Analysis on the current status of E -Learning in Colombia Education

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Abstract

E-Learning is defined as one of the uses of Internet to support learning and is characterized because there is a physical separation between teacher and student, through which a didactic interaction is developed. The student becomes the center of the formation, the manager of his own knowledge, naturally with the help of his tutor and classmates. The learning process is an autonomous work using E-Learning tools which integrates synchronous and asynchronous learning same that is expected to be motivated by a student research process. It is possible to consider that for the actors (tutor, student and community) is a "face-virtual" experience and you can live a self-determining process in the generation of knowledge. However, if the model is enriching, seemingly from every point of view, it is not displayed from the same perspective in the academic modality of undergraduate, where restless little development that have authoring tools in the context of E-Learning. This is the analysis that we seek to address, generating a debate about this subject, in the same way that it is to recognize if there is a contribution or not to the educational model or the subject of this chapter.

Keywords: Colombia, E-Learning, B-Learning, AVA, LMS, Virtual Education

1. Introduction

The "off-campus" or "Non-face" learning is a trend that has been evolving since the late nineteenth century, initiating such process with distance education, at that time, using media as radio, print brochures and sessions. With the massive advent of Internet access, they have multiplied, developed and improved platforms in which this type of education is provided; additionally, access to computers for personal use has allowed the possibility of asynchronous academic sessions. Currently, the intensive use of information and communications technology (ICT), and multiple applications and tools, allow to have a synchronous relationship achieving this academic environment being enhanced substantially and favorably, while presented best solutions for actors to interact in such environment.

A feature of the E -Learning educational environment is given by a principle of freedom, understanding this as the temporary-spatial ability to be at any time and place to make or take an academic session; this allows education to be imparted both by an educational specialized institution in the academic area, with postgraduate courses, master's degrees or doctorates, as well as a private enterprise, which has entered this market with the form of open courses or additional certifications to undergraduate studies; with the advantage already indicated of access institutions that are, colloquially speaking, across the world, and to access contents developed by other professionals who have a very different academic and cultural context than Colombian student, which by Of course enriches gained knowledge.

In Colombia, the state (MEN, MinTic, SENA, municipal mayors, governors, etc.) has been working very hard with much emphasis in the dissemination and promotion of content for Virtual Learning Environments – AVA, delivering technological resources, training teachers in primary and secondary education, but the efforts of the various entities are not articulated, showing that although there is the intention to support this methodology is still not formally appropriate.

However, it is important to inquire about the educational use of ICT, distinguishing the different types of users (being all students), but at different academic levels, as the ones who do graduate degrees, certifications, undergraduate, those who are enrolled in secondary education Basic, evaluating its application and benefits. Although the methodology presents some results of commercial success, you cannot say the same in academic terms, especially when you can see in some educational institutions the implementation of this tool has been enthusiastic but over time their use becomes outdated. It depends on the teacher rather than institutional policies, then be the question appears i_0 it tends to disuse methodology E -Learning? or, conversely, is a problem of focus or institutional policies?

In order to identify, at least one first approach why it is not having the expected success the methodology of E -Learning in the environment of undergraduate education, a review of the state of the art will be held, regarding the academic point of view and state policy; additionally, they will be reviewed, succinct observation level, the most successful business models with this methodology.

2. Some history

Clearly as the E-learning has been a major change in education through the development of technology and distance learning (ODL). The various academic, commercial, technological and political sectors have been concerned to develop and bring education to all levels, from primary and secondary education, through the undergraduate to research and specialization of professionals, including the socalled education for work and human development; entire academic spectrum has been favorably permeated by the author tools.

What Matter is then briefly discussing how it has been possible to conduct training to individuals and not individuals. Such development may subdivide into four main stages. It is common to consider its inception with mailing courses. It is known that in 1840 Isaac Pitman shorthand system program based

on postal cards exchange with students; 1884 London Correspondence Foulks Lynch offered a specialization in accounting. A second phase is already framed with support of technology, there is evidence that the University of Pennsylvania began his first radio courses in 1922 and in 1930 the University of Iowa, Purdue and Kansas State College launched the experimental educational television. From 1960 it is possible to say that juts into the third stage with the use of computers in teaching, being a pioneer at the University of Illinois in 1967 that developed the PLATO program (Programmed Logic for Automated Teaching Operations), as a means of support for distance education; the Open University program is implemented in 1971; finally the fourth stage of this development has several milestones learning, development and online collaboration, are in chronological order the appearance of the LMS platform (Learning Management System) in 1992, the LCMS (Learning Content Management System) in 1995 and the web 2.0 in 2005. At present the massification of collaborative platforms is comparable to social networks, without being designed exclusively for national education and international experiences are known for this purpose.

In Colombia, the evolution of distance education begins with the Radio Schools of the radio station Sutatenza in 1947, which was directed mainly to the rural population, "(...) materials covering learning to read and write, mathematics and catechism (...) "(MEN, 2011). Then, the invisible teacher was passed to the image of the teacher on television February 9, 1970, "(...) opens on Channel 11 (now Signal Colombia) popular educational television for adults and a program of 150 emissions is released a basic course to teach reading, writing and resolve the four basic arithmetic operations "(Colombia learns, 2004), which were in force and air until the end of the 90s; it is recalled that since 1972 the Pontificia Universidad Javeriana aired on television "Educators New Men" and Saint Thomas Aquinas University in 1975, began operating in the mode of distance education program.

Later the University Drive South of Bogotá, UNISUR, public establishment under the Ministry of National Education national order that was transformed by the Congress in 1997 at the National Open University and Distance UNAD emerged in 1981. It was created in order to design and implement academic programs with the teaching strategy of distance education, which were relevant to local, regional, national and international and chords needs with the challenges and demands of a democratic, participatory and dynamic society, allied with scientific, social and cultural models that contextualize the XXI century (UNAD 2014). You may consider (without being subject to this document) that regardless of the development of UNAD, other public and private universities started their way in the design, development and implementation of the methodology of E -Learning.

3. What is E -Learning?

The E -Learning is one of the uses of the Internet that support distance education which the use of ICT and other teaching aids for learning and teaching is integrated. The E -Learning uses tools and several resources such as the Internet, intranets, CD- ROM, multimedia presentations, etc. The contents and pedagogical tools used vary according to the specific requirements of each organization, area, teacher and finally each student. At present many universities and different educational institutions for work and human development and commercial enterprises, have developments in online platforms, implementing e-learning solutions for own systems as well as customized platforms or specialized custom-designed packages.

The combination of computer communication resources and academic content has the purpose of create an environment proper for learning in an environment characterized for interactivity, the profusion of media and structured activities, taking advantage of the ease of content distribution and communication tools own of Internet environment.

For E -Learning, the student is the main actor and around them there are the elements responsible to assist them in this process. It is a "just in time" training, this means that taking advantage of Internet, students can access educational content anytime and anywhere without having to go to schools.

A concise approach to the conceptual evolution to E -Learning shows that is the obvious evolution of distance education (ED) and it is differs from other ED systems by the intensive use of ICT and Internet; in this context, the concept of virtual classroom is relevant in the way that it is the integrating space of different methodological and multimedia content that contain any online course. The importance of Internet use for the E -Learning definition is granted a high degree of interactivity, teacher (tutor) -student, student-student, a feature that was of little relevance in ED systems of previous generations.

One way to define the E -Learning is provided by the European Commission: "(...) the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services, as well as exchanges and collaboration distance " (Avila and Bosco, 2001).

Another broader definition considers not only the use of the Internet but also the set of multimedia technologies for delivering content through electronic media such as Internet, intranet, television broadcasts, television interactive CD / DVD authoring tools, multiple applications it is possible to use for the design and creation of multimedia content.

This marked trend in collaborative learning has become a production environment knowledge, it is what is known as social software in education. O'Reilly (2014) in 2005 gave birth to the term Web 2.0. Since that time, we have been working in an open and collaborative (social networks, wikis, communication tools), when what matters is to acquire more knowledge with tools and web and multimedia applications, in which the generation of the content is created and designed by users. A clear break between the Internet built on " web pages" and the Internet created based on small pieces of information that users can combine or write or rewrite. Web 2.0 is characterized by the bond of new technologies, new developments both academic and technological and innovative attitudes of users to generate, develop and consume information.

4. Virtual Learning Environments (AVA)

A new concept emerges in this profuse environment of innovation. It is necessary to refer to Virtual Learning Environments (AVA), defined as a virtual space where new technologies such as satellite systems, the Internet, multimedia and interactive television among others have been potentiated surpassing the traditional school environment, which promotes knowledge and ownership of content, experiences and pedagogical communication processes. The AVA are composed of space, student, counselor, educational content, assessment and means of information and communication.

Learning environments are not confined to formal or academic education, neither to a particular type of education, it is regarding those areas where conditions are created for the individual appropriates new knowledge, experiences and elements that generate processes analysis, reflection and appropriation. They are called virtual in the way that they are not performed in a specific or predetermined location, this means they are non - space, and that the distance element (without physical - ubiquity presentiality) is present. Additionally, the time concept is not an impediment to any activity, they are a- tempore.

5. Learning Management System – LMS

The system for learning management are types of systems that are installed on a server to create and manage Virtual Learning Environments (AVA). In Colombia there are many examples of these platforms that have been implemented by educational institutions and government entities, such as SENA, the National University District University, the National Open and Distance University (UNAD), among others, who enjoy an online platform containing many courses, either they are deepening for some matter or separate courses to expand knowledge with research work; is not the case of the UNAD: by definition its object is determined to continuously improve the quality of materials, attention to student, tutorial and counseling support, and evaluation processes in virtual

learning environments, strengthening the teaching model Unadista supported by E-Learning from the foundation and operation of their pedagogical, didactic, curricular, technological and organizational components.

Nowadays, these environments and teaching resources have made progress in the quality and capacity of its developments, expanding in the field of education as is the case, to mention only two examples, the one of Educacyl of the Junta de Castilla y León) and Educarex of the Board of Extremadura, government educational portals in Spain, in the business sector, using software or open source (open Source), such as Moodle or Dokeos, the two most used software for its versatility, technological capacity and easy handling. In other cases, have developed proprietary platforms that meet the specific needs of these businesses, in the case of Blackboard, Mejorandola, OpenEnglish, Catedra, Algodoo, Aulafacil, Educaplus, Udacity, Educateca, Profexor, among others.

In the case of companies whose object is to market their own products or other business products, E-Learning methodology has been helpful, specifically in the process of training and updating and some in the certification of its employees or contractors and also professionals as they are required. Examples of these companies are Cisco, ITIL, Oracle, PMI, Microsoft, ITunes, Samsung, Directv, Claro, Movistar, etc..; in the academic area, in addition to those already listed there are as many examples as universities or tertiary institutions, since the majority must offer this additional academic environment to be competitive. In some cases, you cannot even speak about E-Learning itself, because it may be is in the process of migrating from a document repository to education E-Learning or B-learning. However, it should be noted other portals not well known in Colombia as an example of E-Learning: Coursera, Open Education Consortium, Google Developers Academy, Edx, without mention all of them.

These tools are not only directed to educational institutions of great magnitude, because for reasons of improvement in educational quality, academic support and market competitiveness, many private schools are implementing LMS platforms as Environments Virtual Education, to reinforce what was

seen in class, encouraging students to good use of Internet resources, with reinforcement tutorials and spaces in a way of " Virtual Libraries ", or Parent Conference centers.

Some of the characteristics of a LMS platform for E-Learning are:

- Disappear temporal-space context.
- Training is mostly flexible.
- Updated Contents.
- Communication is more interactive.
- Massive use of ICT.
- The student as a center of training.
- The institutional support is closer.

And the following are general functions of an LMS platform:

- Management and Registration of Students and Courses
- Access Control and Monitoring Student Progress
- Administration and Programming Courses
- Management Reports.

Undoubtedly, the implementation of an LMS platform for an educational institution or company, significantly extends the pedagogical competitiveness against other pairs. The interest of the entire community in an educational environment with easy access and high coverage is to integrate the processes students, teachers and administrative staff.

The E-Learning, generates significant expectations educational, social and economic level, which together with the growing interest in the quality of education as stated Gonzalez (2000), "in any of its manifestations and areas, it makes the need to develop evaluation models appropriate to the object and the different contexts in which it occurs is imposed. "(p. 53) additionally states that" the pedagogical

effectiveness of a virtual course is the sum of three components, namely: learning styles (rote, incidental, inductive, deductive discovery); media (text, graphics, audio, video, simulation or more) and interactivity (feedback, review, e-mail, discussion) "(p. 53), the teacher must seek the combination of these three factors.

Changes in teaching methodologies with the progress of the LMS and LCMS platforms involves an entire community to make technological and academic appropriations that go hand in hand with the development of the corporate world. Reiterate what was said by Valerio Ureña and Valenzuela González (2011): "(...) The need for these skills has been a concern of scholars and international organizations such as the World Bank and the OECD, for several years now" (p. 141).

Burbules and Callister (2006) warned to solve the technical problems of Internet access in classrooms is not enough if users do not also have the opportunity to develop the skills and necessary attitudes to take advantage of these resources. Having computers means little if people do not know how to use them. Also, acquire the skills to allow the access is only part of the problem as the biggest challenge is to develop dispositions and attitudes to obtain an effective use of technologies. So, these authors say:

(...) However, these powers require more than just the ability to use a software or to operate a digital mechanism; They require a variety of complex cognitive, motor, sociological and emotional skills, which are necessary to function effectively in digital environments. (P. 141)

Given the fast and continuous development in the corporate world of digital technology it requires addressing necessary skills for students to perform tasks and solve problems.

6. Features E –Learning

This methodology education through Internet allows that education increases massively and reach more people, however it is worth to mention that there are two modalities for classroom and distance / blended teaching:

- E-Learning: when knowledge is distributed exclusively by Internet.
- B-Learning or Blended Learning: when learning combines distance learning with classroom learning.

According to research group interaction and E -Learning at the University of Salamanca, (Seoane Pardo - Garcia Peñalvo, 2012), which makes a very careful analysis of the characteristics of the E - Learning, it is considered appropriate to transcribe some article asides from the main article for its detail model.

From a technological point of view:

- Surfing the Internet makes web pages really easy to use, it is a friendly environment.
- A system of multimedia communication.
- It offers enormous possibilities of interactivity.
- It is a way of global communication.
- The distance between transmitter and receiver is not relevant
- Access costs are relatively inexpensive for students against the alternative of physical movement to study center.
- It is possible to optimize content development costs (which does not mean that the E-Learning is "economic or cheap").
- Most of the research centers, public or private universities and businesses are connected to the web.
- There has been a rapid expansion of the Internet as a way of universal communication

From an academic point of view:

- E-Learning is a new learning methodology.
- Facilitates the incorporation of knowledge through the use of interactive content involving students in course development.
- Allows work and group interaction, so far exclusive to classroom education.
- Train academic, labor and professionally when is needed and where needed, reducing costs and facilitating support activities or labor, social or family obligations.
- Flexible and facilitates the organization of courses wholly or partly reduce physical coordination of activities.
- Empowers more students in less time.
- Facilitate maintenance, updating, generalization and distribution of content.
- It is effective complement to all those activities that do not require the physical presence of the student.

Changes in teaching profile:

- The new training model requires new competencies and skills by the trainer, these characteristics are more like a tutorial to figure.
- Their mission is not just to present contents but to ensure learning by applying the curricular design.

Changes in student profile:

- It is located as the center of the educational process.
- The dynamics of online work increase the responsibility of the student in self- training.
- The concept of work goes from being single to some collaborative dynamics in most activities.

Generation of new professional profiles:



Pedagogical

- Designer of educational content.
- Designer of learning activities.
- Instructional Designer.
- Tutor students individually and in groups.

Technicians

- Software engineer
- Systems administrator
- Security Expert
- Usability Engineer
- Multimedia graphic designer, web, multimedia graphic designer, web, animation and multimedia.

After doing a review of theoretical framework it is appropriate to review some policies of the Colombian State regarding the E -Learning Since 2008 the Ministry of National Education (MEN), leads the E-Learning Project as a strategy to strengthen Education Institutions superior (IES), having as main objective to expand the supply of programs in virtual mode promoting flexible learning environments that exceed the limits of distance and time.

Significant achievements have been reached which are evident in: the knowledge transfer that remains in the IES and the organizational, educational, technological and communicative dimensions that are necessary to ensure the quality of virtual programs. This strategy has giving as a result the creation of new programs in virtual mode at all levels (professional, technical, college and graduate technician). The policy of "educational revolution" followed by the so-called "educate relevance and incorporate innovation in education" from the sector plan proposed transforming the educational system in magnitude and relevance, promoting strategies that are directed to expand coverage criteria of equity, improve the quality and increase the efficiency and productivity of the sector.

Given all the above, the National Program on Educational Innovation (MEN, 2010) was conceived with use of information technologies and communication - ICT, with the purpose that ICTs being integrated as part of the teaching process of teachers, students and general of the educational community in the country, as well as designing virtual education as part of strategies sectoral plan in order to reach all the inhabitants of the country, overcoming distance limitations and promoting environments flexible learning in order to have another alternative for closing gaps.

In order to comply with this, purpose the vision 2019, the National Ten-Year Education Plan 2006-2016 proposes that the four axes are developed in quality, coverage, efficiency, relevance and ICT as a transversal axis of the curriculum. Advancing:

- Building a quality infrastructure and content development.
- Definition of standards and training of students and teachers for the proper use and appropriation of new technologies in education.
- Consolidation of virtual learning communities and networks that take advantage of ICT and generate new knowledge from exploitation.

So, that from 2003 the program operation scheme for higher education starts with framed in the axes of access to quality content, strengthening the capacity of use and ownership and the access to technology infrastructure activities.

Regarding regulatory side in Law 1188 of 2008, as well in its Regulatory Decree 1295 of April 20, 2010, the MEN included the topic of virtual education and required quality conditions that must be comply of programs in virtual methodology for get their Qualified Registry.

The National Development Plan 2010-2014 within its policy of sustainable growth and competitiveness in the area of skills development and formalization for prosperity, proposed the improving of the quality of education and skills development, justifying that most developed countries

with high-tech exports devote more researchers to research and development; hence the importance of training quality and relevance with spaces of articulation and permanent dialogue between the education sector and the productive sector.

To achieve the objectives of the "democratic prosperity", the Ministry of National Education find in Virtual Education an alternative valuable training for many Colombians, for this has a goal the creation of academic undergraduate and graduate distance over 80% of virtuality.

With the development of this relevance policy that is executed with E -Learning project, the main objective is to promote and support programs under the virtual mode and within the strategy for relevance, making the educational system get the required human resource to increase productivity and competitiveness, for which proposes the development of:

- Job skills and articulation of secondary education.
- Strengthening technical and technological education.
- Consolidation of labor observatory.
- Strengthening university-industry linkages.
- Promotion of culture of university social responsibility.
- Internationalization of higher education.
- Promotion of bilingualism.
- Use and ownership of media and new technologies.

Since the national program of educational innovation is part of the strategy for relevance "use and appropriation of media and new technologies" it proposes and develops a missionary structure with four axes and two transverse axes, axes missionary consist of:

- Use and ownership of media and information technology and communication -MTIC.
- Professional development of human resources.
- Content management.
- Management infrastructure.

The transverse axes are identified by:

- National network of support and technical assistance.
- Monitoring and evaluation.

The current context allows us to recognize that in Colombia the subject of virtual training is relatively new and it is moving forward from planning various strategies to achieve effective use of ICT as support tools for the pedagogical process.

According to the book Revolution 2002-2010 Educational Actions and Lessons for E -Learning Virtual Education Ministry of National Education (MEN, 2010) " (...) in 2002, the offer of virtual programs in the country was six belonging academic programs four institutions of higher education, of which four were undergraduate and two graduate programs " (p. 2). As part of the strategy of decentralization of offer that began in 2002, to ensure greater access to higher education, it was concluded that virtual education allowed to expand coverage at a lower cost, it does not require great physical infrastructure remote areas of the country.

That is how in 2003, the program to incorporate ICT began in higher education that was seeking to generate the installed infrastructure in institutions capacity, creating content, teacher training and defining policies to move towards the development of virtual programs. " At the end of 2006, the supply of 13 Higher Education Institutions (IES) went up to 18 programs (12 undergraduates, 4 specializations and 2 masters), but with little coverage of students " (MEN, 2010, p. 2).

Given the slow progress regarding coverage in 2008 the HEIs (IES) were called to accompany the transformation of 18 programs to technical and technological virtual programs distance, looking for expand the range of programs in the Regional Centers of Higher Education - CERES and municipalities where there was no presence of IES. In 2009, again a group of 17 institutions is supported for the creation of 28 higher education programs, then in 2009 there were 36 higher

education institutions offering programs with more than 80% of virtuality in professional technical levels, technological, university professional specialization and expertise in different areas of knowledge.

Review actions that have been brought forward from the MEN allow to visualize the efforts to strengthen capacities in higher education institutions in order to confront the formation process mediated by ICT in particular with the help of the Internet. The policy actions taken in recent years have made possible to position the virtual education in Colombia. Although advances are still few it is evident that there is an environment conducive to further improving and proposing strategies leading to increased coverage but quality context.

The definition of standards in training students and teachers who have appropriate ICT still remains an issue in which it still working; regulate or standardize. For example, the number of students per academic year which could have a virtual tutor, it is an important step in order to seek quality without ignoring the autonomy of each institution. The consolidation of the technological infrastructure and digital content will surely allow educational communities being strengthened; however, maintain some strategies that strength the networks already created, it is necessary to keep the initial efforts made by the MEN.

The extension of the offer of virtual programs in Colombia is evident. According to the Observatory of the Colombian University (2010) 199 programs corresponding to 1.1% of the total supply of programs in Colombia were identified and also in 2011 they identified 266 active programs in methodology distance equivalent virtual to 2.46% of the total offer of programs, so that the efforts made by the MEN in technical advice during previous years are shown in these results about increase of virtual programs, leaving installed capacity and the overall goal of creating virtual programs.

To conclude this section regarding the Colombian state, it is important to mention that about public procurement two cases of content development, two processes of this 2014, the first of Computers for

Schools for \$ 8,901,401,186 and the second SENA for \$ 26.538.295.601, not only call attention due to the high amounts but they have given them new conceptions of content. Below is a brief summary of each of these processes.

In the case of Computers for Schools (Contracts - Computers for Education, 2014) the object of the contract refers to " design, production and / or adaptation of teaching units Digital (UDD) for strengthening the educational practice of teachers ...) " in the other hand the contract from paragraph 5.1 document, the entity performs an eminently sensible legal justification based on standards, government programs and Conpes documents; but what is of interest in this section is related to the Digital Educational Resources and recommendations for development given by UNESCO :

- Ensure the ease of access to digital resources and educational content, including online file deposits from mobile devices and laptops.
- Support the opening of licenses for mobile content to facilitate the use and adaptation as wide as possible. To achieve this goal, the use of open educational resources can be supported.
- Create incentives for responsible of development of these study programs can generate specific content for mobile devices. While it is possible to ' migrate ' teaching materials from computers and textbooks to mobile technology, it must be considered first for this type of technology, taking decisions on how to simplify the presentation and use of contents on devices with small screens and limited incorporated options of data.
- Encourage the creation of platforms or software that allow create or adapt mobile content to active teachers (and other interested people with firsthand knowledge of learners) create or adapt mobile content.
- Promote the creation of mobile content relevant and accessible to local groups in local languages.
 For this you can invite responsible for developing the site to prepare mobile learning content for their communities.

• Promote also development of standards that make accessible hardware, software and mobile content for various groups of learners, including students with disabilities.

In this process is shown the deepening and study of the importance of teaching units Digital (UDD) (Contracts - Computers for Education 2014) considered as a pedagogical strategy for organize teaching:

(...) Teaching Unit is a strategy that maintains and wake up the interest of students to enhance their participation and involvement in teaching and learning processes. Also, meets a significant instrumental value in contributing to the resolution of problems associated with real-life situations of students.

Additionally, it is indicated

(...) The UDD can contribute to the articulation of teaching and learning process from the integration of knowledge, goals, experiences, and content supported by digital educational resources that enrich teaching materials in the classroom and expand the educational prospects of teachers.

It is interesting consider that the policies regarding E -Learning tend for technological development in academics from entities that have interference or directly involved in the training process, either by programs or policies and not only the Ministry of Education, as the examples evidenced here.

The second example is the National Learning Service SENA (Contracts - SENA 2014), the object of the contract states:

(...) The acquisition and production of digital educational resources for teaching foreign languages, aimed at apprentices training entitled in all forms of training, and knowledge transfer in the pedagogical use of digital educational resources aimed at instructors SENA to contribute to teaching improvement - learning a foreign language ", a project that involves 3 years of work developing a "COURSE SUPPORTED IN SOFTWARE (Supported course in software): a digital entity that articulates technological and pedagogical lessons or learning units. Its main purpose is to achieve the learning objectives in each of the levels of a language. For this process the levels are: Introductory A1, A2, B1 and B2", further design, y development and implementation of the" UNITS OR DIGITAL LEARNING LESSONS: is a pedagogical and didactically coherent digital entity that articulates pedagogical and technological learning objects. The main purpose is the achievement of one or a group of skills and communication skills in a language; this achievement is directly related to the level of language, "supported on" learning objects. Is a digital entity with an educational intent in that articulate and link technology and digital resources pedagogically. Its main objective is understanding and putting into action concepts, procedures and attitudes which together allow the achievement of skills and communication skills in a language. Learning objects must have between 4 and 5 digital resources level of high or very high interactivity "finally" DIGITAL RESOURCES: Are digital entities that contain data and information? His educational purpose is achieved either in the production process or in connection with consistent learning objectives.

Importantly, the momentum that entities in reference intended to give to make two contracts with particularly high areas, leaving a concern, while the IES have not grown as expected in its offering of virtual programs, it supports educational institutions public in the primary and secondary mode with the UDD to be hired by the computer program to educate, which will, presumably, accessed via the Internet from any laptop and / or tablets or from digital kiosks flag MinTIC program, Vive Digital, which suggests that this level of investment will enable high quality education and accessible by any teenager enrolled in a public IE.

Regarding SENA side it is important to mention that the interest of the entity by the commitment to bilingualism has been doing for several years now, but this contract envisions that aims to become a leader in process of instruction in other languages , facing equal to the offer private in the same business line; both entities consolidating E-Learning mode which predicts that the IES must consolidate the project to be competitive in this market, implying a prosperous future for this type of education.

It is necessary to state that regarding to teachers, they must have qualities and competencies that characterize them and be willing to change which the pedagogical and didactic research prime on the issues addressed. That is, the teacher must think about their teaching and its active role in it, also conceiving the student as the protagonist agent in the learning process; in addition, they must have extensive pedagogical content knowledge in the specific area to teach; Finally, the teacher must have a proper and appropriate use of ICT, which makes it a professional who is beyond the average; this discussion focuses on several aspects that are inherent to the characteristics and skills of teaching with ICT support.

The teacher should develop: 1- disciplinary skills, recognize scientific and pedagogical knowledge ; 2- investigatory, because it becomes a process where converge the theory and teaching, communicative practices, depends on its ability to achieve effective communication with students, creating participatory development dialogues and self-managed by the students themselves, for obvious reasons appropriation ICT, management and skill to navigate the platforms and the same web, and 3- finally evaluative, because beyond the figure is the opportunity to see progress with this new teaching strategy, it being possible for the student to reflect, investigate, I expanded and collaborate with their pairs in the training process

Conclusions.

It can be deducted according to consulted documents and based on life experience in the administration and management platform LMS that the methodology of E -Learning is constantly growing, (opposite to what was stated in the introduction to this document), which for the average Colombian academic is still in a process of learning and development, in spite of the macro policies and investment in which the Ministry of ICT and MEN have insisted.

Regarding to academics, it still requires a specialized research, conduct fieldwork and keep the record of the topic in a detailed way ; it is true that in the light of today the results of the IES are not the expected ones by entities of government, but it is certain that the "market" E -Learning has progressed with big steps which will force educational institutions in generally, to think again on their processes within this model ; in addition, students should consider their access to the commercial world, having a great training using these platforms because hereinafter largely on the professional market is imminent the agile use and appropriate ICT ; finally, for teachers it is the challenge of appropriating the tools and eventually make more efficient and effective their work.

References

Ávila Patricia y Bosco Martha (2001). *Ambientes virtuales de aprendizaje*. Trabajo presentado en el XX International Council for Open and Distance Education. Düsseldorf, Germany. Recuperado de

http://investigacion.ilce.edu.mx/panel_control/doc/c37ambientes.pdf

- Burbules, N. C. y Callister, T. (2006). *Educación: riesgos y promesas de las nuevas tecnologías de la información*. Ciudad: Granica.
- Colombia Aprende. (2004). *Fechas que marcaron la historia de la televisión en Colombia*. Recuperado de http://www.colombiaaprende.edu.co/html/TVeducativa/1600/article-88623.html
- Contratos Computadores para Educar. (2014). Sistema Electrónico de Contratación Pública. Recuperado de

https://www.contratos.gov.co/consultas/detalleProceso.do?numConstancia=14-1-122336

- Contratos SENA. (2014). *Sistema Electrónico de Contratación Pública*. Recuperado de https://www.contratos.gov.co/consultas/detalleProceso.do?numConstancia=14-1-121779
- González, T. (2000). Evaluación y gestión de la calidad educativa. En T. González (Coord.)
 Evaluación y gestión de la calidad educativa. Un enfoque metodológico (pp. 49-80). Málaga,
 España: Aljibe.
- Ministerio de Educación Nacional. (2010). *Innovación Educativa con el Uso de TIC*. Recuperado de http://www.mineducacion.gov.co/1621/w3-article-233944.html
- Ministerio de Educación Nacional. (2010). *Revolución Educativa 2002-2010 Acciones y Lecciones*. Bogotá: Ministerio de Educación. ISBN: 978-958-691-391-1.

Ministerio de Educación Nacional. (2011). 30 años de la UNAD, pionera en la evolución de la educación colombiana. Recuperado de http://www.mineducacion.gov.co/cvn/1665/w3-article-276202.html

Observatorio de la Universidad Colombiana. (2010) Recuperado de http://www.universidad.edu.co

O'Reilly, T. (2014). What Is Web 2.0: Design Patterns and Business Models for the Next Generation. Recuperado de http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html

Plan Nacional Decenal de la Educación 2006-2016

Seoane Pardo, A. M. y García Peñalvo, F. J. (2012). *Introducción al E-Learning*. Recuperado de http://antia.fis.usal.es/sharedir/TOL/introelearning/index.html

UNAD. (2014). *Reseña Histórica*. Recuperado de http://informacion.unad.edu.co/acerca-de-la-unad/resena-historica

Valerio Ureña, G. y Valenzuela González, J. R. (2011). Competencias informáticas para el E-Learning
2.0. RIED. *Revista Iberoamericana de Educación a Distancia, 14* (1), 137-160. Recuperado de http://ried.utpl.edu.ec/images/pdfs/volumen14-1/competenciasinformaticas.pdf