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# The Procedure Used on Diagnostic Evaluation Process

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**Abstract---** *This article allowed identifying procedures used for diagnostic evaluation in the “Mercedes” Private Education Unit of the city of Calceta, Ecuador, as well as verifying whether these are adequate, relevant and carried out according to the reality of the educational institution by teachers and if you intend to analyze the student in an integral way, not only academic. To support this research, the exploratory method of documentary analysis was used for which bibliographic sources were reviewed. The instrument designed for data collection was the survey where results were obtained that concluded that teachers have limitations regarding the conception of diagnostic evaluation because they consider that the contents are not spaces for continuous learning, it does not meet the different styles of learning to determine what need for academic improvement can be applied to each student although the results of a diagnostic evaluation are taken into account for decision-making focused on improving procedures inside and outside the classroom.*

**Keywords---** *evaluation, diagnosis, evaluation instruments, decision making.*

## 1 Introduction

The teaching and learning processes that teachers develop in the classroom, so that students assimilate knowledge and knowledge adopt in their daily lives, in many occasions they adapt, because they meet students with an academic degree not according to the course in which they are enrolled because they have not acquired skills and abilities during the entire previous process, students who do not make reinforcements academics, or advance educational processes; as well as during the holidays they did not level learning which has an impact on the abandonment of studies, in some cases and poor performance over the course of the school period. Therefore, it is necessary to know the reality in which the educational activity of the student is carried out at the beginning of a school year, this identification can be achieved through a diagnostic evaluation whose fundamental purpose is once made, make the decisions that are relevant to achieve efficiency in the education sector using assessment instruments that allow exploring the real situation of students in relation to academic performance.

The first of the functions performed by the evaluation in relation to the qualitative improvement of teaching is precise to provide validly, reliable data, analysis and interpretations that allow for a precise idea about the state and situation of the education system and its components, (Tiana, 1996; Widana *et al.*, 2018). The results of the evaluation is considered valuable information for the teacher because it intends to take the initiative to adapt and configure the planning of the learning activities contemplating knowledge, experiences, strengths, and weaknesses of the students, and helps the teacher to organize learning groups to obtain better academic results in the immediate future of the teaching process, (Ballester *et al.*, 2000).

In Ecuador, educational policies at the basic and high school level are governed by the Organic Law of Intercultural Education, regulations, regulations and instruments that aim to achieve a quality education that seeks the development of the student as an individual and that this can be inserted into the society with a critical and logical thinking that helps provide solutions to existing problems. In the search for educational excellence, the teaching must be continuous, as well as the evaluation, for this it is necessary to know the degree of knowledge that a certain student has, from there to start and make decisions regarding leveling their school performance, this contribution It provides the diagnostic evaluation that is a procedure that is applied at the beginning of an academic period to identify the preconditions with which the student enters the learning process, (Mineduc, 2012; Mahayukti *et al.*, 2017).

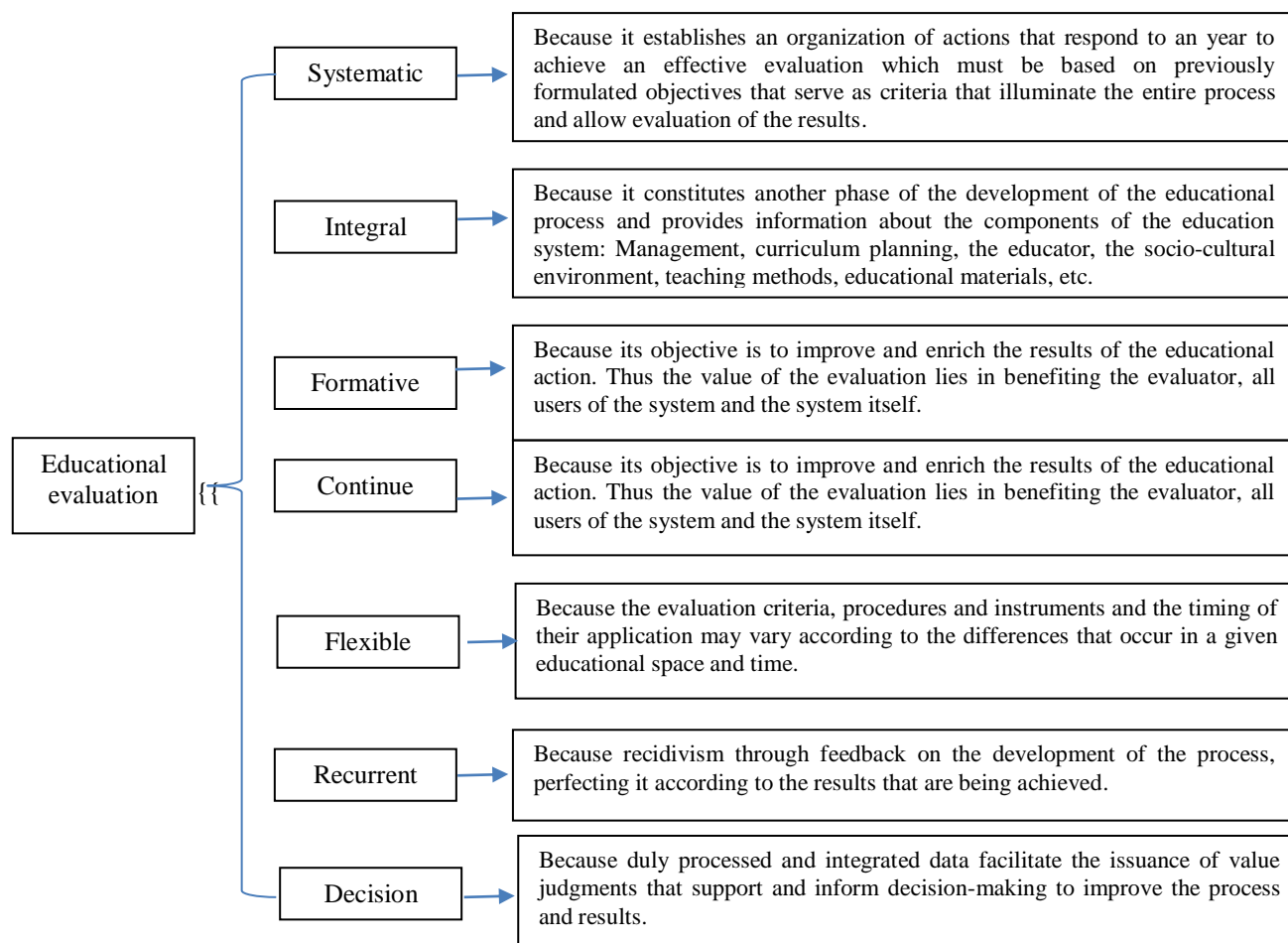
The evaluations being a systematic process of evaluation, the plan that it covers must have a social, cultural and economic context (Sobrado, 2005; Mahendra, 2016), for that reason, it is important to know the instruments and the techniques to make the diagnosis. According to Samueza (2016), the most used for a diagnostic evaluation are written tests, questionnaires, observation with a scale of criteria that were part of the topic of consultation of this article. The self-evaluation and co-evaluation are not used in the process, the evaluation is reproductive only with objective questions, (Cepeda, 2015). The implementation of surveys of teachers of the Individual Educational Unit "Mercedes" of the city of Calceta, Ecuador allowed obtaining essential information to identify if the diagnostic evaluation meets the purpose of determining whether the procedures for evaluating content and the different styles of learning are appropriate and verify the conditions; In addition to the cognitive, psychological and socio-family relationship of the students and whose results will be a starting point for didactic planning according to the reality appreciated (Paucar, 2015; Suastra & Ristiati, 2017; Maba & Mantra, 2017).

## 2 Materials and Methods

This article used the exploratory method as a fundamental part of the research, using the technique of documentary analysis, for which bibliographic sources were reviewed. The instrument used for data collection was the survey of teachers of the "Mercedes" Private Educational Unit of the city of Calceta, Ecuador.

## 3 Results and Discussions

Evaluation is a process of gathering evidence and making judgments about the extent and nature of progress towards the required performance, established in a standard or a result of the learning achieved, (McDonald, 1995). The evaluation process allows to delineate, obtain and provide information to judge decision alternatives, (Stufflebeam, 1995; Maba *et al.*, 2017; 2018), which is vital for technical and professional training, which should be considered a stimulus for learning; The message that should be sent to the student is what knowledge he is learning and what he is not, in addition, it cannot be separated from the social context because the evaluations must have a formative character that contributes to the development of individuals capable of developing in society. As the evaluation is a continuous process, it is necessary to make corrective decisions that generate a high teaching and learning commitment in which there must be an interrelation and participation among those involved through a diagnostic evaluation that is not the usual one but that is heterogeneous during the cycle of a school year in a certain subject with progressive evaluation (Cepeda, 2015). In addition, the teacher must plan teaching strategies after diagnosis, to expand basic learning, make individual accompaniment permanently to monitor the performance achieved in order to improve their individual skills (Fonseca, 2011).



Source: [Rosales \(2014\)](#)

The evaluation should serve to propose a starting point to define what is wanted to be based on quality learning that aims to maintain a structure with defined processes, ([Medina, 2013](#)). The following purposes are cited:

- Integrate methods and procedures into an organized, coherent system that allows students to evaluate the academic performance of the teaching-learning process.
- Plan and direct learning experiences in harmony with the previously established objectives.
- Determine the level of knowledge and achievements of the student, integrally.
- Provide necessary information to students about learning difficulties.
- Assess the relevance of programmatic content in terms of extension, complexity, and updating.
- Stimulate the effectiveness of teaching strategies and resources.

In the same way, the evaluation is indicated as an activity or systematic process of identification, collection or processing of data on educational elements or facts, with the objective of assessing them first and on said evaluation, making decisions, ([García, 1989](#)). For [Hernández \(1998\)](#), any type of evaluation carried out in the educational field must fulfill the following functions:

- Diagnostic function**: The evaluation must characterize the planning, execution, and administration of the educational project that serves the academic guidance authorities that allow deriving actions aimed at improving educational quality.
- Instructional function**: It must produce a synthesis of indicators and implementation of the curriculum. People who participate in the process are trained, learn evaluation strategies and incorporate a new work learning experience.

- c) Educational function: It is from the results of the evaluation where the teaching staff knows precisely how their work is perceived by the educational community with which they can improve strategies for their professional development.
- d) Self-training function: It is mainly fulfilled when the evaluation offers guidelines for the person responsible for teaching to guide their academic work, their personal characteristics and improve their results.

This research aims to determine if the processes and procedures used in diagnostic evaluation that the institution and the teachers put into practice are adequate and relevant, necessary to establish how the student performs academically, in the social, cultural and family context. The Individual Educational Unit “Mercedes” chosen for this purpose has 30 teachers, 6 work in the administration of the campus. It has an academic offer in Unified General Baccalaureate and Accounting Technician, 400 students attend in a single morning section.

In figure 1, the results related to the diagnostic evaluation are shown and if this should be a space for content where the student can continue with the learning processes as something every day, as observed 46.67% of the teachers consulted responded that this never applies and 20% express that sometimes this activity takes place and 33.33% that always.

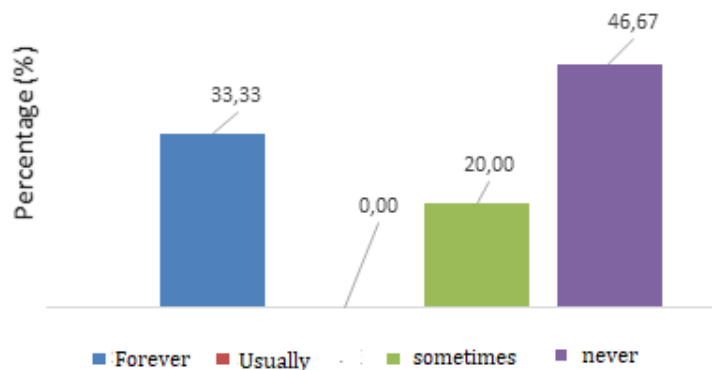
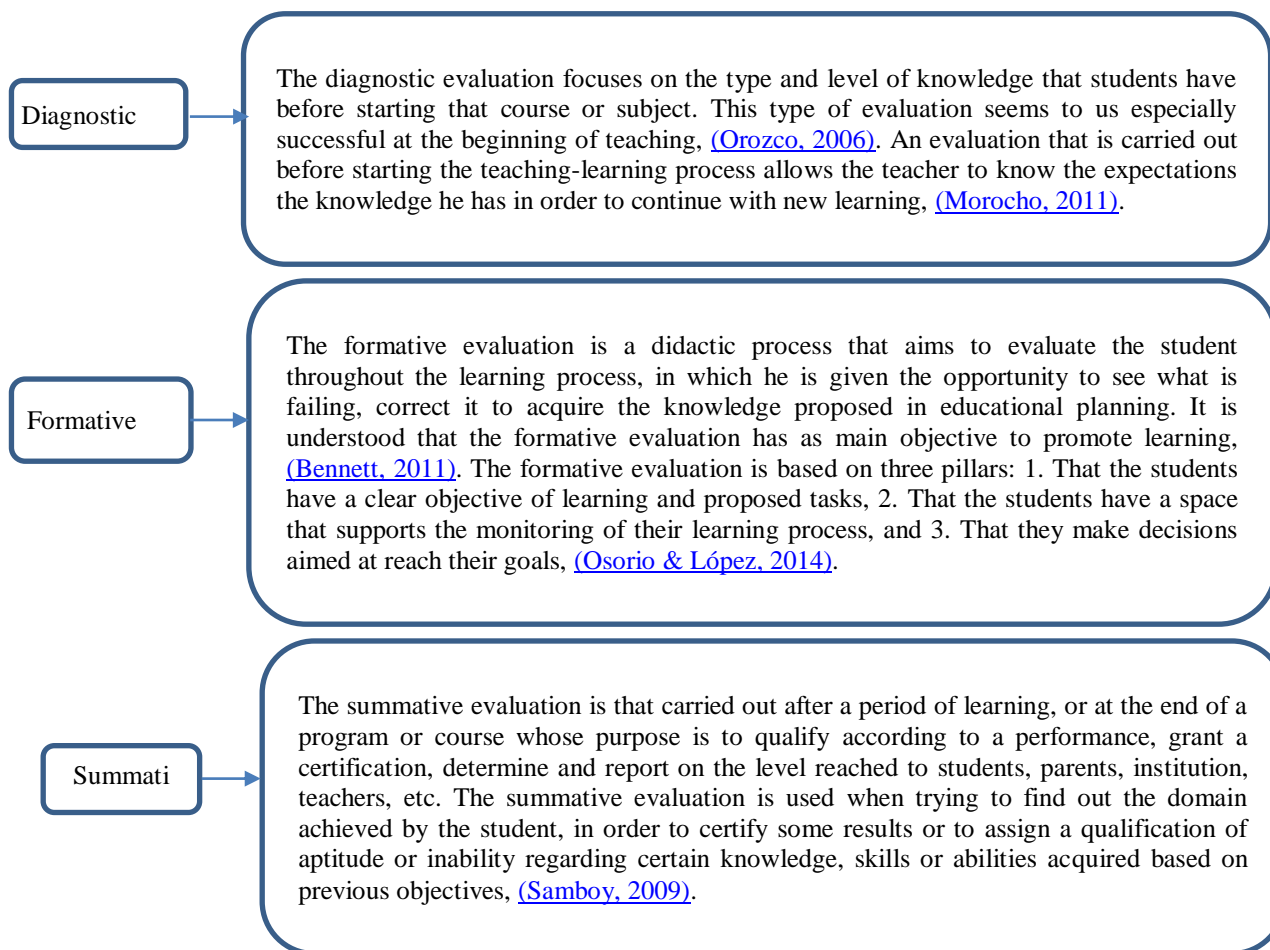


Figure 1. Result of the diagnostic evaluation and relation with the contents

It is necessary to carry out an evaluation to learn, where there are questions necessary to start discussing and reflecting. In this regard, Trillo Alonso reflects that knowing how to evaluate becomes a complex and delicate issue, since it implies a series of questions that need to be adopting new senses in the theoretical-practical dialectical construction, for what, how, why, what, to who and who evaluates, which requires a serious and informed professional performance, reflective, deliberate, intentional, systematic and, above all, justifiable (Trillo, 2005). In the analysis, the first thing to reflect is the function of the evaluation and thereby delineate some classification. We can evaluate to examine, qualify and with that, we would be opting for a normative, summative evaluation, which has a clear direction towards the assessment of errors (Bahón, 2015). What gives meaning to the evaluation is the information that it returns about the program, the institution, the teaching or the learning and fundamentally that, from it, the people involved can make decisions about the merit and value of the evaluated or improve Your performances According to Garcia-Jimenez, there are three types of evaluations (García, 2015).



Once it is determined that the diagnostic evaluation is an initial process that has as its purpose the collection, analysis, and treatment of the information related to the level of knowledge that the students obtain, on certain subjects that are important to establish new learning contents, to make decisions that favor the educational development of students by improving plans and objectives, were consulted regarding teachers; if the diagnostic evaluation comprehensively values the student who is the purpose that should be pursued, not only evaluate it academically; but in the personal context, table 1 shows the result of 86.67% who believe that no and only 13.33% answered yes.

Table 1  
Results comprehensive assessment of the student

Does the diagnosis fully assess the student?	Amount	Percentage (%)
Yes	4	13.33
No	26	86.87

The diagnostic evaluation process must be carried out in a way that the student is the complete protagonist of the process, through interaction with their classmates, the teacher being a guide more and not a judge who is going to value them quantitatively, during this process that aims to measure the level of knowledge of students in a qualitative way so it must be externalized towards an education that generates changes over the years, since teachers must evaluate how students demonstrate their knowledge in a meaningful way, that they are concerned with sharing their knowledge and exchanging ideas in the classroom with their classmates.

With the need to know, if the diagnostic evaluation addresses the different learning styles, teachers were consulted and the response indicated in Figure 2 shows that 40% never attend to the learning styles while 26.67% states that sometimes, 26.67% answer that different types of learning are always attended to.

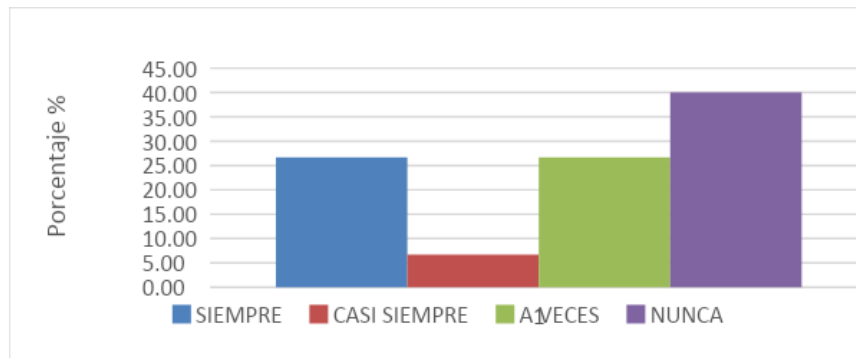


Figure 2. Results attention to learning styles

To adapt the elements of the teaching-learning process taking the pertinent measures to make the educational fact feasible or more effective, taking into account the initial conditions of the students and knowing that the derived information is valuable for those who administer and planning the course it is important to manage the results with great discretion so it is not essential to send it to the student.

According to [Brenes \(2006\)](#), the following phases must be considered for the diagnostic evaluation:



The evaluation is conceived as a continuous and systematic activity whose objective is to search for student data to determine knowledge, skills, values, and attitudes and to achieve those that are necessary instruments for information research. Torres said that among the instruments that the teacher can use to collect the data resulting from the observation are: grading scale, checklists, standardized and non-standardized tests, rubrics and anecdotal registration ([Torres, 2010](#)). They are described below:

- a) Grading scale: They present a set of characteristics that must be judged to indicate the degree of attribute of the student, the character of the student, their abilities, skills, and aspects of personal and social order should be measured as traits.
- b) Checklist: It is valid to track a continuous evaluation. It is useful for preparing student reports, summarizes descriptively what a student has learned or stopped learning in relation to objectives, competencies, skills or abilities proposed.
- c) Standardized and non-standardized tests: They have the advantage of obtaining quick information about the students of a course. They are useful when you want to do diagnostic evaluation throughout the school period. These tests provide quantitative data and allow to determine levels of achievement of the group and of each student, the data must be analyzed before making judgments and use them as the basis for making decisions.
- d) Rubrics: They are a set of guidelines that describe different levels of student performance, are used to evaluate performances or work done by them. They specify the level of development expected to obtain different levels of quality. These can be expressed in terms of a scale or numerical.
- e) Anecdotal Record: Provides a description of the student's behavior in natural situations. It consists of a personal file in which annotations are made of any situation that arises without giving any objective interpretation.

The use of evaluation instruments is necessary for the purpose of diagnostic evaluation. In figure 3, it is detailed that 86.67% of the respondents answered that they use the standardized tests of criterion analysis when performing a diagnostic evaluation and 13.33% use the written test.

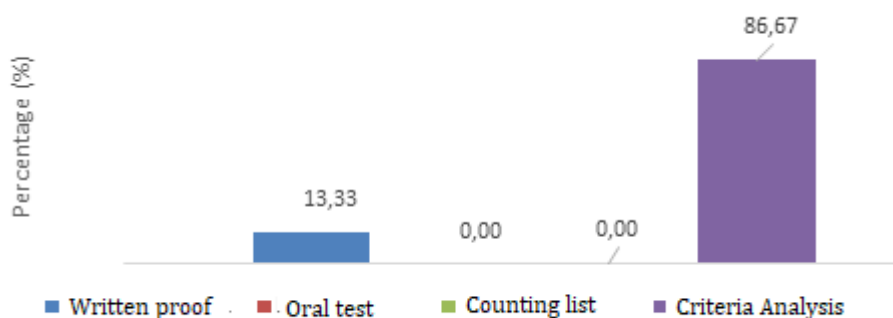


Figure 3. Results types of instruments

Once the diagnostic evaluation is applied where the processes and instruments used for a good teaching process are known, the teacher is able to identify more precisely what the student has assimilated, until that moment in The educational process will have the possibility of making the decision making process better based on the evaluation, that should have an institutional focus and not only be limited to the classroom context in order to define individual or group strategies in coordination with the institution educational. At this level, it is necessary to decide according to the results of each student and group what the school needs according to the internal regulations, organization of educational and recreational activities, training plans for teachers, organization of schedules, advice to students; in short, everything that has to do with the educational project that the school offers to students and their families. Decision-making process. The decision-making process, both at the institutional level and at the classroom level, has to follow these steps: (Monterrey Institute of Technology and Higher Education, 2009).

- a) Problem detection: When the evaluation results are not satisfactory then there is a problem that must be addressed.
- b) Data collection: To be able to take the next step it is necessary to have all the possible information about the situation presented in order to define its scope, including the causes that are causing the problem.
- c) Objective: The result to be expected is defined.
- d) Possible solutions: Explore different paths that can be followed to obtain the expected result.
- e) Choosing the best alternative: Once the alternatives have been explored and their possible consequences, you can choose the best one.
- f) When the information is collected: Once analyzed, the solution alternatives are studied; as well as the consequences then, the team of teachers is able to choose an action plan that organizes actions to be carried out, tasks, times, responsibilities and a system that monitors the steps evaluating the results obtained

One of the most important decisions making that is related to the teaching work and that allows to improve their teaching and achieve optimal student learning individually, here the feedback is applied., this expresses opinions, creates judgments that are based on the teaching and learning process that visualizes successes and mistakes, strengths and weaknesses of the students, (Gorozabel, 2014). Figure 4 shows that 40% consider that yes, the results of the diagnostic evaluation are taken into account to make decisions to innovate and improve evaluation procedures, 13.33% consider that almost always, 26.67% that times and 20% who consider that the results are never used to make decisions



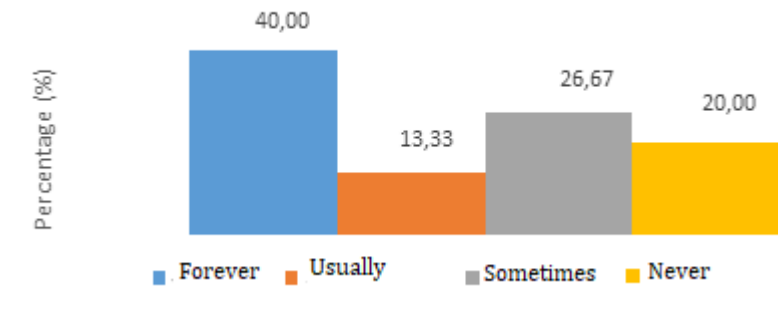


Figure 4. Results for decision-making

It is interesting to note, as there are still professors who do not have the diagnostic test in the teaching-learning process, this also affects As for the students, with these results the teacher must plan content, modify teaching strategies including individualizing their work according to the needs that a student may present, ensuring that he achieves a good academic performance, accompanied by reflective guides and constant motivation to that the student can overcome their own or acquired difficulties. You must also ensure that the student assimilates this new form of learning in and out of the classroom so that he does not suffer isolation and can coexist harmoniously with the rest of his classmates. The educational institutions, together with the teachers, must design and carry out a diagnostic evaluation of the knowledge, abilities, skills, aptitudes, values, past behaviors to determine the degree of learning that they present in addition to verifying if the processes used on which this evaluation is based are the appropriate ones in order to make the decisions deemed appropriate to improve the educational environment.

## 4 Conclusion

The results obtained showed that teachers have limitations regarding the conception of diagnostic evaluation and consider that it is not valued the contents that students must review and develop so that they are able to acquire the fundamental knowledge about a certain activity or task they failed to understand. The study shows that the diagnostic evaluation used by the educational institution does not fully assess the student, nor does it address the different learning styles that allow determining what need for academic improvement can be applied to each student. Teachers believe that the results of a diagnostic evaluation if taken into account for decision-making deemed appropriate would help to improve procedures, provide feedback within the classroom and re-awaken in students that knowledge that is important for continuing with the educational process

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