


**ABOUT PRAXIS: HOW EXPERIENCE BUILDS THEORY**

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**SUMMARY**

This article addresses the theme of praxis, aiming to clarify how, through experience, theory is constructed. The objective is to provide a broad, systemic and pragmatic approach to a subject that needs deep and articulated discussions, clarifying that this is a topic that is much talked about and very little studied. Its scientific relevance lies in the fact that it awakens interest in valuing experience as a directional method for building and consolidating knowledge and creativity. Its empirical relevance lies in the fact that praxis can only be understood, in its broadest dimensions, if the phenomena are observed, described and reproduced (when possible) in whole or in part, leading to the integration between practice and theory. The methodology used was bibliographical research, discussed at length by the authors until an understanding of the theme and its empirical application to the learning and teaching processes was reached. The text is based on the thinking of Aristotle, Comenius, Kant, Vygotsky, Dau and Dau, Souza and Cançali, Diel and, on the experience of the authors in acting as teachers at various levels of teaching. The conclusions reached were that praxis returns to the spectrum of academic discussion, based on the systematization of the study of classical Greek, Hellenic thought. Praxis will contribute to the expansion of intelligence, in which it should be understood as the empirical result of the intellect applied to problem situations, where the synthesis presents itself as a problematization, an answer or a solving action of the problem posed to the scholar: this process can be summarized in the concept of creativity. Therefore, the answers that scholars obtain to the problems raised by society are transformed into learning that will remain in the future, since they are based on rigorous, very well-structured criticism.

**Keywords:** Praxis; Experience; Knowledge; Intelligence; Creativity.

## PROLOGUE

In this article, at first, we will approach the concept of praxis in general, as it is used by Science; then we will discuss the use of concepts by education scientists and, further on, there will be an explanation of the concept of praxis, on condition that it demonstrates its broader usefulness in learning and teaching processes, having experience as its leitmotif .

What must be admitted as a starting point is that understanding the meaning of the term *praxis* is already, by itself, quite complex, because it is not enough to assume its definition, directly, as a practice, a work that is aimed at understanding. of the moral, intellectual and pragmatic processes of a society; as well as we cannot relate it to a certain profession, so that it can be placed as a starting point, or end point, with regard to its understanding and empirical applicability. It is necessary to seek an epistemic and pragmatic understanding for this concept; for this reason, in this article we will start from the concept that the term *praxis* should be understood as a relation of reciprocity and simultaneity between theory and practice.

Taking this definition, as a *leitmotif* , for a broader discussion, we can conceive that each profession will have its particular praxis; which will give rise to a *sui generis set* of categorizations, principles and definitions about its particular dimension, which we must address in a well-defined scientific context.

In the case of a practical action, praxis must be interpreted and synthesized, within the scope of education , as “the practical knowledge of how to perform a task. It is [still] often understood as tacit knowledge, meaning that it is difficult to transfer to another person by written or verbal means. When you manage to bring both together in a single individual, the process of consolidating theoretical competence and technical competence, or teaching practice, is achieved” ( CANIÇALI and SOUZA, 2019, p. 74).

The human being is, *par excellence* , a being of praxis and this is not only proven by his actions linked to his act of thinking about the action before executing it, but also the improvement based on value judgment and development of his knowledge. Marx stated in his work Capital that “a spider performs operations similar to those of the artisan, and the bee surpasses more than an architect in building its hive. What distinguishes the worst architect from the best bee is that he figures his construction in his mind before turning it into reality” (MARX, 1975, p. 202).

In this way, the individual goes far beyond executing a simple abstract action of thinking about what he will do; he consults books, magazines and other theoretical materials that keep

in their pages the knowledge of authors and professionals from other times about what he plans to produce ; so that his thinking is by no means purely abstract; it is a practical construction resulting from an idea arising from a mechanical excitation external to it, but that such condition is due to direct contact with it.

Another detail that must be considered, regarding all this, is that it is not only the practice, understood as a purely mechanical action, that leads to the execution of the proposed task; she also needs reflection on how to act and raise the potential of her work until it becomes a material good, or not, and that can be expressed, through the intellect, with fluent control.

One of the first authors who were concerned with showing the importance of praxis was Aristotle ( 799-737 before Hypatia ); however, many thinkers take their thinking out of context and without applying a deep hermeneutic to it, which makes them reach hasty conclusions and without causal connection. The Stagirite stated that, “the things we have to learn before concretizing, we learn them by doing them — vg, men become builders by building, and they become harpsichordists playing the zither” (ARISTÓTELES, 2006, p. 36).

In this epigraph, Aristotle already emphasizes the need for human technical training to be based on the relationship of reciprocity and simultaneity between theory and practice, because in this way the individual would be able to learn the rudiments of technique and apply them to objective reality and in surrounding; and, what he confronted with his knowledge, he could seek explanations and mechanisms of understanding in the texts of authors who deal with the subject and carry out experiments again, to reach an understanding of the process.

Therefore, the philosopher's statement cannot be understood coldly, as if the simple execution of the task made the actor a master of the subject. Far beyond this, it is necessary to abstract about what you practice, looking for nuances and exceptions until you can interpret the action you practice and develop your intellect and skills towards your maximum potential.

Anything outside this space of evaluation of what is learned, through teaching, reading, its subsequent application in the field of empirical activity and the subsequent confrontation in the sense of validating or refuting this knowledge, that is, without a dynamic process of learning and learning based on practice, what we have, as a result, is a mere repetition of instinctive actions and not based on experience in its strict sense; which, by extension, eliminates any presumption of praxis and becomes a mere mimetic practice on something.

Praxis is something complex, because it involves a direct relationship between what is learned, both through experience and through reading, and its application to practice itself and reflection on this practice (theory); which can result in conflicts, many of them

incomprehensible to the student, still unwary, who does not understand that, by the simple fact that something does not fit, strictly, what is written, the theory, it can be judged and interpreted as being false.

Its broader and more dynamic understanding presumes to know the pragmatic and epistemological dimensions of each object, which it focuses on and this implies knowing the variables that affect it, while determining its behavior in time and space, particularly and singularly.

Taking Aristotle's thought, exposed above, speech, vision and hearing are natural human characteristics with which men are already endowed with them; however, there is still an empirical need to improve these conditions, which is defined as learning.

The ability to develop the senses is innate to human beings; however, if there is no one with whom he can talk and/or who encourages such a condition, the individual will grow up without even knowing how to speak anything.

So it is with hearing and sight in which one can see and hear. But, without the epistemic process of process relations - such as the indication of what each sound is, or the determination of objects through a nomenclature, elaborated in advance, forming a taxonomic scope - , it would be as if the individual heard a tangle of unconnected sounds and observe a set of things, for which he has no determination and, when touching any object, he would not know how to name it.

Taking Aristotle's thought, in isolation, outside the scope of an empirical observation of phenomena, without contextualizing the direction of his expression, is to run the fatal risk of defending a certain knowledge without any causal connection. He, in fact, stated that repetition is the mother of learning, but his thinking in the face of this statement is focused on duty and the formation of ethics, not on cognition with a view to learning parameters of scientific concepts and doctrines.

Scientific experiments conducted with monkeys and humans, including experienced basketball players, proved that when a certain action is repeated, for example, throwing the ball into the basket, at a certain point in the task, all participants begin to reduce the number of correct answers. This is explained by the fact that the brain is an optimized structure and has a chain of direction of its actions and the thought follows on a determined action for a determined time: namely the time that lasts the human attention in focus on a determined object or practice, which is 90 seconds for each year of life, reaching a maximum time of 25 to 30 minutes in

adulthood. This requires directing attention, at each time cycle, so that the focus can be maintained on the actions that matter.

Even so, repetition can be a preponderant factor in human existence and learning conditions; however, it must follow technical criteria: as each time a certain activity is carried out, it is placed under conditions of severe criticism, a condition understood in the precept of Kantian thought, whose pragmatic sense refers to a secular, open, public question, addressed to a specific target object, where its presentation does not oblige the respondent to give an objective answer, or a justification about the directed inference. Its intent is that consciousness and intellect expand, to build new ways of clarifying the issues that cross, directly and indirectly, existence.

Immanuel Kant (2002) argues that human beings need instruction to develop and, even to achieve their intellectual objects, they will also need concepts that can determine them. This is necessary, because the didactic transposition only becomes possible when the elements that determine the object under study are clarified, that is, this act of making it comprehensible, from the expansion of its characteristics and its epistemic dimensions is the which contributes to the reduction of resistance: considering that Freud (1856–1939) already warned about the fact that the student resists learning and responsibility. However, what the Vienna Master lacked was to expand his thinking and make it more enlightening, ensuring that this condition comes, especially, from the difficulty of understanding and comprehending the objects that are placed. He himself will say that it is human nature to transform what is not understood into a falsehood.

It is in this sense that the essential action of working with broad and clear concepts about the objects on which it focuses with the purpose of investigative, didactic and pedagogical studies comes into play. This clarification is one of the conditions inherent to the didactic-pedagogical praxis, in which learning and teaching are predominant activities, with a view to forming useful knowledge for the development of the individual.

Dau and Dau (2013, p. 45) clarify that “the relevance of using [concepts], by scientists, is in an attempt to reduce, to the minimum possible, the variation of the meanings of the word used, so that one can communicate a thought, which may be intelligible to the greatest possible number of members of the Academy.”

Based on what has been exposed, we are in a position to approach our theme within the scope of Pedagogy: the pedagogical work, when well conducted and well oriented, is configured as a preamble to the satisfactory didactic performance of teachers and students. This

requires background knowledge about the object of study, especially about its psychology, how it behaves in certain stages of epistemological formation and what responses to expect, once induced in the cognitive direction. This condition, in particular, may be the most complex, requiring from the participants of the action a higher load of scientific domain and greater preparation for the interpretation of the results demonstrated by the empirical action undertaken.

In this, if you have to, the answer reached can differ, and much, from what was expected, or not; and, in both cases, the individuals who take care of analyzing and interpreting these (supposed) direct results must be imbued with an investigative spirit, in order to obtain explanations about the observed phenomena, only after having empirical proof of the facts.

Very common, in situations of divergence regarding the results of experiments that, as far as they are concerned, led to hypotheses about the target object of study, for scientists to present justifications, sometimes bizarre, instead of showing the results of their experiments: from these they should reach plausible explanations that would invariably lead to broader and deeper investigations. Therefore, it would have the intention of bringing scholars closer to a possible clarification of the phenomena on the empirical situations studied, considering that in Science, we first experiment, only to then theorize.

Once the concept of a given object of study has been clarified, there is, as a natural consequence, the need for it to be systematized, meaning that it becomes a paradigm, because this *sui generis* condition “forces scientists to investigate *some* portion of nature with a depth and in such detail that would otherwise be unimaginable” ( KHUN , 1979, p. 44).

A concept obeys a semantic precept and, in the act of elaborating it, occurs from the experimentation of several objects, which will provide the elaboration of the concept; it is through this that a certain group of scientists adopt it as the foundation for their searches. This presupposes a contextualized study that was experimented with, parallel to the development and, possibly, even before presenting any results to the scientific community and society. Otherwise, there may be an interpretative conflict, arising from the linguistic interpretation of the object and until the misunderstanding is resolved, there may be a witch hunt, or even a denial of relevant work in the name of the ego. , or from fear of public execration.

They are the concepts that guide the scientist in the world of scientific research, indicating which characteristics are important in the study of a specific object and which objects should be studied and how the study of the problems raised should be carried out. This allows greater security in the formulation of hypotheses and in the description of the conclusions presented at the end of the work. For this reason, the definition of concepts is presented as a

fundamental element in scientific discussion, since the one who affirms and the one who asks must have a clear understanding of the meaning of the applied concept (DAU and DAU, 2013).

This transparency regarding the semantic meaning of the object in question increases security for those who read the final work, as it avoids digressions and misinterpretations, creating concepts from abstractions devoid of any causal connection with the objective reality submitted to the condition of experience. . In this sense, “the systematization of a concept has the direct objective of avoiding inhospitable digression, empty of epistemological sense that in the end translates into scientific folly, which takes no one anywhere. The more transparent the concept, the greater the possibilities of understanding the object and the better the possibilities of handling the tools related to it. All of this expands the conditions for dialogue and applicability to technical teaching-learning processes as a categorical procedure” ( CANIÇALI and SOUZA, 2019, p. 19).

The authors, mentioned above, continue their explanation stating that all previous care in the research and selection of terms must be undertaken by those who decide to build a scientific research project, and the same warning can be extended to those who intend to be masters, because the It is not a question of limiting professional suitability to a branch of knowledge, but to a whole process of formation of the academic personological structure . Thus, “the main characteristic of the concept is the identification of the central elements of what is studied; Furthermore, it must be said that a concept does not refer to an individual, to a single case, to a phenomenon, but [makes reference] to classes, groups, relationships, etc. we can claim to be a word that has the following characteristics: universality (its meaning is valid according to the interests of scientists); necessity (it must be understood by all equally) objectivity (its meaning does not depend on the individual preferences of the one who presents it)” ( DAU and DAU , 2013, p. 45).

After this brief detour, where the relevance of the concept for scientific investigation was expressed, we must return to our central point: everyday pedagogical praxis. It can be said that everything that is valid for her is valid for didactic processes; one of the most relevant factors is the link between what is taught and the reality that surrounds the individual and even with their experiences and theories, since we are talking about a relationship of reciprocity and simultaneity between knowing and doing. And, more, between the first and the know-how, a situation that can be taken further when knowing how to teach is advocated as well as having authority such that one can issue value judgments and opinions on the practice of others. Hence, it is inferred that knowledge about the concepts becomes extremely necessary so that the

attributed judgment does not prove to be wrong, harming both the author and the receiver of the action itself.

It can be inferred from this speech that the professional who prepares himself for a scientific work (of any nature) must understand the dimensions required for his performance to be suitable and that, with this, the results when put into analysis demonstrate the quality that is makes *mister* in the planned scope. Teaching is based on a method and, in addition to this, the student must be aware and aware that everything that is being put to him is a very small portion of everything that exists; hence the duty of every teacher to be rigorous, in a didactic way, in his/her praxis in terms of exploring the deeper fields of technique and the discipline on which he works.

The more he strives to know the epistemological details, the target object of his practice, the closer he gets to becoming a profound expert on the subject, in which even if he says he does not have control over a certain branch, this does not jeopardize the dimension of its scientific category.

In a historical moment like the current one, in which all education professionals are required to have technical, didactic and pedagogical competence, there is a conflict that is difficult to understand: this concerns the ignorance, on the part of some scientists, of the concepts relating to the elements adopted as guidelines for practical action, as if this were a mere theoretical whim, a thought that translates as unnecessary.

This point is relevant, because the didactic-pedagogical praxis reveals itself as a complex relationship between theory and practice; by extension, it implies the need to have knowledge related to the topic of study in depth, while one must know how to deal with the experiences that happen, showing up as challenges that demand almost immediate solutions.

All knowledge is based on experience and, outside of this, this epistemic validation and which, simultaneously, functions as a refutation, what we have is nothing more than conjectures and hypotheses without much didactic value. And, what is found in the meantime is a condition without much security about the knowledge that someone expresses, producing, as a direct and immediate consequence, a mediocre type of teaching, resulting in empty learning of epistemological sense.

Such behaviors give rise to pseudo concepts, which create insoluble enigmas; this happens because a considerable part of scientists do not have enough knowledge to carry out empirical research studies and unravel the phenomena; thus, they prefer to say that such are



incomprehensible situations, when they are nothing more than situations not understood, because not tested by effective scientific methods and in an adequate way.

Under no circumstances can it be advanced that, through practical, well-designed and well-conducted experiments, it will be possible to reach the level of knowledge about the causes and effects of the elements in question. What arises is that, using the performance of reliable experiments, there are possibilities of approaching scientific knowledge, proven by experiments and validated by Logic. Absent this principle of investigation, what we have, roughly speaking, is nothing more than a validation of common sense knowledge through a scientific program (thus described), which involves a whole apparatus of content producers, publishers, universities, teachers and scientists in general.

The immediate consequence of this spurious union is the achievement of a superficially generalist knowledge, which is presented as rigorous Science.

A logical understanding of the phenomenon begins with its observation, in a second moment a theory is elaborated which must be shared with its *fellows* in the Academy, so that they can analyze the results achieved, finally, in a third stage it searches the literature for answers to such situations; however, this is not enough to satisfy the human curiosity that ends up being dominated by doubt and the eagerness to find new answers that make it possible, at least, to approach a broader and deeper clarity about what happened. According to Rousseau (2009, p. 375) this occurs among humans because “doubt about the things we care to know is too violent a state for the human spirit; he does not last long in this state; ends up deciding one way or another and would rather deceive himself than not believe in anything.” In the wake of this attitude, he creates for himself and disseminates the most bizarre explanations about the maximum of things he observes and does not understand.

Thus, praxis provides this link between knowledge and its application to objective reality, which is taken as an intrinsic and extrinsic object of study, because it starts from experience, from empirical observation, and only then tries to explain the facts in the most transparent way. possible and even reproduce the phenomena in the laboratory.

## **THE CONCEPT OF PRACTICE**

The concept of praxis is an equivocal term, both within the semantic and epistemic fields, because it cannot be translated, in a simple way, as *practice*, much less be interpreted in this way. This is because it is located at a turning point that unites theoretical knowledge,

learned and apprehended in school and academic training, as well as through readings, or even via the result of empirical, planned and/or occasional experience.

Thinking in terms of Greek parameters, “Praxis is a strictly broad concept, because it is inserted in an environment that involves practice and theory, representing not a mere isolated action of each category, but joint actions, which produce a relationship of reciprocity and simultaneity between theory and practice. What is really most interesting is that it only happens within the scope of empirical work, which gives it a broadly scientific and reliable character, because it can be, above all, observed, measured, quantified, analyzed, understood and interpreted” ( CANIÇALI and SOUZA, 2019, p. 87).

From the moment that praxis is thought of as a constituent element of complex human activity, requiring knowledge based on two existential fields, it ceases, automatically, to be any action. Therefore, it becomes an object of scientific interest, requiring a framework based on an epistemological concept that demonstrates the dimension, at least approximate, of what, in fact, the object is.

In Greece, the word praxis simply meant practice, due to the fact that the Greeks did not know this modern dichotomy between theoretical thinking and practical action in the field of didactics. When a young person decided to become an apprentice to a master, he went to his studio and all his technical training took place through a process in which he was guided about his work and how to perform it. However, the young man did not go through a period of learning about laws and rules that related to the functioning of what he studied. However, this wonderful culture was affected by perfidy, which threw it on the threshold of mediocrity, originating our current culture: the authors of this decadence were Socrates and Plato.

The priest Sócrates, in a fit of pedantry, was responsible for casting doubts on this format of didactic action adopted in the Polis of Athens; we can verify this destruction through the priest Plato and his monologues (dubbed, in modernity, dialogues), in which he demands from the masters a didactic attitude of teaching and mastery of the teaching technique, which did not exist at the time.

In that world, an aspiring sculptor arrived at his future master's workshop to be an apprentice in this category and his aptitude exam was carried out based on his natural ability to do so.

He was given a stone and a sentence: behold, trapped within this stone, a human creature! Free her! The candidate, at the end of his exam, had not carved a representation of something that could be identified as a woman in the marble, he had removed the material that

prevented the appreciation of his beauty by the citizens. Even the technical training of the Greek man was put at the service of the Polis and the adopted didactics followed the same principle. The artist, regardless of his technical performance, received the revelation of Apollo, patron god of harmonic beauty, who was admiration and applied this direction, this divine clarification to the target object of his work action.

Later, JA Comenius (1592–1670) would scathingly criticize this dichotomous separation that befell the pedagogical techniques of teaching and learning. He alleges that young people who dedicate themselves to learning crafts in academies, even after more than 20 (twenty) years have passed, they still do not reach mastery of the studied techniques and those young people who go to the workshops, in order to act as direct apprentices of the artists, in a short time they already reach differential artistic capacity expressed in the development of their works ( COMENIUS, 1957).

This problem arises because under the pedagogical regime advocated by the priests Socrates and Plato, later synthesized by the priests of the Middle Ages and transmitted to all Latin societies, knowledge is something that the individual is born with ready-made. Consequently, under this bias of understanding, it is enough for the Enlightened Master to remember, through rhetoric or oratory, and all that knowledge returns to conscious thought. After all this, assessments are applied to certify that the content taught has been fixed in the conscious memory and, once this is defined, the student is ready for the experience with the object.

However, this is not quite how things work in the world of didactics: direct contact with the target object of work, made possible by experience, produces sensations and doubts that are resolved directly by the mentor during the didactic exposition; this would be praxis in its literally classical Greek form of expression.

Before entering the study, in a systematic way, the student needs to know, clearly, what a scientific question is, which can bring in itself a didactic, pedagogical question or a social problem. No matter what the dimension of the problem posed by society to the researcher, what matters is that everyone expects an answer of an objective nature and, unlike what is thought and, as a rule, is used to interpreting, the collective does not always expect a solution. .

Thus, what has been seen are many individuals coming to the public to offer miraculous solutions that, once put into practice, do not meet the created desires, causing discredit in scientists, scholars and researchers to only rise, more and more.

Praxis, being a mechanism that links a literal connection between practice and theory, in a direct relationship of reciprocity, is able to achieve a horizontal approximation with the problem that plagues the environment; in this way, it clarifies points that, at first, appear to be more complex and equidistant from understanding. This is because, it will subject the phenomenon to experimentation, to, after having enough data, offer a logical explanation.

As we understand, praxis today is nothing more than a substitute for its realization by the Greeks. The interval between practical experience and verification/refutation through systematic studies based on theories becomes too long, ending up harming the learning and teaching process. This occurs because many issues that arise within the scope of experimentation end up being lost, or undergoing value modifications that alter their formative epistemic directional character.

Taking this argument as a central point, praxis can be understood as the reciprocal and simultaneous relationship between practice and theory, that is, everything that is produced in terms of knowledge, knowledge and products are planned results of a systematic action.

Experiences (seeing, hearing, touching, tasting, smelling, weighing and measuring) and theoretical studies that seek to open new horizons, and even submit thought to the principle of falsifiability, lead the student to a level of mastery over the conclusions. From these conclusions, one can argue about the results with extreme epistemic security, presenting hypotheses that can be configured as future research biases.

When one thinks of praxis as something disconnected from theory, what one has, as a direct result, is the stultification of human thought built from a cultural structure. The whole set of symbols that surround and involve the newborn human being needs to be interpreted for him: at first and, even when he takes a critical position, in adult life, in relation to them. The basic difference is that in adulthood the individual ends up gaining new semantic attributes from them, their ways of understanding them are not disconnected from the generic rudiments that compose them, as artifacts directly linked to a cultural scope. The phylogenetic forms of expression are permeated in such a way in the social fabric that their manifestation occurs through the strangest, most complex and, sometimes, even incomprehensible biases for individuals in everyday life.

Experience will allow this phylogenetic expression to manifest itself, contrary to what happens with theory which, in its application, aims to maintain a directional line on what its applicator considers ideal. Therefore, disregarding that every theory, without any distinction,

obeys an ideological principle, which is determined by the society from which this idea comes. This is determined by social, economic, political circumstances and so on.

There is a very common truism that it is scientists and thinkers who dictate the epistemological rules for society; however, it is this that dictates what these individuals will produce and reproduce as scientific truths (so written). Few manage to stay outside this minefield and, sometimes, end up being recognized late in the History of Thought. This occurs when re-readings are carried out in an attempt to shed some light on the present, which remains incomprehensible, given the proximity to sociological events.

In this regard, it must be clarified that praxis requires the scholar to dare to explore and know the empirical and epistemological reality that surrounds him and that determines the material, cognitive and intellectual procedures of his time.

The great secret of a high or low level of intellectuality does not lie in the positive or negative discussion of complex subjects of high scientific status. He finds himself in the negation of such debates: by extension, leading students to surreptitiously accept that what was presented by their mentors is a pacific object to be categorized in human parameters (good, bad, useful, useless, prudish, abject, etc.) and that which is withheld (never even mentioned) simply does not exist (and, if it does, it is so abject as to be unworthy of mention by scholars).

With this, all experiences that manifest themselves, spontaneously, are being hampered and directed to satisfy the ego of academic scientism, leading all knowledge (supposedly of a scientific nature) to be under the aegis of the Academy's paradigm. Therefore, it ceases to be Science to become dogma and, in this way, the knowledge that comes from it becomes a product of pure conventionalism, which in the conception of Diel (1991) is the most base form of destruction of the possibility of intellectual overcoming. human, because it prevents, silently and authoritatively, the search for an understanding of phenomena through experience. The aforementioned author argues that “the banalization [of knowledge], in its most common form, is characterized by the absolute lack of elevation, the constant fall and, consequently, the lowering that, contrary to nervous overtension, is a state of *psychic undertension*” (DIEL, 1991, p. 123).

The advance of human thought towards new hypotheses and discoveries comes with the use of experiences and, once these happen, they are part of the individual or collective fabric, demanding explanations, not justifications; in this way, leading to deeper searches until factual clarification is obtained about the phenomena that occurred and, in some way, experienced: making it very evident that the participants of a given phenomenal occurrence are crossed by

it, not being possible to know, in advance, what interpretations will result from this. Hence the defense that, in science, experiments are first carried out, then theorizing about the results, in an attempt to explain them and make them useful to the greatest possible number of users.

Thus, when the school and the Academy, with all their bureaucratic institutionalization of knowledge, deprive students of unpredictable experiences, the result is the construction of an intellectual eunuch, eternally infantilized: leading them to believe that theories and knowledge, offered by them, are the only possibilities of feasible truths.

Consequently, he cannot think beyond what was stipulated as an epistemic and ideological limit by his master. Worse than that, it has as its determinant the theory and not the experience. Thus, his praxis is the mere repetition of what he learns in books, with no possibility of daring to question more, to discuss with the learning situations that happen to him, spontaneously, during the execution of daily tasks.

Based on all this reasoning, we can state that the development of holistic thinking, based on a didactic-pedagogical praxis, uses various inter, multi and transdisciplinary instruments, all in order to reach the maximum performance in the performance of the teaching and learning function. This working condition is based on valuing the target object of the action, which can be groups ranging from children to adults and, at different academic and scientific levels: for each of these individuals, it is necessary to elaborate epistemic dimensions, determined according to their most particular interests, until the ultimate ends of their unique efforts are understood, so that we can only move on to the elaboration of a theory.

Make it clear that learning, in its strict sense, refers to achieving mastery over some object, in a systematic and pragmatic way, that is, what was internalized in view of the studies (empirical and theoretical) must show a sense of utility. Thus, as a potential solution, for the problems that society poses as a challenge to everyone: if this solution condition is not revealed immediately, at least it can shed a little light on the problems, showing their cracks.

When it comes to the fact that the transfer of this knowledge to other levels is almost impossible, what should be noted is that the way of interpreting the world and things is pertinent to each one and to the peculiar, particular, singular and also collective condition, as its epistemological structure was constructed; what experiences founded or determined the model that applies to individual and collective existence. The more challenged to think about things and their empirical nuances that guide decision-making, the more curious the student will be throughout his life: this series of guiding and instigating questions is called criticism, where

each questioning, carried out intelligently, creatively, there is a new space for viewing what is possible to expand through scientific research and experience.

Praxis, as an object of transmission of knowledge, has a double meaning, in that it allows the master to present what he holds as knowledge to another ; during this process expressing it in technical actions, field tests, laboratory demonstrations, among others and, on the other hand, those who are willing to learn, internalize these moments of practical action. As a result, there is the opportunity to describe, by itself, the results found and the process, that is, understand how the empirical trajectory of what was achieved took place, through intellectual description . Praxis will work as a mechanism for consolidating knowledge, transforming it into knowledge, because by combining experience with theory, both the teacher and the student will be able to have their questions answered and their (initial) doubts resolved. After these studies, both become more able to carry out defenses of their experiences using theories with more categories and epistemological security.

Added to this, the validation of learning, simultaneously, in which it has the possibility of refuting the hypotheses that prove to be fruitless and without any conditions to perfect or improve the didactic work in schools, or to add some condition of improvement of the life of the man in society. Seen in this way, what we have is a working tool, whose breadth and depth focus on the alternative of consolidating pedagogical work, in such a way that it responds to the aspirations of building a technical identity, based on pragmatism and the application of methodological resources.

Once this level of proximity with the object of study is reached, the relationship with it becomes vertical, determined under the principle of power: where the teacher takes control of the situation. As a consequence, he can obtain objective answers to the processes under which he focuses in an attempt to understand the problem situation, clarifying it to the point of being subject to interpretation by the students of the class, since this is the role of a teacher who presents field of didactics.

Praxis is a complex element, because it involves dynamic processes related to experience, knowledge and the act of learning and teaching: ranging from the deepest understanding of the spiral of experience and its operation, passing through the inflection points that make it up to its return. In this, after reaching the apex of individual knowledge, he needs to return to the starting point to know and confront his empirical and epistemological bases, not without first having to be confronted by all the points of validation and refutation that helped

in the definition of his knowledge as something to be placed in a situation of practical and epistemic conflict.

Scientific questioning is always reductionist in nature (as much as it is interested in serving a wider range of individuals), the conclusions presented are always focused on a single direction. They are about a specific object, so when there is any variation of this object, the need for particular inferences arises which, in many cases, does not meet the anxieties set.

When the scholar approaches this stage of scientific research, he must immerse himself in empirical investigation, having as epistemological support the books and treatises already produced: considering that theory represents what once was a practice, which allowed solving problems of great magnificence and to obtain plausible answers to questions of intense complexity.

A scientific questioning imposes on those involved, a condition that demands years of experience, to approach a satisfactory answer; however, the investigator's action on his target object of study makes the deductions appear as mechanisms of expanded responses, hypotheses that will be validated and/or refuted.

It is still possible to think that these responses arising from the experiences will be the object of future studies, if not by himself, by other researchers, considering that fissures in the rigid structure of thought are formed, allowing the construction of new hypotheses and questions about its functioning.

This is the posture expected of a scientist and, contrary to what is perceived, nowadays, a considerable range of them behave as the heralds of common sense. Faced with a challenge, the first answer that comes to their minds is the one they use to explain the phenomenon and, not too late, to use it as a justification.

What is expected of a rigorous scientist is a response to the posed problem and this can even be a categorical I don't know; emphasizing that Freud (1856–1939) stated that only the scientist who is mature and secure in his knowledge is the one who shows himself with enough courage to admit his ignorance in the face of certain phenomena and in this case, it is necessary to return to the object and experience.

The most intriguing thing about scientific phenomena is that they can only be observed and recorded in the midst of practice. This is how it is, because it is necessary to be in action, to be involved in carrying out the activity, to be confronted with situations that challenge understanding and end up forcing the search for knowledge that explains them and not that, in a simplistic and authoritarian way, they justify.



On the other hand, the answers to these phenomenal aspects (which cross human beings during their professional activity) can only be found in their practices. Even if it is argued that empirical research can present solutions and clarifications about the phenomena, a whole primary search starts from the experiences, writings and thoughts of theorists, if not about what happened, but at least in part, something that approaches the situation observed and faced.

Knowledge is consolidated in and through experience. Any other way that one can believe, that it is possible to reach knowledge, is nothing more than an illusion caused by anticipated failure. No rigorous thinker acts as if knowledge were out of reach; in this way, it would be enough for him to use some empirical and epistemic crutches, with the purpose of reaching his objectives in the hope that some wise man or some divine being will enlighten him with knowledge. This type of puerile epistemic action does not fit in the space of scientific configuration where knowledge must be discovered, tested, retested and after found, analyzed, interpreted and synthesized.

If so, what is sought in theory? If it is not knowledge, if not its verification, why sacrifice intense hours of theoretical studies? The answer is that the records record the practices that worked and those that failed for some reason, either because of incompetence or because of a mere elucidative result arising from scientific exploration. Thus, the theory offers foundation and clarification for the scholar, allowing him to find explanations, and not justifications, both for successful procedures and for those that resulted in failure. The experiences must be analyzed, in order to allow scientific conclusions that clarify the phenomena and their occurrences.

When the teacher encourages his student to make this epistemic connection, in which he first listens to his teacher's lecture, the theoretical composition of the theme, and allows himself some time to be able to assimilate what was offered to him, and then let all that settles in your thinking. During this process, he was already in search of authors and theories that would support him in the empirical confrontation of the knowledge presented, what we have, as a direct result, is the intellectual elaboration of what Vygotsky (1896–1934) called superior thoughts, understanding that intelligence must be understood as the empirical result of the intellect applied to problem-situations, where the synthesis presents itself as a problematization, a response or a solving action of the problem posed to the scholar: this process can be summarized in the concept of creativity.

A question that poses a challenge to the teacher is the definition of which teaching method to use in order to be able to dynamically reconcile practice and theory. Here is a

situation for which there is no decisive answer, for the mere fact that each investigation, in particular, is what determines the methodology and not the other way around. In the same way, it is the didactic action, in which certain subjects must be placed as subjects of independent studies, others must be treated in the classroom and there are still those that must be avoided: even under penalty of seeming that they are important for the formation of the student.

What is inferred is that the continuous and dialectical, reciprocal and simultaneous relationship between practice and theory, allows the teacher to create a scientific and in-depth link with his object of study. In such a way that the answers it obtains to the problems raised by society are transformed into lessons learned for the future, since they are based on rigorous, very well-structured criticism.

## **FINAL CONSIDERATIONS**

The learning and teaching process is dynamic and, based on this assumption, one has to follow dialectical principles between doubt, which leads to broad and deep questions, and objective answers, which already makes it clear that these are not simple hypotheses. . Between one and the other are the subjective answers, the categories of formulating hypotheses, which require scientists and students to go deeper and deeper through experience.

Praxis returns to the spectrum of academic discussion, based on the systematization of the study of classical Greek, Hellenic thought. In that, there was no dichotomous differentiation between erudite knowledge and practical knowledge, because only one who mastered his technique could be an artist (poet, musician, painter, architect, craftsman, sculptor, orator, rhetorician): this depended on knowing his most rudimentary principles to the condition that allowed him to achieve excellence in his technique.

What was advocated, throughout this work, was to discuss much more than the *praxis concept* : the objective was to discuss the process of didactic action where experience determines learning and, in the meantime, knowledge about the reasons for phenomenal events is being presented and discussed, empirically and directly, until exhaustion. Thus, the purpose was to build consolidated knowledge under a didactic-pedagogical praxis, understood in the Greco-Athenian molds, as the relationship of reciprocity and simultaneity between practice and theory.

The search for excellence in educational training has long been lost in a rhetorical vacuum, under the nickname of building a critical and participatory student, which resulted in

an individual devoid of knowledge, therefore without the slightest conditions to carry out any sustainable criticism about anything. and who just participates in a train that takes no one anywhere .

The proposal to discuss praxis was part of the interest in reaching what the Greeks wanted, which was the condition of *excellence* . While maintaining their didactic principles based on the understanding that this is the direct result of the practical application of the intellect on problem situations, they became the most advanced civilization of their time. They aimed to solve the problems posed as essential by society and following this model of empirical action, what they produced survived the action of time and the whims of envious people, reaching the present day as models to be adopted.

Thinking about pedagogical praxis is, above all, modeling a learning structure in which student and teacher can have direct access to work processes, instruments and materials. It is these relationships and interrelations that allow direct and indirect intellectual stimuli, producing new results and new questions about the possibilities and potential of the elements in question.

## REFERENCES

ARISTOTLE. *Nicomachean ethics*. São Paulo: Martin Claret, 2006.

CANIÇALI, Mônica Nadja Silva d'Almeida; SOUZA, Sergio Rodrigues de. *The Teaching Place as an epistemological foundation of pedagogical praxis in the ICT Era*. São Paulo: PerSe, 2019.

COMENIUS, John Amos. *Didactic Magna: treatise on the universal art of teaching everything to everyone*. Lisbon: Calouste Gulbenkian Foundation, 1957. [Originally published work in 1657].

DAU, Sandro; DAU, Shirley. *Science : research, methods and norms*. Mutum: Graphic Express, 2013.

DEEL, Paul. *Symbolism in Greek Mythology*. São Paulo: Atton Editorial, 1991. [Originally published 1966].

KANT, IMMANUEL. *Pedagogy*. School of Philosophy - Universidad ARCIS. [1802], 2002. [ Lectures on pedagogy that Kant imparted at the University of Königsberg, and that collected by his disciple FT Rink were published with approval of Kant himself in 1803].

KHUN, Thomas S. *The structure of scientific revolutions*. 5. Ed. São Paulo: Editora Perspectiva, 1998.

MARX, Carl. *The capital*. 3. Ed. Rio de Janeiro: Civilização Brasileira, 1975. Book 1: Chapter V.

POPPER, KR *Conjectures and Refutations* . Brasilia: UNB, 1972.

ROUSSEAU, Jean-Jacques. *Emilio or Education* . São Paulo: Martins Fontes, 2009.

STULIO, Marco. *End Activity and Middle Activity* . Available at:  
<https://personaliteservicos.com.br/divulgacao/atividade-fim-e-atividade-meio/> . Accessed on 10/12/2022.