

# International Journal of Human Sciences Research

Acceptance date: 07/01/2025

## KNOWING HOW TO RESEARCH VERSUS RESEARCH METHODOLOGY THE CASE OF UNAH PEDAGOGY PROGRAM IN HONDURAS

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**Abstract:** Research is an essential function of the University, and the Career of Pedagogy of the National Autonomous University of Honduras (UNAH), contemplates in the professional profile of the future pedagogue the training in research through three subjects of the current study plan. What presupposes the development of investigative capacities in students, however, there is concern that the learning obtained in this field is not achieving the necessary skills in their training, this reflects a problem in the Career of Pedagogy that merits a reflection from the look of the actors involved. Therefore, this study was proposed as a general objective, to analyze the current situation of the teaching of the research methodology and the perception of the learning obtained by the students in the face-to-face modality of the Pedagogy and Education Sciences Career UNAH, University City and UNAH Valle de Sula, during the second academic period of 2016. This research has been developed with the qualitative approach and descriptive scope with a phenomenological perspective. The selection of study subjects was based on intentional sampling, based on attitudinal and academic characteristics. Among some of the findings that can be mentioned is that there is a contradiction in the teaching of technical-conceptual knowledge by teaching methodologies or teaching skills for research, on the other hand, it is evident that the pedagogical practices of teachers they orient a paradigm of process-product and not the interpretive paradigm. An important conclusion is the existence of shortcomings that do not allow the development of research as an area or field of education of the pedagogue; these shortcomings are related to the organization and didactics of teaching work in research subjects.

**Keywords:** learning, Teaching, research, methodologies, epistemological perspectives.

## INTRODUCTION

Scientific research is of utmost importance for the development of any disciplinary field, hence the importance of research in higher education training, the career of Pedagogy and Education Sciences of the National Autonomous University of Honduras UNAH, includes in its curriculum different subjects of research character.

Consequently, the question that guided this research is posed; *what is understood about teaching, as well as the perception of learning that students have in the subjects of research methodology in the face-to-face modality of the Pedagogy and Education Sciences Career, university city and UNAH-Valle de Sula, in the second academic period, year 2016?* This article aims to show some reflections of the possible answers to this question, with an approach of the qualitative approach; which shows the analysis of the educational practice of the Pedagogy teacher, in relation to whether research is taught or research methodology is taught, the same is derived from the epistemological perspectives that teachers have. Likewise, it is reflected if the student develops significant learning based on theories, practices, scientific processes proper of educational research and pertinent to the pedagogue's profile.

From the theoretical review and the findings of this study, it is inferred that the pedagogical practice of teachers emphasizes in the first instance the technical-conceptual and procedural aspects when developing the subjects of the research area, neglecting to a certain extent the development of research attitudes in students; and secondly, it is evident that research topics are approached from the quantitative approach, neglecting the development of the qualitative or mixed approach in pedagogical research.

Finally, this research points to the need to provide spaces further reflection on the work of innovative formative practices in the teaching of pedagogical research.

## METHODOLOGY

### DESIGN

This research has been developed within the framework of the qualitative approach, under which it seeks to understand the phenomenon under study within the intersubjectivities of the actors involved. Álvarez (2003) points out that “qualitative research we speak of the need to achieve and ensure the obtaining of the real and true situation of the people being investigated and, in this sense, it will be preferable and more descriptive to speak of the need to authenticity, rather than validity. This means that people are able to truly express their feelings” (p.32).

This study has a non-experimental descriptive scope, since it was possible to identify the main perceptions of the educational community of the Pedagogy Career, obtained from the consultation carried out in relation to the study phenomenon.

The research conducted was developed under the phenomenological perspective because in qualitative research “it is essential to experience reality as others experience it. And researchers identify with the people they study in order to understand how they see things” (Álvarez, 2003, p.26).

### POPULATION

The population or universe of the present study corresponded to 207 students enrolled in different sections of the subject Uni-Practica Profesional II (Research Workshop) in the Pedagogy and Education Sciences program at Ciudad Universitaria in Tegucigalpa and at UNAH-Valle de Sula; as well as the 86 teachers who are part of the permanent and hourly teaching staff of the Pedagogy department at Ciudad Universitaria and at UNAH - VS.

Subject	University City	UNAH-Valle de sula
PA-602 Uni- Practice Workshop Supervised Professional II	116	91

Table N. 1. Student population at CU and UNAH-VS, II PAC- 2016.

Data obtained provided by the Department Head of both centers, 2017.

CU Faculty			Teachers UNAH-VS		
Permanent	Per hour	Total	Permanent	Per hour	Total
34	14	48	12	26	38

Table N. 2. Teaching population in Ciudad Universitaria and UNAH-VS, II PAC-2016

Data obtained from the Secretariat of Pedagogy CU and Jefatura UNAH VS, 2017.

The sample consisted of 21 students, of the purposive type, since the following selection criteria were considered for the students:

- Students who attended the subject of PA- 602 (Research Research Workshop).
- Academic excellence
- Leadership traits
- Commitment and interest in research

The sample of teachers was 15, including chiefs (2) and coordinators (2) who were consulted because they were authorities, in the case of teachers the selection were:

- Teachers who taught the subjects Educational Research Methodology I and II.
- Teachers who taught PA- 602 Research Workshop.
- Minimum of two periods of teaching experience.

The purposive sample according to Galeano, (2014) “is selected with criteria of qualitative representativeness (knowledge, experience, significance of the place or moment, motivation to participate in the study, opportunity and conditions of development of the research) and in close relation to the purposes of the research” (p.43).

## INTERVENTION

The data collection techniques used to collect information in this study were:

### - Focus group:

It is a meeting in the form of an open and structured group interview or exploratory group interview, in which a group of selected individuals (from six to twelve people) are encouraged by the researchers to discuss and elaborate, under the guidance of a moderator, from their personal experience, expressing themselves freely and spontaneously on a topic (Álvarez, 2003).

Six focus groups were organized with seven students each, three in the Pedagogy and Education Sciences Department of Ciudad Universitaria in Tegucigalpa and three in UNAH-Valle de Sula; they were developed under a guide of broad questions extracted from the categorization matrix.

### - Directed or semi-structured interview:

In this type of interview, participants are allowed to express themselves on all topics and their responses are recorded (often by tape recorder). Instead of asking questions taken directly from a questionnaire, the researcher proceeds to an interrogation based on a script of topics or a set of general questions that serve as a guide to obtain the required information (Alvarez, 2003).

The interview was applied to teachers who teach research classes both at Ciudad Universitaria and UNAH-VS, as well as to authorities to whom a guide of open-ended questions was applied, also extracted from the categorization matrix, giving the participants the freedom offer answers as broadly as possible according to the consultations made.

### - Documentary analysis:

The documentary analysis was developed from the study of the subjects that make up the investigative formative process of the Pedagogy Career, by In this regard, the study of the minimum descriptions of each of the subjects Rese-

arch Methodology I, Research Methodology II and Statistics Applied to Educational Research of the 1988 study plan and the subjects Educational Research Methodology I, Educational Research Methodology II and PA-602 Uni-professional Practice Workshop II (Research Workshop) of the 1994 study plan, the latter being the one still in force, were considered.

The analysis was carried out in two stages, the first was a reflection on the continuity based on the requirements between the subjects, that is, the organization, distribution and order of the subjects per academic period.

And secondly, the linkage and interconnection between the contents of these subjects with other subjects at a given moment in which the student moves through the curriculum.

## ANALYSIS OF THE STUDY

According to Galeano (2014), the collection and generation of information is characterized by being flexible, i.e., adjustments are made according to the progress of the research process and the understanding of reality. For this purpose, the application of information gathering techniques that are in accordance with the scenarios and actors according to the research topic is contemplated. Likewise, the protocols of these techniques will be evidenced and systematized through audio recordings and transcriptions. To guarantee the reliability and validity of the information, the process proposed by Miles and Huberman cited Fernández Núñez (2006) is expected to be carried out, which includes: obtaining the information, capturing, transcription and ordering of the information, data reduction, codification, data arrangement (in which the triangulation technique is used), documentary analysis and drawing of conclusions.

Information saturation was reached in the answers obtained in the interviews and focus groups; according to the categories and sub-categories of analysis (see figure No.1) this led us to the reconstruction of the actors' reality.



Figure No. 1 Categories and subcategories of analysis

Source: Authors' elaboration

## ANALYSIS

The development of the analysis was structured according to each of the previously established categories and subcategories, in the first category *Epistemological perspectives of teachers and in the subcategory of Perspectives on how to teach research in education*, we consulted the teachers on what it is for them to teach science; in UNAH-CU, the notion of teaching the history of science and its epistemological approach is rescued, as a previous step of the particular formation of the investigative field; the teachers of UNAH-VS, assume the idea attached to the practicality; from this it can be inferred that the epistemological perspectives of the teachers is coherent with that proposed by Barrón Tirado (2014), since these practices are directed to a process-product paradigm and not to the interpretative paradigm; This epistemological perspective fits with the traditional way of teaching science, which has reflected a linear teaching, i.e. basically the transmission of information (concepts, data, facts, stages); contrary to the above would be to develop a critical scientific thinking, oriented to promote the attitudinal in learners within the framework of the interpretative paradigm.

The students' discourse in relation to science, epistemology or directly to the research procedures addressed, reflects the teachers' epistemological beliefs and actions.

It is interpreted that there is a difference between UNAH-CU (tendency to the theoretical) and UNAH-VS (tendency to practicality) with respect to teaching science, although the same epistemological perspective of the teachers of traditional science teaching is maintained.

The analysis around teaching **research and teaching research methodology** is a recurring debate, all teachers both from CU and UNAH-VS clearly expressed differences between the two processes, grouping them in the level of complexity of the same, but that in turn are processes that complement each other; teachers slightly recognize the attitudinal aspect that characterizes "teaching to research" which involves building own objects of study; therefore it is interpreted that some teachers orient the subjects to the teaching of research, but conceived from the procedural logic, which Omar Barriga and Guillermo Henríquez (2004) express as the teaching of the methodology that implies appropriation of technical-conceptual knowledge by the students.

The above situation is coherent and at the same time complex, since the discussion referred to the teachers' practice is directed to what is stated in the current study plan (1994); particularly in the minimum description of the subjects PA-103 Research Methodology I, PA-106 Research Methodology II and PA-602 Uni-professional Practice Workshop II (Research Workshop). Since these are oriented to the instrumentalization of research methodology, which is not negative, however, there is no clear epistemological condition oriented to educational research.

In the subcategory *Paradigms of educational research*; the discourses of teachers and students, a disparity was identified in the teaching of methodological approaches in the subjects PA-103, PA-106 and PA-602; In UNAH-VS they teach the quantitative approach, although in the workshop there is some approach to the qualitative and mixed approach, which evidences a level of awareness of the way of working according to the paradigms of research; However, it reflects the theoretical and methodological weakness of applying the qualitative and mixed approach.

At UNAH-CU, the work on educational topics with a qualitative approach is more emphasized, although the scarce capacities of students in this approach are still latent, and there is also the tradition of approaching educational topics in a quantitative manner.

The perception of teachers regarding this problem is understood from their education and training, as well as the domain and experience of addressing educational issues in a quantitative way, which is summarized in the lack of clarity to deepen in the epistemological orientations of educational research, this refers to "the position that the researcher takes regarding the five problems of knowledge (philosophical, theoretical, methodological, technical and instrumental" Nava, 2014, p. 38). The lack of knowledge on the part of

teachers in these fundamental, theoretical and methodological aspects permeates the development of research subjects, pushing aside the paradigms of educational research.

The subjects selected in PA-103, PA-106 and PA-602 are mostly oriented towards educational research, which Restrepo (2002), establishes as:

"The pedagogical-centered as it is generally referred to historical studies on pedagogy, to the definition of its intellectual space, or to the definition of its intellectual space to research applied to pedagogical objects in search of the improvement of education, as is the case of research on the curriculum, teaching methods and other factors inherent to the educational act (Page 21)".

From the above, it can be inferred that not all the topics developed are properly educational topics, but topics that are addressed from the paradigm of the Educational Sciences, topics addressed from society and its practices; and secondly, there is little research on pedagogy as a contextualized practice, that is, the development of areas such as the teacher's thinking and knowledge, the reflective teacher, the organizational culture and climate (classroom ecology, classroom and school ethnography), the teacher as a researcher and critical pedagogy, Briones (2010).

The following opinions reflect the above inferences:

"The problem of garbage around the university" (*G.F.VS 2: P, 2. E4*).

"It's that sometimes we do research that is not meaningful and may not be that useful" (*Interview 5: P, 13. D-CU*).

The results in the subcategory, *Research design in educational research*; allow inferring that there is a lack of establishing a relationship between the topics, the approach and the research designs (generally referring to the descriptive) in the work proposals that are developed in the subjects of PA-103, PA-106 and PA-602.

According to Locke (1994) cited by Nava (2014) “Before starting any research, from the research sciences, we must consider from which philosophical assumptions we are going to start to know the object of study that we want to apprehend (p.7)”.

However, a contribution to the explanation of this scenario, from the students’ perception, is that it seems that teachers often do not know exactly the definition or use as synonyms approaches, methods and paradigms for the understanding of scientific knowledge; this leads us to identify another epistemological problem that consists of a lack of clarity of teachers in both contexts (CU and VS) regarding which paradigm, approaches and methods to use to investigate educational topics.

When addressing educational problems, the tendency is to develop research under the qualitative approach, making use of related studies of ethnography in the classroom, action research, case studies, among others, all oriented to educational practice; although it is clear that “Educational research is implemented from the epistemological perspective of the researcher” (Vélez, 2014). It is fair and necessary that the teacher and students assume a reflective stance towards the perspective assumed and aimed at their own educational reality, therefore, pedagogical research should collect the Socio-educational paradigms according to the problems of the educational reality of which one of the most important is the critical theory of education.

The *Didactic* category of *Research Methodology in Education*, which addresses as first subcategory *Objectives and contents*, the objectives foreseen in the formative processes from the perspective of the teachers are oriented; a) To the development of the scientific process, that is to say to follow the steps of the same and what is the methodology, attached to the conceptual aspect itself. and b) to achieve on the part of the teacher to awaken the student’s interest in research.

From the students’ discourse according to their learning obtained, the achievement of the objectives previously described by the teachers is not appreciated; therefore, it is inferred that, according to their opinions, more technical-conceptual knowledge is developed, which also implies the development of contents attached to the theory and practice, highlighting the procedural, which according to the theory corresponds to the teaching of research methodology itself.

The development of the contents in these subjects is directly related to the type of text used by teachers, which implies the development of studies from unique perspectives on how to develop research skills, in this regard it is appropriate to mention the use of a very limited bibliography.

“We all agree that this book that is used here and I do not think that the rest of us know that there is another book apart from this Sampieri is the one that is most used in the career, I do not know if there is another book that is always referenced in research” (G.F.VS 1: P, 11. E6).

Finally, there is no evidence of a direct relationship between objective and content according to the discourses expressed by teachers and students of the different subjects.

In the subcategory; *didactic strategies*, both teachers and students stated that the didactic strategies developed in their subjects ranged from lectures, still widely used by teachers, to development of individual and group advisories as well as group or work; including practical exercises and others used less frequently such as the use of videos, the development of presentations by students, case studies, workshops, work guides and reading controls.

According to Sánchez (2014), he expresses that the new didactics of social and humanistic research is an invitation to differentiation. There is no single way - universal and general - to teach how to do research. However, with respect to the major tasks of scientific research

ch, it is expected, by the same token, to identify and describe:

- Problem solving skills and abilities;
- Practical knowledge to know how to build observables;
- Practical knowledge, strategies and skills to know how to theoretically and conceptually base a research project;
- Know how to perform experimental designs, as well as appropriate test construction strategies;
- Know how to submit results, as well as well as have of argumentative strategies to disseminate the research.

Then, according to the students' opinions, although teachers are not totally disoriented in relation to the didactic strategies used, it could be innovated considering that, as Morales, Rincón and Tona, (2005) state; for the teaching of research, the following theoretical and methodological proposals can be taken as references that can contribute for students to learn about research and how to do research:

- 1) Read published research on related areas;
- 2) Make conceptual presentations on the research process, seen globally, as system;
- 3) Accompany the researcher in the research process;
- 4) Teach to research by researching;
- 5) Research in and with the community;
- 6) Write as a recursive process of collaboration in the research process;
- 7) Practice meaningful research;
- 8) Evaluate formatively;
- 9) Teach by example;
- 10) Disseminate information about the lines of research;
- 11) Maintain an assertive relationship (student-advisor) in the research process.

Finally, the subcategory *Evaluation Strategies*, according to the opinions expressed by the teachers, the types of evaluation they use are diagnostic, continuous and summative; they perform activities such as defense of final reports, digital portfolio, written tests, elaboration of articles, discussion, final products of

the stages of the research process. In addition, some teachers use co-evaluation, self-evaluation and rubrics.

On the other hand, the students largely agree with the teachers; , some others do not agree with the evaluation strategies, considering them to be not very innovative. Therefore, it is inferred that the evaluation of the development is less valued in relation to the final products.

According to Belmonte (2002) "evaluation does not consist of a certification of a final product but, fundamentally, of a formative attitude (...) it is a question of carrying out a follow-up during which an expert person accompanies the evolution of another person who initiates the research (P. 137)". This is why it is necessary for the teacher to plan the evaluation of learning, as well as to communicate to the students that the evaluation will be carried out by the teacher (P. 137).

The students on the quality criteria that will be applied in the development of the subjects; and with the inputs obtained, to be able to orient it to the continuous improvement.

Due to the nature of these subjects, counseling is the most used didactic strategy according to the informants; however, teachers do not have an application and follow-up plan to provide evidence and, based on this, reorient the training process necessary.

The third category proposed was, **research capabilities of the student**, in relation to the subcategory *skills and abilities developed by the students*, the teachers consider that they are: formulating the research problem, elaborating an intervention proposal and elaboration of scientific articles; and on the other hand, they also express that there are weaknesses in the students in terms of identifying the research problem, lack of a research logic and problems in confusing the methodology of the quantitative and qualitative approach.



On the other hand, students state that their skills are directed to the search for reliable information, elaboration of hypotheses and objectives, management data collection techniques, application of APA norms and reflective interpretation the results

Regarding technological skills, in UNAH-VS the use of SPSS software (Statistical Package Social Science) is handled by most of the students according to their opinions; in comparison to UNAH-CU, where it was mentioned in few cases; other skills mentioned were the use of the UNAH virtual library and the bibliographic management *software* CI-TAVI.

In the subcategory *students' attitudes*, the data obtained through the students' speeches show the relationship between their attitudes and the role of teachers, and are consistent with what Rojas, Méndez and Rodríguez (2012) state, i.e. that an attitude towards research in students is generated by the trust they have towards their teachers, the demands they receive from teachers in the regulations for the presentation and defense of projects and their research reports, the knowledge of the teachers' research and that they are used in classes as didactic resources, the preparation of teachers in educational research, the good advice of the teacher in the research process carried out by the students.

Therefore, from the students' discourse it is possible to infer that the attitudes they have developed are of a generic nature and are oriented towards responsibility, autonomy, teamwork, commitment, dedication and commitment to the community, as well as the development of a sense of responsibility and punctuality and, to a lesser extent, an attitude towards research itself, which is coherent with what is proposed in the teaching of research methodology and technique. On the other hand, attitudes towards research are manifested in isolation.

The fourth and last category refers to the *teacher's profile*; in relation to this, from the theoretical perspective of teaching methodology, it is expected that the teacher develops his/her classes in an expository manner, presenting the theory, methods, techniques and research instruments that guide the production of knowledge about an educational reality; and from the teaching of research, it is the development of attitudes (encouraging the student to wonder about what he/she knows, ask questions, find answers) as well as tools and skills for the construction of his/her own objects of study (Rizo, 2010).

Based on the above, the question arises: Do we want to educate about research or train researchers? This question proposes the analysis of the teacher's profile in two possibilities, from the teaching of research methodologies and the teaching of research.

The analysis focuses, according to the teachers' opinions, on the skills and they possess, such as the construction of the object of study, SPSS handling, mastery of APA norms, conducting field research, or on the attitudinal aspect such as commitment to the students, to continuous training and updating, and interest in research.

In addition to the above, some strengths of the profile of the teachers of the Pedagogy career are valued, such as their experience in the national educational system, their postgraduate training at national and international level, and openness to updating and training in research topics.

In another order of ideas, from the theoretical perspective of teaching to research, the teacher is a professional who ventures into the research task, in correlation with this, the students felt that precisely the aforementioned is a weakness since the teacher is not always an expert in the research area and therefore does not always conduct research.

The following opinions reflect the above inferences:

“For me it is important that the authorities put teachers who are more specialized in that discipline” (*G.F. CU 1: P, 12. E5*).

“One of the suggestions is to put more emphasis on research within the career, so that the students not only, but also the professors do scientific research and that they can make their scientific articles”. (*G.F. VS 1: P, 12. E6*).

While it is true that this problem pointed out by the students exists, many of the teachers are also aware of it, and consider that it is something to be remedied, so a greater commitment and interest of the teachers is required. Another factor that contributes to understand this situation is related the lack of training and/or updating in the paradigm and research approach of the field of education; as well as improving the conditions to develop the subjects, in relation to this, teachers demand the need to have physical spaces (computer lab) and resources (specialized and diverse bibliography on educational research).

On the other hand, the selection of teaching staff to teach these subjects is not always ideal, a situation that is expressed by students, teachers and authorities. In this regard, considering the interest and area of training in which the teacher wishes to develop are criteria to be valued for the assignment the academic load.

“If we want to improve the quality of education we have to place each teacher according to his or her training and competence...” (*Interview 3: P, 12. A-CU*).

“We would have to define the profile of the person who is going to teach the subjects, for me that is, the profile of the teacher... approached from the head himself with the selection of the personnel who will teach these subjects, working together” (*Interview 3: P, 15. A-CU*).

## **ANALYSIS OF RESEARCH SUBJECTS IN THE 1988 AND 1994 CURRICULA OF THE PEDAGOGY DEGREE**

In the 1988 study plan, the concatenation between subjects is evidenced from their requirements in a consecutive manner; in such a way that between the subjects of the research area and the subject Statistics applied to education, the verticality is fulfilled according to the depth and extension, which refers to a curricular structuring according to the training process in which the student passes according to the requirements of the subject, objectives and contents in a logical manner from the first to the eleventh period. On the other hand, the mesh of this study plan allows us to visualize the interconnection of these subjects with other disciplinary fields.

In the case of the 1994 Syllabus; with respect to verticality, the sequence of requirements, objectives and contents is visualized from MM 100 Introduction to Social Statistics located in the second academic period to PA-106 Methodology of Educational Research II. With respect to PA-602 Taller de Supervised Professional Practice II breaks the verticality in relation to the requirements, but not in relation to the objectives and contents. Likewise, the interconnection of these subjects with other disciplinary fields is evident in the curriculum.

## **CONCLUSIONS**

- The practices of the teachers who teach research subjects in the Pedagogy program are based on a paradigm of technical rationality, not proper to the teaching of research; however, this epistemological perspective of the teacher is directly related to the beliefs that he/she has regarding the teaching science.

- It is necessary to carry out reflection processes in the Pedagogy Career at both sites, with respect to teaching research and teaching research methodology, i.e. there is no clarity regarding what is intended in relation to this disjunctive, in relation to the training of the future professional of Pedagogy in Honduras.

- There is an inclination to the quantitative research approach, neglecting the use of the qualitative approach more typical of the pedagogical disciplinary field, which leads to the fact that objects of study of this discipline are not developed in practice, which leads to a lack of relationship between topics, paradigms, approaches and research designs that limits a consolidated training in pedagogical knowledge for students.

- There are shortcomings that do not allow the development of research as a training area for pedagogues; these shortcomings are related to the assignment of teachers not interested and/or not committed to research to teach the subjects and the lack of an organization and didactics of the teaching work in the research subjects.

- The Pedagogy Career presents weaknesses in relation to the resources for the development of research subjects, in this order of ideas the lack of training and/or updating of teachers is recognized, particularly in the paradigm and research approach of the field of education; the lack of suitable physical spaces (computer room and *software*) and dissemination scenarios (scientific journals, congresses, symposiums, among other events), in addition to the lack of specialized and updated bibliography on educational research.

- The profile in the study plan of the Pedagogy Career presents ambiguously the research capabilities that a future pedagogy professional must possess.

## RECOMMENDATIONS

- The profile of the pedagogue must be redefined in terms of the research field; means clearly establishing in a curricular manner the skills that the pedagogical professional will apply in the labor field according to the demands and needs of the socio-educational context that he/she will face in the social reality.

- It is necessary to generate spaces for reflection in the Pedagogy Career, so that teachers who develop in the research area can pedagogical practices in this area and at the same time promote a level of coordination among teachers to attend the subjects of this area.

- The paradigms of research in education should be reinforced in teachers, this process could be through training and/or updating or through reflection groups established for this purpose, in this case the Unit for the Management of Scientific Research in Pedagogy (UGIC-Pedagogy) is the one who should assume this transcendental role.

- It is suggested to reinforce the practice and organization of didactics in the research field with the purpose of improving the training process of the pedagogue; this involves assigning these subjects to those teachers who identify with this field and who are motivated to develop in it, and at the same time who have the favorable disposition to share knowledge and experiences achieved in order to procure a teaching process favorable to students' learning.

- A more efficient management of resources should be carried out by the authorities of the Pedagogy Career, in order to address the difficulties or reduce the weaknesses, trying to establish training and/or updating processes for teachers, creating or updating their technological spaces, enriching the bibliographic collection and generating dissemination scenarios, particularly in the area of research.

- The research axis must be concretized in the study plan of the Pedagogy career in order to adequately articulate the sequence and vertical and horizontal integration of the students' training process, achieving the ideal interconnection between this field and the other disciplines or fields of study of the future Pedagogy professional.

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