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Formative Evaluation and its Impact on Learning in Private Education

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academic performance;
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formative evaluation;
private;
teaching-learning;
process;

Abstract

The research aimed to analyze the application of formative evaluation and its impact on student learning in a particular educational unit in the city of Manta. The analytical and synthetic method was applied with the qualitative-quantitative approach, for this, the data was collected through the technique of the teacher survey, the students' report card was used to identify the evaluation process that was carried out. The results were compared with the bibliographic research carried out in several repositories that showed that the institution applies formative evaluation in a pertinent way, obtaining the advantages that this evaluation system supposes for students and teachers, which influenced the educational system by putting in Practice flexibility in the curriculum. The formative assessment improved the teaching-learning strategies in the classroom.

Contents

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1 Introduction

Because, in some institutions of the country, learning is not systematically evaluated, with a predominance of summative evaluation over formative or procedural, it was analyzed How this methodology is applied in a particular educational unit in the city of Manta, bearing in mind that its main function is to ensure that students respond to the demands and goals of the educational system. The formative evaluation is mainly characterized by knowing if the students achieve the abilities and skills provided by the teacher, determining the aspects that must be modified to obtain a better result in the development of teaching-learning (Martínez, 2012). This evaluation is preponderant in classroom work, allowing students to be assessed permanently, motivating them to demonstrate their achievements throughout the educational process.

The application of formative assessment represents a relevant contribution of changes to educational processes, helps teachers and students share their goals, knowledge and evaluate their progress about the proposed objectives, generating a profound impact of new meanings in the education of each. The strengthening of the internal capacities of educational institutions and decisions aimed at continuous improvement, which allows the application of formative evaluation, as the way to ensure the adequate academic performance of Ecuadorian students (Arroyo & Zambrano, 2020). The Teaching-Learning Process (PEA), is the work in which the teacher transmits knowledge to students about the subjects they teach, using methodologies, techniques, and sufficient resources for the student to acquire meaningful learning (Zambrano & Vigueras, 2020). The evaluation has as its fundamental purpose the transmission of information, leaving traces in the student, reflecting knowledge, skills, and abilities that allow them to adapt to different situations (Sánchez, 2003).

The purpose of current education is not only the transmission of information but also the obtaining of meaningful learning that can be applied at different moments of their training, confirming that this teaching has left an indelible trace in the path of the apprentice, reflected in their knowledge, skills, and abilities, demonstrating it in your daily life. In planning, the teacher organizes the activities using concrete and didactic strategies to achieve the educational objectives set. This should guide, motivate and make the student obtain determined and significant knowledge (Meneses, 2007). They must use methodologies, strategies, and didactic processes that benefit their work, taking into account that the fact of obtaining quality learning affects the comprehensive training of students and not only in what the qualifications reflect (Barcia & Carvajal, 2015).

Currently, the teaching-learning process leads to a permanent evaluation, which determines the degree of skills acquired by the student in their comprehensive training, acquiring knowledge, skills, and values, which are reflected at all times of their career. In the PEA, three solid and inevitable elements intervene, such as environment, student, and teacher. The first is the place where the teaching-learning process is applied, which seeks to open up for the student to efficiently obtain knowledge, these can be physical facilities, such as classrooms, laboratories, conference rooms, and technological environments such as virtual. The next element is the student, the protagonist of their knowledge and skills, capable of being thoughtful, creative, responsible for what they learn and how they do it, always seeking to achieve meaningful learning that they can apply in their daily life (Rosado, 2000). The teacher is the one who provides the setting where the student participates in the areas of knowledge, assessment, and action, he is not only a transmitter of information, he is in charge of teaching, making his students learn and practice values, in addition to promoting attitudes, developing skills and skills that are part of the current educational objectives (Aguirre-Gamboa et al., 2013).

Approximately since 1990, the term evaluation has taken on many nuances and meanings a little questioned precisely because of the incoherence between its application and its intention, some teachers apply an evaluation instrument to measure the amount of content that the student has assimilated, such as If a container is being observed and it is necessary to measure how full it has been, others use them to self-assess and determine if it has reached the student enough for the latter to demonstrate having developed the expected skills or performances and make decisions regarding the results obtained. The teacher is a

researcher and planner, the success or failure of his work depends largely on the methods, strategies, techniques, and instruments to be used, all these stages of planning must go hand in hand like gears. The assessment is not a numerical indicator, it should be considered as a compass that indicates whether you are on the right track or should take another direction, pause, or start over. The teacher must be aware that each human group in his charge is heterogeneous and in that diversity lies the richness of being, he must consider multiple intelligences to make his class the masterpiece that touches the most sensitive chord of the brain of his students, transforming the content in meaningful learning (Maba, 2017; Peter, 2015).

The formative evaluation is conceived from the planning by the teachers, in which the evolutionary process of the students is registered and evidenced to improve teaching practices and adjust them according to their needs, this can also be used by students to improve their ways of learning, thus regulating their way of studying (Popham, 2013; Rampersaud et al., 2005; Chamorro & Furnham, 2003). On many occasions, the results of the formative evaluation generate indecisions that induce resistance to change in teaching actions, due to processes not very well-conceived according to the needs and interests of the students and other factors such as the number of students per classroom, planning errors, especially in the strategies, techniques, and instruments that allow demonstrating the performance standards when evaluating the students (Saltos & Chiriboga, 2016). An important factor to take into account informative evaluation is feedback, since, through this, students know their evolutionary level in learning, as well as it allows them to regulate the way they learn, making them builders of their training It also manages to be a valuable tool for teachers that enables them to obtain relevant information about the knowledge acquired by students, allowing self-assessment to improve their teaching style (Arroyo & Zambrano, 2020).

The teacher can make use of a wide range of instruments to evaluate a student, it is not strictly necessary to do it through a test, he can apply for collaborative, cooperative work, a checklist, anecdotal record, mind maps, problem-solving, expositions, summaries, open questions, drawing graphics, collage, symposium, gathering, dramatizations, essays, analogies, investigations, experiments, compositions, among others. The objective is that the student can acquire and express their knowledge, skills, competencies through making pertinent decisions in their daily life and make them a human being who is esteemed, values, communicates with empathy, takes care of their peers and nature. Some teachers are not prepared to carry out the formative evaluation, but what they do is quantitatively evaluate the knowledge, but not the cognitive, procedural, and attitudinal achievements of each of the students (Guido & Alvarez, 2013). The teaching work requires permanent academic updating in all areas, the evaluation has been maintained with traditionalism, considering the student as a number where they can pass or not the course and it is not observed as an aspect of institutional improvement.

Academic performance refers to the evaluation of the knowledge acquired during the school year, the student who reflects positive results can be said to have good academic performance in the phase in which he is (Edel, 2003; Riera-Ledesma & Salazar, 2013; Martín & Serrano, 2009). In this research, it has been possible to find several authors who provide theories of what academic performance is and classify it into two large groups: Those who consider performance/performance as a synonym of achievement and indicate that academic performance is expressed in the assigned grade by the teacher and those who consider performance academics an expression of the skills that the student develops during the school period (González, 2002). Generally, the student's academic performance is expressed through the qualification assigned by the teacher, in a quantitative average, through a final written evaluation, without taking into consideration that this “quantitative grade” may be affected by learning problems, family problems, pregnancy, addictions, illnesses, mood, which can intervene in the student at the time of taking a test, therefore, it is not a reliable indicator, it is necessary to analyze the student comprehensively during the academic path, in different spaces and activities to make a judgment regarding their performance (Rao & Kalyankar, 2013; Avalos, 2011; Triantafillou et al., 2003).

The constant academic analysis of the students has given way to know why some improve in certain fields and others not, reaching success or failure in what they do, showing that these aspects have to do with general factors such as pedagogical, psychological, and social. These perceptions are conceived as a lack of study habits, previous academic problems, demotivation, poor teacher preparation in their educational activities, as well as the methodologies used in learning (Isaza, 2014; Protti Coto et al., 2017). To improve student performance, the teacher must make motivation a fundamental aspect to increase interest in them and overcome the obstacles they have experienced throughout their student career.

2 Materials and Methods

The research was developed under the quali-quantitative approach, which allowed to analysis and interpretation of the results, this uses data collection to break down the research questions and reveal lights in the interpretation phase. The study was exploratory, it provides a general vision of the reality existing in the institution about the subject investigated. The documentary research served to download and analyze materials available on the website, repositories, and indexed journals, which were the secondary sources of the research Y Bibliographic portals of Dialnet, Scielo, Redalyc, Cloudfront.net. selecting the articles with the most relevant information according to the topic (Gomez, 2010; Contento et al., 2007; Kordaki, 2010). The inductive-deductive method was used, to reach a general conclusion from the particular premises and from the general principles to get to know the particularities. The analysis and synthesis helped to understand the behavior of the theory in practice, the Murray and Larry equation was applied to calculate the sample (Queija et al., 2019).

3 Results and Discussions

The inductive-deductive method was used, to reach a general conclusion from the particular premises and from the general principles to get to know the particularities. The analysis and synthesis helped to understand the behavior of the theory in practice, the Murray and Larry equation was applied to calculate the sample. To carry out the teacher's task, the first step refers to knowing the students and their abilities, the second is aimed at verifying and giving feedback, in the third moment, it is considered to constantly evaluate the results to continue with the learning process. These specific moments of teachers have been called initial, continuous and final evaluation (Gómez & Grau, 2010). For the effective performance of the formative evaluation, three steps are considered that will guide this work shown in figure 1.

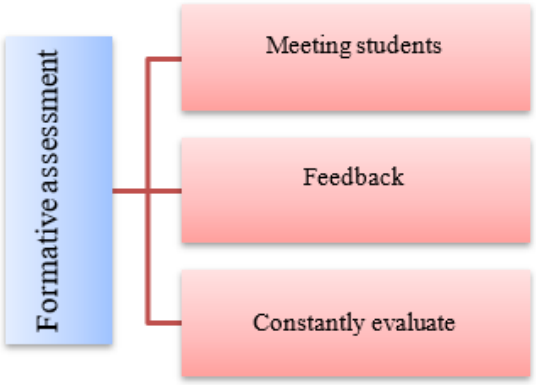

Figure 1. Steps of the formative evaluation

Source: Gómez & Grau (2010)

Two main types of formative evaluation can be distinguished: the formal and the informal, both essential (Talanquer, 2015). The two main types of formative evaluation that are applied within the classroom are shown in figure 2.

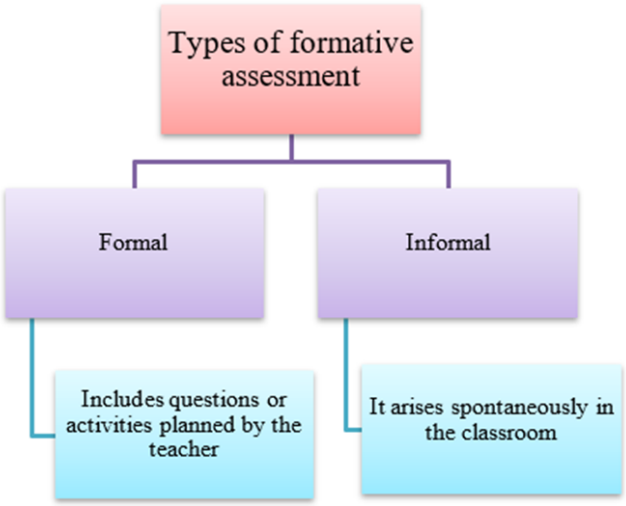

Figure 2. Types of formative evaluation

Source: Talanquer (2015)

These types of formative evaluation are considered applicable in the classroom, The first is foreseen in the teacher's planning and the second is the result of the improvisation necessary when interacting with the students. For the development of the research, a working instrument was applied using the Google Form, which covers some criteria of the formative evaluation and what impact it had on their pedagogical practice. For the selection of the sample, equation number 1 was used (Larry & Murray, 2009).

$$n = \frac{Z^2\,\sigma^2\,N}{e^2\,(N-1)+Z^2\,\sigma^2} \qquad (1)$$

Where:
n → is the size of the population sample to obtain (73)
N → is the size of the total population (100)
σ → represents the standard deviation of the population (0.5)
Z → Degree of Confidence (1.95)
e → Sample error (0.05)

The research scenario was a particular educational unit in the city of Manta, the units of analysis are the 40 teachers and the 73 students who are in high school. The three basic parameters of this research were analyzed, such as teaching-learning, formative evaluation, and academic performance or performance. The first must leave a mark on the students, the analysis is where the students demonstrate the understanding achieved and the feedback strengthens the learning. Generally, these achievements are expressed through a grade assigned by the teacher or an average, either quantitative or qualitative. From the sample obtained, the results of the survey applied to the teachers of an educational unit are presented. In figure 3, the graph of the conception of formative evaluation by teachers is shown.

Figure 3. The conception of formative assessment

Figure 3 shows that 94.7% of teachers conceive formative assessment as a process of learning and improving, 2.7% perceive formative assessment as a process of obtaining qualifications, and 2.6 as test results. It was shown that the majority of teachers applied formative assessment throughout the teaching-learning process, focusing their intervention on improving students' skills and providing educational quality. The intellectual production, improvement, and scientific activity of teachers as evaluators is important so that they propose new instruments and ways to carry out the formative evaluation of their students to observe it as a strategy to improve the process and not as a final result (Lago, González, & Rodríguez, 2019). Different elements lead teachers to apply formative assessment within the teaching-learning process. In figure 4 shows the graph of their behavior.

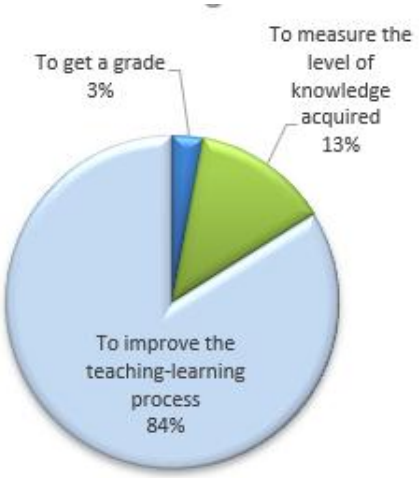

Figure 4. Parameters that measure formative evaluation

The graph shows 84% of teachers apply formative evaluation to improve the teaching-learning process and 3% that it is applied to obtain a qualification, which is why recognizes that teachers apply formative assessment as an improvement strategy, to adjust the applied methods and activities on the fly so that students acquire significant knowledge of practical application in daily life. The formative evaluation must be planned permanently in the didactic process, to know the progress of the learning of each one of the students, to carry out the pertinent curricular reinforcements and adaptations. Figure 5 reveals the statistical graph of the moments in which the teacher applies the formative evaluation.

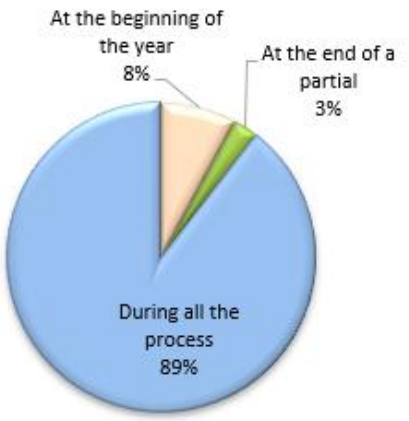

Figure 5. Moments in which teachers apply formative evaluation

In the graph in figure 5, it can be seen that 89% of teachers carry out formative evaluation throughout the teaching-learning process, some of them at the beginning of the school year, this criterion can be valid if they consider the diagnostic evaluation as part of the formative evaluation and the 2.6% who apply it at the end of the semester, the teachers establish the evaluation as procedural and continuous because it allows reorienting the teaching practice permanently by providing sufficient evidence so that you can make the right decisions for the good of the students. Teachers have banished traditionalist memorization, giving way to a more authentic evaluation, which is used as an improvement strategy, allowing to adjust or reinforce during the process, to be clear about the learning trajectory and the real achievements obtained in terms of student performance.

The resulting information underlines that for students the application of formative evaluation systems offers a greater benefit, because it improves the assimilation of knowledge, develops greater autonomy, establishing commitments and responsibilities with the teacher and their learning (Zaragoza, Pascual, & Manrique, 2009). To use an evaluation instrument, a rubric is necessary, which guarantees a less subjective, clearer, and didactic assessment that allows the student to know on what basis to prepare their work, however, the formative evaluation is a process of dialogue with the student where they can express their difficulties, preferences, needs that motivate them to maintain a positive attitude towards the acquisition of new knowledge acquired through their experience achieving meaningful learning. To verify the analyzes carried out, data was taken from the qualification certificates of the 73 students, where it was possible to confirm that they obtained grades between 9 and 8 points. Table 1 shows the averages achieved:

Table 1
Qualification of a group of selected students

Qualification	Frequency	Percentage (%)
9	67	92
8	6	8

Table 1 shows the averages collected from a group of students of a particular educational unit, where 92% of them obtained an annual average of 9 points and 8% average of 8, there is coherence between the results obtained in the survey developed to the teachers, showing that they apply the formative evaluation appropriately. The implementation of a formative evaluation renews the teaching exercise, being the step that promotes change, by projecting teaching-learning from a pedagogical and critical perspective (Reynolds & Trehan, 2000). The application of this methodology in all its phases makes us reflect, dialogue, share doubts, and difficulties; in addition to giving a new approach to the evaluation, dismantling it from the mistaken idea of being only a knowledge meter

4 Conclusion

When the formative evaluation process is effectively applied through dialogue and understanding, improvements in the results are evidenced, obtaining high performance from students who are in the range of achieving the required learning and mastering this, as determined by the Ministry of Education in the student assessment instructions. In the educational institution where the research was carried out, the results obtained prove to be favorable, highlighting the effective use of evaluation to improve educational quality, it applied formative evaluation through its incidence in the teaching-learning process of the student body throughout the school year.

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