

Research Article

© 2019 Martinez et.al..

This is an open access article licensed under the Creative Commons

Attribution-NonCommercial-NoDerivs License

(http://creativecommons.org/licenses/by-nc-nd/3.0/).

Continuing Education of the Professors at Universidad Tecnológica Equinoccial (UTE)

Mayra Martinez

Master in Education, Research Professor, Universidad UTE, Quito, Ecuador

Martha Viveros

Master in Bilingual Teaching: Spanish-English, Research Professor, Universidad Iberoamericana del Ecuador (UNIB.E)

Magda Cejas

PhD in Economy and Business, Research Professor, Department of Administrative and Trade Economics, Universidad de las Fuerzas Armadas (ESPE)

Derling Mendoza

PhD in Education, Research Professor, Universidad Tecnológica Israel (UISRAEL), Ecuador

Doi: 10.2478/mjss-2019-0030

Abstract

This research is justified by pointing out the basic conceptions of the continuing education of the university professor. The process of this research included three phases: First, the search; collection and analysis of information. Second, it includes models of professor training and theorization. Third, it raises the final conception of the educational training of the university professor. The research was developed from a qualitative perspective; therefore, it is implanted in an epistemic conceptualization that corresponds to its nature and the interest to deepen in the intuition of the object of study. In this research participated 8 (eight) professors who work at UTE. For the analysis of the data that was obtained they were applied the Grounded Theory and the Constant Comparative Method, which had the purpose of making a theoretical approximation from the categorizations and their dimensions, through the Atlas.ti operating software, version 8. Moreover, the goal was contributing to the theoretical foundation and methodology of the research which generated the following categories: professional professor role and new professor profile. In the conclusions it was mentioned the importance of the university professor updating through scientific research to promote the knowledge and strategies that demand the need to theorize, produce and raise the level of professor thinking.

Keywords: continuous education, educational innovation, scientific method, theory of education, university education research

1. Introduction

In the educational practice, the participation of the professor in the level of higher education, is a dimension of special interest, because this complex and systemic action shows a gallery of events

that sometimes far from strengthening the processes, become a strong barrier that is constituted by the repetition of the fact in a culture that is assumed as a norm of the organization which includes to the new professors. It has transformed the daily routine of the training process, into cyclical moments with multiple nuances of weakness which become operational barriers in the professionalization of students, because of that, the professors do or do not do their successes or failures in educational spaces and these are shown into levels of student training (Acosta, 2006).

Therefore, it is necessary that professors take possession of knowledge of what they do and the nature of their practice, in order to offer important contributions to the didactic and andragogic diversity in university education. There are important approaches with actions close to innovation which deepen and transform the teaching process in connection with learning from the reality of the classroom and the day-to-day events of training. This is a situation that requires processes of understanding, creation, transformation and orientation of the educational practice (Albert, 2007).

The research was based on the theory of complex thought which is considered as a whole network of associated heterogeneous inseparable constituents where the paradox of the individual and multiple was presented. The complexity is, indeed, a web of events, actions, interactions, retroactions, determinations and hazards, which constitute our phenomenal world. For Morín (1998), complex thinking has its essence in the lost tradition of approaching the world and the human being from a hermeneutic point of view that is interpretative and comprehensive. For this author, complex thinking is primarily a thought that relates and is conceived as a form of rationality in the approach to the world and the human being which consists of the linking of the parts to the whole by establishing relationships among them by taking into account their differences (Gallardo, et al. 2017). Complex thought joins, gathers, relates and addresses the processes in their constant dynamism and change. But also, for the professors it makes it difficult to adapt themselves to the new changes at the moment of facing the system, the solidarity of the phenomena among them, the haze, the uncertainty and the contradiction (Morín, 1999; Aguilar, 2015).

Until the first half of the 20th century, most sciences had specialization and abstraction as a way of knowledge; that means the reduction of knowledge from a whole to the knowledge of the parties. The key concept was the Determinism, the application of mathematical logic to the life problems and the social facts. Therefore, a reform of thought becomes it possible. The thought that separates, must be replaced by the thought that distinguishes and joins. The disjunctive and reducing thought must be replaced by a "complex thought" (Morín, 1999). This reform of thought is directed and has an obvious implication with education, since it is the educational system, the way to initiate this process of reform that transcends from simplicity to complexity.

Consequently, the theory of complex thinking is relevant to research, by analyzing the training process that university professors learn; because this training is a complex issue which implies a multiplicity of factors that are related; and that makes it an active, varied and diverse issue. In human formation there are multiple factors framed in different systemic relationships among culture, society, institutions, the community and those who learn in a personal way (Altarejos, 2006). Therefore, the human professor training cannot be seen from a single aspect or from the union of a set of aspects; but it must be seen from the relationship of factors articulated from the dimension of the subject, the individual and the social subject.

According to Rodriguez, Gil and Garcia (1999), the professor who is trained under the complex elements of education, is overwhelmed by strategic diversity management to solve the difficulties properly, and the theoretical elaboration jumps from the simple to the complex because the complexity informs about the reality; and the resulting educational process is another subject to many manifestations and several elements that disorient educational work. As a consequence, it is important that the researcher assumes the whole link to the ideas of complexity and complementarity, because for Morín (1998), "the aspiration of the whole is an aspiration of the truth, and the recognition of the impossibility of the whole is a very important truth. Consequently, the whole is the truth and the non-truth at the same time"(p.137). This is related to the attention to the andragogic practice training that professors perform in university education, because the lack of this practice produces disorder and chaos during their academic performance (Hirsch, 2016).

Furthermore, it is required some knowledge to realize that the parties depend on the whole and vice versa; something that does not isolate the phenomena, but integrates them in the whole, it

must detect everything as one by admitting the diversity and unity at the same time. It is to say that the andragogic practice should not focus on an encyclopaedism that transmits only the cognitive aspect, which can be done by a computer, a video, a book or a television program. Meaningful higher education is a meeting between human beings, where life itself is the main character. The traditional andragogic instances must be questioned and the complex perspective must be sought (Álvarez, 2007). The contents treated in class must point to the transformation of the human being, where they should not be neutral and they are presented specifically with a certain degree of value. Consequently, each educational content should not be proposed only as an objective knowledge, but it should also be recognized, the freedom of the subject in order to appreciate the importance of research.

This brings with it the idea of change, because in the sciences and social disciplines they are continuously transforming the conceptions of: human being, knowledge, education and training. Therefore, theories and concepts are transient. In response to what was mentioned before, Lizárraga (1998) states that "if educational conceptions and pedagogical practices do not anticipate or evolve simultaneously, they lose their meaning and reason for being" (p.162). The changes of teaching that are thought for their formation are a legitimate and necessary process that must be operated from the moment they are required, and not after waiting for that change to come from the highest governmental institutions of Ecuador. In the field of human professor education, it is required a rationality as a complex thinking, which is consistent with the constantly changing world. The Republic of Ecuador requires innovative university professors who adapt easily to change, with a flexible attitude, the ability to establish relationships between processes and systems, the ability to approach new possibilities; it means that it requires people with qualities in complex thinking, who approach reality in all its complexity in order to understand it and potentially transform it (Bernstein, 1998).

The humanist paradigm was the second support of the research, since education implies a relationship with others, being involved, being responsible for not only the individual development but also the common interest development. It is to build the whole human being through the contact with others, guard the presence of humanity in each one; it is interrelation, human communication and dialogue (Díaz, 2004). This continuous encounter implies keeping in mind the others and within the educational environment, the study of the human being is carried out in a continuous and integral way as a whole that is in permanent change and constant development. About this, Levinas (2000) proposes the possibility of developing a new educational thought which monitors the word and the face of the other. It is a thought that, without renouncing the advantages derived from selfcare and freedom, accepts the challenge of caring for the other as the fundamental basis of educational action '(p.128). In this sense, the humanist paradigm proposes the study of the socioaffective domain and interpersonal relationships and values in educational settings where people do not conceive themselves as alone, but rather in a conception of constant formation through personal exchange. In the humanist paradiam the educational objectives focus on the personal growth not only of the students, but also of the professors in order to foster educational creativity, the promotion of experience and interpersonal influence through communication and the group work, in order to provoke positive feelings of the students towards their courses and to induce meaningful learning through the linking of cognitive aspects with experiential ones (Esté, 2004).

Humanistic education is defined as a paradigm in which all facets of the human development process give special emphasis to the following realities, uniqueness in each human being, natural tendency towards self-realization, freedom and self-determination, integration of the cognitive aspects with the affective area, awareness and openness in solidarity with other human beings, capacity for originality and creativity and hierarchy of personal values and dignity (Martínez, 2007).

Thus, the characteristics of humanistic education promote that the basis of educational decisions are the needs of individuals and their options are increased; it gives value to both: personal and public knowledge. It means that the development of an individual is conditioned for not to interfere in the development of the other and an educational program must promote a sense of importance, value and merit of each person involved. The paradigm maintains that education helps to develop individuality, supports that professors recognize themselves as unique and researchers and it helps them to develop their potential. On the other hand, the professor is

considered by the humanist paradigm as a model to be followed by students and this person must bear in mind that students are different; their characteristics, their contexts and their learning styles are different and because of this they perceive the professor in different ways (Fernández and Melero, 2008).

Consequently, in the humanist paradigm, both, professor and student are conceived as free, elective and responsible for their actions; they behave themselves according to their perceptions and respond to the non-objective environment, as they perceive and understand it (Giordian, 2002). These have a personal encounter through the scenarios of learning in a human relationship, and this is what constitutes the person and which allows people to advance as a human race. Therefore, professor training is humanistic; it is a human encounter with the individualities of each human being and aims at the development of potentialities, dimensions and competences, articulated to the historical-social sense and to the socio-political structures of higher education (Hurtado, 2018).

Professor training as a third theoretical support, explains the ongoing process of acquisition, structuring, and restructuring of behaviors (knowledge, skills, and values) for the performance of a certain function. In the case of educational action, training is teaching, and is defined according to Alvez (2003) and Rodríguez, (2016), as formal and informal 'process of professional preparation for the pedagogical practice' (p. 38). It includes the university career that leads to obtain a degree and later the updating and postgraduate courses. Likewise, during the performance in the classroom, in their professional intervention in a specific context, professors acquire and consolidate specialized knowledge and skills. In this way it is pointed out that the professor's training of high social relevance is an active, permanent and continuous process which is closely linked to the practice in the classroom.

The professor of higher education is a professional whose daily practice is full of questions that are not answered with preconceived formulas and that require the structuring of their knowledge, skills and values to solve daily problems which are presented in the educational space. In other words, the reflection about their work in the institution, allows that the learning acquired by professors in a formal and informal way, takes specific ways and gets a meaning that ensures their social development (Orriego, 2007; Krichesky & Murillo, 2018).

In a modern cultural perspective, professors are the center from which the action is born and scheduled. This does not focus as much on the transmission of values as on the stimulation of the students' personal development, then they can be culture builders rather than followers (Tejada, 2008). Besides, it is perceived that the professors' continuous training consists of their preparation and professional emancipation through a reflective criticism in order to develop an effective teaching style that promotes meaningful learning in students and achieves a thought of innovative action, working with colleagues as a team for the development of a common research project. That is the challenge that current society imposes. This is the path for all professors whose work and mission responds to the requirements of their social context (Osuna, 2007).

Professor training is a complex, critical and constructivist perspective, which as a strategic goal implies: a research concept of teaching work, which is the integration and reconstruction of meanings from different epistemological sources, from, phenomenological, ethical and ideological, disciplinary, didactic and socio-political knowledge related to school content and disciplinary goal; as well as personal conceptions, according to what was expressed by Marcelo (2006). To do this, professor training provides the necessary conceptual tools, so that the environment is analyzed for the construction of relevant knowledge for social requirements. In their professor training, the subject must become a researcher of needs of the community potentials, who is able to work as a team in the accomplishing of a shared task. Moreover, professors must reflect their research skills on their practice in order to transform or modify them by taking into account the educational knowledge they have, the set of knowledge that must be re-contextualized and the tools available to carry out their task (Isaza & Gómez, 2005; López & Pérez, 2017).

Then professor training is not a mere review of teaching formulas or training in specific disciplines, it must be the space that receives the professors' concern to transcend the place where, they can clarify their position regarding the educational problem, their role in social dynamics, and their way of understanding the world through reflection. It should be the space

where the professors in training or in service can be aware of themselves, their work and the world, and can confirm their commitment to their students and their learning process; it is a responsible commitment to what their students' lives can become.

Contreras (2000), mentions as necessary that professor training is assumed from the assumption of several qualities, such as: a) the moral obligation; the ethical commitment involved in teaching that puts it above any contractual obligation that may be established in the definition of employment, b) commitment to the community; education is not a problem of the professors' private life, but a socially entrusted occupation, which makes it publicly responsible. Here the conflict between the professor's autonomy and their responsibility before the society arises. Furthermore, c) professional competence; understood as a domain of knowledge, skills and techniques articulated from the awareness of the meaning and consequences of the teaching practice itself. Therefore, the reflection and analysis of this is a structuring axis of the training and professionalization of professors, according to the postulates of hermeneutic-reflexive tendency (Manes, 2006).

It is the modeling of a series of competences in the professor that allows a work action with the conviction of being a professional with resources, knowledge, skills and attitudes which are necessary for a satisfactory resolution of the situations they face in their professional work (Gimeno, 1999). In the meantime, teaching competences imply the interrelation between theoretical training and applicability of what has been learned. This set of resources only acquires meaning when they are put into practice, adapted to the context in which they are applied and determined by the effectiveness of the students' learning in those specific circumstances. Professors of higher education require training according to the competencies that the profession requires, so that they are prepared for it; but it is not expected that this training will be translated into an unambiguous and fixed collection of competences (Mirabal, 2008). The teaching competences will be manifested and built throughout the professional career, from the context, the changing circumstances, the evolution of the professors themselves, and their continuous training and knowledge that gives them experience (Machado & Rodrigues, 2018).

In the continuous professor education there are some aspects that will be decisive, such as: the individual attitude of the professor towards experimentation and the implementation of what has been learned and the support of the institutions to promote, hence the updating of teaching implies the need for continuous and permanent training, as it is detailed in article 350, of the Constitution of the Republic of Ecuador (2009), which states that the Higher Education System aims at academic and professional training with scientific and humanistic vision: scientific and technological research; innovation, promotion, development and dissemination of knowledge and cultures: the construction of solutions for the country's problems, in relation to the objectives of the development regime. Moreover, according to the Ley Orgánica de Educación Superior (Organic Law of Higher Education) (2010), art. 6, professors and researchers must receive training frequently, according to their professional training and the subject they teach; therefore, it promotes and encourages academic and pedagogical personal improvement.

1.1 Research Problem

This research is important because it aims to make a theoretical approach to the training and continuous innovation of the university UTE. To carry out this, the research was developed under a research designed on the basis of the Qualitative Approach which allowed the researchers to focus their interest on the natural environment where the events occur, in order to find a relevant description of the situations that occur during the development of educational practice. There were applied the following methods: Constant Comparative Method and the application of the Grounded Theory. It was emphasized on the individual and subjective aspects of the experience, about the study of the phenomena as they are experienced and perceived by the subjects under study, by making a description of the meaning of the experiences lived by professors that perform andragogic practice in the context of higher education (Morales & Leguizamón, 2018). Finally, the phenomenology of everyday life was taken because each social fact is only understandable in its context in order to intuit and give meaning through the voices of the informants.

1.2 Researcher's Role

In this research, the researchers maintained a constant communication with the participating professors which facilitated the collection of information and data through the work and academic functions at UTE. It was carried out, through interviews, conversations, anecdotes and opinions described in the course of the semester A-2018. The researchers did not apply any measure of changes or styles of professor training; they only focused on the conceptualization of the results obtained by the professors to make a theoretical approach between their model of innovation and educational reinforcement.

2. Research Methodology

2.1 Research Type

This research was based on qualitative research with interpretative paradigm, also called by Yuni & Urbano (2005) as a paradigm that "obeys to the philosophical conception from which it is nourished and which provides the foundations about the real and the possibilities to know it" (p.107). As a consequence, the researchers carried out the data collection in the same scenario where professors perform their academic functions daily, this was done with the intention of being able to observe them directly and without the presence and influence of other elements that could distort the information provided.

Due to the nature of qualitative research, the interviews were conducted carefully for the informants to express their opinions on the topics that were addressed to comply with the object of study (Crotty, 1998). Thus, each subject answered each question in a pleasant and focused way by using the knowledge they possess according to their area of academic studies; once the required information was collected, the authors proceeded to propose their own interpretations by taking into consideration the opinions obtained.

2.2 Research Participants

Qualitative research focuses on the study of social phenomenology that emerges from the daily and dialogical events of people in a specific context, then the subjects who were susceptible to be part of the approach in the object of study were some people to get identified as interesting for the researchers. About the selection of the sample or informants in the qualitative research, Martínez (2004) mentions that the selection of the sample in a qualitative study requires the researcher to specify precisely what is the relevant population or the research phenomenon, using criteria (which will justify) that can be based on theoretical or conceptual considerations, personal interests, situational circumstances or other aspects. The participating professors were selected in an intentional non-probabilistic manner, a type of special selection for qualitative studies recommended by Pimienta (2000). In addition, for the selection of the informants in the research, the authors based on the criteria of the professors who were chosen according to pedagogical training with an academic degree equal to or higher than a Master's degree, due to their academic training and work experience related to the subject under study.

2.3 Instrument and Procedures

To collect the necessary information that responded to the emerging concerns of this research, it was applied a semi-structured interview to the informants (as can be seen in table 1), in reference to Creswell, (2009) and Hernández, Fernández and Baptista (2014) where the qualitative interviews should be opened, without pre-established categories, in such a way that the participants express their experiences in the best way and without being influenced by the perspective of the researchers or by the results of other studies. For the study, there were asked previous questions that were varying and adapting according to the current situation. Moreover, the authors applied an observation guide to take notes and important data when checking the performance of the

professors during their activities at Universidad UTE (table 2).

Table 1. Questions of the interview applied to the professors participating in the research.

UNIVERSIDAD UTE	Mayra Martínez Derling Mendoza Magda Cejas Martha Viveros
INTERVIEW DATA SHEET	
Participant code:	
Date:	
What type of academic training was provided by your university to become a professor?	
When you started your educational performance did you have any difficulty in teaching students?	
Do you consider that the professors at Universidad UTE have an academic background?	
Do you consider it important to update the teaching profile through academic studies, courses or workshops?	

Table 2. Observation guide applied by the researchers in the study.

UNIVERSIDAD UTE	Mayra Martínez Derling Mendoza Magda Cejas Martha Viveros
OBSERVATION GUIDE	
Participant code:	
Date:	
Professional development:	
Different activities are applied:	
Pedagogy workshops in class are used:	
It is demonstrated an andragogic training in their work performance:	

2.4 Ethical Consideration

At the beginning of the interviews to the professors, the researchers informed them about the rules of professional ethics and confidentiality, as Montes (2017) recommends, their names or personal data would not be issued in the results; only their opinions, reflections and information about the questions or comments issued during the interview were taken. Therefore, it was applied the coding method, in the order of the interviewee. Every professor was described as 'T' followed by an Arabic numeration, for example the third professor interviewed was coded in the texts as 'T3'.

2.5 Data Analysis

In order to analyze and contrast the data from the informants and the theoretical foundations researched and the data imposed by the observation guide, it was applied the digital transcription process by using the Dragon Naturally Speaking System, version 12; which allowed to convert the audios that were recorded into texts of Microsoft Word. After writing the texts issued by the informants, it was performed the triangulation or method of Muhr (2006) by means of the operating system Atlas.ti, version 8 from which emerged the subcategory and main category that supports the theoretical approach of the study.

3. Research Outcomes

Regarding the outcomes obtained, (figure 1) it is described that the training is related to the learning

capacity and tools that enhance the performance of the subjects, as well as the desire for improvement. As a consequence, this will be the main characteristic of the purposes for the university professor training. Therefore, the university where they graduated is the responsible of the training process where the self-training methods are valued, in search of suitable ways for their professional and personal improvement.

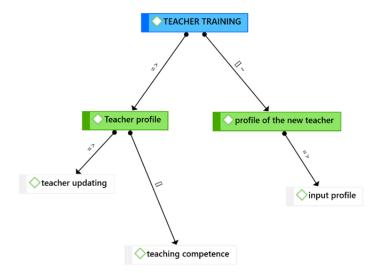


Figure 1: Structural network of professor training for professors at Universidad UTE issued by the operating system ATLAS.ti.

Marcelo (2006), mentions that professor training is the preparation and professional emancipation of the professor to develop a style of teaching that promotes meaningful learning in students and achieves an innovative thought-action critically, reflectively and effectively by working on the team with colleagues in order to develop a common educational project. Therefore, the results issued by the interviews applied to the informants show the following sub-categories: the structured teaching profile by the teaching competence and the teaching update. Among the statements issued by the informants they express that in fact, their university has talked to them about scientific training, but never about the andragogic type (T2).

They also mentioned that their teaching competencies were always framed to the requirement of academic compliance, as a mandatory activity to graduate (T6).

Moreover, as a second sub-category it emerges the profile of the new professors, structured by their entry profile, when analyzing the opinions of the interviewees who say:

Statement – sub-category – category

It was mentioned that when someone studied the undergraduate career to become a professor it was always taught to teach, but never to learn; this person did not know that everything would be different, but now it makes sense (T8).

Another professor said that when he had started working with students in the university, he always felt something new; he had that little difficulty to see that they were adults, and he was wondering if it would be the same as with the boys in a school (T1).

After analyzing the data, it arises the need for reflective and innovative professors, whose training is developed in the context of work, together with the rest of their colleagues in favor of a collaborative work among professors from the same area or university as an effective and relevant way of professor professional training. Furthermore, professor training is a field of knowledge and research focused on the study of the processes through which professors learn and develop their professional skills for the training of other subjects. In order to do this, it is essential to provide

training to the UTE university professor staff; a training focused on the immediate context of work, where professors will be able to analyze the educational system and develop their practice as a work of innovation. The researchers did not rule out from their observation guide, the professor profile capacity to reflect and criticize the educational task, so that the professor is conceived as a designer, planner who is committed to change (Ibarra, 2007).

Some professors who commented on their abilities, expressed that it would be fantastic if there were andragogic universities and pedagogical types of universities to frame that difference for not to get surprised when they were teaching (T5).

The aim is to promote those skills that help overcome the factors that hinder methodological and andragogic renewal, such as: the lack of incentives for the recognition of teaching work, the low value of teaching for promotion, lack of training, time for research, routine, the fear of change, the aging of the teaching staff and the confusion that the whole process causes.

For the authors of the study, professor training in the context of higher education implies a series of actions that place the subjects who teach in an incessant search for knowledge by sustaining themselves between the teaching competencies and their updating. This leads to the decision-making about their teaching professional practice. It also helps them to get rid of the uncertainty that encourages ignorance in their professional investigative role.

The T3 professor thinks that training is necessary to make changes in the system of university higher education, because professors are always formed according to the criteria of the professor who teaches us the subject, but not what they need in the career (T3).

In addition, in relation to the research inquiry it is important to point out the opinions issued by the informants about the necessary training of the professors, from interdisciplinary and trans disciplinary actions, which should not only be supported by theoretical elements associated with planning, evaluation and didactics; but from psychology, sociology and scientific training, in favor of a knowledge with impact on the andragogic practice; then professor training will become a necessity in the context of higher education (Perdomo, 2005). For the authors, it is not only about long hours of information, which in some cases has no impact on the knowledge of UTE professors; but these actions should be reflected on their daily work, every time there is a weakness manifested by the professors.

About the question of the difficulties of professional development, the informant T4, expresses that at the moment he joined classes he was motivated, since it is not the same studying than teaching, or the opposite teaching than studying. He was a bit confused to see that he was in another environment, no more for adults but for young adult students(T4).

Likewise, it was perceived that there is an adequate knowledge of the role played in the subject that is taught. Moreover, research professors require training in order to inquire about their own reality and the context in which they act, a connection with the level of experiences that allows them to contrast with the theory and set an appropriate position in favor of their training as professors and their andragogic performance. These are important details issued by professors considered as new ones in higher education, because the pedagogical universities of Ecuador do not establish continuous research training for graduates.

Professors in formation expressed that they are doing their postgraduate studies and they always have to realize that their tutor leads them only by the methods they know, but it does not let they look for other research options (T7).

Another person learned different models and theories the previous semester, but when they came to apply them in their classes it didn't make sense, because the concepts are updated every day and there will always be a theory that goes out today but tomorrow it will be obsolete (T1).

Professors consider it necessary to break with the constraints that hinder decision-making to change; as well as those who assume positions that lead them to transform attitudinal and ideological actions that separate them from effective work as professors. This is the starting point for a deep change with strategic characteristics that allow an epistemological and methodological reconstruction in the formation of each subject, whose role is to learn in order to educate (Rodríguez, 2006; Standish, 2016).

In relation to what has been revealed in the data obtained, professor training is a challenge of our days, product of the volatility of challenges and changes that occur daily, which is necessary for

trainers to understand their professional work, permanently, in which their entrance profile is to be open-minded professors who learn to teach and teach to learn. For Alanís (2004), this permanent professor training occurs when the individual participates voluntarily in it and both the objectives and the contents of their education are decided or negotiated with the university. For this, the teaching subject participates in the planning, development and evaluation of their own training, systematizes their experiences from the educational practice in order to generate a self-management training process.

Therefore, the formation and assumption of new knowledge, as well as the adaptation to technology, is a strategic way that professors must assume as a praxeological and useful tool to face the changes and transformations experienced in the diversity of educational contexts in the university education as part of the professor update. Thus, the teaching task is so complex that it demands from the professors the mastery of educational strategies that facilitates their didactic performance (Alvarado, 2006). Consequently, the process of learning to teach is necessary to understand better the teaching, enjoy it, and seek for a skill that must contain a hermeneutical and humanistic character; because the understanding of being in its essence is very complex and full of uncertainty. It means that the mere fact that each human being has a humanistic dimension which is characterized by axiological axes, makes that energetic activities which support the way as professors at Universidad UTE apply their pedagogical performance and professional training.

The opinion of the informant T2 about the professor update, is that he has seen that many colleagues do not want to take part of the research presentations at UTE or presentations in other universities. I think it is because they are afraid of being criticized as professionals, but the worst part is when some of them assume that as they have already graduated, they know everything, so they do not accept that they can learn a little more (T2).

From the diversity of elements that constitute the whole, the informants stated that the professors' education in the context of higher education obeys to foundations associated with the theory of systems of the professor profile, which is established with a logical and pedagogical criterion and that is the reason why many professors refuse to professionalize themselves academically or demonstrate their knowledge since they consider that they possess absolute knowledge in such a way that maximum effectiveness is achieved in the construction of knowledge and the development of skills. There is also evasion to face challenges due to the prevailing fear of failure or repudiation of scientific criticism.

The participating professors demonstrated that the recognition of all the elements that constitute a process of training, at the beginning goes through the acceptation of the professors' strengths and weaknesses in meaningful contexts that surround the educational practices; in order to recognize, characterize them and give meaning to what professors do in the diversity of academic spaces, so that they assume the construction of their own practice, from the set of interrelated units. Therefore, the behavior of each person depends on the state of the other people. All of them are in a structure that is interconnected (Bertalanffy, 1981).

For researchers, the education of the current higher education professors takes on a meaningful importance to the effect of enhancing innovation, critical thinking, reflection and creativity, from the theoretical and andragogic option that it takes. This is associated with a philosophical vision of values in just correspondence with the aims of the high education system that makes professors assume the commitment of professional training and approaching to the needs of learning that demands their andragogic practice. Based on the professors' formation, the exposed results reveal the need of a professional subject that is sustained in a conceptual theoretical framework on the individual, interpersonal and group processes that intervene in the different educative spaces in favor of an effective mediation, a connection with the various educational agents, which allows the development of a training process that corresponds to the important social work carried out. For this, it is fundamental that this teaching subject induces a process of reflection in and about the pedagogical practice itself in order to approach a real knowledge of that task of formation for its possible orientation (Camp, 2004).

According to the analyzes carried out, it consists of forming a professor that responds to the demands of the profession which guarantees the solution to the problems faced in the academic organization and in the classroom. It is based on the construction of the educational reality and it is

characterized by the uncertainty totally, the singularity and the conflict of values in favor of the generation of an integrating didactic knowledge that allows a theoretical critical analysis that justifies an educational practice with the objective to strengthen the teaching practice from the important research contributions, product of their knowledge and experiences for it to become an institutional theory (Cárdenas, Rodríguez & Torres, 2007).

4. Discussions and Conclusions

4.1 Discussions

It is mandatory for professors to show their abilities, strengths and weaknesses for the training of others on their professional role. Consequently, an educational model, which induces the agreement of competitions among them, is needed in order to guide the andragogic practice so that they are able to reflect and criticize. Professors must respond to the expectations of the demands of a heterogeneous and critical sector that requires of answers to the complexity of this new society that is in constant change.

In relation to the research, the opening is given to the strengthen of the necessary knowledge in the professors to assume positions of practical orientation. That is to give a hermeneutical sense of their own practice and their own thought, which makes it possible a prospective vision of action with a dialectical sense in favor of the professors' continuous training.

Likewise, it is recommended to allow a critical thinking for the modeling of an active and autonomous conscience in professors who practice at the level of higher education with alternative solutions to the problems that arise, which includes: curiosity, methodical doubt, the reconstruction of ideas or thoughts which constitute elements that encourage continuous training through critical consciousness and channel an action that emerges from the background of the facts themselves to guide in the daily educational work (Delgado, 2004).

4.2 Conclusions

The study demonstrates the need of changes in the processes that occur in the university educational practice. It is a request to a thousand voices that does not find a point of leverage, and for which it is operative in the teaching subjects of the level daring to initiate those necessary restructuring in the practice. Approaching it enables different ways of how training actions are dealt with and understood, which, as a logical principle of action will have an impact on didactic and andragogic day-to-day life.

The information collected fosters a philosophical foundation of vital attention, since in order to attend to the reflection of the processes, it is necessary to know what is being done and even if it seems a logical construction, many of the weaknesses in professors are framed in the ignorance of the training processes. This shows that even if you participate in a practice process, it is not necessarily done with knowledge to act effectively. Hence, the importance of the theoretical foundation enables the necessary theoretical cognitive scaffolding to contrast with the reality of the process, in order to generate experiential planes that open up intentional processes of reflection.

The experience is a form of knowledge or skill derived from the observation, the experience of an event or coming from things that happen in life that contributes sensibly to the wisdom. In this way, professors perform and strengthen themselves through the andragogic practice, which is consolidated in knowledge that is confirmed, or restructured; it is the product of the experiences that occur in the educational context and academic activities by providing the experience a cumulus of events that strengthens the professional maturity of professors and gradually strengthens their professor training (Mendoza, et al. 2018).

The educational training of the university educational context at UTE is represented in the following figure 2 where it can be visualized the interrelation between the profile of the professional and the role that professors perform.

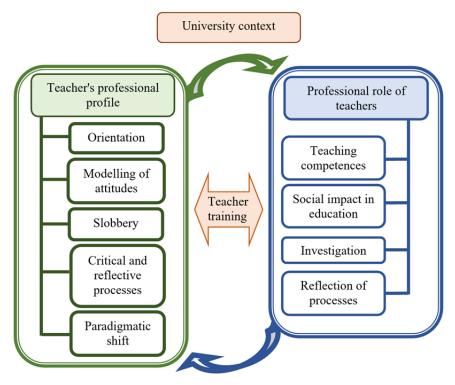


Figure 2: Professor Training at Universidad UTE.

The systematic search of something new with the purpose of inducing solutions to different problems should become habitual practices from the andragogic action; for this, the research allows professors to approach different realities from the educational environment in a systematic way. In conclusion, the authors conceptualize a theoretical approach which shows that research methods strengthen professor training, making of weaknesses the best source for inquiry, which allows a constant improvement of the andragogic practice in the future in which the research carried out by professors will become one of the mainstays, so that meaningful reorientations occur in the praxis that are executed daily by them at UTE.

References

Acosta, M. (2006). El aprendizaje visto como un proceso de interacción social. Revista Ciencias de la Educación, 6 (1), 123-134.

Aguilar, J. (2015). Desafíos de la investigación en formación docente del nivel medio superior en México. Perfiles Educativos, 37, 89-107.

Alanís, A. (2004). El saber hacer de la profesión docente. México: Trillas.

Albert, M. (2007). La investigación educativa. España: Mc Graw Hill.

Altarejos, F. (2006). Ética docente. Barcelona: Editorial Ariel. S. A.

Alvarado, J (2006). La docencia como práctica. Bogotá: Universidad Pontificia Javeriana.

Álvarez, J. (2007). Entender la didáctica, entender el currículum. Madrid: Miño y Dávila.

Alvez, E. (2003). La formación permanente del docente en la escuela. El uso universitario de la tecnología para elevar la calidad del docente en el aula. *Investigación y Postgrado, 18* (1), 36-45.

Bertalanffy, Y. (1981). Tendencias en la teoría general de sistemas. Madrid: Alianza.

Bernstein, B. (1998). Pedagogía, control simbólico e identidad. Madrid: Morata.

Camp, V. (2004). Los valores y la educación. México: Trillas.

Cárdenas, A. Rodríguez, A. and Torres, R. (2007). El maestro protagonista del cambio educativo. Bogotá: Editorial Magisterio.

Constitución de la República del Ecuador. (2009).

Contreras, J. (2000). La autonomía del profesorado. Madrid: Morata.

Creswell, J. (1998). Investigación cualitativa y diseño de la investigación: la elección de las cinco tradiciones. California: Sage.

Crotty, M. (1998). Los fundamentos de la investigación social: significado y perspectivas en el proceso de investigación. Londres: Sage.

Delgado, P. (2004). La formación de formadores dinámicos. Madrid: Editorial Pirámide.

Díaz, V. (2004). Currículum, investigación y enseñanza en la formación docente. Venezuela: UPEL.

Esté, A. (2004). Educación para la dignidad. Fondo Editorial Tropykos.

Fernández, P. and Melero M. (2008). La interacción social en contextos educativos. España: Editorial siglo XXI editores S.A.

Gargallo, B., Pérez, C., Verde, I. & García, E. (2017). Estilos de aprendizaje en estudiantes universitarios y enseñanza centrada en el aprendizaje. *RELIEVE*, 23(2), 1-24. Doi: http://doi.org/10.7203/relieve.23.2.9078

Gimeno Sacristán, J. (1999). Poderes inestables en educación. Madrid: Morata.

Giordian, A. (2002). Los nuevos modelos de aprendizaje ¿más allá del constructivismo?. España: CISS Praxis, Educación.

Hernández, R., Fernández, C., Baptista, P. (2014). Metodología de la investigación. México: McGraw Hill.

Hirsch, A. (2016). Comportamiento responsable en la investigación y conductas no éticas en universidades de México y España. *Revista de la Educación Superior*, 45(179). 79-93.

Hurtado, A. (2018). La gestión universitaria: una praxis educativa consustanciada con los planes nacionales de desarrollo. Revista arbitrada del centro de investigación y estudios gerenciales, 28, 33-51.

Ibarra, O. (2007). La función del docente: Entre los compromisos éticos y la valoración social. Bogotá: Tercer mundo editores.

Isaza, L. & Gómez C. (2005). Práctica pedagógica: horizonte intelectual y espacio cultural. Medellín: Universidad de Antioquia.

López, J. & Pérez, I. (2017). ¿Por qué es necesaria una didáctica específica para la educación superior?. Revista Científica ECOCIENCIA, 5(1), 1-17.

Krichesky, G. & Murillo F. (2018). La colaboración docente como factor de aprendizaje y promotor de mejora. Un estudio de casos. *Educación XX1*, 21(1), 135-156. Doi: 10.5944/educXX1.15080.

Levinas, E. (2000). La huella del otro. México: Taurus.

Ley Orgánica de Educación. (2010). República del Ecuador.

Lizárraga, A. (1998). Formación humana y construcción social; una visión desde la epistemología crítica. Revista Tecnología Educativa, 13(2), 155-190.

Machado, A. & Rodrigues, C. (2018). The contradictory nature of professor education in the partnership between university and school. *Problems of Education in the 21st Century*, 76, 87-99.

Manes, J. (2006). Gestión estratégica para instituciones educativas. Buenos Aires: Editorial Granica S.A.

Marcelo, C. (2006). Formación del profesorado para el cambio educativo. Barcelona: PPU.

Martínez, M. (2004). La investigación cualitativa etnográfica en educación. México: Trillas.

Martínez, M. (2007). La nueva ciencia, su desafío lógica y método. México. Trillas.

Mendoza, D., La Madriz, J., López, M., y Ramón, V. (2018). Research Competencies of Higher-Education Teaching Staff Based on Emotional Intelligence. *Mediterranean Journal Of Social Sciences*, 9(5), 41. Doi: 10.2478/mjss-2018-0137

Mirabal, A. (2008). Pedagogía crítica: algunos componentes teóricos metodológicos. Contribuciones para la pedagogía. Buenos Aires: CLASCO.

Montes, J. (2017). La ética en el campo profesional de la psicología: una encuesta. Enseñanza e Investigación en Psicología, 22(1), 135-144.

Morales, O. & Leguizamón, M. (2018). Teoría andragógica: Aciertos y Desaciertos en la Formación docente en TIC. *Praxis & Saber, 9*(19), 161 – 181. Doi: https://doi.org/10.19053/22160159.v9.n19.2018.7926

Morín, E. (1998). Introducción al pensamiento complejo. Barcelona: Gedisa Editorial.

Morín, E. (1999). La cabeza bien puesta. Buenos Aires: Buena visión.

Muhr, T. (2006). Atlas. Ti. Desarrollo de software científico para el análisis cualitativo de datos. Berlín: Versión 6.0.

Orriego, J. (2007). La pedagogía como reflexión del ser en la educación latinoamericana. Manizales: Editorial Solar.

Osuna, C. (2007). Formación humanista y práctica docente. México: Editorial academia.

Perdomo, C. (2005). Enseñanza de la ética en tiempos postmodernos. Educere, 18, 145-154.

Pimienta, R. (2000). Encuestas probabilísticas vs. no probabilísticas. Política y Cultura, 13, 263-276.

Rodríguez, E. (2006). Teorías y prácticas pedagógicas. Colombia: Universidad Santo Tomás.

Rodríguez G, Gil J y García E. (1999). *Metodología de la investigación educativa*. España: Aljibe. Rodríguez, A. (2016). Crítica a la crítica constructiva. *Teoría y Crítica de la Psicología, 8*, 212-221.

Standish, P. (2016). La enseñanza como exposición: La educación en negación. Revista de Educación, 373, 109-120. Doi: 10.4438/1988-592X-RE-2016-373-323.

Tejada, J. (2008). Perfil docente y modelos de formación. Estrategias didácticas innovadoras. Recursos para la formación y el cambio. Barcelona: Octaedro.

Yuni, J & Urbano, C. (2005). Investigación Etnográfica. Investigación acción. Argentina: Brujas.