

**Teaching and Learning with e-Learning:**  
**«Just another technological and modern utopia?!...»**

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**Abstract:** Every technical novelty brought new hopes for education. Nowadays we assist and we also felt a *huge* pressure for the use of e-Learning platforms. It is consensual that e-learning can introduce different ways to teach and learn because new approaches can be introduced within the educational context. But e-learning can only be such a new and different technological device... The virtual communities are important in this new educational because its very easy exchange information and data but their growth and maintenance will require from teachers and students new ways of working. Is it possible to argue that e-learning may promotes real «*knowledge transaction*» among the members of the virtual communities? This paper aims to reflect and discuss the main advantages and difficulties and limitations of e-learning in order to promote and adequate and efficient use under a *strong* pedagogical approach.

**Key words:** e-learning (advantages, disadvantages, critical assessment).

### **Socio-educational and the virtual context**

We live an era in which the traditional gaps inn society have been broken socially, culturally and economically... The school gap tends to vanish and so e-learning can be the final “the solution”. As it is referred by Caraça (2005) the new world organisation created a new dimension in which cognitive hierarchies are no longer accepted and “(...) the basical communicative process is not a change but a share”. As society more and more works as a network there is a greater facility in the fragmentation of accepted laws as well as that we can call the multipolarity of the accepted powers. Conditions are created according to Caraça (2005) “(...) an information transaction”. In this transaction both intervenient must be at the same level so that the sharing could be processed. In this new social organisation e-learning seems to be adequated to this new dimension as a tool to the building of virtual learning communities. In this new virtual communities of learners knowledge transaction will constitute a third way in the process of teaching and learning. One can distinguish this third way from the classical ones because where the learners listen, repeat and memorise knowledge. With e-learning learners build up their knowledge actively with problem solving and project work methodologies i.e.

learning is more important than teaching. Will e-learning be able to make the difference? Let us first define e-learning, Oliveira (2004) says that e-learning gains political space from the 2000 Council of Lisbon when the Ministers declare their worry so that every citizens should be able to have ICT skills effectively in every sector of society: education, social and profession. The literal translation of e-learning is electronic learning that Potus Lajus quoted by Oliveira (2004) considers correct this definition twofold: objective because translates learning through electronic network emphasising learning itself and not teaching; pedagogically correct because focus on active participation of the learner what demands a methodological and organisational change. Another characteristic of e-learning is distance learning. But what type of distance learning? There is a pressure nowadays to introduce ODL in the educational system and as an example is the implementation of e-campus in higher education with wireless technology and e-learning platforms. Within this context and according to Lash (2002) the current era is one in which long established principles are being: "(...) the current era is one in which long-established principles are being displaced by three new governing logics': the displacement of the national by the global, of a manufacturing logic by one of information, and by a shift from the social to the cultural. There is a transition from a national, manufacturing society to a global information culture."

### **Educational paradigms and the new roles for the e-teachers**

e-Learning imposes a new educational paradigm, a new social and cultural focus. This paradigm imposes a constructivist approach because there is a strong interaction between the learner and the world around. This interaction is only possible in an open and flexible perspective. According to Moraes (2005) this interaction must contain an interactionist dimension in order to allow a live, active, open interaction with the learning scenario. So knowledge emerges from the contact among the learner and the physical and social environment and with peers (Moraes, 2005). From a "banking perspective" where the teacher moved in a "classroom" to open perspective where cooperation, collaboration, interdependence, interchanges is a necessity. The change of the teacher role is inevitable he must become better and greater listener, observer and be able to propose and discuss solutions, reflect about them, analyse mistakes, formulate hypothesis and test them. This new e-teacher will have as his main role the mediation among the text, the context and their producers. With e-learning the teacher should not be tempted to change a virtual room in a traditional classroom, should instead to take advantage of the new learning context. Morgado (2004) advocates that the teacher has to act in a new social learning context in a different way, not moderating the interaction one-to-one and one-to-many but many-to-many: the virtual learning communities.

### **Requirements and conditions for the functionality of virtual learning communities**

All and the different available e-learning platforms are similar by promoting the use of Internet resources and all of them have a location where teachers and students accede and exchange documentation, data and where they are allowed to communicate synchronously and asynchronously. Is a way that allows all the autonomy that may be

required also by teachers and students and because of this motivation is the key i.e. the main responsible for the survival of the virtual community. So the interaction among participants (teachers and students) is always fundamental when the learning is meaningful for all the members of the virtual community. In this scenario creativity may occur and it is welcome because it represents a new way to «feed» in a different way the virtual community. But the most important thing is that both students and teachers are peers and they are simultaneously the «builders» of the virtual community. This is the main and strongest point! Silva (2005) based on Seltzer and Bentley (2001) argue that the «new creative learners» must have the following skills: the capacity of identify problems instead depending on others; the capacity to make the transference of knowledge among different contexts in order to solve new problems; the capacity to focus their attention in a certain aim(s); and believe that learning is a long growing process that leads to success. However several conditions must occur and must be available to the members of the virtual community: trust, freedom of action, variety of contexts, interactive exchange of ideas and knowledge, the promotion of equilibrium between those who propose challenges and those who are required to use their skills to answer positively and the impact of the results reached. This means that virtual communities must be flexible where practice, exchange and share are always present, where informality may constitute the strongest characteristic because is non-formal. However we must be aware that it may become its weaker characteristic if their participants become anarchic and may put in danger its aggregation. But as [14] refers that along the time the virtual communities may tend to be more formal but there must be present an effort to not allow it to loose its flexibility by promoting a continuous exchange of gratificant ideas for all the participants.

### **Virtual learners communities: More problems that facilities?!...**

The efficiency of the on-line courses depends on the variable «time». This is also the opinion of Morgado (2004) stating that there is a direct correlation between the use of time during the on-line courses and their success. The problematic and the main difficulties of a synchronous communication can be observed as the following: a dispersion and pulverisation of the topics under discussion that may obstacle a deeper and a reflective discussion because it is very difficult to respect the sequence of the presentation of the proposals and viewpoints from all the participants; there may occur a problem with the different local times if the learning community is transnational/intercontinental because it will be very difficult to find an adequate and proper time for all the participants; the establishment of the well-known «cognitive overflow» because many and different activities must be done quite simultaneously (answering questions, put available additional documentation, solving conflicts, promoting new and different viewpoints and challenges...). Keeping the maintenance of the internal cohesion among the participants in an interactivity way is a real challenge!!! According to previous statements it seemed to be most appropriate to use synchronous communication among small groups with specific and focused aims and contents in order to control the variables (Morgado, 2004). Besides of those constraints it is very clear that teachers will also need much more time for their activity. But if we expect that the solution is the use of asynchronous communication that may be not true... Teachers must keep attention in their mailbox because quick answers are fulfilling. On the other hand the possibility of having messages of many different areas and contents may not

correspond to the expectative from all the participants. Another problem may be related with the so called «ripple effect» when a message becomes/transforms the original «quest» in a different one and this will bring a great difficult to manage so big diversity of contents, aims and themes. The virtual community may become chaotic... There are also different problems not with the «active participants» but now with the «passive participants» who are difficult to understand and to assess. However besides their passivity they may be very active because they may be excellent observers and self-critical what may promote their learning. Here the problem of assessment arises because there is no visual contact and no direct contact. Porto (2005) argues that technology allows the possibility to check who is or not on-line, when and how many times is connected but there is no way to be sure about their own and real activity because someone else can help and work for them. If one of the most important advantage of e-learning was reported to its possibility to engage many and many students we can imagine all the constraints and disadvantages that may be happen according to the previous statements presented above. A study referred by Masiello et al (2005) reported the initial enthusiasm and excitement within the virtual community at the beginning of the course but during the course those enthusiasm and excitement decreased a lot mainly due to the scepticism about the efficacy and meaningful learning within the virtual community. In consequence of those findings Masiello et al (2005) and Yang (2005), based in more and different researches presented four main reasons for the lack of success: the absence of facial and body language among students and teachers (most of the pedagogical materials gain importance just when they combine the text and/or the graphics with the facial and body expression of the teacher, his/her tone of the voice, the gestures, the expressive looking are determinant most of the cases); absence of a coherence among pedagogical materials (e.g. texts and graphics) and the way the approach is made by the teacher, the way he/she looks at the students, the gestures... the empathy; a lack of temporal coordination between the presentation of the materials, their discussion and explanation (because of the possibility that e-learning platforms offer it is often possible that the time for learning activities are very different among the students but another possibility may occur i.e. students may use different materials without a coherent and correct approach that may promote new topics of discussion that may introduce different goals and the internal strength may be in danger); the inexistence or a difficulty in order to promote a simultaneous among the understanding of the materials (documents, texts, data), the feedback and the on-line interactions may occur (a great advantage of the presencial teaching is the possibility to promote a real context within the different variables that is very difficult to promote and feel in a virtual context; and, at last, the different rules and patterns of each e-learning platform unable some users whose technological literacy is low that in consequence may also put in danger the pedagogical approach.

### **Suggestions, proposals and recommendations**

Although all the limitations and constraints e-learning put forward it is possible to solve those fragilities if some aspects are considered. For example Hinostroza and Mellar (2001) think the teacher intervention very important when designing educational software because of the pedagogical issues involved. The same happens with e-learning platforms. But as Hedge and Hayward (2004) state e-learning should only be used to promote a pedagogical didactic framework and not as a way to deliver information. And

as it is consensually assumed technology and Internet and its services in particular are not neutral, attitudes to face these technologies as challenges that may promote creativity and social and educational changes (Feenberg, 2000). Nowadays global is taken putting aside local and regional, from an economy based in manual work to a world where factors like society and culture are important and the culture of information reigns. Within this new reality many doubts and uncertainties... everything is questioned. But it is also an era of opportunities as Caraça (2005) "(...) provides us with an opportunity to carve out spaces of innovation, freedom, and creativity if we act assertively to shape them rather than passively responding to them." An online course will never be better or worse than a classroom based on: they are different that is why and according to [8] it is important to rethink educational objectives and methods so that this new digital issues becomes a success. We agree with Hinostriza and Mellar (2001) and Moraes (2005) when they say we must profit the best of both platforms and the curriculum must be faced as a whole. It is important to combine virtual and presencial spaces. The utopia of this way of teaching settles on the fact that teacher and students and peers that everyone has something to learn and to teach... like a knowledge transfer... collaborative and cooperatively knowledge occurs. This may be true but more time is needed to assimilate this paradigm and may be true in higher levels of education: post graduation, master and PhD courses, self management, auto and hetero-criticism will be achieved with mature users. It is a great challenge, an opportunity to autonomy and creativity, but more time, experience and research will be needed.

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