FORMAL, NON FORMAL AND INFORMAL COLLABORATION: Relationship Models for the New Media

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Abstract:

In present time, one of the most repeated slogans in education and training, talks about the omnipresence of the education. Concepts like "permanent learning" and "Lifelong learning" are reiterative in the documents about plans and perspectives of future of education. In this way, most of the students and graduate's (and in general people in formation processes) information and knowledge come from informal learning processes, through no-formal and informal educational means. "Learning Together" is one of the most fashionable and frequently used terms in educational literature in recent years. Because today, the work collaboration processes are probably one of our most important knowledge sources and our challenge is to contribute to maximum performance and to enrich our possibilities, inside and outside our classrooms.

In this paper, the authors want to use this previous framework to explain certain kinds of collaboration. In spite of this focus, it is important to note than telematic tools are not specific or exclusive to one kind of collaboration. We can classify them in one or another collaboration model, but this classification is useful only in theory, to talk about them (for the purpose of discussion). However, in practice the tool doesn't determine the collaboration model, rather the collaboration model determines the most suitable kind of tool.

Resumen:

El hombre de hoy debe educarse en todo lugar y en todo momento de su vida. Esta es una de las premisas más repetidas en la literatura y la política educativas de nuestro tiempo. Conceptos como el "aprendizaje permanente" y "la educación a lo largo de toda la vida" configuran el eje central de la mayoría de planes educativos que se emprenden desde nuestras administraciones nacionales y transnacionales. En este sentido los procesos de aprendizaje no formal e informal toman mayor fuerza que nunca en los entornos laborales, y nuestros profesionales apuestan, cada vez de manera más decidida por formas de aprendizaje que les permitan continuar con su vida laboral y que a la vez les incluya en la dinámica de la construcción del conocimiento.

En este entorno, los procesos colaborativos y el concepto de "aprender juntos" suponen una de los grandes recursos con los que podemos contar desde el panorama educativo (cada vez más amplio y con fronteras menos claras), y uno de los que, desde nuestro punto de vista, no ha sido explorado y explotado suficientemente. En este documento, pretendemos presentar un análisis de los procesos y de los modelos de colaboración que han aparecido como consecuencia de la confluencia entre los diferentes entornos de enseñanza y aprendizaje y ese nuevo mundo de comunicación abierto ante nosotros por las tecnologías.

Keywords collaboration; e-learning; informal learning.

1. Technology at the services of humanity

We are living in a world when, never more than now, technology is at the service of humanity. Let us remember "2001: A Space Odyssey"; apes are discovering tools; the human conquest of space combines and further develops a myriad technological advances in its endeavours to achieve an eternal dream.

Clarke in his book and Kubrick in his film both reflect on the relationship between machines and organic life, and how machines could achieve domination over human kind. And yet how humankind could reverse this situation through the means of their ingenuity in ever developing technology and tools to ultimately dominate the machines again. Tools and the intelligence of humankind to evolve and develop tools are the clue to human evolution.

The fact is that human intelligence is more advanced than human imagination and therefore a rational control on the latter. To illustrate this Gerschenfeld [1:72], a MIT researcher relates a story where Clarke, at the conclusion of his book "3001: The Final Odyssey", thought that he had created the idea of human data exchange by means of a handshake, only to suffer disappointment when he discovered that the idea was already in use by MIT.

Technological development advances at an exponential rate and these advances give rise to a variety of meaningful changes in society the most important aspects of which are social. What is the nature of these inevitable changes and who are the most important people affected? Where is it all leading? What new rhythms are being created to mark our gait and direction? And what sense do we make of it all? Are we becoming habituated to an ever-increasing variety and speed of change? Are we gradually becoming accustomed to taking this phenomenon in our stride, without our earlier felt fear and with a new confidence?

Inevitably we will observe a mixed response. Some will look ahead with confidence for a positive and beneficial outcome to society as a whole. Some will fail to achieve illumination in this sense and will become unnerved, disoriented and frightened. Others will regard developments from the fashionable technophile viewpoint of changing last year's kit for this year's kit; ad infinitum to the bitter end; just for the sake of it without any deep, integrated thought for the wider implications of what they are about (Umberto Eco).

Technology, science and society are all the time in a state of evolution. The question begged of the nature of the relationship between the three is whether the evolution is benign and beneficial or whether the first two are in reality provoking a revolution on the last. Inevitably humankind is caught up in the changes wrought by advances in science and technology and the consequences for society must be the principle focus for our educational reflections.

As educationalists we must observe and analyse the educational processes in society and the effects wrought by the march of technology and science. We must look for problems connected with the speed and application of technological developments and try to resolve them.

Nonetheless, from educational technology research, an also from the educational use of technologies, we must recognize that technology is faster than our capability to think and implement this technologies in educational processes. Therefore, we must accept that social use of technology is more noteworthy than educational use of technology, despite than social uses include some educational aspects.

"The Net" is growing and expanding at its own rhythm, spontaneously, without some previous prefixed directions. From this conviction, the collaboration processes¹ are really important for society development, for human development, and not only the formal collaboration (more studied in last years); in this conditions, informal collaboration processes are becoming important than ever.

We want use this previous framework to explain some kinds of collaboration and some associated tools. In spite of this focus on this paper, it is important to note than this tools are not specific or exclusive for one kind of collaboration. We can class this in one or other collaboration model, but this classification is useful only in theory, to talk about them, but in practice tool doesn't determines collaboration model, collaboration model determines most suitable kind of tool.

2.On-line collaboration models

2.1. Formal Collaboration

¹ We assume the principles of on-line collaborative work as learning method expressed by Dillenbourg [2] and Prendes [3].

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The tools and machines called New Technologies -we think this concept worth a special discussion, but this is not the moment- offer us new ways and media to communicate each other, and this new ways open, in the educational field some very interesting possibilities to renew and change the traditional learning models.

Introduce ICT in formal education allow to "walk" from the strict – and historial- "on-site learning" to other kinds of non-strictly on-site learning processes. We can include these new tools in a big variety of forms, only like other media in traditional classroom which can include some uses for tools in the normal classroom processes, and also we can use this media like basis of our remote-learning processes using only in few occasions face-to-face sessions... In the last years we have find one name for this kind of learning processes: "blended-learning".

On the other side, opposite to the strict on-site learning, we can find the wrong called "virtual-learning"² , full-time on-line learning processes. And from that first step out-side our classrooms with these mixed models to this complete remote and on-line educational model; we are talking about "e-learning".

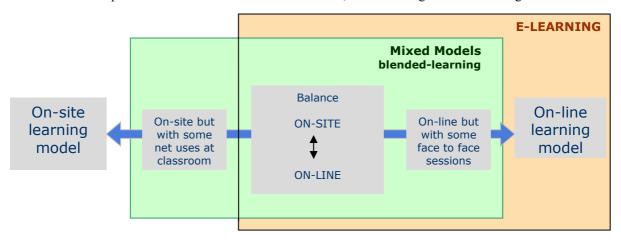


Figure 1 Learning models according to level of ICT use

Whatever the nature of our learning model, with more or less virtuality degree, we can include on these a big variety of learning strategies based in collaborative methodologies, and for each situation this collaboration can be adopt different features and identity signs.

When these collaborative strategies have place in the context of a specific and planned course, and they have predetermined learning objectives and the collaboration model is "controlled" by someone with a teacher role or responsibility, we are talking about "formal collaboration"; one form of planned and guided collaboration with some work and social directions. In this model, the collaboration is a condition to learning, therefore this kind of collaboration demand a very rational planning taking in account the new elements include in these relationships by the new tools: we need do a very specific actor's roles definition, we need defined to much also tasks and objectives, methodology of work, calendar, we also need to select carefully the communication tools and the work tools too, planning social interaction between participants (When, how and why will this interaction be?), and we need, of course, planning evaluation procedures and criteria.

At this time, we can do it with different types of tools. We can use "general use tools", like e-mail, web, on-line forums, etc.; we can use also others specific tools specially developed for e-learning actually called Learning Management Systems (LMS), on these environments (LMS) we can carried out formal collaborative activities with the students; nevertheless, there is some specific environments developed no

² At this point, we think it is really interesting to remember the concept about "virtual" from Lèvy [4]. From this point of view, we can not use this adjective for the learning processes

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only to support learning processes but for structured collaborative working processes called "Computer Supported Collaborative Learning" (CSCL) or "Computer Supported Cooperative Working" (CSCW).

This kind of environments, specially developed for collaborative interactions, should be strong tools for teachers in distance learning processes (formal collaboration), and should facilitate collaborative work processes between organized groups of work. This environments must allow interaction and interchange between group members, tasks register, members information and teachers control, normally in closed spaces reserved only for the group and teacher. On this way, this type of environment must be flexible, users can choose some ways and movements to work in the activity, this different ways enrich too much works results.

2.2. Non formal collaboration

In the formal processes of learning, we can find, maybe every time, processes of communication an participation between the students that goes beyond the formal established parameters in the course and by the teacher; this processes of relationship and collaboration in parallel to formal processes of learning we called non formal collaboration.

Non formal collaboration means that students, free and spontaneously, want to share knowledge, resources, tasks, directly related - or not- with the tasks in course, but always involved in the same learning process.

For this collaboration, students use different kinds of tools, normally they prefer someone free available or very extend in their environment; e-mail, msn, forums... Sometimes, even they use tools integrated in their formal course LMS.

For example, we can talk about student who share documents and papers by e-mail, discuss course aspects in a chat... and all these information interchange processes are organized by themselves without teacher or tutor's assessment, and contribute effective to learning.

But, why can be useful this kind of interchange? Do the students prefer really ask for any classmate before than ask for teacher? Answer is sometimes yes. By the way, Naeve [6:9] said us there are "at least three important reasons" to promote this kind of parallel discussions and interchange between our students, and we want deeper in this three reasons:

"First, in order to enhance their learning, it is crucial to engage the learners in the explanation process. It is only when you get a chance to explain something to someone else that you realize that you may not understand it as well as you thought."

Is useful to avoid the students sense of good learning, is an opportunity to use their new knowledge and to explain this using different kinds of strategies. This is one good way to insure the knowledge sharing.

"Second, when you have just understood something, you tend to be very effective in communicating it."

This way helps us to encourage them, it is a very positive reinforcement and our student can see clear knowledge usability and his efforts as profitable efforts.

"Third, a learner is often ashamed to put a question to a highly qualified knowledge source because of fear that the question might be perceived as stupid. Talking to another learner who is basically "on the same level" is often much less threatening in this respect."

Sometimes they need some peer to peer relationship to be safe and to explain themselves better. This aspect is not only useful for them, is also really useful for teacher, because a lot of times some students have some doubts and don't resolve them only by shy.

At the end, non formal collaboration processes, are useful to learning, but they are also useful to avoid the social atmosphere, develop empathy, and to create bows between these students in the framework of this course and out side of it, sometimes resistant in time.

2.3.Informal Collaboration

Talk about informal collaboration is talk about communities of people who have in common their interests and have a relationship based only in this collaboration. We are talking about communities of

practice (in terms of Wenger [5]), list of distribution, specialized forums, etc. We are talking about collaboration between people in different environments, works, and moments, but with interest in common.

This kind of learning is not exclusive that new technologies, we are every time learning by informal ways, in every moment, everywhere... but, new possibilities open in new media make possible that we can also collaborate each other, because now we can not only "consume" information from others and show us by media, we can produce it, and we can collaborate to produce new knowledge... and even more, we are doing it.

Last decade, the processes and environment of spontaneous, free, and informal collaboration have spread a lot, and day by day we can find informal collaboration experiences more rich and interesting. We are talking about experiences like wikis, whit this kind of new road to build the knowledge, or more and more important blogger movement, or also, the impressive and dynamic experience around video-sharing tools like youtube; people who interchange pictures, music, references, general information, and of course, ideas. By this way the concept of social software was be introduced in our life.

Social software includes the tools that allow social interaction and interchange and which include also some elements in follow (Boyd in Kaplan-Leiserson [7]):

- Support for conversational interaction between people or groups.
- Support for social feedback.
- Support for social networks

That is a concept which don't seems to contribute anything new to our knowledge field, because communication and social interchange are probably one of the most important features from de ICT and on-line networks. The Cyberspace has been being our "non-place" to relationships, communications and interchanges. Nevertheless, there is a key point signed by Boyd and which we think is really interesting: traditionally, people is integrated in groups in their on-line relationships and interchanges with one model which we could characterize as vertical and from up to down, so most of people is integrated by "someone" (more often the group administrator) in some group where they don't have too much decision capability; in the other hand this new concept social software is opening one new possibility, integrate people in groups by the opposite model from down to up, who integrate the groups is people themselves, they decide when, where and whit whom they want to collaborate, and also, which rules or preferences will govern theirs works and social on-line spaces. On this knowledge way, social software allows real processes of informal collaboration and, at this sense, weblogs and wikis are paradigmatic examples.

Mythic power of mass media turned in users' power, a "self-media". "Knowledge is power", in the previous model (which is even in force) few people "bring" the information to all the other people, but now users are publishing information, interchange knowledge themselves, people would be not passive anymore.

Again the change, new tools to explore and to add and squeeze in educational processes, at the end, in all our life; tools which good use are a new challenge for our imagination, and for a our knowledge, a challenge more in the way to transform the school, transform teaching and learning processes and, with all these tools, transform our world.

References

- [1] Gershenfeld, N. When Things Start To Think. New York: Henry Holt & Company (1999)
- [2] Dillenbourg, P. (1999): "What Do You Mean By Collaborative Learning?". In Dillenbourg, P. Col-laborative Learning: Cognitive And Computational Approaches. Oxford: Elsevier
- [3] Prendes, M.P. "Aprendemos... ¿Cooperando O Colaborando? Las Claves Del Método". In (Coord) Martínez, F. Redes De Comunicación En La Enseñanza. Barcelona: Paidós. (2003): 93-128.
- [4] Lévy, P. Qu'est-Ce Que Le Virtuel? Paris: La Découverte Poche 49 (1998).
- [5] Wenger, E. Communities Of Practice. New York: Cambridge University Press (1998)
- [6] Naeve, A. The Knowledge Mainfol An Educational Arcitecture That Supports Inquiry-Based Cus-tomizable Forms Of E-Learning. Technical Report Cid 162. Kth: Stockholm. (2001)
- [7]Kaplan-Leiserson, E. "We-Learning: Social Software And E-Learning". In http://www.Learningcircuits.Org/2003/Dec2003/Kaplan.Htm (2005)