

Analysis of the academic aspects associated with the low results in saber 11 tests of the Santa Teresita Educational Institution of Puerto Libertador -Córdoba



Análisis de los aspectos académicos asociados a los bajos resultados en pruebas saber 11 de la Institución Educativa Santa Teresita de Puerto Libertador -Córdoba

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ABSTRACT

This work is the result of a research conducted at the Santa Teresita de Puerto Libertador - Córdoba Educational Institution. Its general objective is to identify the academic aspects that are associated with the low results in the Saber 11 tests in this Educational Institution, through a contextual analysis and thus allow the improvement of the educational quality. This research has a qualitative approach, which is oriented to understand the phenomena, exploring them from the perspective of the participants in a natural environment and in relation to their context. According to Hernández, Fernández, and Baptista, (2014), data collection occurs in the natural and everyday environments of the participants, using the interview as the main instrument for data collection.

Keywords: Academic Aspects, Low Results, Saber 11 Tests, Curriculum Adjustments, Multimedia Resource

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Resumen

Este trabajo es resultado de una investigación realizada en la Institución Educativa Santa Teresita de Puerto Libertador - Córdoba, tiene como objetivo general, identificar los aspectos académicos que están asociados a los bajos resultados en las pruebas Saber 11 en esta Institución Educativa, mediante un análisis contextual y con ello permitir el mejoramiento de la calidad educativa. Esta investigación tiene un enfoque cualitativo, la cual está orientada en comprender los fenómenos, explorándolos desde la perspectiva de los participantes en un ambiente natural y en relación con su contexto. En donde, según Hernández, Fernández, y Baptista, (2014) La recolección de datos ocurre en los ambientes naturales y cotidianos de los participantes, utilizando la entrevista como el principal instrumento de recolección de información.

Palabras clave: Aspectos académicos, Bajos Resultados, Pruebas Saber 11, Ajustes curriculares, Recurso multimedial

Introduction

In recent decades, education in Colombia has undergone a series of transformations aimed at improving the pedagogical processes in the classroom, which has led to the design of a series of guidelines for educational institutions to adjust programs and optimize their improvement plans.

In this sense, the Colombian Ministry of Education requires to follow up on these processes, and one of these ways is through the census evaluations called Saber Tests; which are applied in the 3rd, 5th, 9th and 11th grade and are done in all the official establishments of the country. Regarding the results of the official educational establishments of the municipality of Puerto Libertador, it can be observed that most of the students are in the lowest and minimum levels, which means that they are low.

This becomes the problem that this research addresses, emphasizing the analysis of the academic aspects associated with the low results in the saber 11 tests of the educational institution Santa Teresita of this municipality.

The main objective of this research is to identify the academic aspects that are associated with the low results in the Saber 11 tests of the Santa Teresita Educational Institution of the municipality of Puerto Libertador, Córdoba-Colombia, through a contextual analysis and thus allow the improvement of educational quality. According to Hernandez, Fernandez & Baptista (2010), research with this approach uses data collection without numerical measurement to discover or refine research questions in the process of interpretation. Initially it will have an exploratory scope, to the extent that it will study or know the conditions of the context where the present study will be carried out, then it will enter into a descriptive approach, there it will describe the situations and events of the context; finally it will land in the explanatory approach because it will establish the causes that produce the identified associated factors, in the adequate learning process of the students of Puerto Libertador.

Materials and methods

This research has a qualitative approach, which is oriented to understand the phenomena, exploring them from the perspective of the participants in a natural environment and in relation to their context. According to Hernández, Fernández, and Baptista, (2014), data collection occurs in the natural and everyday environments of the participants or units of analysis. These authors also state that researchers must establish inclusive ways to discover the multiple visions of the participants and adopt more personal and interactive roles with them, they must be sensitive, genuine and open, and never forget why they are in the context, where Pallella and Martins, (2012) argue that the researcher interprets how the social referents interrelate, their activities and thoughts to the social and cultural environment where they develop and how they manage their individual problems within it.

On the other hand, Cedeño (2001) maintains that qualitative research is considered as an active, systematic and rigorous process of directed inquiry, in which decisions are made about what can be investigated while in the field of study, where, according to Colmenares (2008), narrative records are made of the phenomena studied through techniques such as participant observation and unstructured interviews.

Phase 1. Definition of the participant population

It is general knowledge that the population of a research is composed of all the elements that participate in the research process that was defined and delimited in the analysis of the problem to be investigated. Therefore, the population of the research process entitled "analysis of the academic aspects associated with the low results in the Saber 11 tests of the Santa Teresita de Puerto Libertador - Cordoba Educational Institution", is made up of eleventh grade students and teachers who teach the areas and/or subjects evaluated by the ICFES in the Saber 11 tests.

Regarding the selection and definition of the sample taking into account Hernandez and Mendoza, (2018) state that, in a qualitative study, decisions regarding sampling reflect the researcher's premises about what constitutes a credible, reliable and valid data base to address the problem statement. Being a research with a qualitative approach, the selection of the sample follows the non-probabilistic technique and is conformed by eight (8) students, which corresponds to a little less than one third of the students of eleventh grade totaling thirty-three (33) and seven (7) teachers of the same grade, who work the areas evaluated by the Icfes in the Saber 11 tests. Taking into account the conditions of the context and the population under study in this research, a non-probabilistic sampling technique is used for convenience, due to the fact that it will be chosen according to the cases available or accessible at the time when it is required to apply the information collection instrument, in addition this contrasts with what is expressed by Battaglia, (2008a), mentioned by Hernández and Mendoza, (2018), who states that these samples are formed by the available cases to which we have access. In this sense, Otzen, T. and Manterola, (2017), also argue that convenience samples allow selecting those accessible cases that accept to be included. This is based on the convenient accessibility and proximity of the subjects for the researcher.

Phase 2. Instrument design

In the research project entitled analysis of the academic aspects associated with the low results in Saber 11 tests at the Santa Teresita Educational Institution in Puerto Libertador -Córdoba, the main information gathering instrument to be used is the interview, which, according to De Tezano, (1998) is intended to give an exhaustive and rigorous account of the thinking of the other, in this case of the 11th grade students and teachers who teach this grade at the educational institution where the research is carried out. Tezano also emphasizes that for this to be possible, it is necessary to build a context of trust with the interviewee, a situation that allows establishing a dialogue on general and relevant topics for the study. Furthermore, according to Gaskel (2000),

mentioned by Bonilla and Rodriguez (2005), the qualitative interview is an exchange of ideas, meanings and feelings about the world and events, whose main medium is words.

Table 1: *Types of instruments*

Specific objective	Technique	Collection instrument	Purpose
To identify some academic aspects related to the low results of the Saber tests of the Santa Teresita Educational Institution.	On-site	Interview	To inquire with grade 11 teachers who work in the areas evaluated by the ICFES about their perceptions of the academic aspects related to the results of the Saber Tests.
To identify some academic aspects related to the low results of the Saber tests of the Santa Teresita Educational Institution.	On-site	Interview	To inquire with grade 11 students about their perceptions of the academic aspects related to the results of the Icfes tests.

Source: Own elaboration

Phase 3. Application of instruments

For the application of the instruments and collection of information, the researchers went to the educational institution where the project is being developed and after having the respective consents of the school rector, teachers and parents of the students to be interviewed, they proceeded to apply the interviews to the teachers and students focused on.

Two types of interviews were applied: one to seven (7) eleventh grade teachers who work in the subjects evaluated by the Icfes and the other to eight (8) eleventh grade students.

Phase 4. Systematization of results

The interview was the main data collection instrument, the results were systematized according to the aspects that were related to specific categories, the answers are synthesized and the results are interpreted.

Phase 5. Analysis of results

In the collection of information, the sample consisted of both teachers and students, who were asked for information related to the pedagogical process that takes place within the Santa Teresita Educational Institution and the preparation of their students for the presentation of the Icfes tests. In this order of ideas, this work presents the

analysis of the results of these interviews and the importance of these to look for a solution to the problem of this educational establishment:

Analysis of student interview results

Table 2: *Analysis of student interview results*

Project title	Analysis of the academic aspects associated with the low results in Saber 11 Tests of the Santa Teresita de Puerto Libertador -Córdoba Educational Institution.
Context of application	It will be applied in one of the playgrounds of the Santa Teresita Educational Institution in the municipality of Puerto Libertador, which serves a student population of 895 students, from preschool to eleventh grade.
Method	Semi-structured: the questions are formulated by the interviewer and are open-ended and informative.
Research objective(s) with which it is associated	To identify some academic aspects related to the low results of the Saber tests of the Santa Teresita Educational Institution.
To whom it is addressed	This survey is directed to the students of grade 11 of the Santa Teresita Educational Institution of the municipality of Puerto Libertador, which is where this research will be carried out, a sample will be chosen by convenience; since it will not make use of statistics or probability for its selection.
Purpose of the interview	To inquire with grade 11 students about their perceptions of the academic aspects related to the results of the Icfes tests.
Date of application	From September 19 to 23 - 2022

Category(ies) in relation to which to investigate	Summary of the response (General)	Interpretation of results Emerging categories (Particular)
Academic aspects What activities do you do at home that help you enhance your academic performance in school and how much time do you spend on them? If you do not do any activities, explain why you do not do them?	The activities carried out by the students are: <ul style="list-style-type: none"> <input type="checkbox"/> Performing the tasks <input type="checkbox"/> Studying when there is an evaluation <input type="checkbox"/> Read some documents sporadically <input type="checkbox"/> Some work, so they do few activities. Time spent is related to the amount of time spent doing the activities.	Homework, Evaluation, Reading

<p>What curricular adjustments should be made by the educational establishment to improve the results in the Saber 11 tests?</p>	<p>The adjustments to be made are:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Train teachers in test development. <input type="checkbox"/> Conduct icfes type tests or simulations with explanations or socialization of the same. <input type="checkbox"/> Design of tools to study from home. <input type="checkbox"/> Intensify in the subjects evaluated by ICFES <input type="checkbox"/> Motivating students for the icfes tests <p>Simulations, teacher training, intensification in the evaluated subjects, student motivation.</p>
<p>Saber 11 test results</p> <p>What activities aimed at improving results in the Icfes tests do you carry out at the school and at what times do you do it?</p>	<p>The activities carried out by the school are:</p> <ul style="list-style-type: none"> <input type="checkbox"/> They perform some icfes-type evaluations or simulations. <input type="checkbox"/> In the explanations of the topics, we are told that they are important for the icfes. <p>Evaluations and simulations</p>
<p>Educational Quality</p> <p>On a personal level, what activities have you done or do you do in order to obtain a good result in the saber 11 tests?</p>	<p>On a personal level what students do is:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Most of them do nothing because they do not have material to study, do not know how to study, or do not have a device that allows them to do so. <input type="checkbox"/> Reading some documents <input type="checkbox"/> A few consult on the Internet <p>Doing nothing, reading some documents and consulting the internet.</p>
<p>How is the performance of teachers in their pedagogical work, in terms of class preparation, clarity of explanations and tools used?</p> <p>What are the spaces that the school generates for an adequate pedagogical process and what others</p>	<p>According to the students, the teachers' performance is good, the materials they use on a daily basis from highest to lowest is:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Scoreboard - Board <input type="checkbox"/> Copies -Books <input type="checkbox"/> Video Bean <p>Good teachers using only basic materials.</p> <p>The spaces provided by the school are the teachers' class hours; a program should be designed that leads to improve these processes and that they take place in a different time than the class.</p> <p>Spaces other than the classroom</p>

Inter categories	should be worked on?		
	What are the conditions you require to guarantee a good result in the Saber 11 tests?	The required conditions are:	
	How important is it for you to take the Icfes tests and to obtain a good result in them?	<input type="checkbox"/> Access to icfes-type study material <input type="checkbox"/> Increased preparation of teachers for the development of icfes-type questions. <input type="checkbox"/> Noise minimization <input type="checkbox"/> Use of technological tools	Ease of access to study materials, Teacher training Importance of the icfes tests

Source: Own elaboration

Analysis of results of teacher interviews

Table 3: Analysis of results of interviews with teachers

Project title	Analysis of the academic aspects associated with the low results in Saber 11 Tests at the Santa Teresita Educational Institution in Puerto Libertador - Córdoba.		
Context of application	It will be applied in one of the playgrounds of the Santa Teresita Educational Institution in the municipality of Puerto Libertador, which serves a student population of 895 students, from preschool to eleventh grade.		
Method	Semi-structured: the questions are formulated by the interviewer and are open-ended and informative.		
Research objective(s) with which it is associated	To identify some academic aspects related to the low results of the Saber tests of the Santa Teresita Educational Institution.		
To whom it is addressed	To 7 teachers of grade 11 who work in the areas evaluated by the Icfes of the Santa Teresita Educational Institution of the municipality of Puerto Libertador.		
Purpose of the interview	To inquire with grade 11 teachers who work in the areas evaluated by the ICFES about their perceptions of the academic aspects related to the results of the Saber Tests.		
Date of application	From September 19 to 23 - 2022		
Category(ies) in relation to which to investigate	Response (General)	Summary	Interpretation of results Emerging categories (Particular)
Academic aspects	What are the methodological,	Influencing aspects:	Motivation, flexible curriculum, coherence

<p>pedagogical, didactic and curricular aspects that, in your opinion, influence the improvement of the results in the saber 11 tests of the Educational Institution?</p> <p>What activities do you carry out in your classroom practice to improve pedagogical processes and what tools do you use?</p> <p>As a teacher, during this year have you designed and implemented pedagogical activities to prepare students for the Saber 11 tests? Explain.</p> <p>Saber 11 test results Do you consider that the institution's directors promote or lead the planning and design of the necessary tools for students to obtain a good result in the Saber 11 tests and why?</p> <p>Educational Quality How is your teaching performance, in terms of class</p>	<p>Channeling student motivation</p> <p>Design of pre-icfes strategies or tools</p> <p>Flexible curriculum, according to the needs of the students.</p> <p>Coherence between the competencies assessed by icfes and those developed by teachers.</p> <p>Varied methodologies</p> <p>The activities carried out are:</p> <p>Classroom practice adjusted to the area plan.</p> <p>Workshops or icfes-type simulations</p> <p>Activities focused on the development of communication skills</p> <p>Teamwork</p> <p>Presentation of videos</p> <p>Teachers consult icfes-type questionnaires which are applied and socialized, and periodical evaluations are elaborated to choose the correct answer.</p> <p>Yes, the application of a bimonthly periodic evaluation was implemented, planning is oriented according to the DBA and Basic Competency Standards; however, according to the teachers, other strategies can be implemented.</p> <p>Teachers maintain that they have a good performance in their pedagogical work, that</p>	<p>between what is taught and what is evaluated by the ICFES.</p> <p>Different methodologies</p> <p>Periodic evaluations, icfes-type questionnaires.</p> <p>Planning adjusted to the curricular guidelines, Application of periodic evaluations.</p> <p>Teaching practices, diverse methodologies</p>
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	preparation, clarity of explanations and tools used? Explain	they do their best to be clear in their explanations and look for strategies that help students understand the topics they are explained, in addition to the board and the marker, they use copies, videos or audios, among others. The activities promoted by the school are:	
	What activities does the school promote to generate educational quality?	Planning according to curricular guidelines Increased hourly intensity in the subjects evaluated by icfes Clear evaluation criteria Institutional work by areas.	Area plans, intensification in some areas, Clearly defined evaluation system
Inter categories	What kind of training has the school had or offered you for the design and training for the Saber 11 tests?	The Institution has not offered any training; however, it has created spaces for dialogue among teachers to share their experiences and knowledge. Policies to be implemented:	The Institution to work on teacher training, since it does not do so.
	What policies the educational institution adopt to improve academic processes and Saber 11 test results?	Training teachers on test development Design pre-school courses for students. Developing critical thinking in students Vocational orientation courses or workshops Comprehensive reading training	Training for teachers, design of pre-vocational courses, vocational orientation, development of reading comprehension skills.

Source: Own elaboration

Results

The research work analysis of the academic aspects associated with the low results in Saber 11 Tests of the Santa Teresita Educational Institution of Puerto Libertador - Córdoba, has a qualitative approach, which is oriented to understand the phenomena, exploring them from the perspective of the participants in a natural environment and

in relation to their context. Where, according to Hernández, Fernández, and Baptista, (2014) data collection occurs in the natural and everyday environments of the participants or units of analysis. Said authors also state that researchers must establish inclusive ways to discover the multiple visions of the participants and adopt more personal and interactive roles with them, they must be sensitive, genuine and open, and never forget why it is in the context, where Charres H et al, (2018) argue that the researcher interprets how the social referents interrelate, their activities and thoughts to the social and cultural environment where they develop and how they manage within it their individual problems.

To analyze the interviews, a summary of the interviews is made, the emerging categories that emerge are analyzed and finally it is verified whether these results are related to the research objectives.

Table 4. *The student interviews yield the following results*

Interpretation of results by emerging categories (Particular)	Interpretation with documentary review	Cross-analysis - findings
Homework, Evaluation, Reading	For students' academic performance to have optimal results, in addition to the different contextual reasons, students' commitment and motivation are required.	Students do not adequately fulfill their academic commitments, which has a negative impact on their academic performance.
Training, motivation	teacher training is a very important part, since it provides teachers with the necessary tools to solve the different problems that arise in the classroom, and if they do not have the necessary knowledge, they will not be able to transmit the knowledge they need to their students.	It is necessary to prepare teachers in the elaboration of Icfes type questions so that they can effectively design or work on the Pre-icfes training simulations and, at the

Interpretation
of results by
emerging
categories

Interpretation with documentary
review

Cross-analysis - findings

(Particular)

Evaluations
and
simulations

Colombia, like most countries in the world, in addition to the evaluation that each educational establishment makes of its pedagogical work, also applies a series of exams or tests that allow it to monitor the quality of the teaching-learning process, in relation to the standards established by the Ministry of National Education, through the saber tests.

same time, channel the students' motivation.

Evaluation is an instrument that allows us to demonstrate the degree to which students are learning; however, at IE Santa Teresita the evaluations applied to students are traditional, most of them are not focused on preparing students to obtain good results in the Saber 11 tests.

Spaces other
than the
classroom

ICTs are suitable to promote learning, which can be used at any time or place; therefore, Acevedo J., (2001) indicates that "...ICTs are necessary in the 21st century. However, their real and effective implementation necessarily involves modifying teaching practice from two complementary points of view: the role of the teacher and the teaching and learning strategies" (p.1), and Bates, (2001) points out that "The success of the use of technology in teaching and learning also depends on the ability to introduce important

The spaces offered by the educational establishment to strengthen its pedagogical processes are mainly framed in class time; therefore, it is necessary to create study programs that help to counteract this situation, which could be the creation of a resource through the web that provides tools that contribute to this.

Interpretation
of results by
emerging
categories

(Particular)

Interpretation with documentary
review

Cross-analysis - findings

changes in the teaching and organizational culture" (p.1). All this shows that the teacher plays a fundamental role in the teaching-learning process and in the introduction of ICT in his or her teaching role to achieve meaningful learning in students.

Access to
study material

One of the ways to introduce ICT in the classroom is through Edublogs, which are an agile and attractive medium, where the teacher can offer updated content, which contrasts with what is expressed by Orihuela, (2004) who argues that weblogs can be a great working platform for students since both they and teachers can have a constant pedagogical communication asynchronously, which is why they have informative importance as complementary, alternative and critical sources to traditional media.

One of the conditions that students require to have a result in the icfes tests is to have access to study material, which could be facilitated through an educational blog developed for this purpose.

Importance of
the icfes tests

The saber 11 test is also one of the requirements for admission to higher education, and many institutions have the result of this test as a method of admission. However, in addition to being a mandatory requirement, these tests allow access to many benefits, in

Students are clear that the icfes tests are very important, since a good result can provide them with the opportunity to obtain many benefits; for this reason, the

Interpretation
of results by
emerging
categories

Interpretation with documentary
review

Cross-analysis - findings

(Particular)

case of obtaining a good score, including receiving one of the Andrés Bello distinctions, which are awarded to the 50 best results in the country, where the student receives 100% of their college tuition in any accredited program of high quality, regardless of their social status and the university of their choice, a high score also allows access to scholarships or forgivable credits Generation E, which are awarded to about 80,000 students in the country per year.

educational establishment is in the need to seek strategies or design programs that allow them to improve in this aspect.

After analyzing the interviews conducted with the students, we observe the emergence of other emerging categories that confirm the existing problems in the Santa Teresita Educational Institution of the municipality of Puerto Libertador and that are related to the low results of the icfes tests in this educational establishment. These evidences:

Students have little motivation towards their homework because they do not have easy access to study or reference material to deepen what they have learned in class.

The educational establishment does not have a clear policy or has not created spaces other than the classroom to strengthen the processes at the level of Icfes tests.

The students evidenced that most of their teachers do not have ample skills to elaborate icfes type tests or questions.

It is necessary to establish spaces for dialogues with the students that are oriented to motivate them and to discover their vocational profile.

All of the above leads to seek a solution to this situation, so the researchers of this project believe that the creation of an Edublog designed to provide study tools to both

students and teachers, will help improve the results in the Icfes tests of the students of this educational institution and anyone else who has access to it.

The results of the interviews with the students have made it possible to meet two of the specific objectives set out in this research, since through them it has been possible to identify the adjustments that should be made to the curricular plans to make a proposal aimed at achieving the improvement of the results of the Saber 11 tests and to design a multimedia resource that provides tools conducive to the achievement of good results in the Saber 11 tests of the Santa Teresita Educational Institution of the municipality of Puerto Libertador.

Table 5. *The interviews with the teachers yielded the following results*

Interpretation of results by emerging categories (Particular)	Interpretation with documentary review	Cross-analysis - findings
Flexible curriculum, motivation	Curricular flexibility seeks to minimize learning barriers by guaranteeing the implementation of flexible strategies, according to the diversity present, favoring the formation processes of all students and motivating them to achieve the learning goals. A flexible curriculum suggests the establishment of objectives, methods, materials and evaluation that respond to the needs of all students.	According to the teachers, a flexible curriculum should be developed, according to the students' interests and abilities, which could possibly help to channel their motivation. This is in accordance with what was evaluated by icfes.
Different methodologies	In order to have successful pedagogical processes the teacher must resort to various methodologies that lead to achieve student motivation, therefore Lamas, (2015) argues that "we must bet on flexible didactic interactions and	The teachers claim that they use diverse methodologies in their pedagogical practice; however, when contrasting this with the

	<p>methodologies, susceptible to adaptation to students with very different personalities". He also believes that we must consider that if impulsivity affects the ability to learn, it is possible that only the subject's crystallized intelligence is affected, not fluid intelligence, since the former depends to a greater extent on the teaching-learning processes, while fluid intelligence refers to the ability to establish relationships independently of prior acquired knowledge. pp. 319</p>	<p>students' point of view, it is evident that the teachers' classes are somewhat routine and with commonly used tools.</p>
<p>Evaluations and simulations</p>	<p>Colombia, like most countries in the world, in addition to the evaluation that each educational establishment makes of its pedagogical work, also applies a series of exams or tests that allow it to monitor the quality of the teaching-learning process in relation to the standards established by the Ministry of National Education, through the saber tests.</p>	<p>Evaluation is an instrument that allows us to demonstrate the degree to which students are learning; however, at IE Santa Teresita the evaluations applied to students are traditional, most of them are not focused on preparing students to obtain good results in the Saber 11 tests.</p>
<p>Curricular guidelines</p>	<p>Educational institutions establish what they are going to teach taking into account their institutional horizon and taking into account the curricular guidelines, which are the referents that support and guide this work together with the contributions acquired by the</p>	<p>Despite the fact that the Santa Teresita Educational Institution has organized its area plans according to the Curricular Guidelines and works its pedagogical practice adjusted to</p>

	<p>institutions and their teachers through their experience, training and research.</p>	<p>them, the results in the icfes tests are not as expected, so it must look for another strategy that allows it to obtain good results.</p>
<p>Teaching practices, diverse methodologies</p>	<p>Teachers must resort to varied pedagogical practices and one of these ways is by introducing ICT in the classroom is through Edublogs, which are an agile and attractive medium, where the teacher can offer updated content, which contrasts with what is expressed by Orihuela (2004), who argues that weblogs can be a great working platform for students since both they and teachers can have constant pedagogical communication in an asynchronous way, (2004) who argues that weblogs can be a magnificent work platform for students since both they and teachers can have a constant pedagogical communication in an asynchronous way, which is why they have informative importance as complementary, alternative and critical sources to traditional media.</p>	<p>The creation of an Edublog is a possibility for the teachers of the Santa Teresita Educational Institution to improve their classroom practice and, of course, to obtain better academic results.</p>
<p>Training, vocational guidance</p>	<p>The educational establishment should design policies aimed at enhancing the pedagogical processes and for them should be concerned about training for teachers, since this provides them with the necessary tools to provide solutions to the different problems that arise in the classroom and if they do not have the necessary knowledge they will not</p>	<p>There is a need to adopt policies aimed at obtaining good results in the icfes tests, which could be achieved through a web application that, in addition to being enriched with</p>

be able to transmit to the students the simulations, is also aimed at training teachers and motivating students. In addition to this work on the motivational aspect of them.

Source: Own elaboration

After analyzing the interviews conducted with teachers, other emerging categories emerged that confirm the existing problems at the Santa Teresita Educational Institution in the municipality of Puerto Libertador and that are related to the low results of the icfes tests in this educational establishment. These evidences:

Teachers maintain that their pedagogical practices are adequate or very good; however, students do not see it that way, believing that they are routine and a bit boring.

The educational establishment is not concerned with or has not designed a policy aimed at training teachers in the development of Icfes type tests or questions.

Teachers argue that students are not sufficiently motivated to carry out their academic commitments.

There is a need to create courses designed to prepare students for the icfes tests, this can be achieved through counter-day programs or with the help of multimedia resources.

The above contrasts with the students' answers, as it confirms the existence of a problem to which an immediate solution should be sought, so once again the researchers of this project consider that through Edublogs, both teachers and students can be trained and improve significantly through its guided use, the results of the Saber 11 Tests of the Santa Teresita Educational Institution.

The results of the interviews with teachers have also made it possible to achieve two of the specific objectives set out in this research, since through them it has been possible to identify the adjustments that should be made to the curricular plans to make a proposal aimed at achieving the improvement of the results of the Saber 11 tests and to design a multimedia resource that provides tools conducive to achieving good results in the Saber 11 tests at the Santa Teresita Educational Institution in the municipality of Puerto Libertador.

Many authors argue that in the discussion of a research study, arguments are provided from the point of view of the theory used to carry out the study, the results of the study

are interpreted and their meaning is discussed. In this sense Abreu, (2012) states that it is important that this analysis refers to the issues addressed in the problem statement and research questions, since this presents the reasons for carrying out the study and the results should provide more details about these points. In other words, the arguments presented in this section should be linked to the study issues in the problem statement.

By making a comparative framework between the results found throughout this research, a close relationship with other research carried out by different authors was evidenced, among them:

Determinants of academic achievement in Colombia. Tests ICFES - Saber 110, 2009, which is a work based on the results obtained by students in the Saber 11 tests, corresponding to the second semester of 2009, which yielded the following results: Having favorable economic conditions greatly affects the probability of not placing in the low level in the areas evaluated by the icfes; since a favorable socioeconomic environment allows the student to have the resources required for their academic commitments. In this research it was found that many students of the Santa Teresita educational institution do not respond effectively to their academic commitments justifying that they do not have the necessary means to do so and that they must contribute economically at home. Regarding the parents' level of schooling, the analysis allowed inferring that as the parents' level of schooling increases, the probability of being in the low level decreases; since parents with a higher level of education can directly and favorably support the teaching-learning process of their children, which is also related to the family context of the student population of the institution where this research was carried out, most of the households have economic deficiencies and most of them did not even finish high school.

Another research background related to the topic of this research is entitled "Institutional factors associated with educational achievement in the Saber 11 natural science tests in schools in the Caribbean Region", where one of the hypotheses put forward by the researchers was "The characteristics of the academic institutions have a positive impact on the results obtained by students in the Saber 11 tests in the area of Natural Sciences", which led them to conclude that the results at the ICFES test level depend mainly on the internal planning of the educational establishment and that there is also another second level variable that influences, although not significantly, the average ICFES scores, which is the elaboration and execution of the Pre-ICFES courses. The results of the collection instruments in the research Analysis of the academic aspects associated to the low results in saber 11 tests of the Santa Teresita

Educational Institution of Puerto Libertador -Córdoba, contrasts with this antecedent, to the extent that in this educational institution there is no curricular planning aimed at achieving good results at the ICFES test level and neither do they work in the design of Pre-ICFES courses.

The thesis *Factores determinantes del bajo rendimiento académico en educación secundaria*, final work as a requirement to obtain a PhD degree from the Universidad Complutense de Madrid, where Coral G, (2003) argues that: The socioeconomic level of the parents influences to some extent academic performance, as does the reading routine in their immediate family nucleus, the control that parents exercise with respect to the study habits of their children and the daily time that students spend on the street during working days; substantially influences school success or failure, the motivation the interests of the child guarantee his success as a student and as a future professional. A large number of the students of the Santa Teresita Educational Institution argue that they have to support their families economically, others that they do not read on their own at home and of course they do not have defined academic or professional interests for their future.

Another reference with which it is necessary to make a contrast in the discussion section is the doctoral thesis: *Analysis of the determining factors of the low quality of Spanish language teaching in eighth grade, educational district 15-05, in the Dominican Republic*, which found that the low performance of the students under study is due to many causes, among them the deficiency in the quality of the teaching of the subject, physical environmental factors, planning, cooperation of the authorities and the educational community in general. Accordingly, the author recommends effective training for teachers in this area to improve their pedagogical practices, the improvement of the physical environmental conditions of the educational centers to provide an optimal and welcoming space for the teaching-learning process, and finally, he recommends the design of strategies to analyze the motivation of students to learn in this area. The aforementioned situation, when compared with the context of the Santa Teresita educational institution and the results of the data collection instruments, affirms the need to develop activities aimed at training its teaching staff in the design of tests and the development of preparatory courses to face the Icfes tests.

The research question carried out by the researchers is: How to develop an action research process that determines the academic aspects associated with the low results in the saber 11 tests of the Santa Teresita de Puerto Libertador - Córdoba educational institution in order to propose pedagogical strategies to the educational establishment that allow improving these results, where students in eleventh grade and teachers who

work in this grade in the areas or subjects evaluated by the Icfes in this test were chosen as the study population, a sample of 8 (eight) students and 7 (seven) teachers was established by convenience, to whom an interview was applied in person with the purpose of investigating the perceptions of the interviewees about the academic aspects related to the results of the Saber 11 tests, when contrasting these results, different situations are evidenced that lead the researchers to propose actions to improve the results of the Saber 11 tests, through the development of a multimedia application designed to: Channel the motivation of students towards their homework because they do not have easy access to study or reference material to deepen what they have learned in class, this contrasts with what was answered by teachers, who also see it this way, provide the educational establishment with a space through the web for students to strengthen, provide tools to teachers to adequately guide the pre-school courses of the educational institution, motivate teachers to arrange spaces for dialogues with students and that are oriented to motivate them and help them in their vocational discovery.

The research analysis of the academic aspects associated to the low results in Saber 11 tests of the Santa Teresita Educational Institution of Puerto Libertador -Córdoba. The general objective is "To identify the academic aspects that are associated with the low results in the Saber 11 tests of the Santa Teresita Educational Institution of the municipality of Puerto Libertador, Córdoba-Colombia", which performs a context analysis to subsequently make a proposal that leads to the improvement of the educational quality and the results of the Saber 11 tests. In this sense it was found that:

Students have little motivation towards their homework because they do not have easy access to study or reference material to deepen what they have learned in class.

The students show that most of their teachers do not have ample skills to prepare icfes type tests or questions; therefore, they should be trained in this regard.

It is necessary to establish spaces for dialogues with the students that are oriented to motivate them and to discover their vocational profile.

Teachers maintain that their pedagogical practices are adequate; however, students do not see it that way, believing that they are routine and a bit boring.

The educational establishment is not concerned with or has not designed a policy aimed at training teachers in the preparation of Icfes type tests or questions. There is a need to create courses designed for the preparation of students for Icfes tests; this can be achieved through counter-day programs or with the help of multimedia resources.

It was previously established in the theoretical references that academic performance is where the learning achieved by students is evidenced; this is closely related to multiple variables that have to do with the context and their interests. Therefore, in terms of school performance, it can be seen that in addition to those who are clear about their interests and responsibilities, there are students who do not fulfill their school obligations, who have no interest or attention to the activities that are developed in class given by the teacher; which generally leads to low performance. There the task of education ceases to be successful, since, according to Quintero and Orozco, (2013) the task of education is to train human beings for the present, where skills and abilities are acquired to develop and fight in the world in which one lives, as operational resources and as an instrument in the realization of the educational task. In the collection of information of the research "Analysis of the academic aspects associated to the low results in tests saber 11 of the Educational Institution Santa Teresita of Puerto Libertador -Córdoba" it was evidenced that a great number of students do not fulfill in an adequate way their academic duties, at the same time that there is no motivation in them towards learning.

The purpose of the SABER 11 tests is to monitor the quality of education in educational institutions based on basic standards and to allow students to access higher education. Additionally, they provide students with information about their competencies in each of the evaluated areas, and support the processes of self-evaluation and permanent improvement of the educational establishments. The rector of each educational institution that offers grade 11 must present the total number of students enrolled in the educational institution. The results of these tests in the educational institution where this research was carried out show that in terms of quality, the Santa Teresita educational institution needs to make some adjustments that lead to the improvement of its pedagogical processes.

After applying the data collection instrument and analyzing the interviews conducted with both students and teachers, other emerging categories emerged that confirm the existing problems at the Santa Teresita Educational Institution in the municipality of Puerto Libertador and that are related to the low results of the icfes tests in this educational establishment. These show that:

Students have little motivation for their homework because they do not have easy access to study or reference material to deepen what they have learned in class, which contrasts with the answers given by teachers, who also see it this way.

The educational establishment does not have a clear policy or has not created spaces other than the classroom to strengthen the processes at the level of Icfes tests.

Therefore, there is a need to create courses designed to prepare students for Icfes tests, which can be achieved through counter-day programs or with the help of multimedia resources.

Teachers maintain that their pedagogical practices are good or very good; however, students do not see it that way, they believe that they are routine and a bit boring, and they are not skilled in preparing icfes type tests or questions.

It is necessary to establish spaces for dialogues with students that are oriented to motivate them and help them recognize their professional interests.

Conclusions

The policies of the Ministry of National Education show that the educational quality of an educational institution depends to a great extent on the statistics and results of the Saber tests and the quality of its pedagogical processes. Accordingly, it is important for educational institutions to design pedagogical strategies that allow them to obtain excellent results in these tests, in order to maintain academic quality and enjoy the benefits established by the national government.

In this sense, the research "analysis of the academic aspects associated with the low results in Saber 11 tests of the Santa Teresita Educational Institution of Puerto Libertador -Córdoba" which had as general objective "to identify the academic aspects that are associated with the low results in the Saber 11 tests of the Santa Teresita Educational Institution of the municipality of Puerto Libertador, Córdoba-Colombia, after analyzing the results of the research process, it became evident that there are several phenomena that influence the low results of the Icfes or Saber 11 tests of this educational establishment, it was possible to identify the need to make adjustments to the curricular plans and establish a proposal aimed at achieving the improvement of the results of the Saber 11 tests; For this, the researchers argue that the design of a multimedia resource that provides tools conducive to the achievement of good results in the Saber 11 tests of the Santa Teresita Educational Institution of the municipality of Puerto Libertador, will help solve or minimize this problem.

The above contrasts with what was stated in the specific objectives due to the following: Adjustments should be made to the curricular plans taking into account the topics evaluated by the ICFES in the Saber 11 test, because there is no program aimed at preparing students to obtain good results in this test and teachers should be trained for this purpose, the researchers propose that the multimedia resource with the web address: <https://laboratoriosaber11.blogspot.com/> is a tool aimed at achieving the

improvement of the results of the Saber 11 tests of the Santa Teresita Educational Institution of the municipality of Puerto Libertador.

This web-based multimedia resource or Edublog can be used by both students and teachers and should be geared for:

- a) To enhance students' reading skills.
- b) Facilitate the location of study material for both teachers and students.
- c) To make available to the students pre-test simulations of the different subjects.
- d) Provide tools to teachers so that they can develop icfes type questions.

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