

## The Methodological Framework and Meaningful Learning in Thesis Research at the Graduate School of the Peruvian Police

Guido Fare Olivares Gavino<sup>1</sup>, Grisi Bernardo Santiago<sup>2</sup>, María Susana Roque Marroquín<sup>3</sup>, Jackeline Roxana Huamán Fernández<sup>4</sup>, Carlos Augusto Zerga Morante<sup>5</sup>, Carlos Alberto Jochatoma Roque<sup>6</sup>, Lino Andrés Huamán Gutiérrez<sup>7</sup>, Elva Luz Castañeda Alvarado<sup>8</sup>, Franklin Elder Abanto Chávez<sup>9</sup>, Bernardo Cespedes Panduro<sup>10</sup>

### Abstract

*The experience of the human being acquired throughout his life is fundamentally the raw material with what is contributed to society, the research aimed to determine the application of significant learning in the writing of the methodological framework of the thesis. The methodology, due to its nature of study, was applied. It was developed from the perspective of the quantitative approach in logic and deductive reasoning, at the descriptive-comparative level, used a quasi-experimental design, for statistical analysis the Minitab software was used, the samples were (5) for the control group and (5) for the experimental group, the Chi-Square distribution was chosen to analyze the correspondence if they differ significantly from each other. Data collection was carried out using instruments built following the criteria; (a) Pre-Test (First Test) to know the previous knowledge; (b) Post-Test (Final Test) The results allowed us to appreciate that there are significant differences between the control group and the experimental group (Post-Test) noting that the students of the experimental group obtained higher scores surpassing the students of the control group who received the learning with the traditional method.*

**Keywords:** meaningful learning, methodology, strategies, research, writing.

### Introduction

In many countries worldwide one of the most worrying problems in educational institutions is the constructivist paradigm, in these circumstances it is very difficult for students to know and write the methodological framework of scientific research, it is a problem faced by students, especially in developing countries. According to Montoya et al., (2020) they propose that the methodological framework must be adequately developed following the research process. The positions that teachers take in programs aimed at research training carry different conceptions of scientific knowledge, consequently learning differences would occur (Escobar and Tenorio, 2022). Mainly because they privilege rote learning over critical analysis, because an education where the memorizer is rewarded is not education. As stated by Delgado et al., (2023) pedagogical training and teaching work identify the

<sup>1</sup> Escuela de Posgrado de la Policía Nacional del Perú, Email: golivares@escpograpnp.com

<sup>2</sup> Universidad César Vallejo, Perú, Email: gbernardo@ucvvirtual.edu.pe

<sup>3</sup> Escuela de Posgrado de la Policía Nacional del Perú, Email: susanadircri@yahoo.es

<sup>4</sup> Universidad Peruana de Ciencias Aplicadas, Lima, Perú, Email: PCISJHUA@upc.edu.pe

<sup>5</sup> Escuela de Posgrado de la Policía Nacional del Perú, Email: czerga@escpograpnp.com

<sup>6</sup> Universidad Privada de Huancayo Franklin Roosevelt, Huancayo, Perú, Email: carlos\_arqueologo@yahoo.com

<sup>7</sup> Universidad César Vallejo, Perú, Email: linohg@ucvvirtual.edu.pe

<sup>8</sup> Universidad Peruana de Ciencias Aplicadas, Dirección de Investigación, Lima, Perú, Email: pcmaecas@upc.edu.pe

<sup>9</sup> Universidad Nacional de Trujillo, Perú, Email: fabantoch@unitru.edu.pe

<sup>10</sup> Universidad Privada del Norte, Lima, Perú, Email: bernardo.cespedes@upn.edu.pe

learning patterns of graduate students. Constructivist learning involves overcoming obstacles during knowledge reconstruction. Flores et al., (2020) point out that the procedures and techniques followed do not make a real approach to the research methodology. The master's student who arrives in the classroom, has a lot of experience, product of his experiences in his social environment, consequently, the teacher has the responsibility to help describe and use that knowledge. As Intriago-Cedaño et al. points out, (2022) it is necessary for university professors to show greater motivation and methodological orientation, as active members in the learning of students in research.

The Graduate School of the National Police of Peru (ESCPOGRA PNP) develops study programs and grants academic degrees on behalf of the nation within the framework of the University Law, taking into account the diversity of the lines of research. Many times, there has been talk of paradigm changes hand in hand with technology, but always the changes are not easily visible in the educational reality (Balletbo and Quintana, 2022; Kusmawaty et al., 2022). While police education is teacher-led and teacher-led, it is necessary to uncover students' weaknesses and adopt strategies that can overcome them. As Lugo et al. (2022) state, current circumstances demand training in research methodology and adequate skills in scientific writing. Since rote or mechanical learning places less emphasis on the learning of representations, elements on which the learning of concepts and the learning of propositions is built in the drafting of the methodological framework of scientific research. From this consideration, Ausubel stated that student learning depends on the anticipated cognitive structure that relates to new existing knowledge. Based on the problem, the research had as a general objective to determine the application of significant learning in the writing of the methodological framework of the thesis.

The Graduate School of the National Police of Peru (ESCPOGRA PNP) develops study programs and grants academic degrees on behalf of the nation within the framework of the University Law, taking into account the diversity of the lines of research. Many times, there has been talk of paradigm changes hand in hand with technology, but always the changes are not easily visible in the educational reality (Balletbo and Quintana, 2022; Fahmi et al., 2022). While police education is teacher-led and teacher-led, it is necessary to uncover students' weaknesses and adopt strategies that can overcome them. As Lugo et al. (2022) state, current circumstances demand training in research methodology and adequate skills in scientific writing. Since rote or mechanical learning places less emphasis on the learning of representations, elements on which the learning of concepts and the learning of propositions is built in the drafting of the methodological framework of scientific research. From this consideration, Ausubel stated that student learning depends on the anticipated cognitive structure that relates to new existing knowledge. Based on the problem, the research had as a general objective to determine the application of significant learning in the writing of the methodological framework of the thesis.

### Meaningful learning

Ausubel (1980 cited in Rocha, 2021; Khusniyati et al., 2022) considers meaningful learning as the relationship between knowledge and student experiences with new knowledge. In this sense, the student applies his knowledge in personal, academic or work situations, contributing to the quality of the educational environment (Manjarrez and Romero, 2022). Meaningful learning originates when the student relates new knowledge to their previous experience, it is more durable and effective than traditional rote learning. The use of mind maps as a strategy to facilitate meaningful learning helps to understand new concepts linked to the previous information that is held (Rodríguez and Moreira, 2018). Learning is the synchronized construction of knowledge as Ausubel 1980 points out (cited in Misme (2021) indicates that rote learning has no relationship with previous or new knowledge, it states that knowledge is built and related to the previous knowledge acquired, where the student generates his own knowledge. Coinciding with what Rocha (2021) indicates that knowledge is built in practice, it requires the student's willingness to relate the material with the knowledge he possesses.

Ausubel, Novak and Hanestan (2001, cited in Baque-Reyes and Portilla-Falcan, 2021) point out that the types of meaningful learning are typified in three: (a) learning representations; (b) learning concepts; (c) learning propositions. It is important to bear in mind that the student who arrives at postgraduate studies, comes from a different stage, does not start his learning from scratch, rather makes use of his previous experiences, which must be used by the teacher to improve the learning process. With regard to learning representations, it involves understanding the facts and meanings of human actions (Azelin et al., 2022). In particular, social research aims to theoretically assimilate the object of study in order to transform it ideologically into images and concepts (Kılıçoğlu, 2018; So Hee Yoon, 2022). Similarly, Moreira-Chóez et al., (2021) considers that it is necessary to put interest and curiosity to the student through didactic resources so that there is meaningful learning "is said representational when the learner establishes a biunivocal correspondence between a meaning and a representation" (Moreira, 2020, p.24). As for the learning of concepts, it is based on the learning of representations, it is related to abstract concepts, it acquires a more personal meaning. It involves a set of concepts for effective research, starting from a theoretical position (Atmowardoyo, 2018). For this reason, Moreira (2019) considers that concepts or positions are learned in a substantive way but not literally. The learning of concepts takes place when the student observes events and becomes represented by linguistic symbols. Moreira and Massoni (2011 cited in Moreira, 2020) "concepts are at the basis of human understanding, without concepts nothing is understood" (p.21).

In connection with the learning of propositions, it is necessary to know the concepts that form the sentence to understand the general meaning. In scientific research, methods must be orderly procedures for explaining a truth (Halperin and Heath, 2020). So the teacher must offer essential tools and instruments for students to perform with quality and efficiency in the search and treatment of the information collected, building their own knowledge in an experimental way. Similarly, Salica (2021) mentions that learning propositions goes beyond those representations of words, it involves grasping the meaning of ideas expressed in propositions.

#### Methodological framework of the thesis

Depending on the nature of the objectives pursued, in this part the student indicates and describes the methodological framework corresponding to: (a) type; (b) approach; (c) design; (d) method and (e) level of research, for its application and use during the description of the scientific research work (Arroyo, 2020). In reference to the qualitative approach research following the guidelines established by the Research Area of the ESCPOGRA PNP according to the specific lines of research of the Postgraduate Academic Program. Indeed, Rivas (2022) points out that the methodological framework is a detailed description of scientific research to support those findings or results of the problem posed (Khalilullah et al., 2022). Due to the characteristics of police operations, the type of research used is basic, aimed at providing scientific knowledge, exploring and understanding a reality, fulfilling the objectives established in the research (La Madriz, 2019). It is about exploring a problem and proposing some solution to it. As they point out, Escudero and Cortez (2018) their purpose is mainly to analyze the state and functioning of things, act on this information and produce theoretical information (Masganti 2022). Likewise, applied research is used, based on basic research based on factual and formal sciences that can produce results of immediate utility in participatory research.

The research is developed from the perspective of the qualitative approach, according to Olivares et al., (2023) reveal that "the analysis and subjective value of a particular situation stands out" (p.306). This approach can be explored, describe and understand the problems of the police unit that is the subject of its study (Mesiono 2022). This approach thus makes it possible to ask the right questions with regard to the subcategories raised. Phenomenological design is mainly used, whose main purpose is to explore, describe and understand people's experiences of a phenomenon. In addition, the perspectives of the participants are obtained, which according to Valderrama (2018) seeks to know

qualitatively how people experience, perceive, conceptualize and understand their environment. In addition, action research design is used. According to Delgado (2022) refers that research needs the activity in one way or another, it involves the search for strategies of change in which it operates. On the other hand, ethnographic design is required. According to Ñaupas et al., (2018) they understand as the discipline dedicated to the writing of the different aspects of a culture or people established by their livelihoods and customs. Among other designs depending on the objective set and the information that is required to obtain. In relation to the research method, it is essentially inductive, it goes from the specific to the general, it consists of observing, comparing necessary data that help justify thoughts (Olivares et al., 2023). It is fundamentally inductive because it uses observation to gather information from the police unit. This method is mainly used in police science, due to the characteristics of the data collected.

With respect to the level of research, "it always begins by exploring and describing, and the study may be limited to it, or to relate or explain links between concepts or phenomena" (Hernández-Sampieri et al., 2018, p.395; Hasanuddin et al., 2022). It is interested in analyzing the characteristics and discloses the causes or factors that have given rise to the existence of the phenomenon of study.

## Method

Due to its nature of study the type of research was applied. According to McNabb (2020) it is characterized by the analysis of social reality, the results are used to improve strategies and real actions. It was developed from the perspective of the quantitative approach According to Olivares et al., (2023) "it is based on logic and deductive reasoning, to generate hypotheses that will then be subjected to verification, its object of study belongs to the visible and measurable reality of descriptive-comparative level" (p.306). This research used a quasi-experimental design, according to Hernández-Sampieri and Mendoza (2018) reveal that in this design "the subjects are not randomly assigned to the groups or paired, but these groups are already formed before the experiment: they are intact groups" (p.173). Whose main purpose was to determine the performance of two groups (a) experimental and (b) control, in the drafting of the methodological framework of the thesis. In relation to the research method for this study was essentially deductive. It goes from the general to the particular, as Mahuika and Mahuika (2020) proposes, the way of speaking or doing something carefully stands out, for the deductive method it is the path that leads to a result in scientific research. Minitab software was used for statistical analysis, because the samples are small,  $n=5$  for the control group and;  $n=5$  for the experimental group, the Chi-Square distribution was chosen to analyze the correspondence if they differ significantly from each other. Data collection was carried out using instruments built following the criteria; (a) Pre-Test (first test) to know the previous knowledge; (b) Post-Test (Final Test) was carried out with the purpose of observing the results obtained when applying significant learning in the writing of the methodological framework of the thesis, achieving in the participant the presentation of the final report of the research - thesis, validated by a report by the teacher / advisor (Habibu et al., 2022). As can be seen in Table 1, the tests were applied to students from two classrooms in the writing of the methodological framework of the thesis, 50% for the control group and 50% for the experimental group.

Table 1. Sample by study group

Groups	Frequency	Percentage	% Accumulated
Experimental	5	50%	50%
Control	5	50%	100%
Total	10		

Note: Made up of Master's students from the Graduate School of the National Police of Peru (ESCPOGRA)

The participants for the purposes of the research correspond to 5 students of the specialty of Public Order (experimental group) and 5 students of the specialty of Intelligence (control group). According to Maxwell (2018) the sample was non-probabilistic of intentional type for convenience, that is, the researcher selected representative samples by including the sample of two sections regarding the drafting of the methodological framework of the thesis (see graph I).

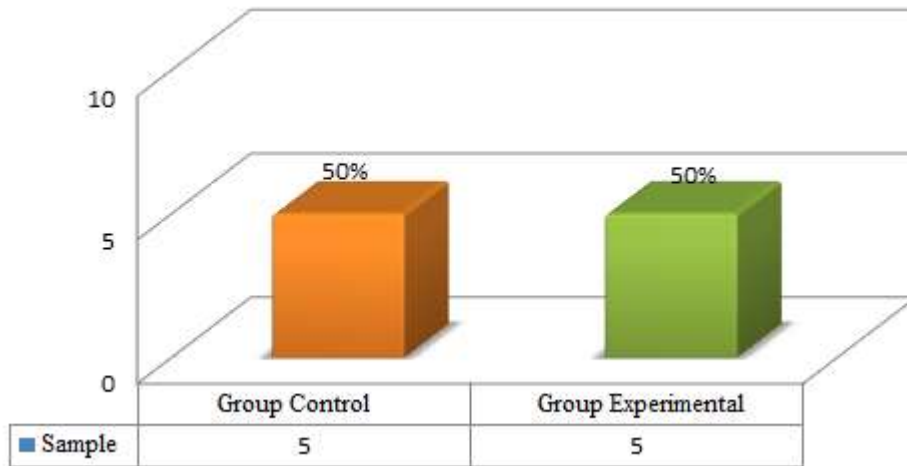


Figure I: Study group; We worked with intact, intentional or convenience groups, the comparison groups were homogeneous.

As can be seen in Table 2, the number of males predominates in the sample taken, 80% (8) males and 20% (2) females.

Table 2. Composition of the sample by sex

Sex	Frequency	Percentage	% Accumulated
Male	8	80%	80%
Female	2	20%	100%
Total	10	100%	

Note: Composition of the sample in the drafting of the methodological framework of the thesis control group and experimental group (ESCPOGRA).

Taking into account the development of explanatory level study of quasi-experimental design and considering the sample less than 30 ( $n < 30$ ) the Ji-Square distribution was chosen; the statistical analysis was carried out with Minitab software.

## Results

Table 3 shows the results of the students in the Pre-Test of the control group where they have achieved an arithmetic mean of 11.2 points that places them in the category between deficient and fair and the students of the experimental group have achieved an arithmetic mean of 11 points that places them in the category between deficient and regular, in diagnostic evaluation (DCS).

Table 3. Pre-Test Pareto Comparison Table

Participant	Group Control		Group Experimental	
	Qualification	Percentage	Qualification	Percentage
n1	14	25%	13	23.6%
n2	13	23.2%	13	23.6%
n3	11	19.6%	10	18.1%

n4	10	17.8%	10	18.1%
n5	8	14.2%	9	16.3%
Total	56/5 = 11.2		55/5 = 11	

Note: Pareto Table

The results presented in Table 4 contrast the performance of the control group and experimental group, allowing us to appreciate that in the Pre-Test, there are no significant differences, ( $p > 0.05$ ) so that both groups present similar levels of performance, (ED) demonstrating that the groups are homogeneous. Because the samples are small,  $n=5$  for the control group, and;  $n=5$  for the experimental group the Chi-Square distribution was chosen.

Table 4. Chi-square calculation with Minitab software:

Categories	Group Control		Group experimental	
	f(i)	h(i)%	f(i)	h(i)%
Deficient	2	40%	3	60%
Regular	3	60%	2	40%
Good	0	0%	0	0%
Total	5	100%	5	100%
Arithmetic average	11.2		11	

Pearson's chi-square = 0.622; P value = 0.430 Chi-square likelihood rate = 0.625 P-value = 0.430 > 0.05

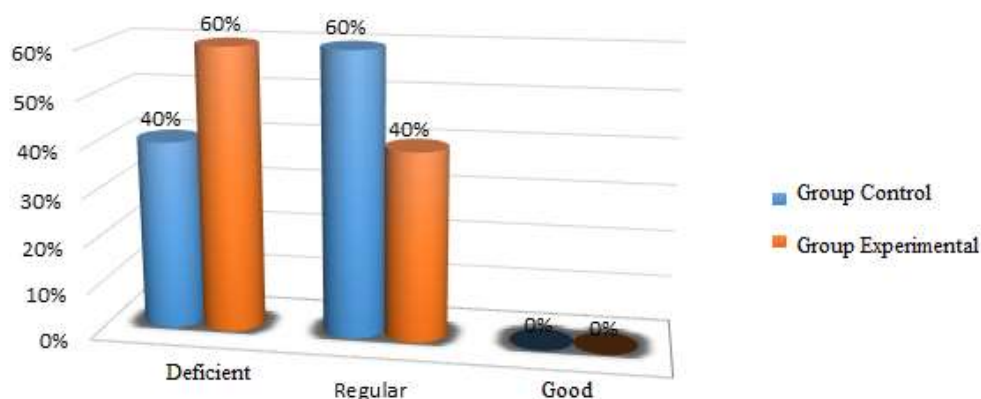


Figure II. Results obtained from the diagnostic qualification of the students of module IV of Master's Degree in the writing of the methodological framework of the thesis, belonging to the control group and experimental group pre-Test.

Table 5 shows the results of the students in the Post-Test of the control group where they have achieved an arithmetic mean of 12.8 points that places them in the category between deficient and fair and the students of the experimental group have achieved an arithmetic mean of 17 points that places them in the category between fair and good, in formative assessment (PE).

Table 5. Post-Test Comparison Pareto Table

Participant	Group Control		Group Experimental	
	Qualification	Percentage	Qualification	Percentage
n1	15	23.4%	19	22.8%
n2	15	23.4%	18	21.6%
n3	14	21.8%	18	21.6%
n4	10	15.6%	15	17.6%
n5	10	15.6%	15	17.6%
Total	64/5= 12.8		85/5= 17	

Note: Pareto Table

The results presented in Table 6 contrast the performance of the control group and the experimental group, showing that in the Post-Test, there are significant differences ( $p < 0.05$ ) noting that the students of the experimental group ( $PE = 17$ ) surpass the students of the control group ( $PE = 12.8$ ). Because the samples are small,  $n = 5$  for the control group, and;  $n=5$  for the experimental group the Chi-Square distribution was chosen.

Table 6. Calculating Chi-Square with Minitab Software

Categories	Group Control		Group Experimental	
	f(i)	h(i)%	f(i)	h(i)%
Deficiente	2	40%	0	0%
Regular	3	60%	2	40%
Buena	0	0%	3	60%
Total	5	100%	5	100%
Arithmetic average	12.8		17	

Pearson's chi-square = 13.263; P value = 0.000 Chi-square likelihood rate = 16.916 P-value = 0.000 < 0.05

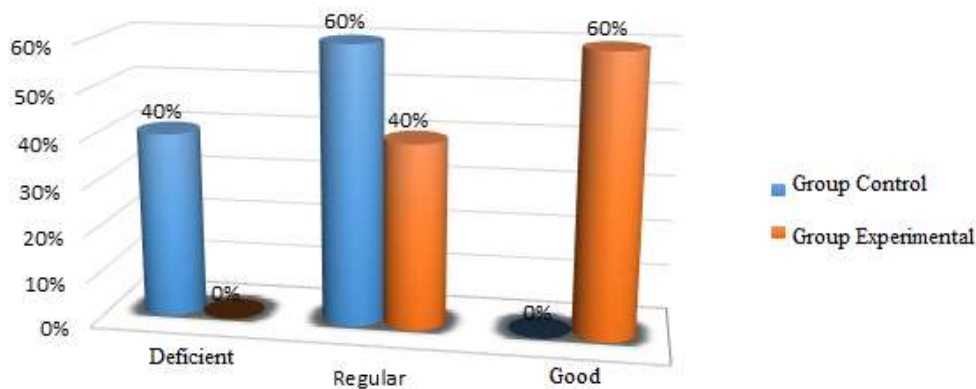


Figure III. Results obtained from the formative qualification of the students of the module IV of Master's in the writing of the methodological framework of the thesis, belonging to the control group and experimental group post-Test.

### Discussion

The students of the control group in the entrance test obtained an arithmetic mean of 11.2 points and the students of the experimental group obtained an arithmetic mean of 11 points that places them in the category between deficient and fair, in the diagnostic evaluation. In



this regard, it coincides with Matienzo (2020) considers that the university professor should promote critical meaningful learning thus facilitating the conceptual, procedural and attitudinal curricular content. It is evident that both control groups and experimental group (Pre-Test) that there are no significant differences, ( $p>0.05$ ) so that both groups have similar levels of performance, (ED) demonstrating that the groups are homogeneous that began in the same conditions in the writing of the methodological framework of the thesis. The diagnostic test was applied before starting module IV of Master's degree. As Guamán (2021) says, research predominantly uses the methodological framework in scientific research, which has an established structure where aspects such as the paradigm and methods are addressed (Yoto et al., 2022). This is related to the study of Punina (2021) who states that the implementation of innovative didactic strategies is necessary, which complements the methodology so that students access and assimilate significant learning that supports the demands of the new society in research.

The students in the (Post-Test) control group in the exit test obtained an arithmetic mean of 12.8 points that places them in the category between deficient and fair and the students of the experimental group obtained an arithmetic mean of 17 points that places them in the category between fair and good, in the (EF)., It is related to what was found by Silva and Reina (2023) consider that the greater the motivation for meaningful learning in students, the greater the academic performance, generating greater attention and dedication in the elaboration of entrusted tasks. It is evident that in control group and experimental group (Post-Test) there are significant differences, ( $p<0.05$ ) noting that the students of the experimental group (EF = 17) surpass the students of the control group (EF = 12.8) this hypothesis has been confirmed, evidencing an improvement of 4.2 points, between both averages which is significant and involves using the method of significant learning in the writing of the methodological framework of the thesis. In this regard, it coincides with Calderón et al., (2023) who determined that the implementation of expository-illustrative methodological strategies improve learning, and allows students to raise their concentration, facilitating the understanding of each topic, reflected in the grades, this shows that the appropriate methodological strategies significantly affect the learning process. According to the results of the research on the application of significant learning in the writing of the methodological framework of the thesis in the Graduate School of the Police, the students of the experimental group improved significantly when relating the new knowledge with their previous experience, reflected in regular 40% and good 60%. In this regard, Rocha (2021) argues that knowledge is built in practice, it requires the student's willingness to relate the material to the knowledge he possesses. This did not happen in the students of the control group who barely reached 40% deficient and 60% regular. In this regard, Ausubel 1980 (cited in Misme, 2021) refers that rote learning has no relationship with previous or new knowledge, states that knowledge is built and related to previous knowledge acquired, where the student generates his own knowledge. According to Pearson's Chi-square test = 13.263 when contrasting the hypothesis had a p value of  $0.000<0.05$  that shows that significant learning favors the writing of the methodological framework of the thesis in the Graduate School of the Police. Taking into account Manjarrez and Romero (2022) propose that in meaningful learning the student applies his knowledge in personal, academic or work situations, contributing to the quality of the educational environment.

## **Conclusion**

Finally, to conclude, it was demonstrated that in the control group and the experimental group (Post-Test) there are significant differences, noting that the students of the experimental group obtained higher scores surpassing the students of the control group, evidencing a difference of 4.2 points, between both averages which is significant and involves using the significant learning typified in the three types; Learning representations, learning concepts and learning propositions. This shows that the appropriate



methodological strategies significantly affect the learning process of the type, approach, design, method and level of research, for its application, use and writing of the methodological framework of the thesis.

## References

- Arroyo, A. (2020). *Metodología de la investigación en las ciencias empresariales*. (1ra. Ed.). Universidad Nacional de San Antonio Abad del Cusco.
- Atmowardoyo, H. (2018). Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, 9(1), 197-204. <https://doi.org/10.17507/jltr.0901.25>
- Azelin Aziz, Hazlinda Hassan, Nurul Sharniza Husin (2022). Acculturative Stress in International Students. *Educational Administration: Theory and Practice 2022*, Volume 28, Issue 2, pp:016-028.
- Balletbo, I. & Quintana, C. (2022). Incidencia del uso de las TIC en el aprendizaje significativo durante la pandemia del COVID-19 en la Universidad Nacional de Villarrica del Espíritu Santo, Paraguay. *Revista científica en ciencias sociales*, 4 (2),18-26. <https://doi.org/10.53732/rccsociales/04.02.2022.18>
- Baque-Reyes, G., y Portilla-Falcan, G. (2021). El aprendizaje significativo como estrategia didáctica para la enseñanza. *Revista Polo del Conocimiento*, 58(6),75-86. <https://orcid.org/0000-0002-8667-895X>
- Calderón, S. D. F., Ramos, T. M. S., & Vélez, C. I. B. (2023). Ambientes de aprendizaje que potencien el rendimiento académico de estudiantes en condición de vulnerabilidad. Año lectivo 2021-2022. *Domino de las Ciencias*, 9(1), 723-741.
- Delgado, A. (2022). Metodología de la investigación- acción participativa para la enseñanza aprendizaje del diseño. *Acta de diseño*, 39(30) 91-96. <https://doi.org/10.18682/add>.
- Delgado, Y., Ciraso-Calí, A., Quesada-Pallarés, C., Matos Nunes, T., Figueiredo, G., García-Orriols, J., Rodrigues, M. y Martínez-Fernández, J. (2023). Patrones de aprendizaje de estudiantes de posgrado en salud pública: relaciones con la identidad, la formación y el trabajo de profesores en Brasil, *Revista Educación Médica*, 24(2023)100829. <https://doi.org/10.1016/j.edumed.2023.100829>
- Escobar, J. y Tenorio, M. (2022). Trastornos específicos del aprendizaje: origen, identificación y acompañamiento. *Revista Médica Clínica las Condes*, 33(5)473-479. <https://doi.org/10.1016/j.rmcl.2022.09.001>
- Escudero, C., & Cortez, L. (2018). Técnicas y métodos cualitativos para la investigación científica. *En Redes 2017*. <https://n9.cl/bu9hq>
- Fahmi Rizal, Tee Tze Kiong, Elmizar, Ambiyar, Unung Verawardina (2022). Evaluation Of Educator's Functional Training Program of Teaching and Learning Studio (SKB) At Learning Activity Development Center (BPKB) Of West Sumatra. *Educational Administration: Theory and Practice 2022*, Volume 28, Issue 2, pp:039-048.
- Fernández Bedoya, V. H. (2020). Tipos de justificación en la investigación científica. *Espí-ritu Emprendedor TES*, 4(3), 65–76. <https://doi.org/10.33970/eetes.v4.n3.2020.207>
- Flores Hinostroza, E. M., Mendoza Velazco, D. J., Guamán Peralta, J. D., & Castillo-Pinos, K. M. (2020). El conocimiento científico y su praxis: un desafío en la transformación universitaria Ecuatoriana. *Edetania. Estudios y Propuestas Socioeducativos.*, (58), 17–40. [https://doi.org/10.46583/edetania\\_2020.58.717](https://doi.org/10.46583/edetania_2020.58.717)
- Guamán Chacha, K. A., Hernández Ramos, E. L., & Lloay Sánchez, S. I. (2021). El proyecto de investigación: la metodología de la investigación científica o jurídica. *Revista Conrado*, 17(81), 163-168. <http://scielo.sld.cu/pdf/rc/v17n81/1990-8644-rc-17-81-163.pdf>
- Habibu Hayatu Babajo, Zakiyah Jamaluddin (2022). Teachers without Wages: The Challenges of Tsangaya School Teachers in Kano State Nigeria. *Educational Administration: Theory and Practice 2022*, Volume 28, Issue 2, pp:001-015.

- Halperin, S., & Heath, O. (2020). *Political research: methods and practical skills*. Oxford University Press, USA. <https://doi.org/10.1093/hepl/9780198820628.001.0001>
- Hasanuddin, Salamiah Sari Dewi, Erlina Sari Siregar (2022). Predictor Of Multiple Intelligence in Educational Practice. *Educational Administration: Theory and Practice 2022*, Volume 27, Issue 2, pp:049-056.
- Hernández-Sampieri, R. & Mendoza, C. (2018). *Metodología de la investigación: las tres rutas cuantitativa, cualitativa y mixta*. McGraw Hill.  
<http://repositorio.cidecuador.org/bitstream/123456789/75/1/Metodologia%20de%20I>  
<https://doi.org/10.1177/1177180120968580>  
<https://repositorio.uti.edu.ec/bitstream/123456789/4655/1/PUNINA%20SISALEMA%20BLANCA%20GRACIELA.pdf>
- Intriago-Cedeño, M., Rivadeneira, Barreiro, M., & Zambrano-Acosta, J., (2022). El aprendizaje significativo en la educación superior. 593 *Digital Publisher CEIT*, 7(1-1), 418- 429. <https://doi.org/10.33386/593 dp.2022.1-1.1014>
- Khalilullah Amin Ahmad, Solahuddin Abdul Hamid, Mohd Nizho Abdul Rahman (2022). Lecturers' And Students' Acceptance of Using Technology-Based Teaching AIDS(TTAs) When Teaching Ulum Hadith During the Covid-19 Pandemic. *Educational Administration: Theory and Practice 2022*, Volume 28, Issue 2, pp:029-038.
- Khusniyati Masykuroh, Elindra Yetti, Yuliani Nuran (2022). The Role of Parents in Raising Children's Environmental Awareness and Attitudes. *Educational Administration: Theory and Practice 2022*, Volume 28, Issue1, pp: 133-142.
- Kusmawaty Matara, Zulkarnain Suleman, Nazar Husain Hadi Pranata Wibawa (2022). Law for Handling Problematic Children in Families in the Context of Child Psychology Education *Educational Administration: Theory and Practice 2022*, Volume 28, Issue 2, pp:74-87.
- La Madriz, J. (2019). *Metodología de la investigación. Actuación humana orientada al conocimiento de la realidad observable*. Centro de Investigación y desarrollo. Ecuador. ISBN 987-9942-802-12.
- Lugo Blanco, Ángel Caridad, Álvarez Yong, Concepción, & Lezcano Mederos, Eduardo Toribio. (2022). Los problemas sociales y la educación científica. *Mendive. Revista de Educación*, 20(1),302-314.[http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S1815-7696202200](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1815-7696202200)
- Mahuika, N., & Mahuika, R. (2020). Wānanga as a research methodology. *ALTERNATIVE: An international journal of indigenous peoples*, 16(4), 369-377.
- Manjarrez, C. y Romero, Y. (2022). Análisis de las estrategias instruccionales utilizadas para el aprendizaje significativo de la definición de derivada de funciones de una variable. *ReHuSo*, 7(3), 112 - 125. <https://doi.org/10.33936/rehuso.v7i3.5157>
- Masganti Sit (2022). Exploring The Knowledge and Experience of Childhood Education Teachers on Steam Education in Indonesia. *Educational Administration: Theory and Practice 2022*, Volume 28, Issue 2, pp:057-065.
- Matienzo, R. (2020). Evolución de la teoría del aprendizaje significativo y su aplicación en la educación superior. *Dialektika: Revista De Investigación Filosófica Y Teoría Social*, 2(3), 17–26. <https://journal.dialektika.org/ojs/index.php/logos/article/view/15>
- Maxwell, J. (2018). *Diseño de investigación cualitativa*. Editorial Gedisa.
- McNabb, D. E. (2020). *Research methods for political science: quantitative, qualitative and mixed method approaches*. Routledge. <https://doi.org/10.4324/9781003103141>
- Mesiono (2022). Model Of Education Management Using Qualitative Research Methods at A Private School in Medan. *Educational Administration: Theory and Practice2022*, Volume 28, Issue 2, Pp: 88-93.
- Misme (2021). El entorno social y el aprendizaje significativo en los estudiantes de secundaria de un colegio de san Juan de Miraflores, 2021. [Tesis de Maestría, Universidad Cesar Vallejo, Perú.]. <https://repositorio.ucv.edu.pe/handle/20.500.12692/66370>

- Montoya, J., Brandl, R., Vishwanath, K., Johnson, J., Darbali-Zamora, R., Summers, A., & Bründlinger, R. (2020). Advanced laboratory testing methods using real-time simulation and hardware-in-the-loop techniques: A survey of smart grid international research facility network activities. *Energies*, 13(12), 3267. <https://doi.org/10.3390/en13123267>
- Moreira, M. A. (2020). Aprendizaje significativo: la visión clásica, otras visiones e interés. *Proyecciones*. <https://doi.org/10.24215/26185474e010>
- Moreira, P. (2019). El aprendizaje significativo y su rol en el desarrollo social y cognitivo de los adolescentes. *Rehuso*, 4(2), 1-14. Recuperado de: <https://doi.org/10.33936/rehuso.v4i2.2124>
- Moreira-Chóez, J. S., Beltron-Cedeño, R. A., & Beltrón-Cedeño, V. C. C. (2021). Aprendizaje significativo una alternativa para transformar la educación. *Domino de las Ciencias*, 7(2), 915-924.
- Ñaupas, H., Valdivia, M., Palacios, J., y Romero, H. (2018). Metodología de la investigación cuantitativa-cualitativa y redacción de la tesis. En *Journal of Chemical Information and Modeling* (Vol. 53, Número 9). <https://doi.org/10.1017/CBO9781107415324.004>
- Olivares, G., Nolasco-Mamani, M., Quispe-Quezada, U., Florez, R., Haro, M., Carranza, S., Llanos, S., Zulueta, C., Sardón, W., Cubas, C., Delgado, L., Céspedes, B., & Gonzales, A. (2023). Mejorando los Componentes de la Metodología de la Investigación Científica para la Enseñanza de Idiomas. *Revista mundial de idioma inglés*, 13 (6), 303-313. DOI: <https://doi.org/10.5430/wjel.v13n6p303>
- Punina, G. (2021). El aula invertida como estrategia didáctica para generar aprendizaje significativo en el Área de Lengua y Literatura en Educación Básica Superior. [Tesis de Maestría, Tecnológica Indoamérica, Ambato-Ecuador].
- Rivas, A. (2022, septiembre 09). Marco metodológico: ¿Cómo redactar y cuál es su estructura? Guía Normas APA. <https://normasapa.in/marco-metodologico/>
- Rocha, J. C. R. (2021). Importancia del aprendizaje significativo en la construcción de conocimientos. *Revista Científica de FAREM-Estelí*, 63-75.
- Rodríguez, L. y Moreira, M. (2018). *Mapas conceptuales: herramientas para el aula*, Barcelona: Octaedro
- Salica, M. A. (2021). Analítica del aprendizaje significativo d-learning aplicado en la enseñanza de la física de la educación secundaria. *RIED-Revista Iberoamericana De Educación a Distancia*, 24(2), 265–284. <https://doi.org/10.5944/ried.24.2.28399>
- Silva, Y. E. L., & Reina, Á. R. C. (2023). Factores motivacionales y el rendimiento académico en la modalidad híbrida: Motivación para un aprendizaje significativo. *HUMAN REVIEW. International Humanities Review/Revista Internacional de Humanidades*, 18(3), 1-11.
- So Hee, Y. (2022). Educational Outcomes of After- School Programs in Korea: A Meta-Analysis. *Educational Administration: Theory and Practice* 2023, 29(1), 18-31.
- Valderrama, S. (2018) *Pasos para elaborar proyecto de investigación científica*. Segunda edición. Editorial San Marcos. Perú
- Yoto Yoto, Andika Bagus Nur Rahma Putra, Alias Bin Masek, Anita Dwi Rahmawati, Nurul Ulfati (2022). Escalation of Vocational Student Capabilities through Mapping of Humanware Skill and Infoware Skill Components in the Era of Society 5.0. *Educational Administration: Theory and Practice*, 2022, Volume 28, Issue1, pp: 143-158.