International Journal of Social Sciences and Humanities
Available online at www.sciencescholar.us
Vol. 4 No. 3, December 2020, pages: 160-167
e-ISSN: 2550-7001, p-ISSN: 2550-701X
https://doi.org/10.29332/ijssh.v4n3.515

Evaluation Focused on Processes to Improve the Academic Performance of Students

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Manuscript submitted: 18 September 2020, Manuscript revised: 09 October 2020, Accepted for publication: 27 November 2020

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Keywords

academic performance; metacognitive valuation; process evaluation; significant learning;

Abstract

This paper aims to analyze the process-centered evaluation to improve the academic performance of the students in a Rural Educational Unit of the Rocafuerte Canton, to meet and achieve the objective, non-exploratory research was conducted with a quantitative-qualitative approach, using the scientific, analytical, and synthetic methods. The commitment was made with young people in the eighth year of basic general education. For this, a survey design has been used through a questionnaire through a Google Form to the students, so it was obtained as a result, that the students are not comfortable with the assessment of the written exams, they would like to be evaluated with different instruments eliminating the traditional evaluations, and ask for greater evaluation of the daily work, so it is concluded that it is necessary to innovate in the evaluation techniques to achieve motivation in the student and obtain better educational product results.

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1 Introduction

International large-scale standardized assessment is characterized by being homogeneous, assuming that students learn in the same way, at a uniform rate and content, to label the status of the educational systems that each country applies and know the student's achievement, exacerbating international competitiveness (Jiménez, 2016). The evaluations that measure results offer a perspective on the level and educational quality of the countries that undergo them and a comparison of their educational systems. At the Ibero-American level, historically, evaluations have been considered as individual selection and control tools that have an impact on the social field, before it was considered as an activity and technique known as an exam, to assess the cognitive after the teaching process, being a valuable teaching instrument to measure learning and academic activity, managing to review and reorient it to the extent of the results obtained (Rosales, 2014).

Upon knowing the results of the tests applied by the International Student Assessment (PISA) program in which Ecuador participated for the first time, where not even the basic performance category in reading, mathematics was reached and sciences (National Institute of Educational Evaluation, 2018) the actors of the educational reality must identify the shortcomings and reprogram the teaching and evaluation strategies, raising their cognitive level so that the contents and the memory do not become the enemies of the educational quality that is expected to be achieved; seeking to improve reading comprehension, solving problems related to exact sciences, thinking, having to rethink the way to evaluate. In Ecuadorian schools, there is an alarming reality, the student's school performance has declined significantly, and many are the factors associated with this problem. One of them is the unsuitable way of assessing, where students' skills are not considered, nor are skills acquired following the demands demanded by the education system or the level of skills necessary to fully participate in society.

Currently, the execution of an authentic evaluation is proposed, which assesses, above all, the processes and not the results, ensuring that the student is the evaluator of their learning, using the evaluation as a tool to achieve the required learning according to the level of formal instruction (Smoked, 2005). In the teaching practice, diagnostic, formative, and summative evaluations are applied, where it is necessary to quantify in addition to the results, the processes, and consequently the performance. For Zavala (2011), the evaluation based on processes or performance is integral, because it is based on the observation and recording of elements such as attitude, aptitude, procedures, written tests, based on the technique of systematized observation quantifying them to through checklists, rubrics, portfolio, valuation scales, among others. In educational practice, sometimes the skills and competencies that are acquired in the course of a training process are not valued, taking into account little significant elements to apply outside the classroom, devaluing the procedures and processes that allow acquiring knowledge.

In educational institutions, it is of vital importance that the teacher has a training oriented to assess the progress according to the particularities of each student since he has the responsibility to make a daily reflection of his praxis to improve the teaching processes - learning (Arzate, 2013; Saadé & Bahli, 2005; Macías et al., 2018). The objective of every educational institution is to achieve significant learning in its students and one of the elements of the curriculum is evaluation, in this context, it is used to measure the knowledge that the student has acquired during the teaching-learning process. However, it is often applied only to define a quantitative grade, giving a value to the student according to a number. As he refers Navarro et al. (2017), one of the teaching concerns is to apply an equitable and valid assessment to the students' learning, find the appropriate means to establish to what level the students achieve the required learning, it is essential to improve the form of evaluation of the learning process and the teaching practice in the classroom. When evaluating the activities that students execute, the attitude they reflect when carrying out collaborative work must be considered, so that an integral evaluation is applied in the cognitive, affective, and psychomotor dimensions.

For Navarro et al. (2017), in the educational evaluation, memory and reproductive activities still prevail, leaving aside the application of practice, even when executing them students feel nervous, often they block and lose their self-confidence. They believe that they are not able to master the skill or competence that is nothing more than content without significant application. The evaluation must be no longer conceived as an

object of fear for students "Most of us have grown up in classrooms in which our teachers believed that the way to enhance learning was to maximize anxiety, and evaluation always had to be the biggest intimidator" (Moreno, 2010). The research shows the advantages of a comprehensive evaluation focused on the processes that the student executes daily where innovative evaluation strategies and techniques have applied that lead to improve academic performance and promote motivation to learn, valuing the particularities and characteristics of each pupil (Conard, 2006; Chamorro-Premuzic & Furnham, 2003).

2 Materials and Methods

The present study was of a non-exploratory type with a quantitative-qualitative approach, the scientific-analytical and synthetic methods were used, which allowed investigating the process-centered evaluation to improve the academic performance of the students, with selection criteria bibliographic that was based on research articles, thesis, books, scientific journals, of the last five years, which allowed a study analysis of the subject to be treated. Under these aspects, the survey technique was applied through a questionnaire on a google form that was directed to a sample of 25 students being considered in the scientific work.

3 Results and Discussions

Academic performance

It refers to the evaluation of the knowledge acquired in the school environment, it is applied from the initial to the university stage. In traditional education, a student is considered to have good academic performance if they get good grades on their exams. But currently, this concept has been adjusted and is considered the one that measures what a student has learned throughout their training processes, taking into account socio-economic factors, study programs, methodologies, prior knowledge, and the level of thinking formal, although this is still inaccurate because you cannot generalize a measure or issue a criterion on the performance of a student only by a set of factors without taking into account all the parameters that affect them and what happens in the classroom and should be considered part of academic performance. Jiménez (2000), refers that "one can have a good intellectual capacity and nevertheless not be obtaining an adequate performance" if we start from this dilemma the complexity is found from its conceptualization that is sometimes known as school aptitude, academic performance or school performance, although these differences are only considered in semantics because in the school and teaching reality these terms are synonymous, also define that someone with a good intellectual capacity does not obtain the expected results we can also understand it in the field of motivations that might not Be positive and influence the environment that may not be the most appropriate.

If we start from the consideration of Jiménez (2000), which mentions that school performance is a "level of knowledge demonstrated in an area or subject compared to the norm of age and academic level" we could determine that school performance would be linked to grades and their evaluation processes, which alone does not constitute to improve the quality in the educational system, and although there are many parameters we can include at least peer work, classroom interaction and social educational context. Besides, student performance is better when the teacher states that the level and behavior of the group is adequate. In the social context, the grades are very representative, they are the only ones that determine whether a student is eligible or not to be promoted during the year, however, the role of teachers is fundamental in this change of conception about the performance of a student, because it is the only one able to assess in their daily work in the classroom if a student has acquired skills and can solve everyday problems, in addition to having the emotional intelligence to cope with them and consider these tools the ideal ones to develop as an integral human being and in turn contribute to our society.

Process evaluation

What is not evaluated is devalued. Throughout the educational interaction, a series of evaluations are carried out, leading to the search for knowledge about what the student knows and what he needs to know, according

to the level he is studying. Thus, when starting a didactic process is evaluated to diagnose what is the knowledge with which the student begins, to know the starting point. Then each aspect of the student will be assessed; that is, not only the cognitive part but also affective, volitional, and psychomotor. Finally, knowledge is measured through a final exam, where it is the one who defines his academic performance through a note.

For Segura (2009), the performance-focused evaluation is based on the observation and continuous recording of elements such as attitude, aptitude, structured, semi-structured and unstructured written evaluations, in addition to extra-class activities, among others, that integrate a whole, so the observation, even as an independent evaluation method, is integrated into the performance-focused evaluation as an auxiliary. These elements observed by the teacher in the evaluation focused on performance should be systematized to be "quantified". Many times priority is given to the final result, where only knowledge can be taken into account, leaving aside other factors that It also favors the achievement of objectives, not only based on the moment but for everyday life and in the future, work. Bordas & Brailowosky (2001), refer that learning is perhaps the central axis of the educational task, however, it is the evaluation that determines the dynamics of the classroom, so, it could be said that this is the force capable of acting in a sense. That is, to reach an end that is to achieve meaningful learning.

Metacognition refers directly to knowledge about cognitive processes and results, it involves knowledge of cognitive activities and the (Nickerson et al., 1987) control we have over this, it is a "learn to learn". Teachers must commit to teaching students to think. If a student can memorize the multiplication tables and master them in the multiplication exercises he has developed the cognitive ability, however, this same student is not able to solve a simple arithmetic problem, it is because he has not recognized the situation posed to apply the multiplication. Students who have metacognitive skills not only know more, but know they know more, know better how to use what they know, have better organized and more easily access what they know, and know better how to learn more. These students will surely be able to solve the problems they are going through by making the best decisions. When assessing students, teachers should put aside the traditional written evaluation, which is sometimes the result of the memorized questionnaire and which consequently reflects an excellent grade. The goal of cognition goes beyond the knowledge that can be memorized. It is about having the ability to solve problems and correct decisions not only in school settings but also in daily life. It is a path for the development of student autonomy.

To train cognitive goal students, cognitive goal teachers who deliver meaningful knowledge are needed and to make this possible it is necessary to adjust the pedagogical practices within the classroom, and not to teach known theories rather create cognitive learning environments for example to solve a problem that resists to a single quick solution, to develop divergent thoughts, in this way they will obtain significant and lasting lessons that will help to solve problems of daily life. In this way, the purpose of the evaluation will not be to qualify but to train competent thinkers, identify causes of difficulties and possible solutions. Although a large part of parents wants from their children is to observe high grades, but not knowing if their representative has the necessary knowledge that will help them face the difficulties that arise throughout their lives in different areas, many times these are linked only to making a good decision, because the goal cognition favors critical development and stimulates self-reflection.

Metacognition

It is considered as the capacity of regulation in cognition as an action that allows understanding the interaction of thoughts, emotions, and behavior allowing to evaluate the compliance of a certain knowledge, where these processes are influenced: environment, skills to solve problems in education, being also a concept of cognitive psychology that focuses on the active part of the individual in their thinking process and therefore in education through the use of metacognitive strategies (Valenzuela, 2019; Al-Kodmany, 1999; Mikhailov & Tsvetinov, 2004).

The term Metacognition discusses a didactic activity that influences by external and internal means with strategies that cause changes in teachers compared to science develops their work and their knowledge, therefore, improve the ways of teaching and learning, being Innovative for the sciences (Lucio Gil, 2008). In this sense, the goal of cognition seeks to evaluate so that students can and can build and apply a system of self-regulation of acquired learning, turning it into meaningful learning. In meaningful learning, the student works with the knowledge already acquired and his cognitive structure, that is, the new knowledge is introduced

through experiences that together with the previous knowledge will allow him to organize the new information, to facilitate this significant learning, the student must actively process the information and be the main evaluator of their learning, restoring the knowledge already developed, the role of the teacher would be framed as a provider, facilitator of the pedagogical help that the student needs (Rodríguez, 2014).

Meaningful learning requires that information be processed actively, that is, when the information in an academic text is learned significantly, the described process is carried out: they validate if the ideas existing in the students are related to the new content to be developed, determine the differences and similarities between previous and new ideas, new information is reconstructed to be assimilated into the cognitive structure, if there is no alignment between existing and new ideas, learning performs a process of analysis and synthesis with information, reorganizing knowledge in a more comprehensive and explanatory way (Díaz Barriga & Hernández, 2002). Cognitive processes are classified as basic and higher, they are a compendium of specific operations that allow the assimilation and memorization of topics presented by teachers in the teaching and learning processes. Araya Ramírez (2014) considers that: cognitive abilities allow the subject to expand their conceptions of the world from their mental operations, the individual must recognize them to make good use of their abilities so that knowledge is appropriated to solve problems and transform the environment (p.2). Cognitive skills relate all the information we obtain from the environment, with which we know the world and helps individuals to move forward in the learning process given their potentization your mental processes to have information at hand when you need it, thanks to these cognitive processes we can focus attention on our environment or a specific place, depending on our preference. Subsequently, after having applied the survey technique to the 25 students, in an educational institution in the rural sector of the Rocafuerte Canton where the research was focused on process-centered evaluation, to improve the academic performance of the students, the results related to the importance of the Note, as shown in Table 1.

Table 1
Importance of obtaining the maximum grade

Alternative	Frequency	Percentage (%)
Yes	22	88
No	3	12
Total	25	100

Source: Process evaluation to improve student performance.

As it is observed for the students they worry about obtaining excellent grades, since it considers that the intelligent people are all those that obtain maximum marks. On the other hand, 12% of the students do not find the quantitative assessment interesting. Table 2 shows the results of the evaluation process by the teacher.

Table 2
The evaluation process by the teacher

Alternative	Frequency	Percentage (%)
Yes	5	20
No	20	80
Total	25	100

Source: Process evaluation to improve student performance

The results are shown in table 2, related to the evaluation process, the teacher values the daily work, 80 % of students, believes that their teacher does not value their academic work continuously, 20% stated that their teacher constantly evaluates them. The result demonstrates a disadvantage that their teachers do not evaluate them continuously but rather by partial of each quizmaster, since the educational institution should not evaluate the degree of knowledge of the students, which should take into account the degree of skills and different content skills applying other educational and technical strategies including the portfolio, essay, panel, the conceptual and mental map that can be applied in different evaluation instruments such as: a

checklist, assessment scale, assessment scale, observation instrument, performing it an innovative, creative way, allowing students to learn in a meaningful way and be able to evaluate themselves.
In some processes, the evaluation can be frustrating. The results of the survey applied are shown in Table 3.

Table 3
The evaluation can be frustrating

Alternative	Frequency	Result in percentage %
Yes	20	80
No	5	20
Total	25	100

Source: Process evaluation to improve student performance

As can be seen in Table 3, the majority of the students consulted, representing 80% that the evaluation is frustrating since they traditionally evaluate them, the evaluation being always in a quantitative way, 20% of the respondents said he does not feel frustrated about the issue. The evaluation in education must be beneficial in the lives of students within their educational environment, to be able to have all the necessary tools and resources to expose their contents where they can improve the progress of their teaching. With the teacher's guidance, different evaluation methods should be used where students feel safe to expose their knowledge and be qualified in a motivating way, developing different competencies established within their educational level. Table 4 shows the aspects that must be evaluated.

Table 4
What to evaluate

Variables	Frequency	Result in percentage%
Have knowledge, skills, and values	21	84
Have high qualifications and recognition	4	16
Total	25	100

Source: Process evaluation to improve student performance

Table 4 shows the variables evaluated, as 84% of the students show that the most significant is to have knowledge and skills and values that match the table at 3 and 16% of the students disagree of having high qualifications or recognition since for them intelligence is not measured by grades. The evaluation is oriented within the classrooms to correct, reorient at the precise moment in the teaching of the students, becoming a continuous process of improvement in academic education where dedication and constant effort on the part of the students and teachers are required.

4 Conclusion

Teachers should present a guide of activities constantly, using various learning techniques, where students' knowledge integration can be obtained through panel techniques, literary circles, essays, timelines, in which they allow to demonstrate mental skills and abilities, thus achieving goals of good acquired learning. Students must be evaluated partially, continues throughout the teaching-learning process, in which they always feel confident. The evaluation does not become a frustration in the students; but rather be able to self-assess, and improve their academic performance individually and in groups, sharing different contents of some disciplines and instilling values of respect and democracy. The written assessment remains one of the most alternate and preferred topics by teachers, without taking into account that students do not learn all in the same way, therefore a quantitative note does not define the grade of excellent in students, but good metacognition.

Acknowledgments
We are grateful to two anonymous reviewers for their valuable comments on the earlier version of this paper.

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