability subjective to the new frontiers offered by the web seems to permeate a process of integration and understanding of the potential of these tools. This path through the "*e-socialization*", can be divided into four phases:

- *The phase of alienation* is the period in which the user feels lost in his new interactive environment. He ignores the rules and styles of communication. He lacks the coordinates useful in self-orientation and moves with difficulty in the new techno-social context (he is unfamiliar with the structure, the layout of the links and their functions, he cannot use the various codes of communication which are or can be activated within

- the social space, etc.);
- The *cognitive apprenticeship phase* in which the user begins to navigate within the new environments and understand the meaning of the language used as well as both the formal and informal rules. He learns to recognize the codes of conduct approved there (which may vary greatly from one to another); he also begins to distinguish the elements that identify different environments and the diverse communication codes activated or to be activated;
 - The *phase of membership* in which the user begins to choose and "build" his environments based on the principles of relevance and contingency that guide his decisions according to his personal interests. In this phase he begins to focus and target his interests among the variety of opportunities offered by the web. He starts to select his network on the basis of quality rather than quantity. The network is no longer seen as the area of compliance or "keeping pace with the times" but rather as an opportunity for cultivating passions and areas of interest, choosing the environments, tools and communication codes adopted more carefully;
 - The last phase is that of *planning*, in which the subject, moving confidently within the web, is able to activate his own development strategy through the selective and instrumental use of social networks in a logic of personal growth. The web becomes an extension of the new cyborg's action, one in which he can consciously communicate his image of self through the adoption of an active role in the production of contents (photos, videos, blogs, products, etc.).

As we have observed with regard to the initial hypothesis, we can isolate different types of community but what is of most interest in this discussion is that these new techno-social environments are particularly necessary in the creation of highly educationally-oriented communities of practice. These tools might contribute to supporting the changes that education systems are facing in competing with the new communications technologies.

The web changes the way in which people and organizations learn, producing a direct impact on the nature of knowledge and the way in which people use it and transform it. These environments modify information. In the system of knowledge that we inherited, the flow of information was slower and organized differently around entities which managed this flow. The information to which we had access was limited, selected and organized, and we could dedicate time to the study of each item according to our interests and/or needs. Nowadays, the social network has obliged us to change our perspective completely, because the flow of information has increased dramatically both in terms of quantity and sources of distribution. At the same time, the information to which we have access appears contradictory, unlimited and disorganized. The cyborg's problem is therefore to archive this chaotic information according to

aggregation and theme, allowing him to elaborate issues effectively and efficiently where necessary. Therefore, once we have learned how to use these instruments, their usefulness lies in saving time and managing/organizing the constant flow of information around thematic nodes. Regardless of the context of use or level of formality, the community becomes a ploy for governing the complexity of information that transcends the individual's ability to manage it. Today, the development of science and technology has created a strange paradox; while the growing complexity of knowledge requires further specialization and collaboration, knowledge becomes obsolete faster and faster.

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