CRITICAL PEDAGOGY AND INFORMATIONAL LITERACY IN HIGHER EDUCATION : A THEORETICAL APPROACH

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ABSTRACT

Addresses two fundamental aspects in higher education: critical pedagogy and information literacy (IL), taking as antecedent functional literacy principles embodied in the scientific literature by Paulo Freire and his influence in Latin America in the adult learning process. Takes the ethical implications of critical pedagogy and contributions of IL in pedagogy, as forming tendency of students and teachers as competent individuals to face the challenges of the knowledge society brand. Consider the IL as an educational process rather than merely a librarian environmental, because their spheres of action are higher in both contexts as ways to access information and knowledge.

KEYWORDS: Information Literacy, Higher Education-Mexico, Pedagogy,

Introduction

The discussion of critical pedagogy draws directly to Paulo Freire (1921-1995), who has been considered during the past half century the most important educator in Latin America. The fundamental reason for this is that working as a teacher in a higher education institute in 1961, he began his career by encouraging students to consider the social education, which was to study not only the theoretical aspect of each school subject, but also the social implication of the knowledge these students were acquiring. His idea covered not only the notion of mastering knowledge in educational programs of different majors, but aiming further by affirming that education was more than a means to dominate the academic field. It was also intended to provide stimuli to the next generation of professionals to encourage them to immerse into the public life, and by doing so, creating a personal commitment to society regarding their future work.

Beginning in 1960, Freire submitted his biodata with his thesis *"Educacion y Actualidad Brasileña"* (Education and Brazilian Modernity in English) to become a professor of Philosophy and History of Education at the School of Philosophy, Letters and Science in the University of Recife. Living in Chile, Freire was consultant for the UNESCO and the Chilean government (from 1964-1969). He was guest lecturer at Harvard University from April 1969 to February 1970, and from May 1970 until June 1980, he was consultant for the World council of Churches in Switzerland. Living in Geneva,

Freire traveled through Europe, Asia, Africa, United States and Latin America to discuss his works. He included new topics such as the interaction of education-theology, education-politics, and education-ethics. He also went into detail about several aspects of his already known ideology, and began a serious criticism towards the same (Ordoñez Peñaloza, 2000).

Between the 1960's and 1970's, Freire developed the educational model that is known as "Critical Pedagogy". In this model, the main task for pupils and educators was to become aware of their reality by having a critical and transforming perspective of their social situation. By doing it so, it was possible to teach literacy by making them aware that they were learning much more than just reading and writing. This allowed the expansion of the learning area to surpass the classrooms by including the person, his reality, and his process of becoming aware (Freire, 1969, 1989; Freire and Macedo, 1989; Ocampo López, 2008).

Freire's proposal is widely known and renowned in the educational field as a method that offered literacy training to adults in very little time with outstanding results, because they were not only learning to write and read, but also they were learning to question their reality. It was due to this, that this method was opposed by many Latin American countries since it was 'opening consciousness' and 'awakening men and women' making them aware of their reality and the needed changes in order to improve their communities.

The method invite the illiterates to step out of his conformism and open his eyes to see beyond his reality. This way of learning is effective and valid in the sense that it starts from the reality of the in-process literate. It starts from what he knows, from the pragmatic value of things and from the daily occurrences in his life, from the things that matter and interest him, from his mere existence, always acknowledging common sense, and moving forward because of it. Having this as a starting point, the in-process literate sets his own improvement.

Starting form this basic principle, the method rejects the mere alienating repetition of sentences, syllables, or words which belongs to the public educational system of any country. Because of this, the method goes beyond these sentences and words, and becomes a challenge for men and women in process of literacy training who, by following this, accomplish a total vision of the language and the reality of its context and the world (Araujo, Freire, 2001). Therefore, the educational practice needs to be committed to the implementation of social and political actions. If we are aware of that, the educational practice becomes transformative. We must strive to have a fairer, less perverse society; we must fight for a democratic society, and paraphrasing Freire (1989), we must have a society free from repressive beings dominating the oppressed; we must have a society in which everybody can have a say in it.

Thiking about education is a task for every teacher. We must have this notion present in any period of time, yesterday, today and always. The greatest challenge we have nowadays is that the neoliberal

ideology and practice overwhelms the majority of people, and benefits only some. Therefore, democracy fails to exist, and injustice at all levels and in all forms takes hold. Good and authentic education is not synonymous now with the idea of 'domestication' presented by Freire in his widely known and published work. Since Freire was highly influenced by several philosophical thoughts and theories, such as Marxism, existentialism, personalism and phenomenology, his way of thinking is 'hybrid' because he takes and retakes what he believes are the best aspects of these theories, and therefore includes them in his discourse and actions. The purpose of his educational labor is his desire to transform reality, hoping to have a fairer and freer society (Araujo and Freire, 2001). He maintained that the pupil should be given a say in the transformation of his surroundings, and by doing so, he will become aware of first importance issues around him.

The student is not only learning things he does not know, he's going beyond mere acquisition of knowledge. Knowing for the sake of knowing is not enough; he must gain insight of this knowledge and become capable of intervening in it, and with it, become aware of the issues that he is experiencing to further develop the appropriate tools to transform his reality. Open-minded and critical beings are able to benefit from any situation, and they are able to transform their reality into something useful to all, eliminating all individualism, and therefore having a collective benefit addressed to the same community which originated the transformation.

This is accomplished through dialogue, which is the essential aspect of life and human activity. This means that the one who educates is learning as well. The pedagogy proposed by Freire promotes reflection, criticism, the possibility of a social transformation, and the diminishing of the inequality of gender, ethnics, and social status, etc., acknowledging that all this issue from a restating conception of the social reality (Aubert y García, 2009 y Ocampo López, 2008).

Critical Pedagogy is a proposal for education that aims to train students to question and challenge social domination, and the beliefs and practices that causes domination. In other words, it is a theory and a praxis in which students reach a level of critical awareness that will have an effect in the social welfare of their surroundings. Critical Pedagogy starts by redeeming the subject and the methods he uses to escape the reality he has to live. It helps him to emancipate and liberate himself from a homogenizing, dehumanizing, all-encompassing system. The only way he has to escape this reality is by reflecting upon this same issue, and to behave in such way to 'become aware' and make other people aware as well. To Freire, Critical Pedagogy is essential to achieve these goals and finally merge theory with praxis by making reference to 'what he conceives as the combination of self-reflective awareness and political and ethical movements (Gómez Torres and Gómez Ordoñez, 2011; Ocampo López, 2008).

For centuries, what has been learned in schools is completely opposite to this type of education; people have learned to be spectators, imitators, believers of everything that is seen without questioning what it is heard, or taught or dictated. The result is the creation of passive beings facing a

series of problems they don't want to solve, and this happens from the very same corner of the classroom to the outer society that fails to respond to what happens right before its eyes, in a world changing day after day, generation after generation. Critical Literacy may establish and accomplish the pedagogic and political goals for the pupils by allowing them to self-release their way of thinking, and by enabling those to transform their reality while they are rebuild themselves along with their society.

It is imperative to begin the educational research in order for the leaders of the field to reflect, criticise, understand, and learn about the new aspect of cyberculture. This is the expression of a world in which it is possible to overcome physical and intellectual disabilities so that the mind can be awaken, or else, risk the loss of what makes us humans and sets us apart from the rest of the animal species (Lopera Lopera, 2007). Nowadays, the ruling power is linked to the industries and business, in other words, linked to everything that depends on and sets the economical power in motion. These means of production have supported the daily life of society, where socio-political organizations and institutions are being created. Therefore, culture represents a key element for the development of society and common welfare (Lopera Lopera, 2007).

At the beginning of the last century, the so called 'new school' was implemented, and with it, a teaching system that aimed to produce fundamental changes to a traditionalist method. However, the system nowadays seems to be the same than that one, aiming to the same claims that Comenio stated back in his days. Does modern education fulfill the expectations of young people? Is the school system perceived with the fresh point of view of the 21st century? Or rather, is the system fostering the same education that hinders growth or the desire to investigate instead of memorizing? Are experiences being shared? Are current issues in society or the world being analysed? To observe is to dare to see within, it is a continual search, a constant motion, an endless evolution (Freire, 1969).

Nowadays we follow the same tendency of only acting according to the substance. There is not a minimal increase of the awareness that is needed, and therefore we have a very limited vision of the solution for real issues that are harassing the majority of people. What was already written in the mind of those in power is only being imitated (Diesbach, 2012). Related to the pedagogy of the higher education contexts, it is becoming symptomatic the generalised absence of teaching techniques, and a much reduced epistemological interest on the educational practice among university intellectuals. It is still being understood that knowing about a subject is more than enough to be able to teach that subject. This practice of university teaching is sufficient to prove that the spontaneous teaching method is the one being used. Medieval teaching methods and settings are being repeated in the classroom, the same methods the students have to endure and enthusiastically accept at the beginning of this new millennium. It is believed that if one has sufficient knowledge of a particular topic, or if one 'masters' some topics, that will be more than enough to provide the students with the tools and notions they will need for the practice of their professions. However, they are forgetting the essential issue of how to transmit this knowledge, or which the most appropriate techniques and strategies are so the students understand the contents and real importance of these notions.

Since 1970 Freire has argued that the educational institutions play a very contradictory role because the first and main function of the education, regardless the level or grade and also including higher education, is the 'repetition of the ideology of the dominant classes', which is ultimately a basic tool for them to reinstall their power. However, this systematic education is at the same time the area for the transformation of the same educational system. 'The university intellectual must know where these areas for the transformation of the university exist; he must transform the university from being an instrument of repetition to an instrument of production of knowledge for the people he has to serve' (Ordoñez Peñaloza, 2000, p. 5).

What is needed in order to accomplish a change in the university education? From the academic perspective, it is necessary to modify the 'epistemological view' and reject the mere repetition of contents, or the imitation of what is being done in other places. It is necessary to reject the mechanical repetition, the forsaking of the dreams of our people. It is necessary to have our own identity, and own production and profile. It is necessary to mindfully commit to the educational process and choose an epistemological approach that allows the students and the very society to have the tools they need for a rational and correct practice of power, which supposedly lies on a democratic society. This also means that it is unlikely to separate the notion of the ruling power using education to manipulate students, instead of liberating them, unlike what Freire stated before (Ordoñez Peñaloza, 2000).

Ethical Aspects of Critical Pedagogy

One of the objectives of critical pedagogy is to attempt from the classroom to raise awareness in the subjects so they can shape their own lives, develop their autonomy, and be able to assess their habits, virtues and established beliefs. Aren't these the same hypotheses included in the constructivist pedagogy? The only difference is the addition of one aspect: to be more capable to challenge the oppression present in all aspects of society. Of utmost importance will be to propose and develop alternative ideals for supportive, fair, inclusive, political societies that defend life as required by the demands of the general welfare. According to these ideas, Critical Pedagogy is defined as a theory and praxis in which students reach a critical awareness to re-define their lives and those in their surroundings.

It is presumed in this neoliberal system that schools will be governed by, and as a result, promote and obtain productivity, profitability, efficiency and cost savings, tech innovations, competitiveness leading to individualism and entrepreneurship. Based on the previous, an economic axiology is emphasized. As a result, the ones who produce and consume, these are the workers, employees or society in general, are dehumanized in the pursuit of a chimerical desire. Nowadays, the world is being measured using this value scale. These are the eulogised ideals in the university, and the myths of equal opportunities, freedom through learning, and alienation of the media, that have been present since the origin of school are still part of the pursuit. The university is not a community or even a homogeneous system, as it is commonly referred to, but rather a complex institution where groups of

different interests, ideologies, philosophies, and political struggles interact. These groups avoid the discussion of what it is to be a community. Actually, the university is the most heterogeneous element in a society which allows any citizen to register at.

Therefore, the ethical problem of the university is established: the issue is the intellectual being and how he behaves in front of other intellectuals. Knowledge is deepened without paying attention to somebody else's knowledge. Everything is circumstantial; therefore, everybody locks themselves into hermetic compartments where the search for solutions to inner problems or conflicts with one another is approached without taking into consideration the 'other' groups. In Freire's pedagogy, there is no one that must be considered ultimately educated or trained. Everybody can still learn and discover new dimensions of knowledge, and mainly learn how to implement that knowledge in the reality he is living. As a result, education becomes a mutual and permanent formative process.

Contributions of Informational Literacy to Pedagogy

Emancipation is comprehensive and in-need-of-reflection process in order to achieve an awareness and sensitivity to enhance the pupil to act, avoiding the political activism that causes the imitation of a behaviour which ultimately provokes poverty, unfairness and every shade of oppression. This pedagogical theory or tool for understanding and action is the one transforming reality, giving a real opportunity for growth, and allowing people to be aware, to actively participate in the development of proposals for the solution of social problems in the community. It is precisely why resistance is the beginning of this liberating process.

Therefore, the school must approach diversity and equality of opportunities and of access. It must approach political, economical and cultural equality, to become a school system that builds a new type of human being living within a fair, supportive and inclusive society. By self-demanding in his educational task, the teacher offers the best to his students, because it is the work he develops inside of the classroom what best describes him. His self-demand, without being dictatorial, is the best medicine to create well intentioned people who will, at the same time, demand from themselves the effort to complete any activity related to them and their social environment. This is the best criticism that comes from Freire´s perception mentioned before, to have and increase the awareness in education and advance towards the transformation of its praxis is exactly which will eventually transform the human being and his surroundings.

Mauricio Diaz mentions that 'critical students and teachers are those who challenge the reasons for everything, those who look for evidence and novel ideas, and those who do not simply subdue to certain authors, or schemes, or leaders, because they trust in their own power of reasoning' (Díaz, 2009 p. 78). How much is being done in the classroom to 'teach' a subject or a topic? The well-known Socrates' quote "know thyself" is actually the self-knowledge that has no place in our educational practice nowadays. Consequently, there cannot be a liberation process in which the individual recognizes his own value and the value of others.

Nowadays, the university must provide and optimise informational services, knowledge and the sciences, but above all, it must improve the ideas of humanism, which are the fundamental reasons for its existence. Those reasons are slowly blurring and moving the university towards the path of alienating commodification it has in the society now. The university is an organism for training and developing people and people's consciousness. The main task of these people should be to ensure the general welfare. Social gaps in register and leaving higher education institutions are narrowing more and more. Drop-out is still the most critical issue in every educational institution. Due to this, academic consolidation is incomplete in most of these institutions and also defined by this dilemma. It is expected that Informational Literacy significantly contributes to the improvement of such education indicators.

Informational Literacy as an Education Movement

The concept Informational Literacy (IL) remains a polemic issue since it is not clear in which research field it could be included. Bawden (2002) states that there are at least six different concepts several authors use as synonyms of IL. These concepts are: Information Technology Literacy also described as the literacy for the new technologies, electronics, and of electronics information, Librarian Literacy, Media Literacy, Network Literacy, and Digital Literacy. Tarango and Marzal (2011) mention the existence of 'significant tendencies in informational literacy and the new approaches towards it, and some novel ideas for the development of contents and general structure that surpasses the notion of using books, and also considering other learning styles' (p.283). Therefore, IL (Informational Literacy) will be understood as the ability of the user to assess the when and why information is needed, locate the sources of information, know how to effectively use it, and also be able to interpret the different layers of meanings some authors convey and by doing so, efficiently and ethically communicate this information. It should be ethically communicated in the sense that the user should acknowledge other authors' contributions about this learning technique, but not take them as his own invention. A text that has been influenced by other authors should give credit to such effort and contribution.

To be literate in information means knowing when and why the information is needed, where to find it, and how to assess it, benefit from it and ethically communicate it. In this virtual and interactive learning, the student will be a dynamic protagonist in the acquisition of general skills that will enable him to deal with the specific requirements of his study field. The student should be able to handle knowledge, select and update information, identify the sources of this information, and understand what he has learned in order to combine everything to place the foundations for his knowledge to later adapt it to novel situations that will arise in his studies, his job, and his daily life (Pinto Molina, 2005). Globalization has undoubtedly benefited the educational field with noticeable and significant ideas. However, the problems in Latin America caused by it should not be undermined. In Latin America, to speak about equality in the quality of education together with the economic, production and efficiency struggle, is foreign to the majority, and it indicates that the benefits of this new technology fall short for the vast population in this region.

The new generation of students is not really in need of schools, but of the knowledge and information that comes from the ICT's, where the media and mass communication lie. The cultural industries make this and other types of knowledge available to the point of reaching the further end of 'a saturation of information' (something which is observable nowadays). The main problem of a dehumanized education is that it introduces a conflict present nowadays and in the future since it distances the subject from that manner of seeing and experiencing the wide world. The notion of education for all seems an issue difficult to picture, especially when inequality and extreme poverty of millions of people are the main problem in the country. The covering of the basic elements of learning, such as reading, writing, teaching of cultural and ethical values, are foreign to these low social strata. The predicament lies on how to narrow this division by accomplishing the emancipation of people of limited resources, and the true establishment of this paradigm.

Other requirements related to IL as an education movement are the redefinition of the teaching techniques, the identification of the knowledge the pupil must possess in order to develop globally in the world, the implementation of permanent changes for the student services provided in schools, the valuing of subjects for human resources training over everything else, just to name a few. The moment the inquiries to these troublesome issues are answered, education will be adapted to a more diverse, less lexicographic culture, providing more appropriate strategies to enable the school to linger in a world that is constantly changing, and in which the pupil alienates himself due to technology.

Informational Literacy (IL) as an educational tendency attempts to define the methods to make the subject aware and able to select and differentiate the truly essential topics in the overwhelming amount of information available today. It also establishes the patterns of behaviour society should follow since it gets more diverse each day, and therefore, the social values weaken. It is still necessary to determine the importance of the school in charge of the promotion of a democratic and civic culture (Cornejo Espejo, 2012). Teaching values is a fundamental aspect in the development of this new educational formation. It is also at the same time, one of the core problems of it, especially when most of the schools aren´t giving the appropriate attention to these type of subjects since they rather focus more in the 'technological progress', not acknowledging the huge gap left by not encouraging an ideology that allows the pupils analyse the background of the social issues they are experiencing.

The role of the school system is to contribute to the harmonious incorporation of every student in the community he lives in. The purpose is to involve him in the core values for the development of the society, and provide him with necessary tools to be prepared for the active and formative participation in his reality. This aspect should not be taken lightly since it is the foundation for the growth and harmony that every society striving to become different and democratic should have. The field of knowledge and the field of life should go hand in hand, they shouldn't be divided or be seen as separated worlds; rather they should include one another. This is the only way to offer a benefit for both areas, and at the same time, renew the basic aspects of both, which are the personal, familiar, and social welfare.

In order to have radical changes, the citizenship must be actively involved. The participation of a fully-aware person will be present firstly by changing the development of a society into a supportive, respectful, and virtuous group that strives to show others it is worth the improvement in order to have a better reality, and at the same time, have an impact on the less fortunate. Constructivism places the pupil at the center of the attention. The pupil is the creator of knowledge and he should take advantage of the skills and abilities instilled by the teacher, also taking into consideration his own active participations and arguments. The student should improve at his own pace and make him be understood by the advisors orienting him and improving aspects of the knowledge, behaviour, and training he is being taught by means of valid school programs each day. The purpose is to create a person that is upright, responsible, reviewer of his own behaviour, self-sufficient and able to make his own decisions, also by respecting his identity during the educational process so he would, after his educational training is over, be able to transmit it to the society that will host him in the future as the professional he is attempting to be (Villatoro y Hopenhayn, 2006). Knowing how to apply the skills he acquired, the new professional will actively participate within and together with his surroundings, allowing the cultural and social aspects of his reality broaden.

To accomplish the previous idea, a new pedagogic training is needed, one that favours teachers' abilities to handle the appropriate tools for the learning of significant elements these students are being taught. These students will then develop skills by being actively in charge of their own learning. It must exist, therefore, a commitment and responsibility to the socio-cultural transformations, a critical and reflective analysis in order to encourage values equally applicable to every person, the establishment of links for civic duties, the promotion of respect for social diversity, and equality of rights.

IL Conceptualizations of the Competent Subject

The switch of the pedagogic model in some educational institutions offers new terminology taken from constructivism and some theories about the active school included in the syllabus, which is the case of education. This has been proposed for several decades, but it is only until today that the changes are being integrated. However, the behavioural model still lingers in the educational methods. Teachers are afraid of 'forsaking control' of the class, and give 'their dominium' to the students. Therefore, it is not possible for the student to be independent and creative.

Information literacy in general and digital literacy in particular, is perceived as the ability to understand and make use of different sources of information by means of the computer. This literacy is closely connected to the mastering of ideas and concepts that are to be used, and not so much linked to the keyboard of a tool that up to now is responsible for enabling human knowledge to increase, and which is an essential tool for every education institution (Travieso and Planella, 2008).

Nowadays, the greatest conflict is economical neoliberalism, currently known as 'social darwinism', which abandons the helpless because this social stratification is not profitable according to a business

(and political) vision. The ideals that have developed following individuality, personal achievement, hedonism greatly conflict with discourse ideals of security, solidarity, and interaction among people. Sadly, a deeper social inequality is obviously perceived. Today, the phase we are experiencing explicitly indicates inequality instead of finding solutions to reduce it. In this case, education is a weapon that could be partially effective to level this boat that is dangerously leaning towards the lack of social awareness.

We have to produce not merely consume, and this is possible by being aware of what happens and how something happens in the community. Because of all this, the IL has a key role as a training tool that eventually provides a service for a fairer, more supportive and democratic society. By using critical pedagogy, it is intended to generate reflections, debates and critic in order to continue with the research to find the answers to some of the inquiries, all of this to develop a more egalitarian and fair society. This is one of the skills the future professional should aim to develop. This can be accomplished due to the critical and creative mind of the teacher who understands the role each student plays in society. The teacher also comprehends how transcendental his participation is in both virtual and face-to-face education.

Teaching Training Characterization towards Informational Competence

Nowadays, Informational Literacy is an indispensable requisite that every teacher should have. It is a first class ability every university teacher should develop since university students are practically digital natives. This known fact argues that for at least the past 25 years in this country, there has been the need to implement significant changes to the university syllabus about the teaching and learning practices. It is important to point out that these changes have already been included in the syllabus of higher education institutions. However, most of these ideas are kept 'in the books' and haven't really been applied in the classroom. The acquisition and development of skills that will be useful for a lifetime are essential. They will teach each individual how to continuously learn, especially regarding how to solve problems since he will have to face them each and every moment of his life. His ability to use the information is closely connected to the success in his training and in his future professional life.

According to Gomez Hernandez and Licea de Arenas (2002), some of basic skills the digital immigrant teacher should acquire to properly deal with digital native students are:
   a) Identification of the need for information
   b) Creation and organization of information
   c) Information search strategies
   d) Information technology skills
   e) Assessment and management of information
   f) Usage and communication of information

g) Ethical and social aspects
h) Active behaviour for a lifetime learning
i) Evaluation of the media
j) Self-assessment

This can be accomplished by continuous up-dates which will give the teacher the skills he needs in order to be a step ahead of these netizens. Some of the advantages the teacher has over these students are the methodology for an appropriate academic information search, the organization of the information he will use, a personal assessment and a critique of the available information, and the writing of formal essays, especially noted at the end of the student's major (thesis, research papers, etc.).

If there isn´t a critical pedagogy provided by teachers, how will students develop a critical thinking? It is necessary to star instilling a way of thinking that would lead future professionals to develop a vision of their mediate and immediate future. This thinking will lead them to suggest real cultural and social changes, and they will show ethical responsibility in their occupations and in their proposals which will be set in motion with the same creativity they showed during their university studies.

The human being needs to learn how to learn in order to solve everyday situations and by that, to be responsible of his own destiny. He is also responsible for his kin and the society he lives in. All of these are elements included in the teaching practice, to instill in the mind of the students not only theoretical knowledge of some authors, but the attitudes these new professionals should show, which is much more significant. The teacher should also instill the desire to innovate, which will develop the creativity of young students. This could be accomplished by working in teams, in cooperation with one another, also by showing the advantages of team work and emphasizing the responsibility each student has to show in order to complete his task. The consequences of the traditional role of the teacher in the classroom have the effect of a low participation of students, who remain passive elements. Students will not learn how to investigate in books, or to look for new and reliable information in the net, and they will not know how to cooperatively work in teams. In this type of teaching, there is no space for practical training, since there is only an emphasis on theoretical memorization (in the case they understood the topic, but which will soon be forgotten)

Conclusion

Segmentation of subjects and knowledge itself is still a common approach, as if the subjects were isolated and only related to one single term or one single teacher. By doing this, the greatest opportunity offered by the rationalization of the teaching practice is being debilitated (Gómez Hernández and Licea de Arenas, 2002). Critic literacy is an assignment closely connected to critical pedagogy, since it shows the level of assimilation of theory and praxis attached to such pedagogy (Gómez Torres and Gómez Ordoñez, 2011).

To incorporate the different teaching and learning styles revitalise students, and the teacher learns how to handle these situations to make the most of the topics covered during the term. With the aid of Internet and other electronic devices, the teaching practices will be transformed and the student will be motivated to strategically use these devices. Universities and higher institutions are responsibly obliged to develop people that participate and link themselves to the production system. And by doing that, contribute to the economical development of their society and their surroundings. But most importantly is not only to produce for the sake of production, but to involve the professional into noticing the 'other' person and collaborate with the benefits that are obtained from correctly applying the technology for their own people. They should understand how responsible they are to slowly develop knowledge in marginalized communities, since knowledge is a favour everybody is entitle to.

The analysis of the educational practice should be based on what happens inside the classroom, and based on the outcomes of teacher-students and student-student interaction. Regarding this, the teaching practice is considered a dynamic, reflective activity that needs the support of the pedagogic theories observed before and after the interactive events in the classroom. This means that this analysis should include the planning process of the teacher, and the assessing process since this is an inseparable aspect of the teaching practice.

The development of teaching training programs must include the encouragement for the reflective work of teachers about their own educational practice in order to improve the teaching and learning stages (Carranza, 2007; Medina Moya and Jarauta Borrasca, 2013). But most importantly, it is necessary to include others in these reflections and thoughts to surpass the boundaries of the classroom premises, to motivate the students into the promotion of their knowledge to the places where it is needed the most. What is the point of education if this educational practice and these activities the teachers are implementing are only shown in the grading card but do not surpass institutions indoors? Where does it lead to? What benefits does it offer to people and pupils themselves?

Some philosophical questions then arise: what type of human being is attempted to be developed? What type of society do we strive for? What values will be considered? This is the starting point from which the new syllabus will be modified in order to develop more open, more critical and cooperative minds. In theory, the hypothesis of this educational model based in competences_affirm that the student will be able to inquire and search for his own knowledge, he will be innovative, creative, fond of research, active, etc. However, has this been accomplished? Have teachers performed as pupils' guides? Are students allowed to inquire, question, reflect upon what has been taught (but not of what has been learned)? Or has the declaration of an economics axiology been proclaimed? This economical axiology overwhelms and forces hundreds of people to lose perspective since they are unable to attain their desired goals, goals that are dominated by an out-of-control mercantilism of this consumer, not axiologically rooted society.

Educational praxis in the universities needs to transform, it needs to become really effective with the purpose of developing responsible, critic and innovative minds. In addition, it needs to foster areas for real discussions of science, technology, humanities. It needs to find a place in debates and prototype presentations, to promote what is being done inside of the schools to enrich teachers, students and the rest of the civilians. "The central concept of a pedagogic approach in an educational community is the possibility to favor social change and reduce inequalities. Learning then, is understood as conversational and transformative element of the school and its surroundings" (Flecha and Puigvert, 2002).

REFERENCES

Araujo Freire, A. M. (20011). La voz de la esposa. La trayectoria de Paulo Freire. In: Gadotty, M. y Torres, C. A. *Paulo Freire: una bio-bibliografía*. México, D.F.: Siglo XXI.

Aubert, A. y García, C. (2009). Pedagogía crítica y el éxito académico de todos y todas. *Revista Electrónica Teoría de la Educación: Educación y Cultura en la Sociedad de la Información*, 10(3), 231-242.

Bawden, D. (2002). Revisión de los conceptos de alfabetización informacional y alfabetización digital. *Anales de Documentación*, 5, 361-408.

Carranza, G. (2007). *La construcción de un modelo de docencia a través del trabajo colaborativo. En: Actas del Congreso Internacional Nuevas tendencias en la formación permanente del profesorado*. Barcelona, España: Universidad de Barcelona y Grupo FODIP.

Cornejo Espejo, J. (2012). Retos impuestos por la globalización a los sistemas educativos latinoamericanos. *Revista Mexicana de Investigación Educativa*. 17(52), 15-37.

Díaz, M. R. (2009). El valor educativo de la crítica. *Revista Iberoamericana de Personalismo Comunitario*, 10, 76-78.

Diesbach Rochefort, N. (2012). *Los retos de la educación en el amanecer del nuevo milenio*. España: Palma Libros.

Flecha, R., Puigvert, L. (2002). Las comunidades de aprendizaje: una apuesta por la igualdad educativa. *REXE, Revista de Estudios y Experiencias en Educación*, 1(1), 11-20.

Freire, P. (1969). *La educación como práctica de la libertad*. Santiago de Chile: ICIRA.

Freire, P. (1989). *Pedagogía del oprimido*. México, D.F.: Siglo XXI.

Freire, P. Macedo, D. (1989). *Alfabetización: lectura de la palabra y lectura de la realidad.*

Barcelona, España: Paidós.

Gómez Hernández, J. A., Licea de Arenas, J. (2002). La alfabetización en información en las universidades. *Revista de la Investigación Educativa,* 20(2), 469-486.

Gómez Torres, J., Gómez Ordóñez, L. (2011). Elementos teóricos y prácticos de la pedagogía crítica: más allá de la educación, metáfora, escena y experiencia. *Revista Electrónica de Investigación Educativa*, 66, 181-190.

Lopera Lopera, L. H. (2007). *La formación en cibercultura desde el enfoque de la pedagogía crítica.* Ponencia para Encuentro de Ciencias Sociales y Humanas: El papel de las Ciencias Sociales y Humanas en el mundo contemporáneo. Medellín, Colombia: Universidad de Antioquía.

Medina Moya, J. L., Jarauta Borrasca, B. (2013). Análisis del conocimiento didáctico del contenido de tres profesores universitarios. *Revista de Educación*, 360, 600-623.

Ocampo López, J. (2008). Paulo Freire y la Pedagogía del Oprimido. *Revista Historia de la Educación Latinoamericana,* 10, 57-72.

Ordoñez Peñaloza, J. (2000). *Paulo Freire y la educación superior.* Seminario-Taller impartido los días 6, 11 y 19 de octubre del 2000, en la Sala del Decanato de la Facultad de Estudios Generales. San José de Costa Rica: Universidad Nacional de Costa Rica.

Pinto Molina, M. (2005). *Habilidades y competencias de gestión de información para aprender a aprender en el Marco del Espacio Europeo de Enseñanza Superior ALFIN EEES.* Granada, España: Universidad de Granada.

Tarango, J., Marzal, M. A. (2011). Funcionalidad de la alfabetización informativa y sus ámbitos de actuación: aproximaciones a los entornos mexicano y español. *Revista Interamericana de Bibliotecología*, 34(3), 283-299.

Travieso, J. L., Planella, J. (2008). La alfabetización digital como factor de inclusión social: una mirada crítica. *Revista sobre la Sociedad del Conocimiento*, 6, 1-9.

Villatoro, P., Hopenhayn, M. (2006). El derecho a la educación: una tarea pendiente para América Latina y el Caribe. *Revista Desafíos CEPAL/UNICEF*, 3.