



Original article

## Psych pedagogical conception for metacognitive stimulation in the initial training of the Bachelor of Education

Concepción psicopedagógica  
para la estimulación  
metacognitiva en la formación  
inicial del Licenciado en  
Educación

Concepção psicopedagógica para  
estimulação metacognitiva na  
formação inicial do Bacharel em  
Pedagogia

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### ABSTRACT

The article presents a proposal for a psych pedagogical conception for the metacognitive stimulation of students in the initial training of the Bachelor of Education, at the university of Cienfuegos in Cuba. The study leads to the idea of recognizing this conception from a psycho-pedagogical position of the subject in a learning situation to adopt pedagogical and didactic alternatives for the articulation of this metacognitive process in all training activities, since the student not only learns and is trained in academic activities, but also in extra-teaching activities. The objective was aimed at socializing the main results of the theoretical and methodological modeling for this type of guidance activity in universities from a psycho-pedagogical approach. A concurrent or mixed methodology was assumed, with emphasis on the qualitative, which consists of linking empirical, theoretical, modeling and mathematical-statistical methods. In the same way, the forms of implementation and evaluation of the scientific result that is conceived are established. The result includes resources that guide towards the pedagogical concretion of actions leading to self-knowledge and self-regulation, facilitating decision-making, life projects; generating a proactive attitude oriented to the personal, professional and social development of students. It proposes the requirements, according to its theoretical-methodological nature, which will make it a viable option to guide the intervention of teachers towards the metacognitive stimulation of students and for its methodological implementation sequence; as well as the approach to the methodological and practical challenges of the proposal.

**Keywords:** psych pedagogical conception; metacognitive stimulation; initial teacher training.

#### RESUMEN

El artículo presenta una propuesta de concepción psicopedagógica para la estimulación metacognitiva de los estudiantes en la formación inicial del Licenciado en Educación, en la Universidad de Cienfuegos en Cuba. El estudio conduce a la idea de reconocer esta concepción desde un posicionamiento psicopedagógico del sujeto en situación de aprendizaje para adoptar las alternativas pedagógicas y didácticas para la articulación de ese proceso metacognitivo en todas las actividades formativas, ya que el estudiante no sólo aprende y se forma en las actividades académicas, sino también en las extradocentes. El objetivo estuvo dirigido a socializar los principales resultados de la modelación teórica y metodológica para este tipo de actividad de orientación en las universidades desde un enfoque psicopedagógico. Se asumió una metodología concurrente o mixta, con énfasis en lo cualitativo, que consiste en la vinculación de los métodos empíricos, teóricos, la modelación y los matemático-estadísticos. De igual manera se establecen las formas de implementación y de evaluación del resultado científico que se concibe. El resultado incluye recursos que guían hacia la concreción pedagógica de acciones conducentes al autoconocimiento y la autorregulación facilitando la toma de decisiones, los proyectos de vida; generando una actitud proactiva orientada al desarrollo personal, profesional y social de los estudiantes. Propone los requisitos, según su naturaleza teórico-metodológica, que lo convertirá en opción viable para guiar la intervención de los profesores hacia la estimulación metacognitiva de los estudiantes y para su secuencia metodológica de implementación; así como, el planteamiento de los desafíos metodológicos y prácticos de la propuesta.

**Palabras clave:** concepción psicopedagógica; estimulación metacognitiva; formación inicial docente.

#### RESUMO

O artigo apresenta uma proposta de concepção psicopedagógica para a estimulação metacognitiva de estudantes na formação inicial do Bacharelado em Pedagogia, da Universidade de Cienfuegos em Cuba. O estudo leva à ideia de reconhecer essa concepção a partir de um posicionamento psicopedagógico do sujeito em situação de aprendizagem para adotar alternativas pedagógicas e didáticas para a articulação desse processo metacognitivo em todas as atividades formativas, pois o aluno não só aprende e é formado em atividades acadêmicas, mas também em atividades extra-docentes. O objetivo foi socializar os principais resultados da modelagem teórico-metodológica para este tipo de atividade de orientação em universidades a partir de uma abordagem psicopedagógica. Assumiu-se uma metodologia concorrente ou mista, com ênfase na qualitativa, que consiste em articular métodos empíricos, teóricos, de modelagem e matemático-estatísticos. Da mesma forma, estabelecem-se as formas de implementação e avaliação do resultado científico que se concebe. O resultado inclui recursos que orientam para a concretização pedagógica de ações que levem ao autoconhecimento e autorregulação, facilitando a tomada de decisões, projetos de vida; gerando uma atitude proativa voltada para o desenvolvimento pessoal, profissional e social dos alunos. Propõe os requisitos, de acordo com a sua natureza teórico-metodológica, que o tornem uma opção viável para orientar a intervenção dos professores para a estimulação metacognitiva dos alunos e para a sua sequência metodológica de implementação; bem como a abordagem dos desafios metodológicos e práticos da proposta.

**Palavras-chave:** concepção psicopedagógica; estimulação metacognitiva; formação inicial de professores.

## INTRODUCTION

The initial teacher training in Latin America has as a challenge the approach of its improvement; however, few initiatives propose powerful innovations and the strategies that are proposed rarely challenge the assumptions rooted in traditional training models. In this sense, the model that responds to the traditional vision of initial training is identified with a lot of theory, little practice and little reflection. On the other hand, the models that in some cases have been implemented motivated by the rise of reflection processes, or for ideological reasons, have been characterized by a reflection lacking understanding and conceptual foundation (Vaillant, 2019).

In a certain way, this process has as its content the dynamic construction of knowledge, skills and attitudes of professional performance through the use of different ways, means, methods and educational resources for the articulation of teaching activities and practices of educational influences, aimed at developing cognitive, affective and metacognitive spheres of personality. It is regulated by the systemic evaluation of the modes of action of the future professional in, from and for practice, research and exchange of knowledge and experiences, among other aspects.

The initial training, in this case, of the Graduate in Education, from the programmatic platform that supports it, conceives three phases as parts of the curricular process: a design phase, a development phase, and an evaluation phase (Cuesta, 2001; Moreno Iglesias et al., 2019); metacognition and its stimulation, although

it is not directly limited to them, is included in these three phases. Its characteristics and operating dynamics cannot be understood in isolation, but rather as part of the curricular process. For this reason, the approach that is defended is that the metacognitive stimulation of the students addresses a process of entry, development and exit that extends from the curricular design, passing through the development and that ends in the curricular evaluation; with special emphasis on the system of relationships between the participants involved in the training process that determine their participation in the training activities and their results.

There are processes and relationships of a psycho-pedagogical nature, even when the stimulation of the metacognitive processes of the students is not explicit. The demands and educational resources necessary in the different phases of the training cycle to give intentionality to educational influences through the mediating role of teachers, tutors and year groups to stimulate the metacognition of students also demand a psycho-pedagogical support that it must be supported by analysis and research. In this sense, the metacognitive stimulation of students is considered in the specific case of the Bachelor of Education career, specializing in Pedagogy-Psychology in Cienfuegos.

The metacognitive stimulation of the students is the set of influences, mediated by the teacher that is directed to dispose, mobilize self-knowledge and self-regulation; emphasizes self-assessment, promotes the use of self-knowledge; and, what is equally important, it is generated in the projection and transformation of their current development situation (Senra Pérez et al., 2021).

From the psycho-pedagogical perspective, there is no conception that contains a sufficient methodological sequence in which, from its internal dynamics, an organizational

and a methodological dimension correspond where academic, labor, research and extension activities concur to stimulate the metacognition of students. from actions carried out by teachers and students. Also, one can speak of a weak integration, intentionality and projection of educational influences in the educational strategies of year groups by virtue of stimulating the metacognitive sphere, aspects that take into account the quality patterns of initial teacher training, not in its totality as a panacea that solves all training problems, but in the context in which actions are requested that contribute to the integral formation of the personality of the students.

In the psycho-pedagogical conception, the principles are defined and the stages of the modeling process are characterized from the moments in which each of them is transited and the actions of both the students and the teachers involved are determined; These are constituted as a basis to characterize the results of each of the moments to give a solution to the problem raised above.

There are several authors who have dealt with the metacognitive stimulation of students in initial teacher training from different conceptions, among others the following stand out: Alsina et al. (2019); Eagle Flowers (2020); Gutiérrez-de Blume & Montoya-Londoño (2020); Sánchez-Cruzado & Sánchez-Compañía (2020); González León & Rivera Oliveros (2020).

In Cuba, the initial training of Graduates in Education has a long tradition (Valle Lima, 2012); but, in recent years, national indications legitimize the importance of ensuring the appropriation of knowledge, skills and attitudes that allow these young people to develop individual potential for fulfilling the responsibilities and commitments they assume as a person, professional and citizen before the society.

These clarifications are consolidated when metacognitive stimulation is assumed as the conscious continuity of the influence of the teachers of the year group to activate psychological processes such as reflection, understanding, the capacity for anticipation that they have to recognize behaviors and practices that restrict your potential for tolerance and acceptance, a deeper understanding of what it means to be a professional in your area; and, have an objective appreciation of the implications and impact of their work, anticipate behavior (own and others) from perceiving emotions and feelings.

Regarding the concept of initial teacher training, it is conceived as a scientific, technical and socio-cultural, psychological, disciplinary and didactic learning process, in which this knowledge is shaping the ways in which the student should approach their performance in practice (Contrera Betarte et al., 2022).

The previous idea is made to correspond when it is noted that initial teacher training is a complex, comprehensive, systemic, continuous process; directed by the university faculty (or collective), whose purpose is the transformation and development of future professionals, aimed at creating the conditions for their performance.

In this sense, the results presented by those who consider that, in Cuba, when referring to this, point out, it is an integral process of teaching, research and practice, systemic, continuous, in correspondence with the functions declared in the context of the model. of formation of the professional of the Cuban education. For this reason, the participation of all the actors involved in its design, development and evaluation is inevitable, and the need to see it in an integrated manner, in relation to social transformations, so that it is designed in the best way and thus take advantage of

educational resources, linked to educational influences from the educational strategies of the year and in all training activities.

In effect, the need for coordination and management of all participants in the process is enunciated between the lines, and its link with social transformations, which is taken into consideration in the conception that is presented, being consistent with educational policies. that are followed today in Cuba when it comes to strengthening pedagogical training in the face of multiple social demands in times of current crisis. Taking into account the above, this work has as its main purpose to socialize the psych pedagogical conception for the metacognitive stimulation of students in the initial training of the Bachelor of Education.

## MATERIALS AND METHODS

A concurrent or mixed methodology was assumed (Hernández-Sampieri & Mendoza, 2018), with emphasis on the qualitative. Theoretical level methods typical of educational research were used: analytical-synthetic, abstraction-generalization, structural systemic approach, modeling and systematization.

Abstraction-generalization was used to make inferences, arrive at particular analyzes and generalizations; and, reach conclusions about the metacognitive stimulation of students in the initial training of the Bachelor of Education.

In addition, the inductive-deductive was used to determine the problem and the elaboration of the proposed conception. The systemic-structural approach to determine the didactic structure of the conception, and, reveal the hierarchy and functional relationships between its components.

The empirical methods applied are framed mainly in the analysis of the product of the activity to know, through the observation record of the training activities of the Pedagogy-Psychology career, how the metacognitive process of the students is developed in practice, the role of the teacher in this sense and the relationships that are established; In addition, to determine those sentences or conflict situations that could be accounting for the components of the students' metacognition.

The analysis of documents, made it possible to obtain the information contained in the professional models, the discipline programs, subjects; as well as the educational strategies and governing documents of the process, which allowed to characterize the educational policy related to the initial training of the graduate in Education and the metacognitive stimulation of the students during it.

Surveys were also applied, in order to confirm and consult experts on the effectiveness of the initial training of the graduate in Education, and improve its dynamics through metacognitive stimulation of students; as well as, for the assessment of the relevance and feasibility of the proposed psycho-pedagogical conception.

The interviews were applied to managers and teachers to collect opinions about the conditions of initial training activities and the relevance of metacognitive stimulation of students of the Bachelor of Education.

The psychological test was applied to determine the metacognitive development of the students in the initial training of the graduate in Education.

Triangulation was used to analyze the results of the methods and techniques applied during the different phases of the investigation; and, through the triangulation of sources, determine the characteristics of

the initial training of the graduate in Education to incorporate metacognitive stimulation.

For this same purpose, the discussion group was developed to assess the preliminary proposals, provide the necessary elements and carry out the analysis of the final proposal.

The criteria of experts were used to assess the theoretical assumptions analyzed around the initial training of the graduate in Education and the metacognitive stimulation of students and enrich, from criticism, the Psych pedagogical Conception.

The mathematical-statistical methods were used in the validation of the instruments, and the descriptive and inferential analysis of the data.

The participation of several sample groups was estimated, according to the stage and conditions of the investigation; and. the possibilities of incorporating diverse contexts. The intentional selection criteria and informed consent included career coordinators, main teachers of the year and discipline, teachers and researchers of the initial training of the graduate in Education, in the country and specialists in Educational Psychology and Psych pedagogical Guidance.

For the systematization of the results of educational research, the foundations of the Historical-Cultural Theory were taken, which places man as the center of the educational process, and emphasizes the active role of the subject and their interactions; as well as the determining role of activity and communication in the formation of consciousness.

## RESULTS

The result of the empirical methods demonstrated the following:

In the analysis of documents, the value of metacognitive stimulation in the process of training students as future teachers is recognized, and the career and years are given a fundamental role in this purpose, but its intention is not explicit in professional training. At the same time, it is inferred the need to sequence the use of resources and auxiliary means that help and support teachers and students to stimulate and appropriate the contents that are involved in metacognitive development.

In this sense, the objective declared for each of the years is not alluded to, the orientation that teachers can and should follow when designing and executing their teaching-learning activities, educational activities in general, is limited (Cuba. Ministry of Education, 2016). This situation was confirmed in the analysis of the activity observation record, in which the evidence related to planning does not include specific metacognitive assessment exercises.

In the interviews with teachers, it was recognized that although they are convinced of the importance of this type of resources in the quality of learning, they confirm that they lack preparation, educational resources and that this conception is not followed from the careers; but, in the Pedagogy-Psychology career, a treatment more associated with the conceptual aspects that should be applied as part of the exercise to empower students is evident.

The psychological test (Metacognitive Assessment Inventory) showed limitations in the metacognitive development of the students, which are related to the metacognitive skills system and the problem focuses on the action planning stage, where (74% of the students ) presented difficulties with setting objectives before carrying out any action in the context of learning and

educational activities; as well as, in the questioning of the variables related to the person, the task and the strategies to be used; which affects the system of these skills in a general sense, as limitations also appear in metacognitive regulation and evaluation.

Indeed, these insufficiencies constitute the basis for the improvement of the educational activity of the career, for which it was necessary, through discussion groups, to confront with the professors the scope that the metacognitive stimulation of the students in the career should have. Bachelor of Education, specialty Pedagogy Psychology.

Based on the initial diagnosis made, a goal was set to achieve in order to obtain better results. In the first place, it was recognized that, as the internal dynamics of the conception is based on the complementary relationships that each of the stages and sequences that support the dimensions through which the process goes through, the teacher should structure and adapt the resources. educational and influence to model the metacognitive process; all of this, based on the communication and interaction that this dynamic facilitates from the self-knowledge that the students have, the task they carry out and the strategy they use to carry out the activity successfully.

Secondly, to carry out the assessment of the preliminary proposal by virtue of carrying out the metacognitive stimulation of the students in the initial training, it was necessary to include the actions of the teachers, tutors and managers with support in the integration and intentionality of the influences; to later, support the implementation of the proposal; as well as, facilitate the relationships between teachers, tutors and managers to make decisions regarding other training activities and establish the evaluation to feed back the decision-making of teachers, tutors and managers.

As a conclusion of this stage, the relevance of this type of study was confirmed, since, according to the training requirements of university students of pedagogical careers, metacognitive stimulation should be prioritized; Thus, according to the theoretical position defended in this research, students' abilities to self-generate the best external conditions for the development of their learning must be reinforced; as well as self-knowledge, self-determination, control and mastery in their modes of action, so that it affects the integral formation of the personality of the students from the various training activities.

In addition, responding to this requirement requires paying attention to the design of actions and activities aimed at pondering the diagnosis; and, to intentionally include educational resources for metacognitive stimulation. In the same way, there are potentialities to promote this type of result, but it is up to the teacher to play a mediating role, which is equivalent to providing the didactic and pedagogical tools that facilitate the student learning the contents that guarantee the fulfillment of the objectives of the course. metacognitive development.

Therefore, a reflection was generated around the need to socialize the theoretical study and transfer from the practice itself the analysis of the educational resources necessary to conduct the process. The main results were determined in the analysis of the proposal of the psych pedagogical conception for the metacognitive stimulation of the students in the initial training of the graduate in Education.

In the literature that addresses this issue, the meaning and characteristics of a conception evidence their wide diversity in themselves; that is why in the philosophical dictionary Rosental & Iudin (1985) define it as *"a set of principles, opinions and convictions, which determine the line of activity and the activity that an individual,*

*social group, class or society maintains towards reality". society as a whole" (Valdés Zambrana et al., 2017, p. 276).*

The conception, in the pedagogical context, implies the knowledge of the properties or substantial aspects of the objects and phenomena of reality; as well as the knowledge of the main links and relationships between them, for which the authors who have proposed it insist on assuming it as the result of a certain stage of knowledge and/or way of thinking that underlines the essential characteristics of the object of knowledge and of the ideas that guide educational practice.

In this sense, when referring to the conception as a scientific result, general postulates of the General Theory of Systems are assumed, in which it is based that the totality manifests the dialectical unity of components that have their own characteristics and specific functions that make them independent, but parts of a single whole. By emphasizing its structural aspects, Valle Lima (2012) defines it as *"the set of objectives, essential concepts or starting categories, principles that support it, as well as a characterization of the research object, emphasizing and making explicit those transcendental elements that undergo change, by assuming a point of view to analyze the object or phenomenon under study"* (Valdés Zambrana et al., 2017, p. 277). These authors evidenced the diversity of criteria when naming it in correspondence with the processes under study; In this way they can be called didactic, curricular, systemic for improvement, pedagogical and theoretical-methodological conceptions.

A study in the pedagogical field carried out by Keeling Álvarez (2013), made it possible to identify that among the essential features of the conception as a scientific result is its theoretical-methodological nature and the integral approach of the elements that support it, ideas, reflections or concepts that

are they relate to each other and guide the practice by establishing new arguments of a process. This shows the need to specify the theoretical positions for the analysis of a process or phenomenon of educational reality; as well as the orientations for its concretion in practice and the pedagogical actions for the appropriation of the contents.

For the conception proposed in this research, the requirements proposed by Valle Lima (2012), Keeling Álvarez (2013) and Valdés Zambrana et al., (2017) were taken into account, regarding the consideration of its theoretical-methodological nature. ; particularly with regard to its meaning as a whole, since it must represent the configuration of integrated elements to achieve a common purpose, contemplate types of relationships between elements, parts and between the system and the external environment that contains it and be the product of a abstraction of reality that is executable.

As part of the investigative process, it was necessary to define what is a psychopedagogical conception for the metacognitive stimulation of students in the initial training of the graduate in Education; in this regard, based on the criteria proposed by the aforementioned authors (Valle Lima, 2012; Keeling Álvarez, 2013; Valdés Zambrana et al., 2017); and, taking into account the consideration of the variables: stimulation and metacognition, it is considered as a set of ideas, categories and representations of the process of metacognitive stimulation of students in the initial training of the graduate in Education, which is presented as a viable option. to guide the intervention of the teachers of the year group in the orientation for the confrontation of different substantive activities interrelated in their guiding logic towards the success of their professional functions and their personal and civic development.



Therefore, the proposed psych pedagogical conception is given by the following psych pedagogical elements that the process includes:

- The assumption that teachers become aware of the need for metacognitive development and the importance of systemic stimulation integrated into personal learning and modes of action.
- The mediating work of the teacher, who, supported by stimulating resources, directs the process so that the student appropriates the knowledge, skills, attitudes, values that contribute to their personal growth.
- The meanings and senses that are given to the spaces of intersubjectivity, which emerge as a result of the relationship that is established from the methodological procedures by harmonizing the formative experience and the metacognitive assessment.
- The assumption of ideas about internalization by giving importance to metacognitive assessment in the development of the young person, first at the social level and then at the individual level from their conscious involvement in their own metacognitive development (a requirement that is expressed in a integrated into the procedure to stimulate the process).
- The logical and psychological significance that the activities must achieve so that they exercise self-knowledge and the ways in which they learn and the critical and reflective capacity to solve professional problems using personal resources and acquired strategies.
- The significant role that is given to the experience that is where the particularities of the development of their professional and personal identity are manifested.

The general objective of the psych pedagogical conception presented is:

stimulate the metacognition of students in the initial training of the graduate in Education.

For this, the integration of the procedure to the demands of the training process was assumed; therefore, it goes through the design, development and evaluation of the training process by intentioning the influences and educational resources so that students can self-know, self-assess and self-regulate.

In its internal structure it is composed of:

The foundations, which are nothing more than the integration of philosophical, sociological, psychological, pedagogical and didactic notions, which have the function of serving as the basis for the proposal and stand as its principles.

The dimensions explain the internal structure of the proposal, the relationship between the organizational dimension that explains how the structure of the process is conceived through its moments, to which the methodological dimension is made to correspond, which reports on the sequence of psycho-pedagogical actions that make possible the stimulation of the teacher and the activity of the student to obtain the objective to which he aspires, the results that are obtained in each of the stages and moments from both dimensions. Next, each of the principles is explained and then proceed to explain the stages and moments based on the internal dynamics of both dimensions.

The resources are the means, the techniques that are used to obtain the desired results in each of the moments through which it travels.

The relationships explain the characteristics of the activities carried out by both teachers and students and the help relationships that are offered to each other to obtain the results.

Principles of the Psych pedagogical Conception:

Indeed, the stimulation generated in the activity and the communication established

by the teacher in this activity, is supported by actions and resources that guide those involved towards the pedagogical realization of actions in the educational strategy and psychological actions such as self-assessment. , the reflection about the personal characteristics, the task and the strategies that were followed to solve them, by virtue of the appropriation of self-knowledge tools, and self-regulation that would make decision-making possible, the elaboration of coherent life projects in function of social demands and, above all, they will generate a proactive attitude and oriented towards self-development, their professional activity and at a social level.

According to this position, the teacher's activity as a mediator should comply with the following principles, determined from the Historical-Cultural Theory that supports the present study, and, on which the operation and success of its concretion in the phases of formation of the university student of the races of Degree in Education. These are:

#### 1. Metacognitive stimulation as a dynamic element of the integral development of the personality

It is a fact that metacognitive stimulation is a dynamizer of development, since starting from the current and potential state of the student, the guiding influence of teacher's courses as encouragement, motivation and awareness of who he is and who he wants to be and what he has to achieve. the development aspirations of oneself at the moment of life in which one finds oneself. The metacognitive examination reveals the set of potentialities to overcome the obstacles of the environment and the personal shortcomings that identifies and values the possibility that it has to grow, to the extent that it achieves an adequate balance between the personal being, the acting model and the professional profile. that will define you once you graduate.

In addition, so that the student himself is involved in the search for training opportunities, he manages the aid while the teachers in the year group share the task of rethinking the contents and educational methods. This explains why, by virtue of the fact that at this time when the academic is so limited, it is essential to treat the contents from the academic point of view in order to later make a social contribution; that is to say, one must be working theoretically on what the student has to know and know how to do.

#### 2. Multidimensional, gradual and integrating nature of metacognitive stimulation

It is made up of a multidimensional way, while the transformative action must ensure that the influence has a triadic character, since all the activities are not only oriented towards the achievement of the training objective set out in the professional profile, but also include openness to emerging personal and social goals. Thus, it is explained that the formative relevance also attends to the type of influence that must be guided by their participation, both professional and citizen, and thanks to the dialectical unity that exists between socialization and individualization. It means that every time the teacher manages to stimulate self-knowledge, self-assessment and self-realization in the student, he induces him to a greater entrepreneurship to participate in the activities.

A stimulation process is taking place that is gradual to the extent that it takes place in a double group-individual and individual-group sense. This supposes that the stimulation resources are presented in the influences, first, as challenges or aspirations of the group in which each one can contribute to their concretion; and, later, from the collaborative implication that each one carries out on the others, the group is once again able to develop and achieve results with their meaning and meaning for each and

every one of them. Likewise, integrality is also dual when considering that the content of the activities mobilizes the cognitive-affective and attitudinal aspect, while it is also present in all academic, investigative, labor and extension processes, inside and outside the institution; by all the teachers of the group of year and career who interact with them during the training process.

3. Coherence of the educational influence in the metacognitive stimulation activities, where the activities are conceived as a coherent expression of the educational influences, and attend to the nature of the external conditions in which the initial training of the professional takes place. At the same time, with a problematic, practical and investigative approach, they are integrated and achieve coherence to the extent that they can help the need for self-knowledge and self-regulation for performance to emerge.

Indeed, influences are promoted that promote the internalization of emotional experiences and feelings from which the channeling of information broadens its meaning and sense that serves as the basis for decision-making, which is externalized again as a guarantee of successful performance. Then, the planning of the activities carrying intentional influences goes from the informative and reflective provocation of the information to internalize the process of self-knowledge. Therefore, students are mobilized to identify personal possibilities to favor the growth of the group and vice versa, which requires giving meaning to the satisfaction of "who I am" and "what can I do" based on the group; to later get involved in a projective activity that entails giving group and personal meaning to what must be done from proactive, entrepreneurial and collaborative action.

### **Stages of the psych pedagogical conception for the metacognitive**

### **stimulation of students in the initial training of the graduate in Education**

The ideas exposed up to here are translated into a sequence that specifies the didactic procedure, from the stages and moments that include, internally, the relationship dynamics between the organizational and methodological dimensions, which is presented and described below.

To ensure the understanding of the psych pedagogical conception, it is necessary to understand that as a whole it is possible to identify its structural components which, in their dynamics, allow the metacognitive stimulation of students to be specified in each and every one of the training activities and as part of the management. that is carried out by university teachers in the activities they carry out in the groups to which they belong, with emphasis on the group of the year.

In this case, an organizational dimension and a methodological dimension are identified. The first justifies the sequence of the process, in its order and relationship with the design, development and evaluation of the training process; the second announces the synergy of the interactions that characterize the activity and the use of resources. Each of them is present in the different phases of the training process. Let's see how they contribute, in an overlapping way from each of the stages.

### **Previous stage**

The objective of this stage is to guide decision-making based on the approach, conciliation and projection of the process. Thus, it explains that, when establishing the metacognitive stimulation of the students, from the year group, from the metacognitive diagnosis and the selection of educational resources (Application of instruments, Discussion, Self-report, List of objectives, goals and ways to achieve it) that stimulate

reflection and introspection, help is offered so that the student achieves the correct self-assessment based on the assessment of others and of himself. This constitutes an important element for the initial projection that lays the foundations for the final projection of his professional performance. It has three moments that express the diagnosis, the conciliation and the initial projection.

### **Preparation stage of metacognitive stimulation**

The objective of this stage is the preparation of metacognitive stimulation in the student's initial training process. It is explained from the sensitization that is achieved in teachers to establish the commitment to prepare themselves in order to direct educational resources (Readings, Guided Analysis, Product development, Training, Portfolio, Socialization of experiences in events and informal meetings, email, blogs, Interviews, Group Analysis, Projection, Discussion) to the execution, to later socialize the results in the year group and conceive the focus and planning of the stimulation process. It has three moments that express self-preparation, joint preparation and planning.

### **intervention stage**

The objective of this stage is, in effect, to carry out metacognitive stimulation, which becomes a condition of the process in the initial training of the Graduate in Education. It is explained from the new quality of methodological integration that training acquires, to the extent that academic, work, research and extension activities are based on a systemic and synergistic approach to metacognitive stimulation of students. It is produced in a process of entry, development and exit, through the use of educational resources (Prepared biography, Self-report, List of objectives, goal and way to achieve them, reading itineraries, guided critical analysis, guide with self-knowledge

questions, Guided assessment, Diary, Portfolio, Questionnaires, Group Analysis) to lead the student to metacognition through reflection and introspection. This action allows you to plan, control and assess your performance, which will manifest itself in a process of self-knowledge, self-assessment, self-realization and self-determination to guarantee success in training. It has three moments that express implicit stimulation, reflection and explicit stimulation.

### **Evaluation stage**

The objective of this stage is to assess, in a critical and projective way, self-knowledge, the conditions in which they are formed and developed, their peers and the way that self-regulation assessments influence it, as well as the identification of the key areas of development, the help and support they need from their peers and teachers to reach higher levels of development. It is then a self-assessment that, based on self-perception, guided reflection and external assessment of peers, which is obtained with the use of educational resources (Guides, Discussion) reveals the correspondence between the image they have of themselves, their beliefs, attitudes and personal, professional and citizen projection. It is explained from the establishment of indicators or rubrics that guarantee the objectivity of the evaluation. It is carried out in three moments that express self-evaluation, co-evaluation and comprehensive evaluation.

### **Requirements for the implementation of the psych pedagogical conception**

1- The methodological work of the career, disciplines and groups of years to identify the moments, types of influence, resources that are used by the teachers in the activities and the way in which the design, development and evaluation of the interventions will be ensured.

2- The preparation of teachers in the theoretical methodological aspects of the conception and its adjustment to the dynamics and conditions in which each career develops its process.

3- The projection of the monitoring and follow-up of the results systematizing the advances, setbacks or stagnation; as well as the identification of other resources and aid that may emerge inside or outside the university institution and that are integrated into the proposal.

4- The assurance of the use of verbal or extraverbal communication with a positive approach as a way of constant feedback of the results of the stimulating influences, the product of the activity and the performance as the result of its influence, either in the formal activity or informal, revealing the affective, cognitive or axiological character with which students are linked to the activities.

All of the above was valued by the directors of the Faculty of Humanities as essential conditions to guarantee the improvement of the training process. At the same time, they requested to expand the improvement program and introduce into the methodological work system the psychopedagogical occupation in the instrumentation of the diagnosis, the elaboration of educational strategies, the monitoring of the formative evolution of the students, based on the actions incorporated by the teacher in each formative stage.

## DISCUSSION

The results of the empirical methods show the relevance of this type of study, since, according to the training requirements of university students of pedagogical careers, metacognitive stimulation should be prioritized; Thus, in accordance with the

theoretical position defended in the research, and coinciding with Alsina et al. (2019), they insist on the need to mobilize the professional capacity of the teacher in training through a reflective and self-reflective process to know how to identify with their functions and recognize the characteristics of their own learning. This allows you to achieve self-control and self-control as essential socio-emotional skills in a consistent professional, personal and civic projection.

The response to these demands focused attention on the design of actions and activities aimed at pondering the diagnosis. However, although the current study shows its particularities compared to those carried out by Cuesta (2001) and Moreno Iglesias et al. (2019), they acted accordingly with the criteria of these authors, who in their studies, ensure that in order to design study plans and programs in correspondence with the purposes of society (design phase), it is necessary to start from the personal diagnosis and of the context as a premise, to adapt them to the specific contexts, time and place in which they act (development phase) and evaluate the results of their implementation as a whole to verify if any restructuring, modification, change and introduction of something new is necessary, both in its micro (class) and macro (study plan) (evaluation phase) connotations.

Also, the ideas of Vaillant (2019) were taken into consideration, which are far exceeded, considering mediation as a style of educational interaction, guided by a series of principles, and capable of promoting and accompanying the learning of the students, that is, to promote in them the task of building and appropriating the world and themselves. In this case, the mediator must meet certain requirements to ensure that the metacognitive stimulation of the students responds to the socio-educational transformation in all activities in initial training. These principles and requirements

are defined in this research as a guarantee of its coherence.

The results obtained in the study show coincidences with the one carried out by Valdés Zambrano et al., (2017), in the sense that both are part of research projects that contribute to the implementation of the results (models or conceptions) in pedagogical careers. which offers evidence of the need to contribute to the comprehensive training of education professionals, both in economic-legal and psycho-pedagogical aspects. The fact of making this contribution from the proposal of theoretical-methodological conceptions (in the particular case of the present investigation, psycho-pedagogical conception by its nature) satisfies the need to go to work theoretically on what the student has to know and know how to do.

In addition, as the internal dynamics of the conception was supported by the educational resources of metacognitive stimulation that the teacher uses as a mediator; According to the criteria of Vélaz de Medrano & Vaillant (2021), this facilitates that, at each of the moments, he can deploy the activities and resources that allow him to model, support and help the student to the own elaboration (individual or group) of her project.

In this way, the resources that were used the most, due to their materiality, were identified as means, guides, brochures, techniques, strategies, meetings with personalities who have an experience on the subject, which facilitated the work and the establishment of relationships. among the participants, mutual knowledge that promoted interaction and the achievement of learning goals. It coincides with Keeling Álvarez (2013) on the need for the conception to constitute a viable option to guide the intervention of teachers in the orientation for coping with interrelated activities in their guiding logic towards the success of professional functions, it was determined the methodological and practical

challenges of the psych pedagogical conception.

From the theoretical point of view, the work had the consequences of defining the principles that underlie the metacognitive stimulation of students in the initial training of the Bachelor of Education. And, for the determination of the possible practical applications, the challenges of the proposal were determined.

In this sense, challenges were presented in the research from the methodological and practical point of view despite the fact that the theoretical and methodological elements that justified the proposal were taken as a starting point, which allowed establishing the relationship between the gap, the fundamentals and the result to be consistent with the relationship between the object and the field, the use of the characterization of psycho-pedagogical conditions for metacognitive stimulation in initial teacher training; and then at conception.

With the results obtained, it was possible to adjust the procedures for implementation in practice, obtain information on possible results of the investigative process, ensure the relevance and feasibility of the proposal for the solution of the declared problem. Among these adjustments to the procedures for implementation are: the preparation of teachers, tutors and managers and the use of methodological spaces (real and virtual) for the integration of training actions.

Also, it was possible to identify research needs related to: the development of other resources and their relevance and impact on groups of students with different levels of metacognitive development; the systematization, in the results of the methodological preparation and improvement of the groups of the year, to generalize the results.

In this case, the methodological work system of the university, educational innovation, and the research projects that are being developed, as a claim for the improvement of practices in Higher Education, value the role of virtual spaces to promote the establishment of the ideas that are presented in the psycho-pedagogical conception that is proposed, therefore, the commitment from this proposal remains, to assume the search for new ways of stimulating the initial training and the metacognitive development of the students.

The study carried out allowed the authors of this work to socialize the main results of the theoretical and methodological modeling for the guidance activity in universities from a psycho-pedagogical approach about the metacognitive stimulation of students in the initial training of the graduate in Education.

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The authors participated in the design and writing of the work, and analysis of the documents.

#### Quote as

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