

Building Autonomous Thinking From Practice Using Leading Research

Segundo José Gálvez Vásquez¹, Juan de Dios Aguilar Sánchez², Segundo Rosendo Delgado Vásquez³, Uva Peralta Pérez⁴, Víctor Rafael Loayza Palomino⁵, Jeiden Revilla Arce⁶

Abstract

The construction of autonomous thinking from practice using leading research, are variables faced by educational institutions to develop critical and creative thinking in the attention to the achievement of learning, deductive attention to the problem started from the general objective: to analyse the construction of autonomous thinking from practice using leading research; it was qualitative approach protagonist, had the teacher as actor-researcher of his own pedagogical practice, in two phases: initial (analytical, reflective, interpretative and critical) and applied (with new pedagogical rationality through nesting of the pre-experimental design pre-test/post-test with a single group, we worked with a population of 135 students in the fourth grade of secondary school in an educational institution in Rioja, the sample was non-probabilistic intentional of 29 students, who provided information to explain the foundations of the teacher's dominant pedagogical rationality and the contextual factors that conditioned the emergence of the central critical episode, and to construct a new pedagogical rationality (NRP) for the development of written argumentative competence, structured in a psycho-pedagogical programme. In the results the standard deviation of the pre- and post-test scores in writing an argumentative text shows an improvement in the dispersion of the results; in the hypothesis test the calculated Pearson's correlation coefficient (6.026) is higher than the tabular Pearson's value (1.7011). Finally it is concluded that the psycho-pedagogical programme based on a NRP significantly developed written argumentative competence.

Key words: construction, autonomous thinking, practice and leading research.

INTRODUCTION

One of the infrequent types of qualitative research practised in academic institutions worldwide is protagonist research, it is assumed to be a new type of research, that someone tries to subsume it in action research, because of particular and foreign interests that despise qualitative research, or it is a really difficult type of research that requires handling a series of superior or fundamental capacities (Vigotsky, 1986) to understand phenomena in an inter- and transdisciplinary ¹or complex way (Morin, 2004), because it allows for a

¹ Escuela de Educación Superior Pedagógica Pública "Nuestra Señora de Chota"

² Universidad Nacional Autónoma de Chota

³ Escuela de Educación Superior Pedagógica Pública "Nuestra Señora de Chota"

⁴ Universidad Católica Sedes Sapientiae

⁵ Escuela de Educación Superior Pedagógica Pública "Nuestra Señora de Chota"

⁶ Universidad Nacional de Jaén

¹<http://orcid.org/0009-0002-3882-872X>

²<http://orcid.org/0000-0001-5152-5665>

³<http://0002-2397-0563>

⁴<http://0000-0001-9687-75684>

⁶<http://orcid.org/0000-0001-5152-5665>

dialectical understanding of the essence of changes in nature (Hegel, 1808) using the principle of the universal concatenation of elements or the three basic laws of historical and dialectical materialism: from quantitative to qualitative changes, from negation of negation and, struggle of opposites, which now many try to disguise with other terms "principles of double logic", "organisational recursion", "hologrammatic" (Morin, 2004); because it is not part of the curricular and educational systems of the conservative oligarchies that control the world and avoid the development of reflective, critical, creative, autonomous thinking to stay in the simple repetition. The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2023) specifies that teachers are the fundamental support for the education of students, in order to achieve the Sustainable Development Goal (SDG 4), which calls for inclusive, equitable and quality education.

In Latin America, education is not prepared by professionals in the field of pedagogy, but by administrators who have never taught a class, it is a purely administrative phenomenon: students who arrive, students who leave; teachers who arrive, teachers who leave; workers who arrive, workers who leave. A teacher is a public employee appointed to do the employer's bidding and nothing more. The United Nations Educational, Scientific and Cultural Organisation (2023) states that since the 1990s, projects have been developed in the region in order to respond to the educational problems demanded by the States of Latin America and the Caribbean, since, according to Peralta et al. (2023) Balentín and Jorcuera state that a teacher receives a group of 30 students to carry out educational activities according to timetable and time, applying traditional methodologies, despite the fact that the development of competency-based education is being implemented, which should be based on the diagnosis of students' learning needs. The structure is designed to make students compete with each other, to separate them into classes, to marginalise them, to make them learn content during the years of basic education, and in the end it is of no use to them. The United Nations Educational, Scientific and Cultural Organization UNESCO (2023) through the Regional Dialogue on Learning and Innovation in Latin America and the Caribbean, demanded that the demands of socio-economic inequality in each country be addressed, the implementation of digital environments, the articulation of basic education with university education, innovative learning through action or protagonist research, the practice of citizenship to develop critical thinking, or the development of socio-emotional education, emphasising that to achieve the proposal, it is necessary to start with ongoing teacher training through the organisation of alliances between countries, companies and institutions that seek common educational objectives.

In Peru, the use of participatory research goes unnoticed, as educational institutions are not promoting the development of participatory research, since higher education institutions responsible for teacher training are doing little or nothing to promote the practice of research, limiting themselves to developing descriptive research and only in some cases pre-experimental research with pre-test and post-test, following the positivist routine. The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2023) specifies that Higher Education Institutions should experiment with the development of participatory action research, leaving behind the traditionalism of basic and applied research, with the aim of co-producing knowledge from the development of transdisciplinary research, articulated to the achievement of the SDGs, making initial teacher training develop curricula that mention leading research. López (2019) specifies that it is the institutions in charge of teacher training who have to implement curricula that promote the development of formative research, highlighting leading research or participatory action as fundamental for the development of creative and critical thinking based on leading research; given that in the Peruvian education system, it is customary for teachers to stop to plan, meditate and evaluate the results of student learning and move on, which leads them to continue with the next class. They rarely stop to look back, let alone

reconstruct the pedagogical processes; and almost never reflect critically on the results, let alone on their role in the problems of the classroom.

Faced with this, a certain teacher, touched by the "very good results" obtained by the students in the area of Communication, after receiving a terrible punishment a few days earlier, began the investigation. The teacher did not stop there; he struggled to understand how this strategy could have had a positive impact on learning outcomes. In this sense, he undertook a tough process of critical and creative reflection on the deeper reasons for the change. He questioned his own pedagogical actions. For this purpose, the term "protagonic recording" refers to the recording, reproduction or filming as accurately as possible of all or part of the course of a lesson or learning session, in which the "critical episodes" are located. The following example was taken: the teacher's entire communication lesson.

This is how the protagonist register emerges: a teacher observing the development of one of his routine classes with his students, in a passage of the class he observed a case that was also routine, but that day it caught his attention:

Wow, they got very good marks! Their parents will be happy to have very studious children, geniuses! He pauses and shifts his gaze to the students, while his face shows discomfort. He continues: "Shame on you, you have no forgiveness from God! The exam was easy; they would have got 20! What do you think, you donkeys, you're shameless, you don't value your parents' efforts! Look at the marks you're going to take home!

Faced with such a situation, the teacher asked himself: What do I do? The teacher immediately thought of a series of actions to be taken to improve his students' learning. He chose one: punishment using a crude ruler 70 cm long by 5 cm wide and 2 cm thick. The teacher made them line up in a column, defiantly walking with the "pancho" in his hand around all sides of the students. He advised them that they should study, that after three days he would take another test and, if they failed, the "maja" would be worse. Then he punished each of them with "two slaps" on the buttocks with all his might. The students, one by one, in tears, committed themselves to study and pass.

After three days, the teacher administered a test, even more difficult, and the results were surprising: of the 29 students, only one scored 10; encouraged by the results, the teacher began to analyse and interpret them, obtaining an arithmetic mean of 15.3, a standard deviation of 1.2, a range of 3, and a mode of 14 points. Faced with the new results, a series of questions were asked, such as: What did I do, why did I do that, why did I do that, why do my students study more when I punish them, why do almost all of them use punishment, am I proceeding pedagogically, why, why, what are the new pedagogical approaches, and why? What are the new pedagogical approaches, Are my classroom practices well founded, What can I do to verify what I have done, What factors led to the use of punishment, What do I do to reconstruct what I have done, He continued to ask himself about the causes and reasons for his actions, He continued to ask himself about the causes and reasons for his actions.

In response to the teacher's reflection, the teacher proceeded with the objectification or reconstruction of the critical episode, where the teacher's concern to know more and more about why he used punishment and how it influenced the improvement of his students' learning continued to grow. He then decided to undertake a process of "reconstruction" of the events in each of their moments, both internal and external.

Within the internal (classroom) reconstruction, we analysed the objective representation of the episode, the emotionality of the teacher and students, how the punishment was used in the section, the factors that intervened in the use of punishment, among others.

In the institutional reconstruction, we analysed the teachers, students and punishments carried out in the school, the instruments and forms of punishment regulated in the school, the attitude of parents to punishment, among others.

In the contextual reconstruction, he analysed family upbringing models, regional upbringing models, punishment and educational practices, types of punishments in the EE, EE, punishments imposed in the community and/or social organisations that prevail in the region.

In view of the reconstruction carried out, the teacher discovered that punishment is commonly used and is practised in the personal sphere, where the student is punished at the various levels of basic education; it is used at the institutional level, where it is used by directors, teachers, parents and society in general, and is subject to internal rules; it is of social or contextual use, it is common in the community, and is practised by parents and the general population. With the analysis it was concluded that in all educational and social spaces punishment is used as a motivational means for the achievement of learning and personal development of each student.

In view of the above-mentioned protagonist register, the research formulates the following problem: How is the construction of autonomous thinking developed from practice using protagonist research, seconded by the specific problems: What are the foundations of the teacher's dominant pedagogical rationality and the contextual factors that conditioned the emergence of the central critical episode? and How is a new pedagogical rationality (NRP) constructed for the development of written argumentative competence, structured in a psycho-pedagogical programme? As well as What scientific, philosophical, technological foundations and what personal, institutional and social factors conditioned the use of punishment as a stimulus for students to improve their learning in Communication?.

The study was justified because it allowed to obtain the knowledge of the applicability of the leading research in the educational context, since it allowed to follow processes to acquire the nature of the critical episode, from the problematisation, critical episodes, reconstruction, background, problem statement, analysis and interpretation of the fundamentals, to then make the proposal, develop the alternative proposal using the fundamentals, modification of the reality, evaluation of the results, to then systematise it and obtain a reality of the pedagogical practice.

The study was conducted on the basis of the general objective: to analyse the construction of autonomous thinking from practice using the protagonist research of students in an educational institution in the province of Rioja, San Martín region. The specific objectives include: to explain the foundations of the teacher's dominant pedagogical rationality and the contextual factors that conditioned the emergence of the central critical episode. To construct a new pedagogical rationality (NRP) for the development of written argumentative competence, structured in a psycho-pedagogical programme. Describe the scientific, philosophical and technological foundations and what personal, institutional and social factors conditioned the use of punishment as a stimulus for students to improve their learning in Communication.

The research posed the following hypotheses: the construction of autonomous thinking from practice using leading research is achieved from scientific, philosophical, technological and personal, institutional and social factors conditioned the use of punishment as a stimulus for students to improve their learning in the area of communication.

Among the international antecedents that support the study is the article by Placencia and Verdugo (2023) developed with the aim of analysing the purposes and conditions for implementing research in teaching and initial training in Chile and Colombia, qualitative

research that analysed 11 research documents in 11 institutions, the information reported that in Colombia there is more research at all levels of education, unlike Chile, which does not encourage action research. Peralta and Mayoral (2022) worked with the aim of analysing action research as a strategy for reflection, improvement and change in the teaching practice of language teaching, a qualitative reflexive research developed with foreign language teacher training students at a university in western Mexico, the answers of the questionnaire applied to the sample distinguished 31 codes and four categories; With the information, it was determined that action research helps teacher training students to identify problems within the pedagogical practice, which through reflection guides the improvement of teaching and learning, achieving the construction of autonomous learning. Aldana et al. (2021) developed research with the aim of analysing research and learning as challenges in Latin America towards 2030, working with descriptive methodology, documentary analysis of bibliographic design, reviewing 52 research articles, extracted from the Web of Science database, Scopus, Scielo, Latindex, Redalyc; the results showed that there is a need to implement the development of action research in the pedagogical training of future teachers.

At the national level, there is the study by Sánchez and Rodríguez (2022) developed with the aim of implementing a project-based learning methodology to improve research competence in students of Health Sciences, the research was based on a qualitative case under the design of action research, working with 116 students and 3 teachers in the area of communication, the information was obtained from the documentary analysis of the students' and teachers' portfolios, The results show that the students are motivated to choose a topic in which they are the protagonists of the reflection of their actions, there are difficulties in the analysis and processing of information due to a lack of knowledge of the process of leading research, the effectiveness of the methodological processes is found, as long as the teacher responsible assumes the leading role in the feedback demanded by action research. León et al., 2021) in their investigations find that, for Peruvians, we were independent, sovereign, free, and we had our own rationality: the Andean, Inca rationality, but it was interrupted by the invasion of Western, Eurocentric, elitist rationality, brought by the Spanish invaders to destroy our autonomous rationality.

Among the theoretical bases that underpin the research is the analysis and interpretation of the foundations of the Critical Episode sustained with the conditioning western rationality, which according to Peña (1993), states: "(...) rationality is a mental process that is transformed and structured according to the needs of survival in confrontation with the challenge posed by the geographical environment, tradition and beliefs (p. 3), (...) While rationality is a process, cosmovision is an intuition of totality" (p. 5), (...). 3), (...) While rationality is a process, worldview is an intuition of the whole" (p. 5). Bueno, Gustavo (quoted by Muñoz and Velorde, 2000) rationality is: "a set of standardised achievements or open set of rules governing the production and reproduction of the means necessary to make human life on earth possible" (p. 481). Golte (1980), for his part, defines it as: "the set of tools constructed by man in a historical process with which human beings come to partially or completely dominate the conditions of nature", while Mosterin (1993) states that: "Thinking rationally implies making use of a rigorous method of analysis and relying on the solid results that science gives us. Only in this way will we be able to say something coherent and cognitively relevant. This healthy attitude of intellectual honesty allows us to be at the height of our time and to look optimistically to the future (p. 342). The authors specify that rationality can be classified according to genetic culture into Western and Andean rationality; according to intellectual activity into university, humanist, artisanal and scholastic rationality; according to the activity of the subjects into quantitative, operative and instrumental; according to the way of reasoning into formal and dialectical; according to the scientific method in hypothetical - deductive, intuitive - intuitive, analytical - reductive, and synthetical - totalising; according to the conceptions of the world it is classified in Judeo-Christian and materialistic rationality; while according to its purpose it would be theoretical and practical.

Among the scientific foundations are the sociological ones, the research professor highlights that after 200 years, the Peru of the bicentenary continues to show deep gaps of educational exclusion, discrimination, delinquency, corruption, neglected basic services, authoritarianism and precarious democracy (León et al., 2021). The psychological foundations, framed in behaviourism, associationism, pragmatism, conditioning, sadism, punishment, PPS "R" (R - M - R); pedagogy: traditional, banking, repressive, active, based on punishment, homogenising, globalised; communication, articulated to traditional grammar, structural functionalist, isolated in text comprehension, instructive; educational policies: imposition of instrumental norms, by the WB, OECD, UNESCO, UNICEF, USAID, etc.; management model: positivist, positivist, based on the use of the "R" (R) and "R" (R - M - R), management model: positivist, rigorous, vertical leadership; the curriculum expressed in plans, knowledge, competency-based, homogenising; anthropology: Western conception, generalisable, discriminating culture, detached from reality; where an economy prevails: neoliberal, free market; ideology and political science: Monroe, Washington Consensus, NATO, OECD (Oppenheimer, 2010). The Ministry of Education (2020) in the PEN version disseminated a new and different conception of competence; however, it was only published as a part of the National Curriculum (2016), we assume that it was erased by the consulting agencies imposed by the World Bank, faithful instrument of the North American transnational corporations. As Pope Francis (2015) says in the encyclical "Laudato si", how can one form competent students when around 60% of children suffer from chronic and acute malnutrition and anaemia, or when a region like Cajamarca, "owner" of the largest gold mine in Latin America, is in first place in terms of poverty?.

The philosophical foundations include the positivist conception, which is unidirectional as in Euclidean geometry and classical physics: reductive, bivalent, causal. It holds that knowledge is in concrete reality, in the object; to represent it in the intellect it is only necessary a copy or a photograph of reality through the senses to store it in the brain. The epistemic subject is subordinated to the epistemic object and its conditions. For positivism there is only one method to know reality: the scientific method, while for other paradigms and social researchers there are many methods to discover the truth and not only one. Good learning consists of objectively apprehending reality without any change, without any "associated factors" Tercel - PISA (2018) (cited by the Organisation for Economic Co-operation and Development (OECD, 2019); i.e. affective and socio-economic factors such as poverty, malnutrition, vulnerability, etc. do not count. The theological conception that considers the teacher as a Catholic believer; the structuralist conception as a heterogeneous movement that initially appears as a scientific methodology, then becomes a philosophical ideology that aims to develop objective and verifiable theories through scientific control of the sciences of the spirit; the pragmatist conception, conceived as action (punishment) justifies and validates knowledge since it is a hypothesis of action. For Capella (1993), this conception based on logical positivism leads to reductionism, by stripping education of the possibility of dealing with the most significant, historical, dialectical and critical problems.

Van Dijk's (2006) linguistic-communicative foundations are added, pointing out that global society is exposed to millions of data and information that circulate through the media and that come from different sources with symbolic economic, political, cultural and social power; the economic foundations established in the "free market" are dominated by large companies with dominant power, capable of manipulating the dollar, prices, market supply, generating speculation, agreeing prices, etc. For example, during the Covid-19 pandemic, the lack of technology and devices hindered the development of asynchronous and synchronous virtual education. In the political sphere, the research agrees that politics, despite being a social science created to serve the welfare of the people and administered by its members, has become the art or strategy for the living to subjugate (violate) their fellow men and women under the power of representation.

The technological foundations include the methods, techniques and strategies proposed by UNESCO (2023) articulated to the use of ICTs, in order to avoid repetition (instruction), scientific method; "punishing" methodology: behaviourist ("the letter with blood enters with blood", "the best teacher is the one who punishes the most"; management tools: linear, imposed by the ministry of education and SDG policies; educational and curricular programming: linear, imposed by the MED, consultancies, WB and UNESCO; the use of Information and Communication Technology (ICTs) submerged in the technocratisation of society, "smart fingers", "mechanicism", "homogenising pedagogy", "globalisation", privatisation", artificial intelligence, etc.

METHODOLOGY

The study was qualitative in approach, based on a qualitative case under the design of protagonist research that is built on pedagogical reflection as an opportunity for self-knowledge and self-improvement of teachers, proactive, where the management of the categories of research in terms of the "subject - subject" "protagonist" of their own changes predominated.

The population consisted of 135 students in the fourth grade of secondary education from an educational institution in the Province of Rioja, San Martín region.

The sample was non-probabilistic, purposive, and consisted of 29 students (16 females and 13 males).

The information was collected using observation, in-depth interview and documentary analysis techniques; the instruments used were: the observation guide, the evaluation scale, the interview guide, the questionnaire and the documentary analysis guide.

Analysis was carried out using the contributions of Kerlinger and Lee (2001) stating that it: "means the categorisation, ordering, manipulation and summarising of data to answer research questions (...) reduces the data into understandable and interpretable form so that the relationships of the research problems can be investigated and tested" (p. 172). Interpretation took the "results of analysis, making inferences relevant to the research relationships studied and drawing conclusions from these relationships, the researcher who interprets research results, searches them for their meaning and implications" (p. 72).

RESULTS AND DISCUSSION

The analysis of the construction of autonomous thinking from practice using leading research in students from an educational institution in the province of Rioja, San Martín region, is presented on the basis of the results according to the specific objective:

To explain the foundations of the teacher's dominant pedagogical rationality and the contextual factors that conditioned the emergence of the central critical episode, one has:

Directive pedagogy is a common characteristic of EI teachers. That is, control of teaching and learning is external to the student. In this sense, the teacher decides, determines and orders what happens in the classroom. As a result, students have learned to keep quiet and obey; they do not feel capable of proposing, much less protesting against any situation that makes them uncomfortable or violates their rights. The information validates the Ministry of Education's proposal (2020) that the Peruvian education system is profoundly inequitable and does not guarantee quality learning. Free education is a half-truth. The national curriculum is proposed as a strange document for teachers and its implementation processes have many limitations.

In the homogenizing pedagogy as the worst punishment, the teacher found that, both in the country and in other parts of the world, the imposition of a single pedagogical and curricular approach to form citizens of a unipolar and rootless world prevails. Monitored by transnational organizations that are embedded in the very core of educational systems

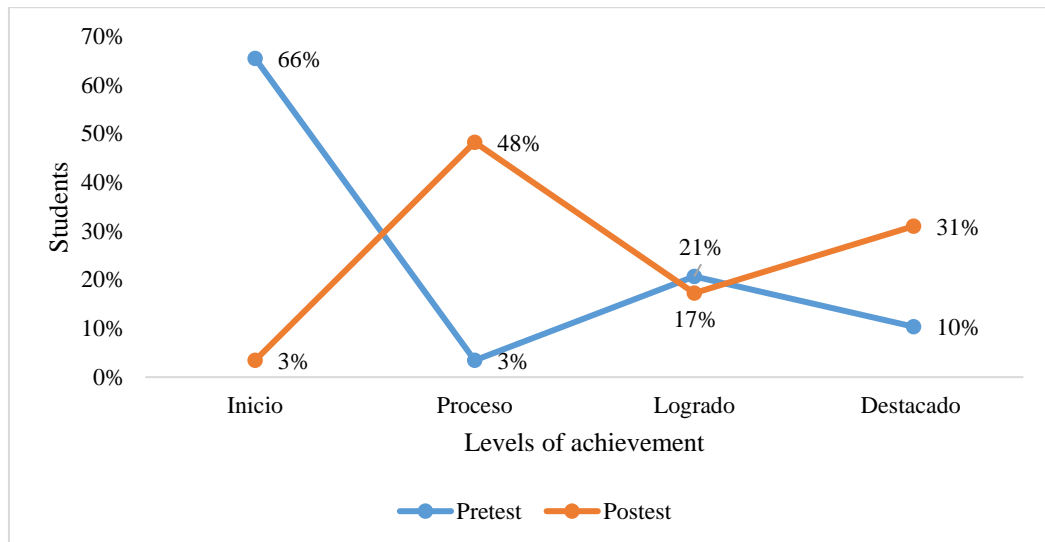
to spy and manipulate the development of national and regional curricular projects. Characterized by the deprofessionalizing technocraticism of the teacher; the extirpation of learning for reflection and understanding of one's own existence and of the world, such as philosophy, politics, history, geography, geopolitics, etc. The information strengthens the statements of the Organization for Economic Cooperation and Development (2019) by specifying that in order to train operators at the service of transnationals: "there is a very close relationship between competencies, exclusionary neoconductism and the new coloniality of knowledge and knowing". The "global village" or "common home" is technocratized, meritocratized" (Pope Francis in *Laudato SI*, 2015).

The construction of our own pedagogy is an urgent alternative to confront the imposition of a homogenizing pedagogy on the world. There is the challenge of building a scientific pedagogy under principles that promote new rationality, sovereignty, freedom, self-determination of peoples and protection of our socio-cultural identity. That will then allow us to transform reality in favor of the demands of the people, under a logic of broad possibilities. The information strengthens the study of Peralta et al. (2023) by highlighting that each researcher protagonist places himself in the same concrete historical moment in which his pedagogical practices took place, becomes a "mirror of himself" and begins to reflect rigorously on his own practices based on understanding, analysis, interpretation and criticism. But also a creative and transforming reflection with the aim of unveiling or discovering the reasons and conceptions that conditioned the nature of the critical situations in the educational process.

The new teaching practice needs a pedagogy that meets the demands of the philosophical sense that the education of man should have. That is to say, a libertarian or liberating education that allows students to discover themselves as free, dignified, social individuals and to construct their learning in a critical, creative and autonomous manner, as specified by the Ministry of Education (2020) when it states that education should be oriented towards the formation of full citizenship, as the supreme purpose of Peruvian education and of the educational systems of the world. An education that transcends the formation of consumers, prone to the development society, education has to rebuild the sense of "we" in the classroom and school relationships; because, talking about democracy and silencing the students is a farce; therefore, education at school needs to be reconceived, rethought and reconstructed as a democratic sphere.

As for the specific objective, to apply the New Pedagogical Rationality (NRP) to develop written argumentative competence in fourth grade students of an educational institution in the province of Rioja, it is specified in the following figures:

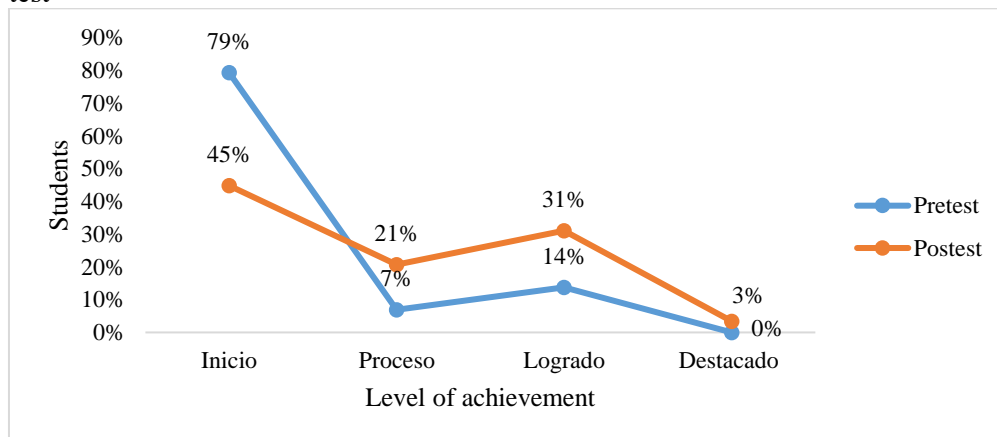
Figure 1 Level of achievement in the "Thesis statement" dimension in the pre- and post tests



Note: The statistical data were obtained from the application of the pre test and post test to the study sample.

The information in Figure 1 indicates that after applying the New Pedagogical Rationality (NRP), the results of the pretest in the dimension "Thesis Statement" of the argumentative text were reversed. It obtained an increase of 48% in the Process level, 31% in the Outstanding level; and reduced from 66% of the pre-test, to 3% of students in the Beginning level in the post-test. The results validate the study developed by Golte (1980) when he affirms that "the set of tools constructed by man in a historical process with which human beings come to partially or completely dominate the conditions of nature" or the case of (Mosterín, 1993) when he affirms that thinking rationally implies making use of a rigorous method of analysis and basing ourselves on the solid results that science gives us. Only in this way will we be able to say something coherent and cognitively relevant. This healthy attitude of intellectual honesty allows us to be at the height of our time and to look optimistically to the future (p. 342).

Figure 2 Level of achievement in the dimension "Argumentation" in the pre-test and post-test

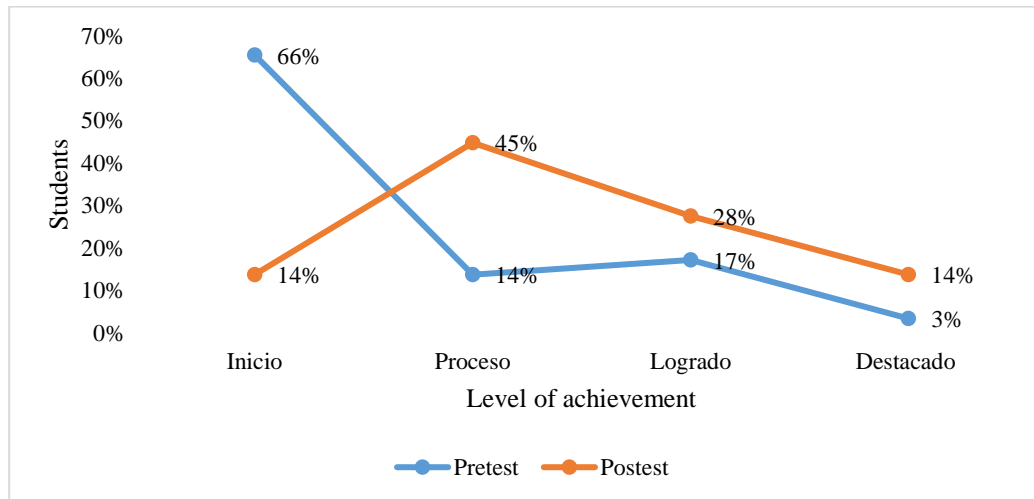


Note: The statistical data were obtained from the application of the pre test and post test to the study sample.

The information in Figure 2 indicates that the application of the NRP also improved the results of the pre-test in the dimension "Argument approach", going from 79% to 45% of students in the Beginning level of achievement; it increased the number of students who were in the Process level (31%) and increased the number of students who reached

Achieved and Outstanding levels from 14% in the pre-test to 34% in the post-test. The information validates Peralta and Mayoral's (2022) statements when they found that teacher training students, by using action research, identified problems within the pedagogical practice, and that through reflection, they oriented to improve teaching and learning, achieving the construction of autonomous learning.

Figure 3 Level of achievement in the dimension "Conclusion approach" in the pre and post tests



Note: The statistical data were obtained from the application of the pre test and post test to the study sample.

In addition, according to Figure 3, the NRP managed to improve the results of the pretest in the dimension of "Conclusion statement" of the argumentative text. It went from 66% to 14% of students in the Beginning achievement level; it increased the number of students who were in the Process level from 14% in the pre-test to 45% in the post-test; in addition, it increased the number of students who reached the Achieved and Outstanding levels from 20% in the pre-test to 42% in the post-test. The information strengthens the research of Aldana et al. (2021) who found that there is a need to implement the development of action research in the pedagogical training of future teachers, in order to achieve successful learning. Likewise, the information strengthens the research of Sanchez and Rodriguez (2022) by stating that students are motivated to choose a topic where they are the protagonists of the reflection of their actions, there are difficulties in the analysis and processing of information due to lack of knowledge of the protagonist research process, the effectiveness of the methodological processes is found, provided that the responsible teacher assumes the protagonist role in the feedback demanded by action research.

Tabla 1 Paired samples test of the grades obtained by the students

Variable/Dimen sions	Matched differences			95% confidence interval of the difference		Tc	Tt	gl	Sig. Bilat.
	Med ia	Desv. Desviación	Desv. Error promedio	Inferi	Super				
				or	ior				
Comp. Arg. post – Comp. Arg. pre	4,65 5	4,16 0	,772	3,07 3	6,23 8	6,02 6	1.701 1	2 8	,00 0
P. tesis post – P. tesis pre	4,37 9	4,33 8	,805	2,72	6,02 9	5,43 7	1.701 1	2 8	,00 0

P. argum. post	4,24	3,71		2,82	5,65	6,14	1.701	2	,00
– P. argum. pre	1	9	,691	7	6	1	1	8	0
P. conc. post –	4,55	4,17		2,96	6,13	5,87	1.701	2	,00
P. conc. pre	2	1	,775	5	8	6	1	8	0

Note: The statistical data were obtained from the application of the pre test and post test to the study sample.

Finally, Figure 4 shows that there is a significant difference in the means of the scores obtained in the pre-test ($\bar{x}=8.86$) and post-test ($\bar{x}=13.52$); in addition, the calculated Pearson correlation coefficient (6.026) is greater than the tabular Pearson value (1.7011). Likewise, the ratings data come from a normal distribution (P-Value $> \alpha = 0,05$) and the significance level presents a P-Value of $0.000 < \alpha = 0.05$. The results contrast with the research of Placencia and Verdugo (2023) in finding that in Colombia there is more research at all educational levels, unlike Chile, which does not encourage action research. It also strengthens the study of Peralta and Mayoral (2022) by distinguishing 31 codes and four categories, determining that action research helps teacher training students to identify problems within the pedagogical practice, which through reflection guides the improvement of teaching and learning, thus achieving the construction of autonomous learning.

Regarding the scientific, philosophical and technological foundations and the personal, institutional and social factors that conditioned the use of punishment as a stimulus for students to improve their learning in communication, we have:

Scientific foundations such as liberating education, historical-critical theory, sociocultural theory, complex thinking, moral development, theories of creativity, scientific, technological and polytechnical research, entrepreneurship and innovation, sustainable human development, local, regional, national and international reality, agricultural development, metallurgical development and political education. The information contributes to the theoretical approaches of Oppenheimer (2010) by highlighting that the scientific foundations, framed in behaviorism, associationism, pragmatism, conditioning, sadism, punishment, PPS "R" (R - M - R); pedagogy: traditional, banking, repressive, active, based on punishment, homogenizing, globalized; communication, articulated to traditional grammar, functionalist structural, isolated in text comprehension, instructive; educational policies: imposition of instrumental standards, by the WB, OECD, UNESCO, UNICEF, USAID, etc.

Among the philosophical foundations, education to form citizens, education in values and integral, transformative education are specified as goals; to establish values of institutional identity, truth, freedom, responsibility, dialogue, justice, solidarity, honesty, etc. The type of man and society, highlighting the formation of citizens resulting from ethical, moral, civic, political, creative, critical, autonomous, entrepreneurial training; as well as systemic, dialectical, critical, interdisciplinary, transdisciplinary, sociocultural, sustainable human development, autonomy approaches. The information contrasts with the OECD research (2019) by highlighting that good learning consists of objectively apprehending reality without any change, without any "associated factor", that is, affective and socioeconomic factors such as poverty, malnutrition, vulnerability, etc. do not count. It also contrasts with the theory of Capella (1993), by stating that the conception based on logical positivism leads to reductionism, by depriving education of the possibility of dealing with the most significant, historical, dialectical and critical problems.

As for the technological foundations, we have person-centered, democratic, participatory management, shared leadership, methodologies by discovery, research strategies, innovation, entrepreneurship; qualitative, ethnographic, protagonist, action research; formative evaluation strategies, strategies for learning by researching, and new

strategies to manage the factors involved in the teaching-learning process. The information contributes to the study of UNESCO (2023), by demonstrating that the practice of action research can promote the use of digital tools, which awaken the interest of students to promote the development of leading research and achieve students to develop autonomous learning.

CONCLUSIONS

The foundations of the teacher's dominant pedagogical rationality and the contextual factors that conditioned the emergence of the central critical episode are the directive pedagogy, homogenizing pedagogy that led to build a pedagogy of its own and to undertake a new pedagogical practice that generates the development of autonomous learning.

The NRP systematized in a psycho-pedagogical program, applied in the group-classroom through a learning project, significantly developed the competence of writing argumentative texts, in the students of the Fourth Grade "A" of the Educational Institution "José Carlos Mariátegui La Chira" - Naranjillo, reaching a level of Achievement, with $T_c = 6.026$ higher than $T_t = 1.701$, with a level of significance $\alpha = 0.05$.

The results were produced as a consequence of a renewed pedagogical practice with new philosophical, scientific and technological foundations. The NRP began by exalting dignity and freedom as supreme values of each student; as well as believing in the educable nature of the student and his or her unlimited capacity to apprehend culture and realize himself or herself through it in solidarity with others. In addition, the results are the effect of building democratic relationships between teacher-students and among students; of caring for classroom relationships as political relationships. They are the result of having applied a set of methodological guidelines that recover the student's protagonism and formative evaluation. Finally, they are the result of enhancing self-efficacy as an activating mechanism for better self-esteem, motivation and emotions favorable to learning.

The results of this study were partial and unfinished, taking into account the cyclical process of the protagonist research. The analysis and interpretation of the evidence collected in the protagonic research records suggests that the school urgently needs to be reconceptualized, rethought and reconstructed as a democratic versus public sphere; as a place where students learn to cultivate a critical spirit, respect for human dignity and the construction of autonomous knowledge.

The benefits of empowering the teacher's protagonism for the transformation of the educational system must be worked against the bureaucratic, normative, mechanistic, centralist and deprofessionalizing action carried out by the Ministry of Education and its decentralized bodies.

The scientific foundations include educational, pedagogical, sociological, psychological, economic, anthropological, political, ecological, linguistic, cultural, etc.); the philosophical foundations include worldviews, paradigms, conceptions, teleological, doctrinal, axiological approaches, etc.; and the technological foundations include types of management, leadership, programming, technological resources, methodological currents, etc..

REFERENCIAS

- Aldana, J. J., Vallejo, P. A., and Isea, J. (2021). Research and learning: Challenges in Latin America towards 2030. *ALTERIDAD. Revista de Educación*, 16(1), 78-91. <https://doi.org/https://doi.org/10.17163/alt.v16n1.2021.06>
- Capella, J. (1993). Educabilidad y problemas de aprendizaje. Pontificia Universidad Católica del Perú. <https://doi.org/https://doi.org/10.18800/educacion.199302.001>
- Francisco (2015). Encyclical Letter Laudato Si on care for the common home. <https://www.vidanuevadigital.com/wp-content/uploads/2015/06/Laudato-Si-ES.pdf>

- Golte, J. (1980). *La racionalidad de la organización andina*. Lima, Peru: Instituto de Estudios Peruanos.
- Kerlinger, F. N., and Lee, H. B. (2001). *Behavioural research: Research methods in the social sciences*. Mexico: Mc Graw Hill.
- León, J. E., Peralta, U., Delgado, H., Gavidia, G., Revilla, J., Aguilar, J. d., & Gálvez, S. J. (2021). Thought control, bicentennial heritage: notes and reflections for freedom, democracy, dignity, sovereignty. León Fernandez, Jairo Esli. [https://doi.org/ISBN 978-612-00-7158-8](https://doi.org/ISBN%20978-612-00-7158-8)
- López, Y. M. (2019). Protagonist research model to overcome the critical thinking deficiency. Universidad nacional Pedro Ruiz Gallo. <https://repositorio.unprg.edu.pe/handle/20.500.12893/4420>
- Ministry of Education (2020). National Education Project. Corporación Paes E. I. R. L. <https://cdn.www.gob.pe/uploads/document/file/1915017/CNE-%20proyecto-educativo-nacional-al-2036.pdf.pdf>
- Mosterín, J. (1993). *Rationality and Human Action*. Alianza Universidad.
- Muñoz, J., & Velorde, J. (2000). *Compendium of epistemology*. Madrid, Spain: Trotta S. A.
- Oppenheimer, A. (2010). ¡Basta de historias! Latin America's obsession with the past and the 12 keys to the future. Mexico: Debate.
- United Nations Educational, Scientific and Cultural Organization (2023). Knowledge-based actions: transforming higher education for global sustainability. ITESO. <https://unesdoc.unesco.org/ark:/48223/pf0000387267>
- United Nations Educational, Scientific and Cultural Organization (2023). Highlights from the global report on teachers: what you need to know. <https://www.unesco.org/es/articles/aspectos-destacados-del-informe-mundial-sobre-los-docentes-que-debes-saber>
- United Nations Educational, Scientific and Cultural Organization (2023). Latin American youth propose 6 lines of action to transform education. <https://www.iesalc.unesco.org/2023/10/03/juventud-latinoamericana-alza-su-voz-por-la-educacion/>
- United Nations Educational, Scientific and Cultural Organization (2023). Planning education, building the future: a regional perspective. <https://www.buenosaires.iipe.unesco.org/es/portal/planificar-la-educacion-construir-el-futuro-una-mirada-regional>
- Organisation for Economic Co-operation and Development (2019). PISA 2018 Assessment and analytical framework. <https://doi.org/https://doi.org/10.1787/b25efab8-en>
- Peña, A. (1993). *Racionalidad Occidental y Racionalidad Andina*. Universidad Nacional Mayor de San Marcos CIDS A.
- Peralta, F., & Mayoral, P. J. (2022). Action research as a strategy for reflection, improvement and change in language teaching practice. *Revisra Iberoamericana para la investigación y el desarrollo Educativo*, 12(14), 1-25. <https://doi.org/https://doi.org/10.23913/ride.v12i24.1152>
- Peralta, U., Vargas, L. M., Delgado, S. R., Loayza, V. R., Aguilar, J. d., Revilla, J., & Gálvez, S. J. (2023). Protagonist research. Constructing autonomous thinking from practice. Valeria. <http://isbn.bnpgob.pe/catalogo.php?mode=detalle&nt=143152>
- Placencia, V., & Verdugo, A. (2023). La investigación como responsabilidad docente. An analysis of educational policies in Colombia and Chile. *Páginas de Educación*, 16(1), 28-46. <https://doi.org/https://doi.org/10.22235/pe.v16i1.3060>
- Sánchez, M. d., & Rodríguez, E. A. (2022). Project-based learning for the improvement of the research competence of university students. *Revista de Investigación Apuntes Universitarios*, 13(1), 93-111. <https://doi.org/https://doi.org/10.17162/au.v13i1.1318>
- Van Dijk, T. A. (2006). Discourse and manipulation: theoretical discussion and some applications. *Revista Signos*, 39(60), 49-74. <https://doi.org/http://dx.doi.org/10.4067/S0718-09342006000100003>