

# Contributions of the philosophy of education to the development of critical thinking

## Contribuciones de la filosofía de la educación para el desarrollo del pensamiento crítico

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(Received on: 05/02/2024; Accepted on: 14/04/2024; Final version received on: 16/12/2024)

Suggested citation: Cherres-Vargas, D. y Aguilar-Gordón, F. (2025). Contributions of the philosophy of education to the development of critical thinking. *Revista Cátedra*, 8(1), 100-116.

### **Abstract**

The critical thinking of learners is in crisis, mainly because they are continuously exposed to immediate and unverified information, which weakens the processes of analysis and reflection. In this context, philosophy of education, from its humanistic-critical basis, analyzes the state of the educational fact and builds a conceptual normative framework. This framework evaluates and proposes philosophical methodologies and strategies for the development of critical thinking. The following philosophical methodologies were identified in this work: the Socratic method, the pragmatic approach, the critique of existing conditions, the pedagogy of liberation, philosophy for children, the competency approach from the humanities, and the approach based on the natural capacities of the learner. The article is divided into six parts: the first establishes the relationship between philosophy of education and educational transformation; the second reflects on the contribution of philosophy of education to meaningful learning; the third describes the methodology of this research; the fourth presents the analysis of the data collected; the fifth develops the



discussion of the results obtained through interviews with professionals in education and philosophy; and finally, the sixth part presents the conclusions of this research.

### Keywords

Education, philosophy, critical thinking, philosophical principles, reflection.

### Resumen

El pensamiento crítico de los educandos está en crisis, principalmente porque están expuestos de manera continua a información inmediata y no verificada, lo que debilita los procesos de análisis y reflexión. En este contexto, la filosofía de la educación, desde su base humanista-crítica, analiza el estado del hecho educativo y construye un marco normativo conceptual. Este marco evalúa y propone metodologías y estrategias filosóficas para el desarrollo del pensamiento crítico. En este trabajo se identificaron las siguientes metodologías filosóficas: el método socrático, el enfoque pragmático, la crítica a las condiciones existentes, la pedagogía de la liberación, la filosofía para niños, el enfoque de competencias desde las humanidades y el enfoque basado en las capacidades naturales del educando. El artículo se divide en seis partes: la primera establece la relación entre la filosofía de la educación y la transformación educativa; la segunda reflexiona sobre el aporte de la filosofía de la educación al aprendizaje significativo; la tercera describe la metodología de esta investigación; la cuarta presenta el análisis de los datos recolectados; la quinta desarrolla la discusión de los resultados obtenidos a través de entrevistas dirigidas a profesionales de la educación y la filosofía; y, finalmente, en la sexta parte se presentan las conclusiones de esta investigación.

### Palabras clave

Educación, filosofía, pensamiento, pensamiento crítico, principios filosóficos, reflexión.

### 1. Introduction

This article deals with the contributions of humanistic philosophy of education to the development of critical thinking. The philosophy of education from a humanistic perspective focuses its attention on the integral development of students, which leads to reflect on the quality of the teaching-learning processes and the need to enhance critical thinking so that human beings can perform adequately personally and socially. Analyzing the contemporary context of education, authors such as Paulo Freire, Martha Nussbaum and José Carlos Ruíz identify a crisis in the educational system, which responds to market profitability objectives, resulting in learners who do not think but merely reproduce knowledge, which has repercussions in the formation of manipulable subjects who lack the tools to analyze information, turning them into disposable products in the long term.

To solve this crisis, it is considered that the philosophy of education provides a reflective framework on the current state of the educational fact, rethinking and problematizing education. This reflective framework makes it possible to evaluate the educational practices that hinder the development of critical thinking and to propose methodologies that form reflective subjects. According to Eyzaguirre, critical thinking is necessary for decision making in all scenarios:

because the human being with the ability to objectively analyze and evaluate arguments, phenomena or diverse situations is the one who can achieve aims, goals and objectives, can optimize resources and seek



mechanisms to achieve social justice by questioning systems of oppression (Eyzaguirre, 2018).

In this sense, philosophical reflection is consolidated as a necessity to achieve integral learning, since it analyzes the theoretical and practical assumptions of the educational fact. Currently, learners are immersed in a digital era, characterized by the rapid circulation of information that is not subjected to verification processes and is legitimized by mercantilist hegemonies. Faced with this reality, philosophy in the educational field must propose updated methodologies and tools that promote the formation of critical learners. This article is based on qualitative research with a descriptive methodology. The techniques used were interviews and documentary analysis. The instruments used to collect the information were the interview script, the reading cards and the analysis matrix.

The structure of the article is as follows: section one analyzes the contribution of the philosophy of education to educational transformation. Section two deals with the reflection on the philosophy of education in relation to meaningful learning. Section three presents the methodology used in this article. Section four analyzes the data collected. Section five develops a discussion of the results obtained through interviews applied to experts in philosophy and education. Finally, section six presents the results of the research.

### 2. The philosophy of education as a mechanism of educational transformation

Turning to the history of philosophy, in ancient Greece we find some connotations about education. For example, Plato (370 B.C.) mentions three types of education: that of nature, which refers to the development of the subject's own faculties; human education, which encompasses the management of innate abilities through experience; and that of things, which refers to the restructuring of ideas according to experience. Therefore, according to Platonic thought, education is inherent to the subject, being an integral process that involves the development of natural abilities, the acquisition of external knowledge and reflection on experiences.

Throughout time, it has been recognized that education is a process of training the individual for life in its social, intellectual and emotional dimensions, besides being a guide to acquire knowledge and prepare subjects to face life. In modernity, we find Rousseau (1762), who describes education as a process by stating that "plants are obtained by cultivation, and men by education" (p. 9). According to Rousseau, the subject is born in a state of autonomy and defenselessness, so he needs to acquire skills to face life, which are obtained through the educational process. In this sense, any human being who has not been immersed in an adequate educational process could find himself in a situation of helplessness in the face of the challenges presented by the material world.

In contemporary times, according to Dewey (1920) education is "a process of renewing the meanings of experience by a process of transmission...and in part deliberately instituted to effect social continuity" (p. 270). Through the educational process, the individual assimilates new knowledge in order to confront the areas of reality that he has to face. Philosophy in educational matters, according to Dewey, is an attempt to understand the details of the diverse phenomena to be studied in a set of guidelines that establish ultimate principles in the educational field and guidelines to reach valid and verifiable criteria, in such a way that it allows the analysis of the situation of the phenomenon (Dewey, 1920). For Aguirre et. al. examining from philosophy dynamizes and directs educational practices



that develop critical, creative and innovative thinking, which allows analyzing educational practice in order to improve and transform processes, from a rational, critical and integral condition (Aguirre et. al., 2021). According to Morales et al. the philosophy of education starts from a deep analysis of the educational fact, focusing on evaluating the purpose of education. This is how it contributes to comprehensive and reflective learning to the extent that it rethinks the educational fact and improves teaching-learning processes and methods (Morales et al., 2019).

In the Report of the International Commission on the Futures of Education published by UNESCO in 2021, a crisis is identified in the field of education, highlighting significant gaps that prevent the achievement of states of well-being, sustainability, justice and peace for humanity, objectives that together constitute the ultimate purpose of education. In line with such crisis, Essomba (2019) points out that, in order to overcome it, a profound transformation of the educational system is necessary, in order to achieve both individual and collective emancipation of the subjects of education. In this context, the philosophy of education stands as a key mechanism to develop reflection and analysis of the educational phenomenon, contributing significantly to its transformation by offering a conceptual framework that supports improvements in the educational process and combats the identified shortcomings. In addition to the role of philosophical reflection in education, Lipman (1992) emphasizes the need to respond to the needs of all learners, regardless of their cultural or socioeconomic conditions.

### 3. Contributions of the philosophy of education to achieve meaningful learning.

According to Baque and Portilla (2021), meaningful learning constitutes a process in which new information is integrated into the learner's cognitive structure through an assimilation operation mediated by verification criteria. Ausubel et. al (1998) refer to meaningful learning as the process in which pre-existing ideas are related to new information, giving meaning to the new learning. Furthermore, according to Ausubel et. al. (1998), there are "two main characteristics for understanding it: its substantiality and its lack of arbitrariness" (p. 17). They also argue that meaningful learning refers to a harmonious consolidation of solid knowledge, in which concepts and new information are structured in a coherent way, thus forming a lasting learning.

Ausubel et al. (1998) propose the following types of learning: representational, conceptual and propositional. The first refers to obtaining meanings from symbols that represent a concept or image. Learning by means of concepts refers to learning a structured and composite idea, which consolidates a new concept with meaning and significance for the individual. Finally, propositional learning is produced by the association of the new meaning from the relationship between concepts and ideas relevant to the cognitive structure. In addition, learning starts from two dimensions: a connotative dimension, which refers to the emotional and subjective meaning, and a denotative dimension, which refers to a literal and objective representation. The philosophy of education has a direct bearing on meaningful learning. In accordance with this, Barcena (2013) argues that philosophical reflection, starting from its critical assumptions, analyzes its theoretical and practical dimensions. Thus, one of the contributions of philosophical reflection to education is to provide it with a normative framework and to exercise a contextualized critique of the educational fact. Therefore, the philosophy of education, through reflection, curiosity and the establishment of inferences, consolidates a direct relationship between learning and its cognitive system.



Another contribution of the philosophy of education is related to learning by discovery. To detail this contribution, it is necessary to understand that this type of learning is consolidated from the learner's own construction. According to Ramos (2015), philosophical analysis, being reflective, contributes to learning by discovery due to its critical basis, proper of philosophical analysis insofar as it interprets, analyzes and understands education as a practical end of reality and the development of society.

According to Garcés et al. (2018), in order to achieve meaningful learning, the types of learning of learners must be taken into account, developing strategies so that they are able to structure their own knowledge. The conceptual framework that is consolidated from philosophical reflection allows the development of strategies for meaningful learning, since it examines and evaluates the processes being developed in the educational fact, proposing methodologies to achieve solid learning that prepares learners for life. This framework cannot be satisfactorily developed without the foundations of philosophy and, in particular, of educational philosophy.

### 4. Methodology

The qualitative approach is the one that methodologically guided the structuring of this document, which was aided by the collection of bibliographic data from different authors specialized in the subject. The research followed an inductive process that required the collection of data through field research that contributed to the collection of information through experts in the field of education and philosophy.

According to Hernández-Sampieri et al. (2015), in their typology of research for the Social Sciences, they group 4 types of research: exploratory, descriptive, correlational and explanatory. In the present work, a descriptive research was developed because it focuses its analysis on the understanding and justification of fundamental concepts and categories.

The research is aided by the hermeneutic method, since according to Hernández-Sampieri et al. this methodology allows to interpret the experience of the phenomenon through texts and to contrast the information with the experience (Hernández-Sampieri et al., 2015). To collect the information, interview and documentary analysis techniques were used, using instruments such as the interview script, reading sheets and the analysis matrix. The interview was directed to philosophy and education professionals; the interview script consisted of 6 questions and was applied to 5 people whose profiles are university and higher basic education teachers. The profile of the interviewees is detailed in Table 1.

Interviewee	Títle	Workplace	Position held
E1	M.A in Philosophy	Salesian Polytechnic University	Research teacher
E2	PhD in Philosophy	Salesian Polytechnic University	Research teacher
E3	PhD in Philosophy	Salesian Polytechnic University	Research teacher
E4	Bachelor of Sciences in Education with a Philosophy Track	Borja 3 Cavanis	Teacher
E5	M.A in Applied Philosophy	Santo Domingo de Guzmán Educational Unit	Docente



### 5. Data analysis

In this section, the information obtained through an interview consisting of six questions is analyzed. Subsequently, a bibliographical contrast is made between the answers of the experts and the criteria of the specialized authors.

Regarding question one: what is the Philosophy of Education and what is its importance in the context of the development of critical thinking? E1 (20%) maintains that it is a "process of content, principles, actions that help or give us tools to think critically," adding that it must be analyzed from three concepts: history, how it has been developed in different cultures; development through criticism; validity, that is, the current situation and presence in the educational field; E2 (20%) understands it as: reflective philosophy, criticism of thought around the educational fact, mainly focusing on the objective and teleology of it. E3 (20%) mentions that it is the philosophical reflection around the educational act; E4 (20%) argues that "it is the branch of philosophy that deals with reflecting on the principles, values, theories that underpin and at the same time give meaning to the educational fact"; for E5 (20%) it is: "a branch of philosophy that is dedicated to research, reflection and criticism on what education is" and also refers to "a study on problems of an ethical order" and an ontological dimension.

Regarding the importance of the philosophy of education in the current context for the development of critical thinking: E1 (20%) maintains that the importance lies in a critical exercise about the contents that are taught in the curriculum; E2 (20%) argues that philosophy, by having a reflective nature about the components of education, is a critical exercise par excellence and also directs the curriculum to form critical citizens; according to E3 (20%) he considers that it is a critical exercise and adds that its function is to counteract the alienating dimension of education; E4 (20%) mentions that philosophical reflection favors the integral development of subjects and therefore encompasses the dimension of critical thinking; in agreement with E5 (20%) he points out that philosophy is a critical exercise based on valid arguments, and to promote the development of critical thinking, an "exhaustive examination of our statements about the world" must be carried out.

Regarding question 2: What are some of the fundamental philosophical principles that can be applied in Education to promote critical thinking in students? E1 (20%) maintains that the anthropological vision is fundamental, because it "articulates the human being in reality", if this principle does not exist, subjects become manipulable and meaningless; E2 (20%) maintains that it is based on a "neurological, physiological basis of pragmatic, positivist philosophies, which see knowledge as a product of the anatomical structures of the brain, the central nervous system, the peripheral nervous system", and this is configured so that the teacher understands "how these structures work" and directs the knowledge processes; E3 (20%) maintains that the fundamental principles are: the principle of suspicion, interpretation and hermeneutics, because they allow improving educational approaches; E4 (20%) identified "the ability to identify, argue, make deductions, make differences, decide, evaluate, take critical positions regarding an idea" as philosophical principles, because they form thinkers for the world, who have the ability to respond to challenges. Finally, E5 (20%) states that it responds to a liberal, anti-authoritarian and normative principle. These principles allow questioning through questions "plausible arguments that receive rational acceptance about a state of things that may be better".



Regarding question three: What strategies of the philosophy of education have you used in class to enhance the skills inherent to critical thinking? E1 (20%) maintains that it is self-criticism and a historical and theoretical review of philosophy; E2 (20%) points to the Socratic method, constructivist, phenomenological and hermeneutic strategies; E3 (20%) identifies maieutics, proper to the Socratic method and interpretation; E4 (20%) identifies collaborative learning and sensitivity to the world as strategies; according to E5 (20%) the main strategy used is the Socratic method, with an emphasis on formulating questions.

Regarding question four: What methodological strategies contribute to the development of critical thinking? E1 (20%) maintains that reading based on authors that are easy to understand and contextualized to each group of students; E2 (20%) places case analysis, note-taking, and exposition as key methodological strategies; E3 (20%) as essential methodologies for: collaborative construction of knowledge, critical pedagogy and the interpretation of phenomena; E4 (20%) places practical philosophy, philosophy for children and teacher-educator training as methodological strategies; E5 (20%) points out cinema, appeal to the arts and recognition of emotions as strategies for the development of critical thinking.

In relation to question five: what challenges arise when implementing strategies for the development of critical thinking in the classroom? E1, E2 and E4 (60%) interviewed agree with challenges that arise from current technology which involves the use of artificial intelligence, manipulation through social networks, bubble filters, interpretation of the human being through platforms, this impacts on subjects who do not seek to reflect, on the contrary, they seek to saturate their senses. E3 (20%) points out technology as a challenge and also adds globalization; E5 (20%) categorizes bureaucratic challenges as: planning time, time dedicated by teachers to monitoring students, number of students, reduction of subjects that encourage critical thinking such as philosophy, and also points out as challenges the social economy of the world, mediated by processes of internationalization of relations and preponderance of efficiency.

Regarding question six: what alternative solutions can be proposed from the philosophy of education for the development of critical thinking? E1 (20%) argues that dialogue with students is important; according to E2 (20%) philosophical and aesthetic contemplation, together with critical reading of social, economic and political contexts are consolidated as a proposal; E3 (20%) comments that the work of teachers together with enriching subjects such as philosophy that are critical is a solution; in agreement with E4 (20%) all subjects of education must be trained and think critically in the face of the phenomena that arise; Finally, E5 (20%) maintains that the essence of education and its teleology must be rethought.

### 6. Discussion

From the information collected through question one, it is inferred that the philosophy of education is understood as the application of philosophy that, according to Ramos (2015), revolves around the reflection of the educational fact, both in its theoretical and practical framework, in order to form critical subjects who consolidate society and transform it. By virtue of the fact that it starts from philosophy and focuses its reflection on the development of the student, according to Eyzaguirre (2018) he maintains that,

Three fundamental dimensions are analyzed: truth and knowledge in education, ethics when analyzing principles of justice and good, and



finally they understand the existence of the subject in the educational fact, which consolidates an ontological dimension (p. 32).

In addition to this, education is in fact normative by directing the process in order to intentionally achieve an objective. Maris (2012) maintains that, "one of the central characteristics is the normative connotation, since this concept implies the criterion that something valuable must be achieved" (p. 25). From this arises the analysis of the elements of education which according to Morales (2019) are "principles, ends, criteria, premises, values, concepts and contexts" (p. 118) to form a certain subject for society.

Philosophical reflection, when derived from the analysis of education, from the relationship with an environment and the transmission of knowledge over time, is properly a critical exercise because it analyzes and questions the pre-established components. By virtue of this, its importance today lies in rethinking the educational fact in order to evaluate and improve it. Barcena (2013) points out that "it is about wanting to know, not to confirm what we already know, but to think differently" (p. 711). That is, rethinking one's own thinking is consolidated as a critical exercise, and is translated into the educational field by problematizing it, which corroborates the statements made by the interviewees. Indeed, an analysis of content, curriculum, purposes, contexts, challenges and in general of all the components of education is necessary, because it is based on the premise of rethinking the entire educational spectrum.

In accordance with question two, the importance of the same understandings is highlighted as the philosophical theoretical basis in understanding the educational fact. According to Morales et al (2019) they refer to the conceptual basis on which the elements of education previously mentioned are based. In the interviews conducted, the following philosophical principles identified according to Aparicio (2020) stand out: anthropological principle because the educational fact starts from a reflection about the subject who is educated, in a certain context and reality; pragmatism, understood as the reflection of the understanding, interpretation and meaning around the educational practice; a positivist principle, in the context of education it refers.

According to Maris (2012) to "state causes and laws of educational action, as it actually develops, and that must be reviewed and corrected based on what empirical research shows" (p. 49), therefore the statement of categorizing it as a principle is correct in relation to not losing focus on the biological consistency of the students within the acquisition of knowledge; a hermeneutical foundation based on understanding the educational fact from its context to understand and interpret the phenomenon. Morales et al. (2019) suggest adding three principles to what has been analyzed: the principle of autonomy in which each student must reason, think and act for themselves and the anti-authoritarian dimension is included due to the ability to rethink preconceived arguments from autonomy, the principle of democracy by virtue of the fact that education consolidates citizens and the principle of freedom, by which the power of decision-making is established.

Regarding question three, the Socratic method is essential for the development of critical thinking, since it is based on a critical self-examination understood as a process of internal and external reflection. For Nussbaum (2010), this self-examination allows the construction of solid arguments that are not accepted only by authority. The Socratic method responds to the following process: the teacher questions the interlocutor on a topic; the interlocutor issues his or her response, and then the teacher issues a counterargument. According to Ruíz (2018), this process necessarily involves an in-depth reflective exercise by the interlocutor. The Socratic method is necessary for the development of critical thinking as it



stimulates reflection through questions. Two additional strategies identified are hermeneutics and phenomenology. According to Maris (2012), regarding the first, its relevance lies in the consolidation of a basis for historical understanding and interpretation, contextualizing the educational fact according to the characteristics of each group. As for phenomenology, based on educational reality, it understands how the educational phenomenon develops. It should be noted that it has two approaches: an inductive empirical description that starts from external experience, and an a priori phenomenology based on internal experience and an intentional sense.

A final philosophical strategy identified is the one derived from constructivism, which consists of the student being the protagonist of the learning process, and the teacher becoming a facilitator of knowledge. For Sáez, this strategy allows each new knowledge to adapt and relate to pre-existing mental structures (Sáez, 2019). However, for the operationalization of this purpose, in terms of Aguilar-Gordón (2024), the predominance of,

Active learning where students are actively involved in seeking and constructing knowledge; promotes the ability to adapt to different learning environments and situations; fosters students' intrinsic motivation by allowing them to choose and direct their own learning (p. 38).

Regarding the fourth question, the interviewees identify the student as the central agent of pedagogical strategies. In this sense, a contextualized reading is proposed that suggests adapting the strategies based on the needs of each student. The strategies mentioned, such as case analysis, note-taking and presentation, promote learning and understanding, since they represent active learning in the construction of knowledge. In addition, the collaborative construction of knowledge is emphasized, accompanied by the student's own interpretation, as the main strategy for the development of critical thinking. This methodology allows students to take ownership of knowledge instead of simply repeating information. Another relevant strategy is philosophy for children, through which students, from an early age, become familiar with philosophical practices such as Socratic dialogue and stories with philosophical content. The aforementioned strategies have one thing in common: reflection and analysis of phenomena, key elements for the development of critical thinking as they exercise the student's intellect, allowing him to be an active part of the teaching process.

In relation to question five, it is clear that the use of technology is currently the most worrying challenge for the development of critical thinking. As Ruíz (2019) states, concern arises about the takeover of the virtual plane over the real world. In this sense, technology configures an "emotional drug addiction" in which subjects accustomed to immediate satisfactory stimuli produced by digital media, are focused on continuing to feed that dependency, transporting their presence in a virtual construction of being, which impacts on all the identified challenges: the manipulation of the subject due to the substitution of knowledge by the oversaturation of information, the validation of a performance society legitimized by the immediacy of the format of social networks, the bubble filters which refer to the fact that digital media patterns show users topics of interest, interpreting the needs and interests of the subject at the expense of consumerism, and finally, the development of artificial intelligences which, when poorly managed, eliminate the need for reflection because they provide answers obeying again the immediacy. According to Paul and Elder (2003), critical thinking allows the subject to formulate theoretical assumptions with clarity and precision, analyze important information through abstract ideas that he understands,



develop conclusions, have an open mind, establish solutions from standards of excellence, this constitutes a danger for a system of immediacy, since said system seeks to eliminate reflection and analysis, which is reflected in the changing trends of the digital plane.

For the analysis of question six, it is important to specify the three components of the didactics of philosophy, which according to Aguilar (2019) are the teacher, student and the curriculum.

The first of them is in charge of guiding the teaching-learning process; while the second is the subject of education and it is expected to achieve modifications in it both at a cognitive and attitudinal level; the third component refers to the theoretical and methodological guidelines, which are taught in classes (p. 136).

The solution strategies for the identified educational challenges must involve the three components, with the teacher and the curriculum being the main solution agents. For the strategies that the teacher can propose, his or her training is key when it comes to generating lasting solution proposals. From this perspective, developing systems of dialogue, philosophical contemplation, critical reading of the world, and correct use of technology become part of the strategies for the teacher to enhance critical thinking in students. These skills could not be taught without the teacher having adequate training in methodological strategies.

Regarding the curriculum, the current relevance of philosophy must be discussed. According to Ruíz (2019), philosophy is based par excellence on curiosity and encourages perplexity and wonder, the need to know, question and ask, thus allowing the exercise of critical thinking. In addition, the purpose of education and what citizens are intended to be formed through it can be examined in order to evaluate the contents of the subjects.

### 7. Presentation of results

The bibliographic analysis of various authors cited so far allows us to affirm that there is a contribution from the philosophy of education for the development of critical thinking, since there are methodologies that arise from philosophy and tend to energize it. This, added to the criteria of experts interviewed, allows us to establish two key results: the philosophy of education directly affects the development of critical thinking, and it is evident that this has a fundamental role in current education.

The authors referenced are Socrates, Rabindranath Tagore, Paulo Freire, John Dewey, Matthew Lipman, Martha Nussbaum and José Carlos Ruiz. Each of them proposes methodologies based on different approaches: maieutics, contextualized education based on art, liberation pedagogy, pragmatism, philosophy for children, the approach to capabilities from the humanities and the development of critical thinking.

Socrates, a Greek philosopher who lived in Athens in the 5th century BC, consolidated the Socratic discussion as a catalyst for critical thinking. Through this method, argumentation is consolidated as an agent of development of critical thinking, since students play a main role in the process. Socratic argumentation, according to Nussbaum (2010), allows to question and analyze discourses, develop a self-examination, and also favors processes of innovation and peaceful coexistence, but above all contributes to the development of critical thinking. This method responds to three moments: the first refers to the conflict, in which there is a problematizing situation that invites the interlocutors to establish a theoretical and reflective position regarding the situation. After this, a reconstruction arises from the



collective, when all the subjects express their opinions, exercises of rethinking the theories previously discussed are achieved. And the most important step, according to Eyzaguirre (2018), is to examine the arguments of each individual, in this way critical thinking is exercised through analysis and reflection. Likewise, Betancourth et al. (2012) point out that

The Socratic method allowed for the enhancement of interpretation, understood as a deep understanding of knowledge, in addition to clarifying meanings. Additionally, it managed to improve the argumentation processes of the students, which allowed them to significantly improve their inference processes (p. 38).

In this same line of research, Dewey (1920) highlights the importance of critical thinking for students to reflect on their experiences and seek solutions to social problems. According to this author, critical thinking or reflective thinking is an arrangement of terms, which respond to each other and have a conclusion as their objective. In this way, the close relationship between the philosophy of education and critical thinking is reinforced, by analyzing and reflecting on educational processes and establishing both theoretical and practical foundations for their pragmatic development.

In Dewey's methodology, according to Wayne and Gautreaux (2018), it starts from the conception of the student as a future citizen, who will participate in democratic life from the community. Dewey argues that critical thinking is based on understanding reality from interconnections, processes of analysis of facts that are not evident at first glance, which is dialectical thinking as it is a complete consolidation of the phenomena of study. In short, Dewey's method is based on the whole, breaking it down into parts.

Rabindranath Tagore proposed an educational reform for India that arose from his criticism of the British colonialism of the time, which limited education to a training based on English imperialism, offering individuals an impoverishing education. Tagore's educational paradigm is based on a humanistic approach that seeks to promote well-being and self-sufficiency, especially in those from more vulnerable groups, also highlighting a capacity-oriented approach.

For Tagore, the goal of education was to develop the intellect through practices that fostered connection and harmony, thus contributing to the development of critical thinking. This ideal was materialized in his school, Shantiniketan, founded in 1901. According to Meléndez (2019), Tagore's educational practices focused on prioritizing students' freedom of choice and action. In addition, it promoted active learning through outdoor activities and with resources such as art, nature and sports. In these activities, students participate as protagonists, structuring their own learning through experience, autonomy and the exchange of ideas with their peers. Students are encouraged to imagine an ideal school and society, based on the analysis of their reality and that of their peers; this reflection invites them to question pre-established ideas and to demonstrate the validity of their own ideas.

Paulo Freire (1970) through the philosophy of liberation cemented a beneficial system for the development of critical thinking, through criticism of the traditional education system, which in his view, strips students of humanity since it perpetuates a social order in favor of dominant classes. He points out that there is a close relationship between education and the liberation of the historically oppressed. In this way, education must be a process of historical dialogue and critical reflection that allows students to question their environment from a contextualized perspective. Freire (1970) advocates an emancipatory education that enables students to understand and transform cultural, historical, political and economic



processes; he defends the active participation of students as an essential element in education, since it is not enough to analyze the educational system, but it is necessary to transform it. This establishes a clear relationship between the philosophy of education and the ability to analyze and change society through knowledge-based empowerment. This transformation is born from critical and reflective thinking; students must be aware of it in order to overcome their state of oppression.

For Lipman (1997), the traditional educational system responds to a serious problem: it does not train to think, but to repeat. In this sense, students immersed in the school system, instead of developing critical thinking skills, tend to lose reflexivity, invention and creativity. Lipman (1992) considers that to develop critical thinking it is necessary to implement the teaching of philosophy from an early age, for the construction of democratic societies and the formation of autonomous and informed individuals. Thus, according to De Puig (2018), a philosophy program for children is proposed, in which students must learn to think for themselves, enhancing 4 skills: reading, writing, listening and speaking. According to this author, the role of critical thinking is the analysis of information preconceived as true, to achieve a reflective, logical and rational analysis.

Nussbaum (2010) highlights the humanization of education, therefore he proposes an approach to capabilities from humanism. The author criticizes education based on international standards, which seeks to homogenize students, focusing its efforts on turning it into a commercial process. According to the author, this would produce subjects valued as merely productive mass. This goal would be achieved with a system that preponderates and limits the curriculum to the study of subjects related to exact sciences, displacing the humanities from the stage. To overcome this state, the philosopher proposes revaluing the humanities as catalysts for critical thinking and pillars of the construction of democracy. Nussbaum (2010) regarding critical thinking maintains: "it allows one to investigate, evaluate evidence, write one's own works with well-structured arguments and analyze arguments that are presented in other texts" (p. 84). Nussbaum starts from a Socratic method in which the teacher must encourage active participation of students, and cultivate curiosity.

Ruiz (2019) details how to develop critical thinking in students from philosophy. His methodology for the development of critical thinking is born from natural attitudes in individuals. He maintains that children are philosophers par excellence due to their capacity for wonder. He proposes to exercise critical thinking from the circumstances of children, analyzing and generating debates on problems of daily life, encouraging students to organize their ideas; this exercise must be incorporated from home. In addition, he proposes to cultivate wonder, curiosity and questioning, elements that enhance the development of critical thinking.

In the previously cited cases, there are efforts to implement methodologies that develop critical thinking, putting students in the main role. Through the authors studied, it is evident that the philosophy of education contributes to the development of critical thinking, as it questions existing educational systems at first, evaluates them, and proposes methodologies that develop critical thinking from a contextualized dimension. Additionally, one of the main challenges for the philosophy of education and its contributions to the development of critical thinking is that, as Aguilar (2020) maintains, "... it rethinks the dynamics of today's society in its complexity and the subject that intervenes in it, which encourages the rational use of technological tools for the benefit of the individual and the world" (p. 109). On the other hand, because mental operations are part of critical thinking,



it is necessary to analyze them since they are linked to the subjects' processes of assimilation and information management.

In today's education, it is essential to strengthen critical thinking to overcome the various problems caused by various factors inherent to the immediate society, in which education must provide the necessary tools for adaptation to the social, vital and intellectual processes of reality, which are achieved through a reflective process that demands depth.

Nietzschean criticism, according to Arteaga (2020), denounces a Western educational system, in which the only thing that is sought is to form docile subjects suitable for a mercantilist system. This system is mainly focused on economic development and tends to neglect the human growth of individuals. In the same sense, Nussbaum (1998) maintains that there is a worldwide crisis in education, since it obeys the interests of capital, in which profitability prevails. The result of this perspective is a serious crisis in critical thinking, which poses a great problem for the ultimate goal of education, which is to prepare subjects for life. As a possible solution to the problem identified by Nussbaum, we could take up the thought proposed by Freire (1970), which is based on an emancipatory education that ensures the prolongation of the subject and therefore questions the dominant structures.

According to Ruíz (2018), society is currently digital and hypertemporal, in which information is immediate and lacking in rigor and analysis. These characteristics cause students to accept preconceived ideas without analyzing them, which represents a serious obstacle in their educational process. This is evidenced in the formats of social networks, compressed into 3-second capsules, which cause the brain of students to fail to retain information for a long time. As a consequence of this current paradigm of information, two problems are consolidated: knowledge is in crisis and is imposed by hegemonies, which triggers a form of education that continues to legitimize processes of knowledge reproduction and not analyzing information.

Critical thinking is related to intellectual capacities that allow strengthening the educational process to achieve meaningful learning, and encourages the comprehensive analysis of reality, since it is born from curiosity, allowing to generate reflective questions about the topics that are raised. Curiosity is strictly related to the generation of questions, an aspect that enriches the educational process, since through the questions that are raised, dialogues and debates are generated, which allow growth in knowledge and understanding of a whole.

Additionally, Bauman (2007) analyzes several current problems, all of which have something in common: hypertemporality. Individuals do not want something lasting, but something immediate and disposable. This is not exclusive to education, but to the totality of reality. As a consequence of this, an impatience syndrome arises, which does not allow critical thinking processes and memory to develop. Another of the challenges for current education is linked to knowledge, which understands it as a mere commodity, and results in manipulable students. In this changing and increasingly complex scenario, critical thinking is necessary to elucidate information and develop cognitive skills that allow us to face the current accelerated changes.

Paul and Elder (2003) point out the importance of critical thinking today under 4 main factors: a world that presents dizzying, accelerated and complex changes, a reality mediated by fear and divided into factions that increase violence, information manipulated towards power groups, and finally an excess of information without prior evaluation. In this sense, critical thinking allows us to discriminate information and subject it to analysis, which



necessarily leads to overcoming states of misinformation, and taking control over our thoughts that in turn shape our decision-making.

Ruiz (2018) defends the idea that critical thinking allows us to analyze knowledge from a comprehensive perspective, relating ideas to our own thought structures, which in turn are configured in their context, understanding not only individual conditions, but also social ones. To validate knowledge, it can be verified whether it meets the following characteristics, proposed by Bunge (1960): being factual, not limited to facts, but raising new discussions, being analytical and responding to complex approaches, being communicable, verifiable, explanatory, open and useful, and responding to problems for the benefit of society.

Critical thinking is a means provided by the philosophy of education to obtain knowledge that complies with the guidelines of the scientific method. It is therefore essential for the educational process that "...students are able to identify problems, propose creative solutions and apply strategies to solve them" (Aguilar-Gordón, 2024, p. 33). In this sense, it is essential that the teacher proposes alternatives for the student to develop their critical-reflective capacity.

Authors such as Bertrand Russell (1950) emphasize the importance of critical thinking to avoid the influence of emotions or propaganda and reason about phenomena in an objective manner. This ability implies adopting a position of doubt and skepticism before accepting truths without questioning them and understanding them through reflective thinking.

International standards are increasingly placing less interest in the humanities, reflecting a system that seeks to train individuals who are primarily productive in economic terms. This is evidenced through the imbalance of time loads between purely technical subjects and humanities subjects. However, it is essential to reflect on the role that the humanities play in the formation of emancipated subjects and the promotion of democracy, which would be carried out satisfactorily as long as the humanities subjects have a more significant relevance in education, thanks to their capacity to transform reality through knowledge, questioning and philosophical debate.

The humanities play an essential role in the development of critical and reflective thinking, as Nussbaum (1998) points out that "the study of philosophy teaches us to question our own beliefs and to analyze the arguments of others in a critical and rigorous manner" (p. 38). In addition, questioning, analysis, criticism, evaluation, inferences, are characteristics of critical thinking also present in the humanities subjects, and are relevant to forming critical and reflective subjects, who are not prone to manipulation by means of mass information.

Critical thinking, according to Fisher (2011), is a skill that can be taught and learned, and is essential in education, work, and everyday life. Therefore, it is essential that educational systems include the teaching of critical thinking as an integral part of education. To achieve this purpose, Aguilar (2020) establishes the following as necessary aspects: "...to foster in the student freedom, creativity, self-discipline, the practice of values, a moral order;" (pp. 104-105). In short, critical thinking is consolidated as a response to the dehumanization of subjects, because it allows contextualizing learning, and recognizing the other as an end in itself. It is consolidated as a break between the media and the face-to-face.



### 7. Conclusions

The philosophy of education is relevant in the teaching-learning process since it is consolidated as a reflective basis of the educational fact, playing a fundamental role in understanding it and promoting critical thinking, in order to achieve the comprehensive education of students.

Currently, there is a crisis in the development of critical thinking and the formation of participative and reflective citizens due to the imposition of traditional models of education, the predominance of a markedly mercantilist approach and the immediacy of training. In this scenario, it is critical thinking that allows the analysis, evaluation and inference of information, as well as reflection on circumstances and context.

The philosophy of education contributes to critical thinking with a series of categories that allow: to establish a rigorous conceptual framework to implement methodological strategies, to critically reflect on the educational fact, to propose methodologies that encourage reflective thinking and promote the emancipation of students through access to information, construction and consolidation of knowledge. In the face of an education based on economic production, critical thinking allows us to reflect on all the knowledge that is built around a market economy, returning analytically and critically to the roots of the humanities. To deepen and contextualize the strategies that contribute to critical thinking, it is necessary to apply instruments that allow us to measure the degree of impact of the execution of the strategies identified in the medium and long term on students.

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### Declaration of Authorship-CRediT

**DIANA CHERRES-VARGAS:** Data collection, conceptualization, data analysis, methodology, writing of the original draft.

**FLORALBA AGUILAR-GORDÓN:** Definition of the central theme and the structure of the research, supervision of the research process, formal and conceptual review of the writing of the original draft, rewriting, further research, editing and final adjustments.

