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ORIGINAL ARTICLE

Perceptions regarding teaching and learning in research at a higher education institution: towards the improvement of research capabilities

Percepción sobre la enseñanza y los aprendizajes en la investigación en una institución de educación superior: hacia la mejora de las capacidades investigativas

Percepção sobre ensino e aprendizagem em pesquisa em uma instituição de ensino superior: rumo ao aprimoramento das capacidades de pesquisa

Melissa Rodríguez[1]

Universidad Nacional Autónoma de Honduras, Tegucigalpa - Francisco Morazán, Honduras

https://orcid.org/0000-0003-1772-6097

ABSTRACT. The purpose of this study was to analyze the perception of students, teachers, and authorities about teaching and learning in the research courses of the Pedagogy and Education Sciences Program at the Universidad Nacional Autónoma de Honduras (UNAH for the Spanish acronym), On-campus modality at Ciudad Universitaria and UNAH-Valle de Sula, on the first academic term of 2017. The approach of the research was qualitative; the target population was constituted by both, the students enrolled in the research workshop and the teachers who offered research courses. The research presents a Convenience sampling, based on selective criteria, focus groups and semi-structured interviews were applied to the teachers. In conclusion, weaknesses were found in the pedagogical practices and the need for teachers' collective consideration was observed, consequently, in 2019, the "First Gathering of Teachers for the Education Research" took place, establishing agreements and guidelines for a Pedagogy of research.

RESUMEN. El objetivo de este estudio fue analizar las percepciones de los estudiantes, docentes y autoridades sobre la enseñanza y los aprendizajes en las asignaturas de investigación en la Carrera de Pedagogía y Ciencias de la Educación de la Universidad Nacional Autónoma de Honduras (UNAH), modalidad presencial en

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[1] Professor National Autonomous University of Honduras.
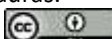
| perspectivas epistemológicas, reflexión pedagógica. | Ciudad Universitaria y UNAH-Valle de Sula, I Período Académico 2017. El enfoque fue cualitativo; la población se constituyó con estudiantes matriculados en el Taller de Investigación y con docentes que brindaron las asignaturas investigativas. El muestreo fue intencionado, basándose en criterios de selección, se aplicaron grupos focales y entrevistas semiestructuradas para los docentes. Se concluye que existen debilidades en las prácticas pedagógicas y la necesidad de la reflexión colectiva por parte de los docentes, en consecuencia, en el 2019 se realizó el "Primer Encuentro de Profesores por la Investigación Educativa", estableciendo acuerdos y orientaciones para una Pedagogía de la Investigación. |

| **PALAVRAS-CHAVE**

Didática, pesquisa, perspectivas epistemológicas, reflexão pedagógica. | **RESUMO.** O objetivo deste estúdio fue analizar as percepções de los estudiantes, docentes y autoridades sobre a enseñanza y los aprendizajes en las assinaturas de investigación en la Carrera de Pedagogía y Ciencias de la Educación de la Universidad Nacional Autónoma de Honduras (UNAH), modalidad presencial en Ciudad Universitaria e UNAH-Valle de Sula, I Período Académico 2017. El enfoque fue cualitativo; la población se constituyó con estudiantes matriculados en el Taller de Investigación y con docentes that brindaron las assignaturas investigativas. El muestreo fue intencionado, basándose en criterios de selección, se aplicaron grupos focales y alterações semiestructuradas para los docentes. Se concluir que existem debilidades nas práticas pedagógicas e necesidad de la reflexión colectiva por parte dos docentes, en consecuencia, en el 2019 se realiza o "Primer Encuentro de Profesores para la Investigación Educativa", eciendo acuerdos y orientations para una Pedagogía de la Investigación. |

1. INTRODUCTION

The goal of doing research is to create knowledge to solve problems and transform society, therefore it is conceived as a systematic and complex process (Latapí, 1994). Regarding to social sciences and/or humanities, the focus is the human being, culture and society, and the research paradigm applied, depends on each science and discipline. Thus, it is imperative for the learning processes developed in the higher education, to be pertinent and of high quality. On the other hand, teaching research methodology, requires a profound reflection (Barriga & Henríquez, 2004a), which should not be based on how reseach is made, but how it has been made, presenting the challenge of teaching methodology from a teaching research perspective.

From Rizo´s (2012) perspective, teaching how to research is associated to the students being able to build his or her own objectives of study. Canto (2009) and Rojas (2005) consider this issue in relation to the perception of contents, the portrayed curriculum goals, students' background, and teachers´ interpretation for their lectures.

The prior discussion surfaces the recurrent issue of what must be taught: Research methodologies or research in the higher education level? As suggested by many authors (Córdoba, 2016). To answer this question, two concepts must be established: first referred to the technical-conceptual knowledge, and a second one about the attitude towards scientific research matters.

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Related to this issue we find the teacher´s interpretation and beliefs towards his or her teachings (Padilla & Garritz, 2014), as well as the attitud and entusiasm for scientific research that must be transmitted to the students by the teachers (Aldana, 2012).

On the other hand, teaching methodologies or teaching research in the undergraduate level have a direct impact in the postgraduate levels, as noted by Wainerman (2001) and Fernández & Wainerman (2015), since the purpose is to promote research in undergraduate level so students can decide to advance in the field and enhance the development of knowledge in society.

In the context of Pedagogy as a science that studies education, different concepts, methodologies, and practices are posed to understand what? How? And What for? is knowledge developed in this science, since there are multiple concepts worthy of reflection: a) research in education, b) research about education c) educative research d) pedagogical research, noted in various studies (Restrepo, 1996; Calvo, Camargo, & Pineda, 2008; Rincón, Murcia, & López, 2018).

Based on this framework of considerations, the necessity of defining a clear way to build pedagogic knowledge is inferred, teaching educative research is an ideal way to bring up the pedagogy´s professional, since it allows a decision making set up in the teaching and learning process, in conditions and culture of educative institutes, as in all the parties involved (Piña, 2013), besides it possess an epistemological and methodological foundation, as well as specific objectives with a diversity of approaches and methods (López & Farfán, 2006).

About teaching educative research, the quantitative approach is the traditional way to address the phenomena of study (Sandín, 2003), none the less, there are other views from the qualitative approach, such as educative action-research (Restrepo, 2004), education´s ethnography (Maturana & Garzón, 2015) and classroom ecology (Briones, 2010) that bring a meaningful contribution into the development of pedagogy´s professionals.

In the same vein, the applied literature represents an issue regarding teaching educative research, as it is used like a recipe to develop research and with scarce epistemological foundation. Because of this, one of the main reflections is epistemological comprehension for the construction of scientific pedagogical knowledge. The epistemology in education, corresponds to a historical evolution of science and the many scientific tenets that separate the research methodology from the epistemology, shown by the curriculum of universities (Cazau, 2011).

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This issue of the Pedagogy and Education Sciences Program of the Universidad Nacional Autónoma de Honduras, is observed in background researches which consider research teaching related to traditional pedagogic practices (Ramos, 2015), non the less, there are not contextualized records that deeply address the former descthe present research: How is the teaching and learning process in the research subjects according to the perception of students, teachers and authorities of the On campus Pedagogy and Education Sciences Program, in Ciudad Universitaria and Valle de Sula on the first academic term of 2017?

To conclude, the necessity to promote spaces to reflect on the teaching endeavors and pedagogical research´s didactic innovation was observed in the study (Sánchez, 2004). To this end, the Pedagogy and Education Sciences Program through the Scientific Research Management Unit (UGIC-Pedagogía for Spanish acronym), executed the "First Gathering of Teachers for the Education Research" on the third academic term of 2019, defining practical guidelines for substantial improvement of a Pedagogy of research as noted by Vega (2013).

2. METHOD AND MATERIALS

This research was formulated from a qualitative approach, which intends to comprehend the research phenomenon from the subjectivity of the parties involved. Álvarez (2003) indicates that these studies authenticity lies on individuals being able to express how they feel and think. The research was framed on a phenomenological perspective, where the day-to-day routine and lived experiences of individuals define meaningful structures for the world´s comprehension (Rodríguez et al., 1996).

The target population was 207 students enrolled in the first academic term of 2017 (noted in table 1). The students were taking the course PA-602, which allow them to establish assessments and criteria regarding their learnings in the research field subjects.

Table 1. Population of students in Ciudad Universitaria (CU) and UNAH-Valle de Sula (VS), First Academic Term 2017.

Subject	Ciudad Universitaria	UNAH-Valle de Sula	Total

PA-602 Taller de Práctica Profesional Supervisada II	116	91	207

Source: Data obtain from Pedagogy Department CU and Chair of UNAH -VS

The researched population added up to 86 professionals who work in the Pedagogy Department in both campuses (Table 2.)

Table 2. Population of teachers in Ciudad Universitaria and UNAH-Valle de Sula, First Academic Term 2017.

Campus	Tenure Teachers	Temporary Teachers	Total
Ciudad Universitaria	34	14	48
UNAH-Valle de Sula	12	26	38
			86

Source: Data obtain from Pedagogy Department CU and Chair of UNAH -VS

A Convenience Sampling was applied, Galeano (2003) claims it corresponds to a profile of subjects who fulfil the selection criteria established by the researcher in order to comprehend their particular reality. The sample consisted of 38 outstanding academic performance students enrolled on the research workshop who were interested in the research, eleven teachers who present plenty of experience offering the research subjects (PA-103 Methodology of Educative Research I, PA-106 Methodology of Educative Research II and PA-602 Supervised Practice Workshop II), and four authorities (chair and academic coordinator) of both campuses Ciudad Universitaria and UNAH-Valle de Sula.

For the study, a matrix was developed using the following categories: epistemological perspectives of teachers, research methodology didactics in education, research capabilities of students and the profile of teachers.

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The methods applied for data collection were:

a. **Focus group:** It consists in a group structured interview, to discuss, share opinions, experiences, and perceptions in a spontaneous way, following a question guide delivered by a moderator (Álvarez, 2003). Six focus groups were implemented, three in Ciudad Universitaria (Figure 1) and three in UNAH-VS. To develop the inquiry a 12-question guide was formulated using information from the Matrix of categories.

b. **Semi-structured interview:** it is a type of interview in which the individuals speak freely about topics proposed by the interviewer through a question guide. It was developed through 15 questions applied to teachers and authorities selected for the study.

Figure 1. Focus Group of students in Ciudad Universitaria

3. RESULTS AND DISCUSSIONS

To guarantee the reliability and validity of information it became necessary to perform the process of results analysis proposed by Miles and Huberman (1994) quoted by Fernandez (2006), defining the process of data reduction, data disposition and conclusion drawing. The results are structured accordingly to the categories of analysis.

Epistemological perspectives of teachers

It is conceived as the way teachers understand knowledge and therefore how they come close to comprehend the reality (Barrón, 2015). In this category of analysis, the teachers were asked in relation to: What is teaching science? The teachers from Ciudad Universitaria associate it to teaching its history and its epistemological approach, specifically as transmission of information, concepts, data, facts, and stages. On the contrary, the teachers from UNAH-Valle de Sula associate the idea attached to developing research projects. It is inferred that the teachers are set on a paradigm of teaching science associated to a process-product frame and not to an

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interpretive paradigm, hindering the possibility to promote knowledge stem from reflection and criticality to teach science. The studies about beliefs and attitude teachers possess regarding the work they perform in the classroom are meaningful contributions (Garritz, 2014).

Other results obtained from this research displays that teachers think teaching research methodology and teaching research are both complementary and complex processes. We were also able to interpret that the attitudinal component towards research is not recognized as an integral part of research teaching. On the other hand, some of the teachers direct their classes to research teaching, from a procedural view, which carries along the appropriation of technical-conceptual knowledge by the students (Barriga & Henríquez, 2004b). From the former results it can be interpreted that subjects from the current pedagogy´s curriculum led to the instrumentalization of research methodology, limiting the perspective of teaching educative research on the Program.

Regarding the educative research paradigms, teachers and students identify differences in the methodological approaches teaching, in subjects like PA-103, PA-106 and PA-602. At UNAH-VS teachings under the quantitative approach are emphasized, however, in the course PA-602 the conducted research is based on qualitative and mixed method approach. It is appropriate to manifest that teachers show a certain amount of awareness regarding teaching scientific research paradigms, although they indicate theoretical and methodological weaknesses in the implementation of these approaches. Based on the answers of the UNAH-CU teachers, it is considered that educative topics correspond to the qualitative approach, nonetheless, weaknesses were identified in capabilities to apply action-research methods, as another qualitative view that enhances teachers to reflect on their own performance (Perines & Murillo, 2017).

In the former issue various causes can be identify, among them: the perception teachers possess concerning curriculum subjects and the academic coordination developed in subject matter sequencing, teaching and assessment strategies, and decisions regarding teaching educative research´s own approaches.

Based on the results, it is interpreted that not all the topics that were researched in courses were exclusively from a pedagogical field, some are social based issues and others are approached from pedagogy´s auxiliary sciences, for example some students´ expressions can be quoted:

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"The pregnancies, the incidence presented in teenagers" **(G.F.CU 1: P, 2. E5).**

"Alcoholism in men" **(G.F.VS 3: P, 2. E3).**

The development of research topics such as: thinking, reflection and teachers´ knowledge in respect to his or her pedagogical practice, organizational climate (ecology and ethnology of classroom and school), the teacher as a researcher and critical pedagogy (Briones, 2010) are not considered as topics for research.

Another relevant finding is the students' opinion regarding to most of the teachers not being able to conceptually differentiate between paradigms, approaches and methods of scientific research, situation that hinders the teaching of scientific knowledge. Besides they think teachers display preference in regard to teaching from a quantitative approach with a descriptive design.

Rincón, Murcia and López (2018) point out the researching tendency to apply the qualitative approach yet persisting a positivistic tendency towards education research. Meanwhile Vélez (2014) notes that educative research is implemented from the researcher´s epistemological perspective, sensing the necessity for teachers and students to assume a reflexive posture towards the perspective of researched topics and oriented to the very own Honduran educative reality. The pedagogical research must collect the socio-educational paradigms from the critical theory in education.

The results from this category of analysis, allows understanding that teachers´ epistemological perspectives are in congruence to their teaching performance, which is reflected in the type of education, experience and cultural development they possess, therefore configuring their pedagogical style to this image. (Gimeno, 2003).

Research methodology didactics in education

The second category of analysis considered knowing the objectives, contents, as well as didactical and assessment strategies developed in the research field courses. The opinions indicated that teaching objectives proposed by the teachers are oriented to 1) Scientific method and methodological designs explanation and 2) awaken the students´ motivation and interest towards research. It is convenient to point out that students´ opinion regarding the prior described objectives, address these as not consecutive in the courses, and point out the existence of a prevalence to teach technical-conceptual knowledge.

Regarding subject content development, the students stated that it is related directly to the limited literature used by the teachers, resulting in a scarce development of research capabilities in them. The following opinion to illustrate the former statement:

> *"Other literatures should be used, and the teacher has to master them, since they are far too settled on Sampieri and they´re not willing to master other literature"* **(G.F.VS 1: P, 12. E2).**

It is identified that students are aware that applying diverse literature would cause a wider vision regarding what and how to teach.

The strategies more frequently used in research courses were direct instruction technique, individual and group counseling, teamwork; and other ones less frequent as the Cinema Forum (educative videos implementation), students´ presentations, workshops, study guides and reading quizzes.

The students expressed that little planning prevails on behalf of the teachers in regards to serving counsel and they demand for others didactic strategies that enhance academic exchange such as: guest professors, research seminars and conferences attendance, and disclosure of results. These expressions are related to a didactics that must be foreseen and executed to achieve the objectives of scientific research endeavors (Sánchez, 2004). There are other methodological proposals regarding how to do research using concept maps, a strategy that teachers can implement in the classroom (Arellano & Santoyo, 2012).

The teachers state that they use diagnostic, formative, and summative assessments in their teaching endeavors. They execute activities to socialize research's results, written quizzes, final report, and scientific article writing assignments, digital portfolio, debate technique, and products from different stages of the researching process. Besides, some teachers implement co-assessment, self-assessment, and assessment rubrics. Although students agree with teachers, some of them show little acceptance towards assessment strategies, since these are considered as traditional method oriented. For example, the following opinion:

> *"It was as any other course three exams, presentations, research defense and report".* (G.F. CU 1: P, 8-E7).

In accordance to Belmonte (2002) it must be considered that assessment does not mean to grade a final assignment, but to hold a formative attitude. Thus, the need for teachers to plan the learning assessments, communicate the criteria that will be applied in the courses to the students, and value feedback as a continuous improvement principle.

Students consider that teaches are not totally disoriented in how to teach, nonetheless, a conventional and linear vision is predominant in the didactical planning, applying limited procedures, means, resources and tools. It is deduced from the prior statements; how important it is to reflect on the appropriation of a research didactics that considers a practical learning model.

Aware of the issue and in pursuit of didactical innovation in the classroom, the teachers work must be fortified with attitude and disposition towards change. Innovation could be made considering other theoretical methodological proposals which can support students to learn about research and to do research (Morales et al., 2005). Also, to reflect on the relationship between learning styles and teaching styles to comprehend the pedagogical practices even further (Ventura, 2016).

Research capacity of students

This category of analysis addresses skills, abilities and attitudes developed by students in the research field courses. According to the teachers, the abilities and skills students have are: formulation of the research´s approach, design of an intervention proposal, and scientific articles making; they also noted some weaknesses in the students concerning identification of research phenomenon, lack of research logic and difficulty discerning between the methodology of quantitative and qualitative approach. However, students manifested their abilities to be oriented towards finding reliable information, hypothesis and objectives making, handling of the methods for data collection, employment of APA format, reflexive interpretation of results, technological abilities handling SPSS (Statistical Package Social Science) software, as well as other abilities directed towards seeking for repositories such as the University´s Virtual Library and use of programs for reference management like CITAVI.

According to the arguments of students, the attitudes they have developed in the research field courses are merely generic, at the same time, they mention the responsibility, collaborative and autonomous work, commitment, dedication, in opposition to the scarce development of

attitude towards research. These considerations illustrate how profoundly research methodology and technique teaching prevails in education. The following quote is an example of the former opinions:

"Research any simple issue that occurs in their surrounding environment".
(G.F. CU 1: P, 7. E6).

Based on the results obtained, there is an evident bond between personal disposition towards research and motivation and interest teachers awaken in the students. Students value when teachers use their research as a didactical resource in their lectures. The attitude towards research is generated by the academic confidence and the research experience teachers inspire (Rojas et al., 2012), adjoined to efficient assessment processes and accompaniment of the students´ research practices.   The concept self-efficacy and the interest towards students research learning carries great value, since it is associated to the curricular background and to the viewpoints provided by the teachers collective (Criollo et al., 2017).

The profile of teachers

In the last category of analysis, the results lead us to conclude that in methodology teaching, the teacher is a speaker of theory, methods, techniques and instruments of research to orient the production of knowledge regarding educative phenomena, on contrary to research teaching, where the teacher intends to develop attitudes towards research (promoting the students to question what they know, formulating questions, finding answers), as well as developing abilities regarding the construction of their own research subjects. On this matter, teaching research subjects, the teacher must be an adviser and counselor that accompanies students in their education (Acosta, 2014).

The teachers acknowledge they possess abilities and skills regarding the construction of the research subject, handling of statistical and qualitative software, domain over APA format, and experience at educative and pedagogical research. They also manifest to have attitudes such as commitment and dedication towards their students, disposition towards continuous learning in research, and interest towards research as part of the endeavors of university teachers. This consolidates even further the idea of bringing research closer to teaching (Tesouro & Puiggalí, 2014). However, weaknesses can be observed to reach an ideal profile, as shown by the next opinion.

"The University has not generated truly active spaces for permanent education in the research field" (Interview 5: P, 13. D-VS).

Besides the prior statements, other strengths of teacher's staff must be considered, such as: their experience working in the national educative system, their postgraduate education in national and international universities and their openness to updating and training in research field topics. This reinforces the posture of Aldana & Joya (2011) as they expressed that teachers must constantly incursion in research endeavors, that is how they will have influence in the students attitude towards research. In contrast, the students state that their teachers do not display experience in the research field in their lectures.

Finally, we can enunciate other factors which can contribute to comprehend the scarce preparation teachers have regarding training in research paradigms and epistemological approaches in the educative field, also improving the conditions to develop the subjects. The last one is about the demands teachers manifest because they do not count with physical spaces (computer labs), resources (specialized and diverse literature regarding educative research) and the distribution of teaching load accordingly to each teacher´s field of education. The next opinion reflects the prior statements:

"If we want to improve the quality of education, each teacher must be located accordingly to their background education and their competence…" (Interview 3: P, 12. A-CU).

4. CONCLUSIONS

The pedagogical practices developed by teachers in the research courses of the Pedagogy and Science Education Program are set in a view of the technical rationality paradigm, which is consider as unsuitable for research teaching; at the same time, these practices correspond to an epistemological perspective related to the teacher's own beliefs regarding how to teach science.

It becomes a priority to generate collective reflection processes in the Pedagogy Program, considering both campuses (Ciudad Universitaria and Valle de Sula), with the main purpose of debating about teaching research methodology and teaching to do research, the developed study displays how the parties involved do not have an established consensus regarding which are the

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research capacities intended for the Pedagogy´s professional. A strong tendency towards quantitative approach teaching is demonstrated, overlooking education concerning qualitative approach for the study of pedagogical field phenomena. In consequence, this situation prevents the development of research subjects from qualitative views like phenomenology, ethnology, action-research, grounded theory, ethnomethodology, among others in the courses. In the same vein, it is recognized a lack of training and/or updating of these approaches by the teachers. In the light of the outlined situation, an education grounded in pedagogical knowledge is limited for the students in the Program.

To develop research as an area of the pedagogues' education, it is necessary for the courses of this field not to be assigned to teachers who do not have interest and/or are not committed to research endeavors; in addition to this, it is urgent to have an efficient administrative management, as well as work coordination between the teachers who offer the courses. Another main weakness, illustrated by the individuals´ opinions, is the little resources available for courses' development, such as lack of an ideal physical space like well-equipped computer rooms with research specialized software and means of dissemination like a scientific magazine of the same field, attached to the Pedagogy Department; and last, the lack of specialize and updated literature regarding educative research.

In consequence, the pedagogue profile must be reformulated in the curriculum, in order to reinforce the research competencies of the tomorrow´s professionals who will serve in changing socio-educational contexts.

Permanent reflection spaces must be created in the Pedagogy Program, with the sole purpose of allowing teacher staff to acknowledge weaknesses and strengths of their pedagogical practices while teaching the research subjects; as well as proposing overall solutions along with other parties involved in the educational process, at the same time a technical and methodological coordination must be established among teachers to properly attend the subjects of this field. Training processes and/or setting up discussion groups are demanded to reinforce the education research paradigms. In the light of the prior statements, the Scientific Research Management Unit (UGIC-Pedagogía for Spanish acronym) founded in 2016 is responsible for the transcendental function of coordinating processes of change and innovation in the Program.

An efficient management must be prioritized to acquire means and resources (technological spaces, updated literary collection, and means of scientific dissemination) by the

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Pedagogy Program´s authorities, to attend demands and needs of teachers and students, procuring training and/or other procedures to bring the teachers up to date.

Towards the improvement of research capabilities for the Pedagogy and Science Education Program

As an extension and implementation of the study, the Scientific Research Management Unit of the Pedagogy Program, proposed, planned and executed the First Gathering of Pedagogy Teachers for the Educative Research, on August 29th and 30th of 2019, in this instance the road "towards the improvement of research capabilities for the Pedagogy Program" was defined, considering the teaching staff of the Program both On Campus and B-Learning modalities, who were part of the summoned reflection process.

Teamwork table Epistemological Foundation of Research

The main objective was raising reflections regarding the teaching practices applied in the research education offered at the Pedagogy Program, allowing a space to share experiences, reinforce knowledge, focusing the discussion on the improvement of research capabilities in the students. The methodology applied in the gathering was set up in two stages, the first one consisted on the development of conferences and a qualitative research workshop by an education specialist from Costa Rica, the second stage took place in three processes, a keynote speech presenting the results of the present article, teamwork tables and a general plenary.

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Following, the figure 2 is introduced, where problematizing axes and some of the results derived from the debates and discussions of teachers are outlined.
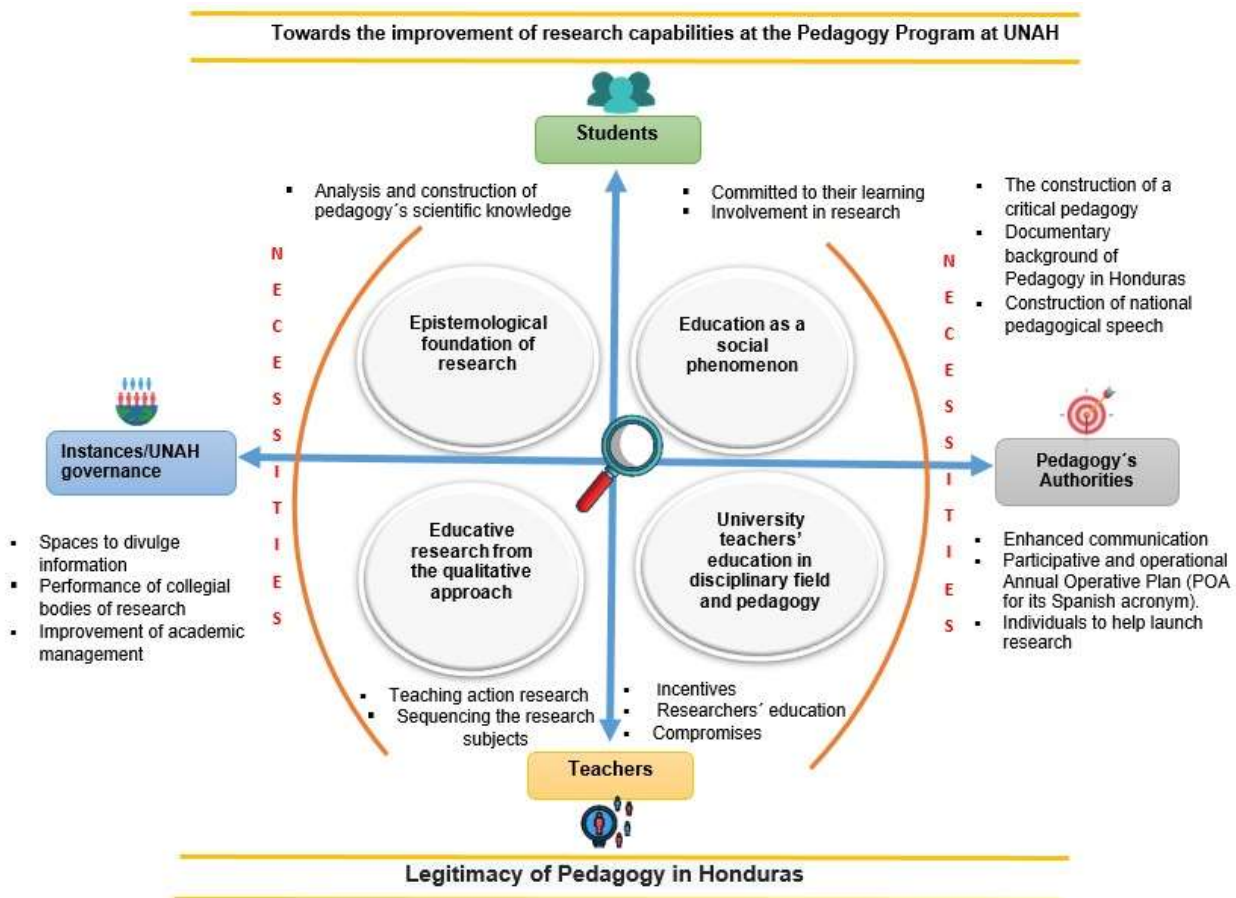

Figure 2. Problematizing axes and their results

Source: prepared by the author

The university teachers must be empowered of the essential function that research means in the university, in such way that the academics uphold that science epistemological knowledge must be a professional profile competency of the university teacher, their role is to educate university professionals with scientific, critical, and reflective thinking. Finally, pertinent decision making is demanded and a prospective planning on behalf of the authorities of the Program and UNAH, to generate changes in the education and development of research.

Conflicto de intereses / Competing interests:
El autor declara que no incurre en conflictos de intereses.

Rol de los autores / Authors Roles:

Mellisa Rodríguez

No aplica.

Aspectos éticos / legales; Ethics / legals:
El autor declara no haber incurrido en aspectos antiéticos, ni haber omitido aspectos legales en la realización de la investigación.

BIBLIOGRAPHY/ REFERENCES

Acosta, S. (2014). *La investigación en el aula. Aprender a conocer*. Trillas.

Aldana, G. (2012). La formación investigativa : su pertinencia en pregrado. *Revista Virtual Universidad Católica Del Norte*, *35*, 367–379. http://revistavirtual.ucn.edu.co/index.php/RevistaUCN/article/view/366

Aldana, G., & Joya, N. (2011). Actitudes hacia la investigación científica en docentes de metodología de la investigación. *Tabula Rasa*, *14*, 295–309. https://doi.org/10.25058/20112742.428

Álvarez, J. (2003). *Cómo hacer investigación cualitativa. Fundamentos y metodología*. Paidós Educador.

Arellano, J., & Santoyo, M. (2012). *Investigar con mapas conceptuales*. Narcea.

Barriga, O., & Henríquez, G. (2004a). Artesanía y técnica en la enseñanza de la metodología de la investigación social. *Cinta de Moebio: Revista Electrónica de Epistemología de Ciencias Sociales,* 126–131. https://dialnet.unirioja.es/servlet/articulo?codigo=1065040

Barriga, O., & Henríquez, G. (2004b). Revalorando lo artesanal. Lo sustratos de los objetivos pedagógicos en la enseñanza de la metodología de la investigación social. *Investigaciones Sociales*, *VIII*(13), 311–324. https://doi.org/https://doi.org/10.15381/is.v8i13.6933

Barrón, C. (2015). Concepciones epistemológicas y práctica docente. Una revisión. *REDU: Revista de Docencia Universitaria*, *13*(1), 3. http://dialnet.unirioja.es/servlet/articulo?codigo=5027835&info=resumen&idioma=ENG

Belmonte, M. (2002). *Eneñar a investigar. Orientaciones prácticas*. Ediciones Mensajero.

Briones, G. (2010). Tendencias recientes de la investigación en pedagogía. Áreas, Problemas y Formas de Relación. *Centros de Estudios de Opinión*, 1–23.

Calvo, G., Camargo, M., & Pineda, C. (2008). ¿Investigación educativa o investigación

pedagógica? El caso de la investigación. *MAGIS. Revista Internacional de Investigación En Educación*, *1*(1), 164–174. http://www.redalyc.org/articulo.oa?id=281021687011

Canto, J. (2009). Metodología de la investigación en el nivel superior. Cuestiones epistemológicas en su enseñanza. *Metodología de La Ciencia. Revista de La Asosiación Mexicana de Metodología de La Ciencia y de La Investigación*, *1*(1), 142–163. http://www.ammci.org.mx/revista/pdf/Seccion metodologia de la ciencia (2a parte)/MetInvESCanto.pdf

Cazau, P. (2011). Evolución de las relaciones entre la epistemología y la metodología de la investigación. *Paradigmas*, *3*(2), 109–126. https://dialnet.unirioja.es/servlet/articulo?codigo=3798214

Córdoba, M. (2016). Reflexión sobre la formación investigativa de los estudiantes de pregrado. *Revista Virtual Universidad Católica Del Norte*, *47*, 20–37. https://www.redalyc.org/pdf/1942/194244221003.pdf

Criollo, M., Romero, M., & Fontaines, T. (2017). Autoeficacia para el aprendizaje de la investigación en estudiantes universitarios. *Psicologia Educativa*, *23*(1), 63–72. https://doi.org/10.1016/j.pse.2016.09.002

Fernández, L. (2006). ¿Cómo analizar datos cualitativos? *Butlletí La Recerca*, 1–13.

Fernández, L., & Wainerman, C. (2015). La dirección de tesis de doctorado: ¿una práctica pedagógica? *Perfiles Educativos*, *XXXVII*(148), 156–171. http://www.scielo.org.mx/pdf/peredu/v37n148/v37n148a10.pdf

Galeano, M. (2003). *Diseño de proyectos en la investigación cualitativa*. Fondo Editorial Universidad EAFIT.

Garritz, A. (2014). Creencias de los profesores, su importancia y cómo obtenerlas. *Educación Química*, *25*(2), 88–92. https://doi.org/10.1016/S0187-893X(14)70529-4

Gimeno, J. (2003). *El alumno como invención*. Morata.

Latapí, P. (1994). Reflexiones acerca del "éxito" de la investigación educativa. In *La investigación educativa en México* (p. 243). Fondo de Cultura Económica.

López, A., & Farfán. (2006). Congreso Estatal de Investigación Educativa. Actualidad, Prospectivas y Retos. *Congreso Estatal de Investigación Educativa*, 9.

Mellisa Rodríguez

https://atenea.epn.edu.ec/bitstream/25000/344/1/La-investigación-educativa-como-base-de-la-nueva-educación-LOPEZ-Y-FARFAN.pdf

Maturana, G., & Garzón, C. (2015). La etnografía en el ámbito educativo. *Educación y Desarrollo Social*, *9*(2), 192–205. https://doi.org/https://doi.org/10.18359/reds.954

Morales, O., Rincón, Á., & Tona, J. (2005). Cómo enseñar a investigar. *Educere*, *9*(1316), 217–224. http://redalyc.uaemex.mx/redalyc/src/inicio/ArtPdfRed.jsp?iCve=35602910

Padilla, K., & Garritz, A. (2014). Creencias epistemológicas de dos profesores-investigadores de la educación superior. *Educación Química*, *25*(3), 343–353. https://doi.org/https://doi.org/10.1016/S0187-893X(14)70550-6

Perines, H., & Murillo, F. (2017). ¿Cómo mejorar la investigación educativa? Sugerencias de los docentes. *Revista de La Educacion Superior*, *46*(181), 89–104. https://doi.org/10.1016/j.resu.2016.11.003

Piña, J. (2013). Investigación educativa ¿para qué? *Perfiles Educativos*, *XXXV*(139), 3–6. https://www.redalyc.org/pdf/132/13225611010.pdf

Ramos, S. (2015). *La Enseñanza de la Investigación Científica en la Universidad Nacional Autónoma de Honduras Valle de Sula, UNAH-VS.* [Universidad Nacional Autónoma de Honduras]. https://tzibalnaah.unah.edu.hn/bitstream/handle/123456789/5958/T-MSies00036.pdf?sequence=2&isAllowed=y

Restrepo, B. (1996). *Investigación en Educación.* Instituto Colombiano para el Fomento de la Educación Superior.

Restrepo, B. (2004). La investigación-acción educativa y la construcción de saber pedagógico. *Educación y Educadores*, *7*, 45–55. http://www.redalyc.org/articulo.oa?id=83400706

Rincón, L., Murcia, N., & López, C. (2018). Perspectivas de investigación en educación y pedagogía. *El Ágora USB*, *18*(1), 73. https://doi.org/10.21500/16578031.3212

Rizo, M. (2012). *Enseñar a investigar investigando. Experiencias de investigación en comunicación con estudiantes de la Licenciatura en Comunicación y Cultura de*. 20–39.

Rodríguez, G., Gil, J., & García, E. (1996). Capítulo II. Métodos de Investigación Cualitativa. In *Metodología de la Investigación Cualitativa* (p. 378). ALJIBLE.

Mellisa Rodríguez

Rojas, H., Méndez, R., & Rodríguez, Á. (2012). Índice de actitud hacia la investigación en estudiantes del nivel de prgrado. *Entramado*, *17*(2), 216–229. http://www.scielo.org.co/scielo.php?pid=S1900-38032012000200015&script=sci_abstract&tlng=es

Rojas, R. (2005). Proceso de enseñanza -aprendizaje de la metodología de invetigación. In *Formación de Investigadores Educativos. Una propueta de Investigación.* (Décima pri, p. 252). Plaza y Valdes.

Sánchez, R. (2004). *Enseñar a investigar. Una didáctica nueva de la investigación en ciencias sociales y humanas* (Segunda). Instituto de Investigaciones sobre la Universidad y la Educación.

Sandín, M. (2003). Investigación Cualitativa en Educación Fundamentos y Tradiciones. In *Mcgraw Hill*.

Tesouro, M., & Puiggalí, J. (2014). La relación entre la docencia y la investigación según la opinión del profesorado universitario. *Procedia - Social and Behavioral Sciences*, *196*, 212–218. https://doi.org/10.1016/j.sbspro.2015.07.031

Vega, D. (2013). Pedagogía de la Investigación: Problematización de la Enseñanza-Aprendizaje. *Educcación y Territorio*, *3*(1), 155–172. https://www.jdc.edu.co/revistas/index.php/reyte/article/view/399

Vélez, D. (2014). *Perspectivas epistemológicas para la investigación educativa: aspectos fundametnales, teóricos y metodológicos.* Grupo Editorial Éxodo.

Ventura, A. (2016). ¿Enseño como aprendí?: el rol del estilo de aprendizaje en la enseñanza del profesorado universitario. *Aula Abierta*, *44*(2), 91–98. https://doi.org/10.1016/j.aula.2016.05.001

Wainerman, C. (2001). Acerca de la formación de investigadores en ciencias sociales. In *La Trastienda de la Investigación* (pp. 19–26). Ediciones Lumiere.

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