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## THE IMPORTANCE OF USING THE METHOD, METHODOLOGY AND RESEARCH TECHNIQUES IN THE CONSTRUCTION OF A SCIENTIFIC TEXT IN EDUCATION

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The present study comes from a doctoral thesis in education, built by the author, and has the general objective of demonstrating that the construction of a research work in education requires the use of methodological rules in a clear and objective way, which are consubstantiated in identifying the phenomena involved in the research.

There are specific objectives: To review the literature that deals with the differences between method and methodology; and, to establish the main techniques that can be used in the writing of a scientific work in education, from the theoretical-scientific profile.

Scientific research is based on the systematized and secure knowledge found in science. For that, it uses the methodology, methods and techniques necessary for the planned strategies to be adequate and find the true motto of the discovery of the researched question, behold, there are general guiding criteria that help the researcher along this scientific journey.

The construction of an investigation work in education must not distance itself from this analysis, it requires the use of methodological rules in a clear and objective way, where the foundations are largely in the technical norms applicable to scientific research, with regard to the written.

Thus, in the present research, the models embodied in the writing of scientific works will be described, when conceptualizing and differentiate between method and methodology. From the following problem: Can you see knowledge in education within your perspective, from the methodology or the method?

This research is justified by the fact that it is observed in practice that there is a relative deficiency of both students and professors in the use of methods and techniques in the construction of scientific thinking during the development of course conclusion works,

in the various higher education courses. In the scientific field, for the structuring of any research it is necessary to start from the methodological field, as this field seeks theoretical proof in facts based on the use of procedures and techniques specific to science and not the sense of common sense.

The present investigation reflects its scientific relevance due to the fact that educators sometimes express doubts about which method or technique to use in writing and researching a scientific work, with some confusion with the concepts applicable to both. Thus, these are themes that arouse the study of education academics and theorists, for the reflection of aspects focused on the conceptual part by which the present work discusses.

Under the social perspective, it is seen that the community involved in the field of education, as well as in other areas, can also, at some point, benefit from the present study, since they will be able to apply it in their studies during academic practices, both in the research and the writing of scientific papers.

With regard to the methodology used in carrying out the research, it will be a review study. With regard to the technique, it will be explanatory, of the bibliographical type. As for the final results, it is expected that, with the use of science institutes and scientific research, it will demonstrate what is expected in the scientific profile of an education scholar.

In this analysis, as a result, we seek to conceptualize, characterize, describe and analyze the methodological strategies used by the teacher in his writing, and which methodological means can be considered, in view of the problems encountered during the training of his students.

This reflection primarily seeks to work on the conceptual and differential aspects of Research Methods, establishing the particularities and specificities inherent to

them and their application to the field of research.

Immediately afterwards, it deals with the conceptual and differential aspects of Research Methodology, where it tries to show the researcher that this path is fixed in the proceduralization of the systematic application of the rules of the object of study to elucidate doubts or find answers to the researched problem.

Further on, it seeks to express the conceptual and differential aspects of Research Techniques, where the researcher must have the skills and abilities of a scientist, in which the acquired knowledge is relevant and with them know which path to take and which type(s) of research, its classifications, techniques and forms of material collection, structure of the scientific work, as well as other important elements for the study to be in line with the scientific study that is being developed.

Soon after, it discusses a brief discussion about the need to use the method and methodology in teaching practice and the field of transformations in learning, precisely because of the work of teachers with students within the academic experience and its impact on the writing of final papers.

It also highlights the importance of science and its practice as inseparable amalgamating elements, where the Higher Education Institution, the professor and the students must be prepared to act and act in line with the methods, methodology and appropriate techniques, in accordance with the needs that the respective profession requires.

Finally, it presents the results and final considerations taken from the brief reflection on the topic addressed.

## CONCEPTUAL AND DIFFERENTIAL ASPECTS OF RESEARCH METHODS

It is convenient for the present study to establish the difference between method and methodology, behold, despite being in line with each other, they are in different scopes and play a relevant role in the success of the research, because without the use of these institutes of science, the research would not acquire the scientific profile.

Knowledge is seen from an unrestricted perspective, it is refined over time and with method and methodology guidelines.

Thus, the concept of method permeates the technique and appropriate means, in the accurate selection of research sources, which are necessary to differentiate, inquire, analyze and verify procedurally the steps for the development and completion of the research.

Therefore, according to the Michaelis dictionary (2021), the word method originates from the Greek, *methodos*, meaning *meta*: through, through and *hodos*: way, via.

For Eduardo CB Bittar (2016, p.22), “The method is, above all, an accurate, judicious and careful selection of research sources, because as is known, the source of information determines the reflective and conclusive results of any research.”

It is seen that the doctrine that discusses the concept of method expresses that there are different kinds of method. Each one of them aims to reach the truth about what is sought to be researched. In this notion, starting from knowledge, without going into each one of them specifically, behold, the construction of the works of each one of them is grandiose, it is based on the ideas of Aristotle, Plato, Francis Bacon, Descartes, Hume,

In the view of Eduardo Bittar (2016, p. 34-35), he expresses, among several types of

1 The term knowledge is used based on the notion inscribed by Oliveira, Silvio L. de (2002, p. 48), in which knowledge is taken by the “reflection and reproduction of the object in our mind. This way, the senses, reason and intuition participate in the process of knowledge.”

method, a table with the definitions of some of the most recurrent ones and their respective main characteristics, see:

Method	Definition	Features
Inductive	It corresponds to the discursive extraction of knowledge from concrete evidence that can be generalized.	It proceeds from the particular to the general, emphasizing the empiricism of the starting point.
Deductive	It corresponds to the discursive extraction of knowledge from applicable general premises and concrete hypotheses.	Proceeds from the general to the particular.
Intuitive	It corresponds to the direct and non-discursive apprehension of the essence of the thing known through sensitive or spiritual contact.	Withdraws unprovable evidence immediately from the thing known.
dialectic	It corresponds to the discursive apprehension of knowledge based on the analysis of opposites and the interposition of different elements.	It proceeds critically, apprehending laws of concrete history, pondering opposite polarities, until reaching synthesis.
dialogic	It corresponds to the construction of shared knowledge, through interdisciplinary dialogue.	It starts from the evidence that there is no watertight truth, and ponders on various acquired knowledge to build transitional conventions useful for knowledge and application.

Chart prepared by Eduardo Bittar (2016, p. 34-35)

The method walks with the practice of science, and for its action it is necessarily linked to ethical conceptions so that the work carried out finds scientific achievement in an adequate way and without the shackles of subjectivism and partiality inscribed in man.

It must be noted that the method has an instrumental character, since it is between non-knowledge and knowledge, it makes up the state of reflection to reach results crowned by knowledge. To do so, one goes through the state of ignorance, passing through the moment of construction of scientific knowledge until reaching the state of the expository result. (Bittar, 2016, p. 27).

For Lakatos and Marconi (1986, p.16), the method guarantees the veracity of knowledge, from which one finds the orderly direction of thought when working with science.

Thus, for a given scientific study to be adequate, it needs to be based on the method, precisely because it is in this that the criteria for distancing the researcher's subjectivism and partiality are found. In this case, it removes the researcher's responsibility for the results of the research with the most authentic conclusions possible, with regard to the conclusions obtained.

These perceptions are seen as lenses on the researched object, however it becomes clear that in order to have a look at something it is necessary to follow the appropriate form or forms for a given object, in order to find plausible answers and with the real essence of the object. that is searched.

Therefore, when it comes to method, there is the perspective of building a set of rational, systematic and rational mechanisms, with the aim of achieving a certain intended objective, in an adequate way and with a view to finding the veracity of what is sought to be researched. To do so, it finds in the various species, according to the directed propositions, scientifically discovering the knowledge of reality.

## **CONCEPTUAL AND DIFFERENTIAL ASPECTS OF RESEARCH METHODOLOGY**

With regard to methodology, it is also

convenient to present the etymology of the word, whose meaning is found in the junction of the terms *methods* and *logy*, where in this association it means the study of the path that is taken when using the study of science. It has in its sense and concept the logic of scientific procedures applied for development with a view to finding the said results in the proposed objective.

In order to develop knowledge and at the same time go deeper into it, it is necessary to investigate everything that is intended to be collected as relevant data and information, and that actions are conscious in the production and reproduction of knowledge, following and achieving the systematic application of the rules of the object of study to clarify doubts or find answers to the researched problem.

It is important to emphasize that the Theory of Knowledge studies knowledge based on three pillars (Oliveira, Silvio L. de., 2002, p. 56):

a) Gnosiology – Originates from the Greek *gnosis*, meaning knowledge, and *logos*, from the Latin, which means science, study, treaty; is concerned with studying the essence of knowledge, its origin or sources, nature, form or species, validity, entering into it to know reality, observing its distortions and subjective conditioning, with the aim of obtaining the truth. It finds its answers in the reflection of the subject-object. Its main defender is John Locke (1632-1704).

b) Epistemology – comes from the Greek *episteme*, meaning science and *logia*, study; Its purpose is to study the validity of scientific knowledge. It can be understood as the science of science, where the critical study of the principles, hypotheses and performance of the various sciences is sought. For Mario Bunge (1980), epistemology makes it possible to solve scientific-philosophical problems,

seeking solutions in particular semantic, epistemological and ontological ones related to methods, plans or results of scientific investigations of what is currently being researched. Its icon is the ideas of Immanuel Kant (1724-1824), who became an important milestone in modern and contemporary epistemological thinking. (Kant, I., 2015). In education, the ideas of Piaget (1992) are sought, when he sought to deal with Genetic Epistemology, in which the psychogenetic method is instilled, capable of providing knowledge of the stages of development in a progressive way.

c) Methodology – comes from the Greek methods (*meta*, along + *hodós*, path, way, organization of thought) and *logia*, meaning study. It aims to study “[...] the means or methods of investigation of correct thinking and true thinking that aims to delimit a certain problem, analyze and develop observations, criticize them and interpret them from the cause-and-effect relationships.” (Oliveira. 2002, p. 56). It is divided into formal logic and dialectical logic. The first studies the formal principles of thought, basing its statements on correct thinking. Aristotle (384a.C.-322a C) is its first thinker, whose ideas are rooted in the procedures used for any type of reasoning. The second studies the subjective-objective conditions of knowledge from reality, with the aim of reaching objective truth, analyzing the correlation between thought and the object (objective reality). It seeks in Plato’s ideas (428 BC-347 BC) to uncover contrary ideas, to refine them until reaching a common truth.

Therefore, within this perspective, it is seen that when it comes to methodology, we will be facing a field of study where study and investigation methods are studied to reach a defined objective, starting from a problem.

Thus, when it comes to Scientific

Methodology, Science is studied, with its components, its logical aspects, its classifications, its methods, in the search for knowledge, with a view to finding the truth; when it comes to Research Methodology, this is the practice of science, with the search to find answers to the researched problem, based on a theme, hypothesis(s), defined objectives, type of study, research techniques and case studies, research planning, theoretical bases for the research, among other relevant questions for obtaining answers to the formulated question.

## **CONCEPTUAL AND DIFFERENTIAL ASPECTS OF RESEARCH TECHNIQUES**

Finally, it is convenient to establish what research techniques are, since it is possible that some confusion arises with methodology. First, it is important to mention that for each research modality, there is an applicable methodology, a specific method and one or several specific research techniques that will culminate in its development and in the outcome of the researched problem, in education it is not different.

The research must follow several steps, from the envisioning, its elaboration, its planning, its execution and exposition of the results. It is in these phases that in the realization it is essential to use the systematized knowledge to reach the objectives, using creativity, imagination and critical aspects inherent to science.

To do so, it is necessary to master, or more precisely, to possess the necessary and pertinent knowledge of the types of research, their classifications, techniques and forms of material collection, structure of the scientific work, as well as other important elements for the study to be consistent. as a scientific study.

The education researcher must carry out the scientific work in an efficient and useful way so that his reflections are not questioned

due to the inadequate choice of a certain technique used.

In Knechtel's (2014) analysis, scientific research can follow various techniques. Among them are:

- a) Bibliographic research. This translates into a systematic study developed through written, recorded or filmed material, accessible to the general public;
- b) Field research. It is seen that in this technique it is the investigation that collects data *in loco*, in which information is sought about a certain object, in order to compare the collected data with the theoretical reference on the data.
- c) Documentary research. In this, the focus of the study is given based on documents, whose content is obtained from records that can serve as an object for the researcher to find ways before what was documented;
- d) Experimental research. Here we have the reproduction of experiments in a controlled way of a fact or phenomenon, with this, the objective is to discover the factors that produce it or that are produced by it.
- e) Participant research. This is the type of research that sometimes involves the researcher. It has a social nature, which can involve different people from society to analyze their own reality; in education it is widely used, since it is an educational activity and social action, as it involves the community and the interaction with it.
- f) Action research. Here, more than one researcher is involved, usually from different areas, with the aim of finding answers to the problem. With this, it is possible to obtain several solutions to the same problem.
- g) Case study. In this type of research, the aim is to detail and deepen a specific

case that has already happened or has been observed *in loco*. Hence, we seek in theoretical sources to find answers to the problem contained in the case.

For Lakatos and Marconi (2009, p. 176), "research techniques are based on a set of precepts or processes used by a science or art; it is the ability to use these precepts or norms, the practical part. Every science uses innumerable techniques in the attainment of its purposes.

It is seen that the research techniques have a specific nomenclature in their content, as well as the reflection and use of the general guiding criteria that will be used by the researcher based on the problem to be investigated, so that the understandings, inquiries are expressed accordingly. with the theoretical and practical knowledge inherent to scientific research.

In Education, when using any of them, it is necessary to be precise, exhaustive and clear, since when using them it is important to have a schedule so as to avoid running over phases inherent to each of the techniques inscribed in a certain methodology, to which inserted Full name.

## **THE METHOD AND METHODOLOGY IN TEACHING PRACTICE AND THE FIELD OF TRANSFORMATIONS IN LEARNING**

The topic of learning has been the subject of discussion at the present time, due to the paths built in theories, fundamentals and learning factors as delineating points of the structure of the formation of subjects in the journey of knowledge. For the present doctoral research, the focus was on learning related to the intrapersonal field. There are related studies by Rosman (2006); Betancourt (2006); Goleman (2000, 2006), Gardner (1993).

For the present research, based on the ideas

of Rosman (2006) and Betancourt (2006), the study was used to relate the classroom environment within the training process. In another turn, Goleman (2000, 2006 and 2007) and Gardner (1993) are for the intrapersonal field, where they work on points related to self-confidence, flexibility, self-control and perseverance in everyday life.

Establishing points for the subjects' awareness of the complexity of teaching, learning and evaluation acts are necessary elements for the viability of academic performance, as these actions imply the enhancement of quality and, at the same time, the observation of the evaluation process of academics as a delineating point of the thermometer inscribed in the assessment.

Still, the student needs to become aware of the need to produce a relationship and intertwining between thinking-feeling-acting in the face of varied situations that he will experience in his daily professional activities. Hence, the importance of the role of the mediating teacher in academic training, given the complex thinking of their students.

The teacher, when covering contents from Psychology, such as yoic functions, whose effect is directed to the best adaptation to reality, where the real dynamics works with the predominance of one over the other, in an alternating way, walks to a process of cognition that can take the student in its entirety, see (FUNIBER, 2016, p. 62):

“a) Basic functions: directed towards the outside world, others and aspects of oneself. Perception, attention, concentration, memory, anticipation (planning of action), exploration (trial and detour), execution, control and coordination of action.

b) Defensive functions: aimed at neutralizing anxieties through different ways of handling conflicts created between reality conditions, impulses and prohibitions. These functions (dissociation, denial, repression and impediment) act on the previous (basic) ones

and frequently interfere with them. In turn, these interfere with the first, perceptions and memories can be repressed if these are very painful.

c) Integrating, synthetic or organizing functions: allow to maintain, through a great variety of conducts, a cohesion, organization in the face of the ambiguities or contradictions of the human being. The syntheses consist of, for example, effectively articulating contact with one's own desire and rational control over the actual conditions for satisfying desire. The presence of these functions is crucial for learning, in which, on a constant basis, experiences relating to previous failure must be synthesized, along with motivation, frustration and new practical information.”

The voic functions in learning can be well conducted in situations that involve memory, attention and concentration to study and fix concepts and knowledge. Here, we have such a relevant point that waiting can, for example, collide with frustration tolerance, as it is not always possible to fully exercise them.

The task of the mediator teacher in the face of these approaches is located in the pursuit of realizing, updating and deepening the psychological knowledge of teachers, in view of what is presented in the academic world. These contents that are linked to the pedagogical and didactic from a systemic-complex perspective need to be in the field of learning and experimenting.

The teacher, as a transforming agent of reality, together with the student, is embedded in the environment in constant transformation. Creativity becomes the driving element that will shape the circumstances of people's and society's lives. The subjects, each day that passes, find themselves questioned by the natural, cultural and social values of a globalized and complex world.

This conformation, as mentioned by S. de La Torre (2006, pp. 312), has its sense increasingly present in an integrative way



in educational training, as the educational dynamics must be located in four intersecting directions: Person-Environment and Process-Result, assuming its meaning as follows:

“ These concepts from the educational field intersect with concepts from creativity as indicators, pedagogical or mediational theories of creativity; the processes of learning, problem

solving and decision-making related to the creative processes; the constraints, stimuli and blocks arising from the bureaucratic structures of the administration, from professionalism based on content rather than processes and competences; teacher-student relationships; innovative programs and projects, and of course the criteria for evaluation and diagnosis of creativity” (p. 312).

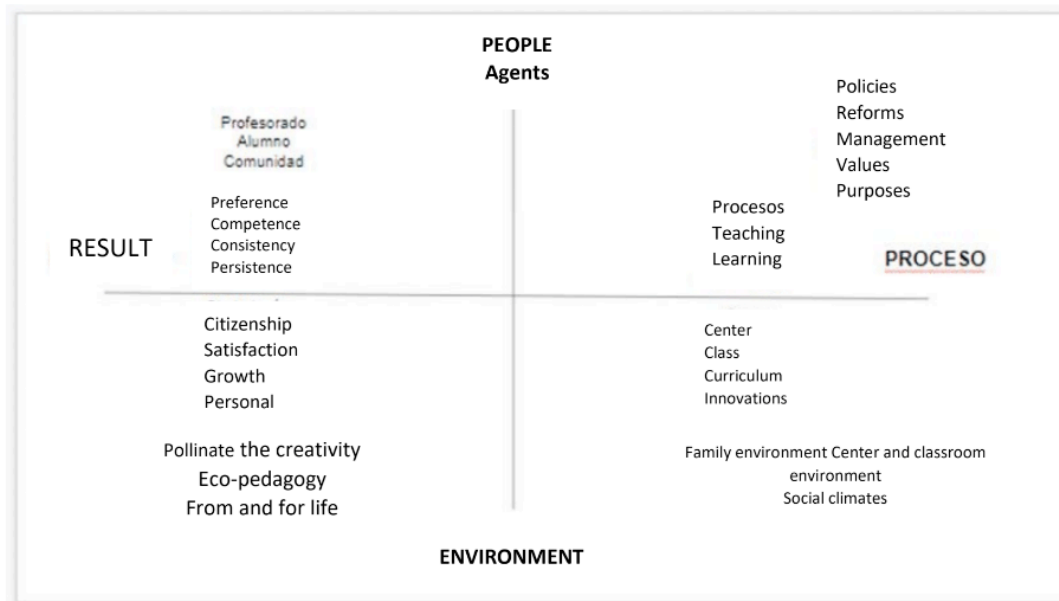


Figure 1 - The Four Directions of educational dynamics in education.

Source: S. de La Torre (2006, p. 312)

Thus, for the teacher, it is necessary to understand that academic performance depends on personal, academic, socioeconomic, psychosocial and institutional problems (FUNIBER, 2016, p. 62).

At this point, it is seen that by understanding it as a complex process, it is emerged in a complexity of multiple variables and certainly there is no model that can describe it with precision and certainty, so that the student can base himself and find in school activity, only the certainty of success.

In the view of Córdoba (2001), the student needs to have a high motivation to conquer, associated with a positive self-concept, the vision focused on establishing clear objectives

and behaving positively towards the study.

López, H., & Torres, D. (2018, pp.28-39) when researching the psychosocial characteristics of first-semester students at a private university, in the faculty of education, in Colombia, through a descriptive qualitative research, with 828 new students, starting in 2016, found relevant results on the panorama of psychosocial vulnerability that could be influencing school dropout rates.

“In the socioeconomic factors, low family economic resources, low employment and low support in grants were evident. Learning difficulties such as attention, memory or concentration were identified, as well as depressive tendencies, anxiety and family and peer difficulties. The results reflect a

*high vulnerability in the studied group from the economic, mental health, academic and emotional dimensions, since it is important to establish inter-institutional agreements and local support networks, which sponsor comprehensive intervention processes.”* (pp.28-39).

The research based on the aforementioned authors aimed to analyze the students' psychosocial profile in terms of sociodemographic, health, recreational, academic-vocational and emotional dimensions.

It is expressed in the result of the research presented by López, H., & Torres, D. (2018, pp.28-39), that the student is exposed mainly to factors that cause university dropout: external factors, internal to the university and intrinsic to the student.

In the investigation of these researchers, external factors were correlated with completeness between the different levels of primary and secondary education, as well as low academic level in secondary education, whose content establishes competences in basic areas; The interns were associated with the wrong curriculum, overpopulation, deficit in the teaching staff, lack of help for students, inadequate planning and scarce resources, as well as insufficient statistical information; finally, those intrinsic to the student, these are related to psychological development, personality profile, socio-structural mobility, behavioral change and inappropriate decision-making for the chosen career in relation to qualities and skills.

It can be seen that the investigation carried out by López, H., & Torres, D. (2018, pp.28-39) was based on studies by (Salcedo, 2010; 2020; Barrero Rivera, 2015; Bresó, Grau, Llorens, Martínez & Salanova, 2005; 2015) with regard to the affectation on psychological well-being and academic performance, as intrinsic factors that can lead to university dropout.

The doctoral research, despite not having a

direct focus on university dropouts, however, walked in the state of consciousness of the subjects in the face of learning, it is seen that as for the subjects, despite not giving up the course, in the face of their difficulties, it continues in the course without due effort, as pointed out by Córdoba (2001) without what refers to the high motivation of achievement, associated with a positive self-concept, the vision aimed at establishing clear objectives and behaving positively towards the study.

The relevance of the teacher acting as a mediator lies in identifying these difficulties in students and immediately working on the correlation between the intrapersonal problems faced and directing them to the appropriate professionals, such as psychologists, psychoanalysts, course coordinators, career counselors, and others related.

Here it is clear that the teacher must hold a complex set of knowledge, skills and competences related to a set of attitudes linked to the learning process, that is, to the applicable method and methodology, precisely to be able to indicate to the student the best path during the learning process. training, so that he can fully develop himself.

At the first signs of learning difficulties associated with attention, memory or concentration, adaptation and communication may mean problems related to the intrapersonal field, and it is up to the professor and the Higher Education Institution to outline mediational strategies that aim to favor the construction of a higher education course with quality, since the first semester of academic training.

These are points that take learning to a different level, because when there are integrative functions based on thinking-acting-thinking, students understand their own ignorance and begin to dedicate themselves with more precision of meaning

to a certain theme, precisely because of the teacher being imbued with knowledge and making use of the method and methodology in teaching practice, in the field of transformations in learning.

When faced with a scientific investigation, there is a search for knowledge focused on research with a methodological basis, where facts and phenomena must be analyzed in order to discover causes and effects and, in the end, find the law that governs the respective phenomena. Thus, for the method, there are the fields of analysis associated with the research categories, which in practice is usually seen with several lenses, for analysis of reality, for this there is demonstration or experimentation.

In learning, to a certain degree, there are highlighted ways of detaining content so that the set of knowledge used is capable of leading the student to the successful training process, based on the potential instilled in each individual, based on the experiences acquired, based on reflection and exhaustive study of the scientific literature. With these first paths, the subject returns to finding the answers to the problems experienced day by day.

## **SCIENCE AND ITS PRACTICE AS INSEPARABLE AMALGAMATING ELEMENTS**

It is relevant for the Higher Education Institution to be prepared and in line with the methods, methodology and teaching techniques that are in accordance with the needs of the students, in view of the learning difficulties that arise throughout the academic training, so that the conjunction student-student, student-teacher and professor-teacher are in line with what the job market needs.

In this sense, it is seen that contemporary society walks in a process of advancement and complexity that is so excessive that the teacher

must seek not only in updating knowledge, knowledge, but in the way of transforming this knowledge into a mechanism that can transport the student to encourage the construction and deconstruction of thinking.

About this, it cannot be said that there is a social order that reacts to the point of discouraging the development of learning, which is still fragmented and linked to the decontextualization of teacher training, despite being contained in the academies. As well noted by Angel I. Pérez Gómez (2010).

Today, the teacher must not only hold a set of knowledge and skills related to practice, but also intricately seek contextualization, interdisciplinarity and transdisciplinarity, since the student lives in his environment a moment that is too exacerbated and fast in all aspects.

Another influential point is the social complexity, both experienced by the teacher and the student, both have to deal with it, sometimes in different ways, but the meaning is the same: they are seeking common knowledge. Therein lies education and training as a relevant factor in the construction of the social order.

Thus, as a driving element, the permanent updating of the professor must last throughout the academic and scientific life and this must be taken to the student as a trajectory of constant improvement. In this regard, evidence of identifying skills and abilities aimed at knowing how to involve students in their learning is important, and at the same time, use technologies so that critical and creative aspects take place in the classroom. However, that this does not only bring meaning to that moment, but that a reflection is established and from it there is a transformation for the students' entire lives.

In this space, there is the importance of using a method or methodology, with the respective techniques, by the professor,

whose application alerts the student about the professional career, as a way of leading him to understand the process of elaboration of an awareness, seen in terms of excellence in training, as the main model for building critical thinking.

In this regard, the importance of social and emotional learning must be understood as a preponderant way to acquire knowledge. It is knowing that it is extremely relevant for the subjects involved in the training process, the detention of awareness of the positive and negative factors involved in learning by both (teacher and student), behold, knowledge leads to reflection, because creativity and Emotional balance must be the main motto to be pursued, to the point of rethinking the path of learning every day.

In this case, given the difficulties and complexities in learning, the school is still the space for building learning to learn, thinking, acting and discovering the subjects' various abilities and skills, linked to the knowledge necessary to understand the world.

Therefore, it is necessary to emphasize that for the set of knowledge used to be able to conclude cases or practical problems, based on the knowledge acquired, based on reflection and on the exhaustive study of the scientific literature, it is relevant to lead the student to the state of consciousness of its limits and capabilities, in order to find answers that are satisfactory.

## RESULTS

In the research mentioned above, after the brief review of the methodological literature, when the researcher in education seeks to follow the appropriate and procedural steps of a research, he must find in them the most consistent results of the research problem, as he turns to the construction of tools that can help the academic community in building a more accurate scientific and critical thinking,

with answers to pretensions or propositions that can contribute to the educational sector, with regard to academic progress and its reflections in the student's life.

## FINAL CONSIDERATIONS

In view of what was presented in the discussion of the present theme, it is possible to perceive that knowledge presupposes the use of scientific methods and techniques. In education, it is essential to use the method, methodology and respective techniques, in an interrelated and necessarily intertwined way, since it is in education that the paths for the development of the various perspectives for the world and things that compose it are transmitted.

When defining a research theme or a dialogue on a certain subject, one must immediately choose which method the research will be carried out, which methodology will be used and which techniques are necessary to find the answer(s) to the researched problem.

The concatenation of the theoretical field with the practical requires care with the epistemological, epistemological and methodological fields, precisely so that there are criteria specific to science and these find in the reality of the subjects the source of improvement of the subject as a human being.

Knowledge requires a direct or indirect position on the meaning and origin of any phenomenon, as it demands analyzes and value judgments, as well as for the writing of what was analyzed to be carried out, with this, one must walk in the processes inherent to science, in its most primordial sense the word and the elements that compose it.

Thus, it is from the method, the applied methodology and the techniques used that one must aspire and find ways to build tools that can contribute to the advancement of education and its practices.

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