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Pedagogical Processes in Formative Evaluation According to Students of a Public Higher Pedagogical Institute in Perú

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Abstract

The present study aimed to analyze the pedagogical processes in formative assessment according to students of a public higher pedagogical institute in Ica. A systematic review was conducted following PRISMA principles, defining specific inclusion criteria: articles related to the topic were selected, covering a research period from 2015 to 2023, and publications in both English and Spanish were included, prioritizing those available in open access. The search results allowed the selection of 23 articles. It is concluded that, pedagogical processes in formative assessment, from the perspective of students of a public higher pedagogical institute, highlights its importance in the integral development of learning. This methodology promotes a collaborative and personalized approach, focused on the continuous growth of the student and the development of critical skills. The results suggest that formative assessment fosters deeper and more meaningful learning, preparing students for the challenges of the modern world and reinforcing the importance of an adaptive, learner-centered educational approach.

Keywords: Pedagogical Processes, Formative Evaluation, Students, Education

INTRODUCTION

Formative evaluation within pedagogical processes is a cornerstone in modern education, particularly in higher pedagogical institutes, where future educators are trained. This research focuses on pedagogical processes in formative evaluation, specifically from the perspective of students of a public higher pedagogical institute in Ica. The study seeks to delve into how students perceive and engage with formative assessment and the impact this has on their educational process (Casa et al., 2022).

Formative assessment is distinguished by its focus on continuous monitoring of learning and adapting teaching strategies to meet the needs of students. Unlike summative assessment, which evaluates learning at the end of a course or unit, formative assessment is a dynamic process that fosters continuous growth and understanding. In the context of teacher education, this mode of assessment is especially critical as it prepares future teachers to apply reflective and adaptive pedagogical practices in their future classrooms (Henriquez, 2023).

A central aspect of this study is to examine how higher education students perceive the feedback received through formative assessment. This feedback is crucial for the development of pedagogical skills and the fostering of a reflective approach to teaching. Understanding how students interpret and use feedback can provide valuable information about the effectiveness of formative assessment practices in pedagogical colleges (Hincapié & Clemenza, 2022).

In addition, the research focuses on the relationship between formative assessment and the development of pedagogical competencies in students. Since these students are preparing to become educators, it is essential that they experience and understand the importance of formative assessment. This experience not only enhances their current learning, but also equips them with valuable tools for their future careers in education (Garcia et al., 2021).

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Ultimately, this study aims to contribute to the dialogue on best practices in formative evaluation in higher education, with a particular focus on teacher training. Through the analysis of the experiences and perceptions of the students of the Instituto Superior Pedagógico de Ica, it is hoped to offer recommendations that will improve evaluative practices. This approach will not only benefit the institution under study, but may also provide insights for other educational institutions seeking to optimize their evaluation methods and, consequently, improve the quality of the education they offer. In this sense, the present study aimed to analyze the pedagogical processes in formative evaluation according to students of a public higher pedagogical institute in Ica.

METHODOLOGY

The research presented was carried out using a methodology based on a systematic literature review, as detailed in Aguilera et al. (2021), descriptive in nature and in accordance with the PRISMA standards described by Vega and Vázquez (2021). This methodology included specific steps: a) establishment of clear objectives, b) formulation of precise search equations, c) definition of criteria for including and excluding studies, d) creation of a flow chart for the process, e) detailed examination of the selected texts, f) critical evaluation of the sources consulted, and g) systematic organization of the findings obtained.

Search Methodology

In the search for information, several search engines were used and access was gained to key databases such as Scopus, Redalyc, Google Scholar, WOS and SciELO, selected for their importance and simplified access to the documents for authors, reviewers and readers. Next, the literature relevant to the study was collected (Manzano and García, 2016), establishing specific inclusion and exclusion criteria, which are detailed in Table 1.

Table1 Inclusion and exclusion criteria

| Inclusion criteria | Exclusion criteria |
|--|--|
| Productions of the referential topic | Subjects not related to the topic |
| Studies conducted between 2015 - 2023 | Non-corresponding periods |
| English or Spanish language production | Languages other than English and Spanish |
| Open access studies | Academic productions |

The search began after identifying the keywords necessary for the formulation of search equations. These were created by combining the keywords with the Boolean operator "AND" to broaden the scope of the search. In addition, descriptors in international terms were incorporated and appropriately translated. This resulted in the combination of "pedagogical processes" AND "formative assessment" AND "student teachers", which allowed the identification of studies relevant to each category, using keywords found in the title, abstract and body of the text.

Data collection and analysis process

The selection and review of the bibliography was carried out systematically, considering: a) period of publication, b) authors, and c) subject and title. Figure 1 shows the issue to exclude documents, starting by discarding those studies not related to the research topic, followed by those outside the established time period, and then those in languages other than Spanish or English. Subsequently, bachelor's, master's and doctoral theses were eliminated, and finally, articles with restricted access. As a result of this procedure, a total of 23 documents required human review and analysis. For this purpose, the conventional method of repeated word search using the Detector tool, which can be found at <http://www.repetition-detector.com/?p=online>, was used. This tool was crucial to extract the most important points from each source.

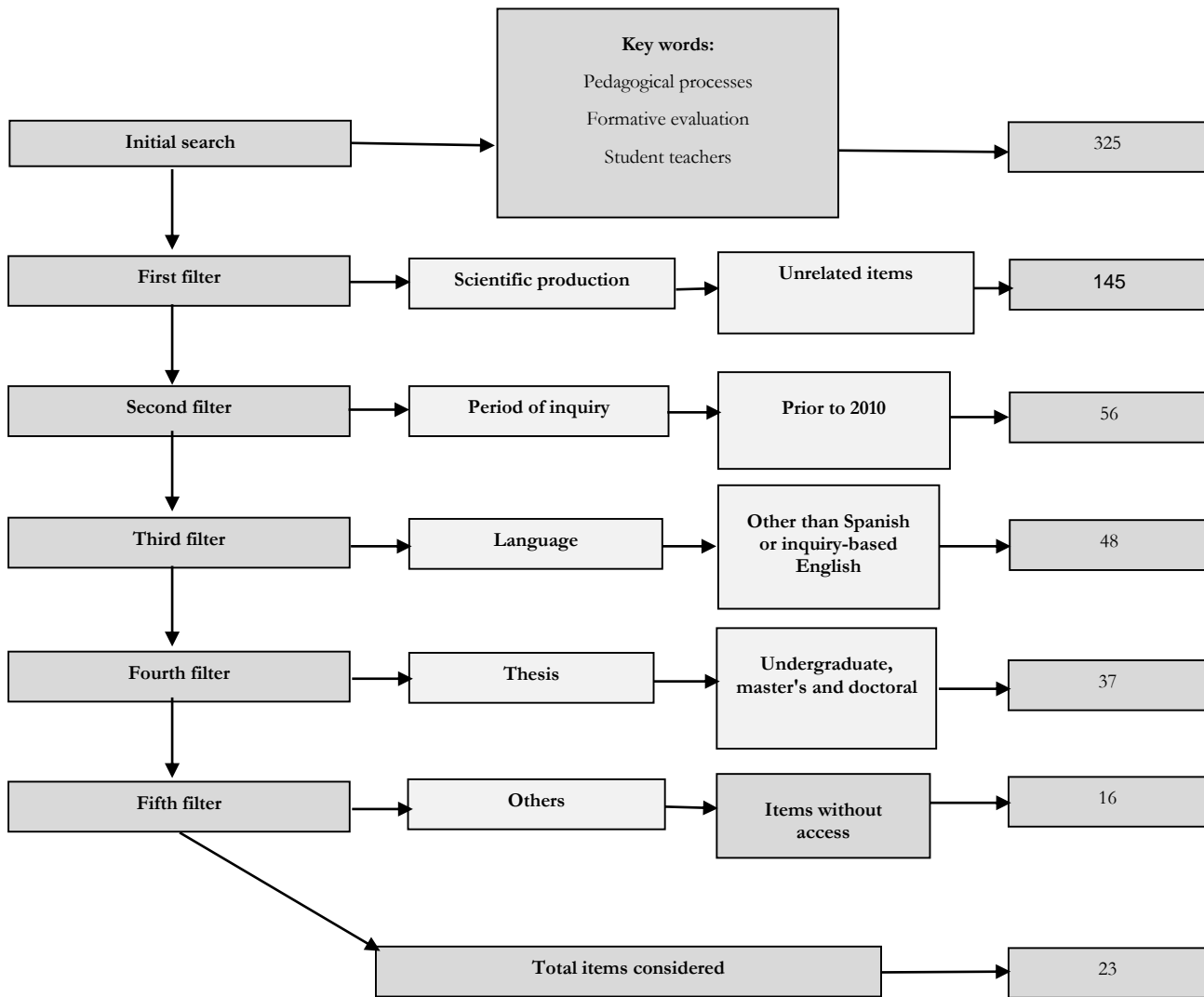


Figure 1 Prism Flow Diagram

The following is the synthesis matrix (see table 2), which is the result of the systematic review carried out after applying the exclusion process to the documents studied. This approach allowed for a broader vision and a coherent structuring of the information, making it easier for readers to read and understand. This matrix details the key elements that underpinned the scientific research and facilitated the visualization of the relevant findings for triangulation, comparison and analysis processes.

Table 2 Matrix of synthesis of articles considered for review

| N. | Year | Author(s) | Title | Country |
|----|------|---------------|---|------------|
| 1 | 2017 | Perez et al. | Formative evaluation in the teaching and learning process | Cuba |
| 2 | 2022 | Crusader | Formative evaluation in education | Peru |
| 3 | 2021 | Falcón et al. | Formative evaluation, reality or good intentions? A case study of primary school teachers | Peru |
| 4 | 2018 | Segura | The formative function of evaluation in daily school work | Costa Rica |

| | | | | |
|----|------|-------------------------|--|---------------|
| 5 | 2022 | Sandoval et al. | Educational assessment of learning: Basic conceptualizations of a professional language for its understanding. | Chile |
| 6 | 2020 | Moon | Formative evaluation of the educational model in Mexican institutions of higher education | Mexico |
| 7 | 2022 | Casa et al. | Formative evaluation in the teaching and learning process during the COVID-19 pandemic. | Peru |
| 8 | 2023 | Sanchez et al. | Application of formative assessment in higher education students. | Peru |
| 9 | 2019 | Garcia et al. | The Evaluation of Student Learning by New University Faculty | Spain |
| 10 | 2021 | Torres et al. | Formative assessment: a look from its different strategies in regular basic education. | Peru |
| 11 | 2023 | Henriquez | Evaluation of teaching performance during the pandemic: views of Mexican university students. | Mexico |
| 12 | 2015 | Talanquer | The importance of formative evaluation | United States |
| 13 | 2023 | Rodríguez and Soplapuco | Formative assessment of learning in physical education | Peru |
| 14 | 2021 | García et al. | Formative assessment: a challenge for teachers in distance education | Peru |
| 15 | 2021 | Emphasis and Clemenza | Competency-based learning assessment: A theoretical view from the Colombian context. | Venezuela |
| 16 | 2021 | Fuentes et al. | The learning evaluation process from the Virtual Learning Environment at the university level. | Ecuador |
| 17 | 2023 | Barcia et al. | Formative evaluation in the pedagogical practice of Higher Education: Systematic Review. | Ecuador |
| 18 | 2022 | Ccala et al. | Formative assessment in secondary school students | Peru |
| 19 | 2022 | Sanchez and Solís | Formative evaluation: a reflective and systematic process of teaching practice | Peru |
| 20 | 2021 | Antúñez et al. | Theoretical framework supporting the pedagogical conception of formative assessment | Cuba |
| 21 | 2020 | Martínez et al. | Impact of competency assessment on the quality of learning: perception of undergraduate nursing students and teachers. | Spain |
| 22 | 2020 | Valdivia and Fernandez | Formative evaluation in a context of pedagogical renewal: Practices in the service of success. | Mexico |
| 23 | 2022 | Sandoval et al. | Educational assessment of learning: Basic conceptualizations of a professional language for its understanding. | Chile |

From the systematic analysis established in the previous table, the elementary topics necessary for the systematization of adequate information and to be able to tabulate the findings are taken into consideration. In this sense, before triangulating the information and discussing, the graphic analysis is established from a perspective of analysis by year and country of origin. Thus, we have the following:

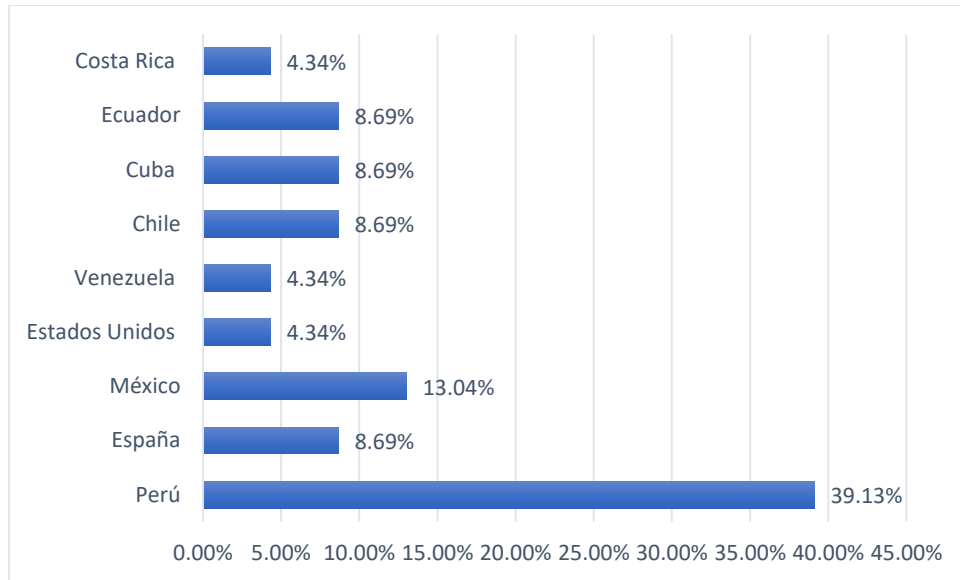


Figure 2 Analysis by country

It is evident in the analysis that there is a prevalence of scientific production in Peru represented by 39.13% (9) of the production chosen for this research; Mexico is in second place with 13.04% (3); Ecuador, Cuba and Chile with 8.69% (2); and finally, the minority in production was established in countries such as Costa Rica, Venezuela and the United States with 4.34% (1).

Consequently, we proceed to the systematic analysis of the evaluation by year of production in such sense, it is evident that there is a productive increase of the resources for the years 2021 and 2022 with 26% (6) of the selected production. On the other hand, for the year 2023 it is evident that there has been a production of 17.39% (4); for the year 2020 there was a production of 13% (3) of the production of analysis. Finally, it is evident that for the years 2015, 2016, 2017, 2018 and 2019, 4.34% (1) is produced.

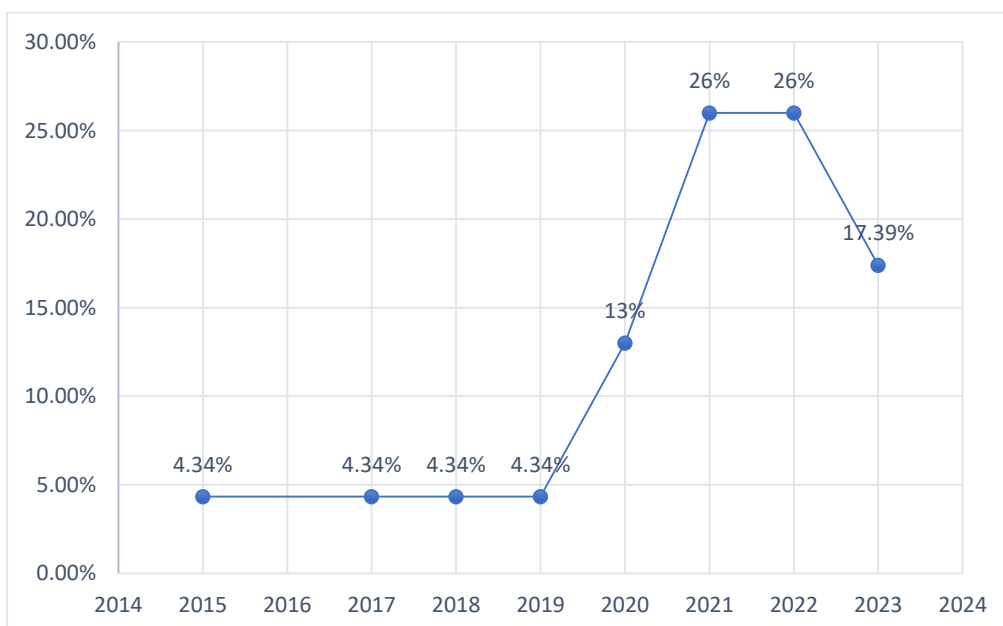


Figure 2 Analysis by year of study

DISCUSSION OF RESULTS

Pedagogical processes in formative evaluation are essential to optimize the teaching-learning process of students. This evaluation allows students to be co-participants of their evaluation, involving feedback based on evidence, generating a transformation of the evaluative practice in the improvement of learning with autonomy and reflection.

From a methodological perspective, formative evaluation consists of issuing assessments on students' performance and productions. This approach facilitates the management and improvement of the quality of student learning processes, focusing on a high-level evaluation centered on performance. A key finding is that formative assessment is processual and is implemented throughout the pedagogical mediation (Talanquer, 2015; Segura, 2018).

In the formative perspective of evaluation, peer evaluation is carried out, where students actively participate in the assessment of their own performance or performance, either individually, in the whole class group or within a specific work subgroup (Pérez et al., 2017). In terms of correlational analyses, formative assessment allows for monitoring the learning process. However, no specific details on correlational analyses were found in the sources provided (Rodríguez and Soplapuco, 2023; Brahim et al., 2024; Tuomainen, 2019).

Formative assessment is an essential pedagogical approach that seeks to optimize the teaching-learning process of students. This type of assessment allows students to be co-participants in their evaluation, which implies feedback based on evidence and improvement of learning with autonomy and reflection (Ccala et al., 2022). In the framework of the competency-based approach, formative assessment focuses on the assessment of students' performance and the collection of information on their performances and productions (Luna, 2020).

This approach also contributes to managing the quality of learning processes, since it focuses on performances and on the quality of the training provided by an educational institution. An important characteristic of formative evaluation is its processual nature, as it is applied during the development of pedagogical mediation (Martínez et al., 2018).

In this approach, peer assessment is practiced, allowing students to participate in the assessment of their performance or performance, either individually, in the whole class or in a work subgroup (Casa et al., 2022). The formative function of assessment in daily school work is integrated into the didactic intervention, focusing on processes rather than learning outcomes. The feedback obtained is of a qualitative nature, which makes it possible to detect learning barriers for the development of the students' pedagogical mediation (Barcia et al., 2023).

Formative evaluation requires feedback-feedback processes to evaluate the objectives, contents or competencies of the students in the pedagogical mediation. From a complex point of view, the resources of the subject and those of the environment are used when evaluating students, preparing them to face similar challenges in the near future (Antúnez et al., 2021).

In summary, formative assessment is a key pedagogical process that allows students to actively participate in their own learning, providing valuable feedback to improve teaching and learning. This approach focuses on student performance, the quality of training and the detection of learning barriers, contributing to the personal and academic development of the student body (Martínez et al., 2020).

Formative evaluation in a public higher pedagogical institute represents an essential pillar in the teaching-learning process. This evaluation modality focuses on the continuous development of the student, offering constant and constructive feedback (Hincapié and Clemenza, 2021). When viewed from the students' perspective, it is perceived as a tool that not only measures their performance, but also contributes significantly to their academic and personal growth. Formative evaluation is perceived as a continuous dialogue between teacher and student, where the focus is not on the final grade, but on the learning process (Sandoval et al., 2022).

In this context, pedagogical processes adopt a more interactive and participatory role. Students become actively involved in their educational process, fostering greater responsibility and commitment to their learning (Cruzado, 2022). This constant interaction with teachers allows them to better understand their strengths and areas for improvement. In addition, teachers can adjust their teaching methods to more effectively address the individual needs of each student. This collaborative approach to education reinforces the concept that learning is an ongoing process and not an end in itself (Pérez et al., 2017).

Another relevant aspect is the personalization of learning. Formative assessment allows teachers to identify the specific needs of each student, adapting their pedagogical strategies to maximize learning (Torres et al., 2021). Students, in turn, benefit from an educational approach that respects their individual rhythms and learning styles. This personalization results in greater motivation and engagement on the part of students, as they feel that their learning process is unique and valued (Rodríguez and Soplapuco, 2023).

Formative assessment also promotes the development of critical skills for the 21st century. Students not only acquire knowledge, but also develop skills such as critical thinking, problem solving, and self-assessment (García et al., 2021). These skills are critical in an ever-changing world and are highly valued in the workplace. The ability to reflect on their own learning prepares students to face future challenges more effectively (Sánchez, et al., 2023).

From the students' perspective, formative assessment can be challenging, as it demands greater involvement and responsibility in their educational process. However, this greater involvement results in more meaningful and lasting learning (Casa et al., 2022). Students learn to value the process of learning as much as the results obtained, thus developing a growth mindset that will serve them throughout their academic and professional lives (Falanquer, 2015).

In conclusion, formative assessment in a public higher pedagogical institute represents a comprehensive and dynamic educational methodology. From the students' perspective, this approach not only improves their academic performance, but also fosters the development of essential skills and greater self-awareness of their learning process. This formative approach is key to preparing students for the challenges of the 21st century, cultivating learners who are autonomous, reflective and committed to their personal and professional development.

CONCLUSIONS

The systematic review of pedagogical processes in formative assessment, from the perspective of students of a public higher pedagogical institute, highlights its importance in the integral development of learning. This methodology promotes a collaborative and personalized approach, focused on continuous student growth and the development of critical skills. The results suggest that formative assessment fosters deeper and more meaningful learning, preparing students for the challenges of the modern world and reinforcing the importance of an adaptive, learner-centered educational approach.

It is important to point out that this review was limited by certain technical and methodological restrictions. Therefore, it is suggested for future research to expand the search in more databases. Although those used in this study were ideal for their accessibility and impact, other relevant studies indexed in different databases that could offer valuable contributions to the research topic were probably omitted. In addition, it would be beneficial to broaden the range of the research period and include studies published in languages other than Spanish and English.

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