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Article

# Educational quality as seen from the perspective of pedagogical management, innovation and learning environments: A diagnostic study

## La calidad educativa vista desde la gestión pedagógica, la innovación y los ambientes de aprendizaje: Un estudio diagnóstico

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## Abstract

Pedagogical management, educational innovation and learning environments are fundamental components that complement each other to guarantee educational quality. The study presented here is the result of the research project Quality of the educational process, through pedagogical management, educational innovation and learning environments, in institutions of the Ecuadorian General Basic Education, developed by students and teachers of the Basic Education course at the Instituto Superior Universitario Espíritu Santos in the city of Guayaquil, and aims to characterise the current state of the quality of educational processes, through pedagogical management, educational innovation and learning environments, in educational institutions in the city of Guayaquil. The research followed a qualitative methodology of an exploratory and hermeneutic type; methods such as analysis-synthesis and inductive-

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deductive were used, within the empirical methods observation, survey, interview and documentary review were used; reaching the conclusion that when pedagogical management, innovation and learning environments are combined effectively, enriching educational environments are created that promote academic success, emotional well-being and the integral development of students, which translates into educational quality.

**Keywords:** Educational quality, pedagogical management, educational innovation, learning environments

## Resumen

La gestión pedagógica, la innovación educativa y los ambientes de aprendizaje son componentes fundamentales que se complementan entre sí para garantizar calidad educativa. El estudio que se presenta es resultado del proyecto de investigación Calidad del proceso educativo, a través de la gestión pedagógica, la innovación educativa y los ambientes de aprendizaje, en instituciones de la Educación General Básica ecuatoriana, desarrollado por estudiantes y docentes de la carrera de Educación Básica del Instituto Superior Universitario Espíritu Santos de la ciudad de Guayaquil, y tiene por objetivo caracterizar el estado actual de la calidad de los procesos educativos, a través de la gestión pedagógica, la innovación educativa y los ambientes de aprendizaje, en instituciones educativas de la ciudad de Guayaquil. La investigación siguió una metodología cualitativa de tipo exploratoria y hermenéutica; se utilizó métodos como el análisis-síntesis y el inductivo deductivo, dentro de los empíricos se utiliza la observación, la encuesta, la entrevista y la revisión documental; llegando a la conclusión de que cuando la gestión pedagógica, la innovación y los ambientes de aprendizaje se combinan de manera efectiva, se crean entornos educativo enriquecedor que promueve el éxito académico, el bienestar emocional y el desarrollo integral de los estudiantes, lo que se traduce en calidad educativa.

**Palabras clave:** Calidad educativa, gestión pedagógica, la innovación educativa, ambientes de aprendizaje

## Introduction

The quality of educational processes is achieved through a balanced combination of effective pedagogical management, educational innovation and appropriate learning environments. These elements not only contribute to the academic development of students, but

also prepare new generations to face the challenges of the 21st century and contribute to the development of society.

Ensuring that students have access to a quality, equitable and excellent education that prepares them to be active and competent citizens in a constantly changing world is an aspiration of every education system. The Constitution of the Republic of Ecuador stipulates that "the quality of education is a responsibility of the state", and Article 346 states that "there will be a public institution, with autonomy, comprehensive and external evaluation, which promotes the quality of education" (Ecuador, Asamblea Nacional Constituyente, 2008).

Technology has transformed the way teaching and learning take place; digital tools, online platforms and innovative educational resources offer new opportunities to personalise learning, increase access to education and improve the quality of teaching. However, this poses a challenge in terms of effective integration of technology in the classroom, teacher training and digital equity. Quality education must harness the potential of technology to improve learning outcomes and prepare students to be responsible digital citizens.

According to Hernández (2017) cited by (España & Vigueras, 2021), ICT are considered part of educational innovation because of their different applications for teachers and students in the development of skills planned in the classroom and dynamised with the purpose of changing the current reality, ideas, attitudes and methods, as well as to intervene and improve the teaching process.

On the other hand, effective pedagogical management implies quality in planning, organising, directing and evaluating the educational process, which includes appropriate selection of teaching objectives, content, methods and evaluation, as well as attention to the diversity of students. However, in practice, a solid pedagogical management that encourages the active participation of students and promotes learning environments conducive to the development of cognitive, social and emotional skills has not yet been achieved (Spain & Vigueras, 20).

(España & Vigueras, 2021), consider that the relationship that exists between planning and innovation with respect to the quality of education is that both are aimed at the search for relevance and socio-cultural nuances through the subjects who learn, who are the spokespersons of social structural change.

The article presents the main results of the diagnosis of the research project "Quality of the educational process", carried out by students and teachers of the Basic Education course at the Instituto Superior Espíritu Santos in the city of Guayaquil, and its objective is to characterise the current state of the quality of educational processes, through pedagogical management, educational innovation and learning environments.

## Materials and methods

The research responds to a qualitative methodology, due to the active and participatory participation of the research subjects in the study, and its flexible design allows for the incorporation of unforeseen findings for a better characterisation of the educational process, through pedagogical management, educational innovation and learning environments. The research is exploratory and hermeneutic, its purpose is to analyse and interpret the information gathered from the experience of the actors involved and the relevant documents that regulate education; this allows for a holistic understanding of the object of study based on evidence of the key aspects related to educational quality: pedagogical management, educational innovation and learning environments.

The scientific methods used are theoretical, analysis-synthesis and inductive-deductive, which allow the authors to collect, analyse and interpret information on educational quality, pedagogical management, educational innovation and learning environments; empirical methods used are observation, survey, interview and documentary review; also used as a mathematical-statistical method is the percentage analysis.

The research sample is made up of 90 basic education teachers, 233 students, 8 DECE professionals and 11 directors of private and public educational institutions in the city of Guayaquil. The sample of students is shown in Table 1.

**Table 1.** *Sample of students*

| **Muestra** | | **Cantidad de estudiantes** | |
|---|---|---|---|
| **Estudiantes privadas** | **Instituciones** | 145 | 62% |
| Estudiantes | Instituciones públicas | 88 | 38% |

| | | |
|---|---|---|
| Estudiantes sexo Femenino | 129 | 55% |
| Estudiantes sexo Masculino | 104 | 45% |
| Estudiantes de Básica Media | 108 | 45% |
| Estudiantes de Básica Superior | 125 | 54% |

In the data collection process, a survey was applied to basic education students in order to obtain information to characterise the educational process through pedagogical management, educational innovation and learning environments; semi-structured interviews were also conducted with directors, DECE professionals and basic education teachers from private and public educational institutions in the city of Guayaquil.

## Results

The diagnosis assumes the pedagogical and administrative management dimensions established by MINEDUC by the National System of Evaluation and Social Accountability (Ecuador, Ministry of Education):

In relation to the pedagogical management dimension, the main results of the survey of 90 basic education teachers from private and public educational institutions in the city of Guayaquil are presented first.

In response to the question related to diagnosis and its role in curriculum design, the following results are presented: 47% of teachers state that they sometimes carry out curriculum planning based on the results of the diagnosis, 24% respond that they always use this technique as a starting point for curriculum planning, and 29% admit that they do not carry out diagnosis prior to curriculum design and planning (see Table 2).

The lack of diagnosis for curriculum planning represents a significant challenge in the educational field, because this technique provides valuable information on the needs, skills and knowledge of students, which is essential for the design and planning of the curriculum at all levels. When the starting point is not a diagnosis, curriculum planning does not respond to the individual needs of each

student, which means an education that is not very inclusive; in this case, teaching does not adjust to the reality of the students, causing their lack of motivation for learning.

With regard to the question related to the design of study materials and teaching resources in accordance with the curriculum planning, 57% of the teachers surveyed stated that they do design study materials and teaching resources in accordance with the curriculum planning; however, 38% of the teachers stated that they do not (see table 2). The results of this question have implications for the quality of the educational process, because when teachers design study materials and teaching resources in line with curriculum planning, there is a greater likelihood of systematicity and coherence in student learning. This ensures that the content taught is in line with the established objectives, which promotes meaningful and developmental learning.

35% of the teachers consider that they promote reflection, enquiry, analysis and debate in their classes; 58% only achieve this sometimes and 7% never (see table 2); this indicates that there is a significant gap between the intention and practice of promoting reflection, enquiry, analysis and debate in the classes. The fact that only 35% of teachers consider that they do this consistently indicates that there is an important area for improvement in teaching. The discrepancy between intention and practice may be subject to a variety of reasons, such as: teachers with little capacity to integrate active methodologies into lessons effectively, pressures to comply with the curriculum, assessment standards, and other external factors that also play a role in this problem, such as class time and resources available to devote to activities that encourage in-depth reflection and discussion.

With regard to the appropriate use of ICT in the teaching-learning process, 49% of the teachers surveyed consider that they always promote the appropriate use of ICT in their classes; however, it is important to bear in mind that 36% of the teachers consider that they only sometimes achieve this and 14% state that they never promote the appropriate use of technological tools in the teaching-learning process (see table 2).

This response highlights an important concern about the effective use of Information and Communication Technologies (ICT) in the teaching-learning process. While a significant percentage of teachers claim to always promote the appropriate use of these tools, there is a considerable proportion who recognise difficulties in achieving this

goal. This gap can be attributed to various factors, such as the poor development of computer skills, limited space for teacher preparation in relation to the effective use of ICT in the classroom, and last but not least, the fact that technological or infrastructural barriers hinder their integration.

According to the survey of Basic Education teachers, the technological resources most used by teachers in the teaching-learning process are: videos, PowerPoint presentations and social networks; and the least used are: discussion forums, infographics, software and Prezi.

The fact that the technological resources most used by teachers in the teaching-learning process are videos, PowerPoint presentations and social networks reflects the prevalence of multimedia tools and communication platforms in the current educational environment. Videos are an effective tool for presenting information in a visual and dynamic way, allowing teachers to incorporate multimedia content, such as images, graphics and animations, to enrich the students' learning experience. PowerPoint presentations, on the other hand, allow information to be organised and presented in a structured and visually appealing way, which facilitates students' understanding and retention of concepts; and social networks encourage debate and discussion, and promote students' active participation in the teaching and learning process.

On the other hand, the least used technological resources according to the results of this question may reflect less familiarity or accessibility on the part of teachers, as well as technical or infrastructure barriers that limit their adoption.

When teachers were asked whether they allow students to question their learning and seek alternative explanations or solutions to their questions, results were obtained that highlight a crucial dynamic in the teaching-learning process: fostering students' ability to question their learning and seek alternative explanations or solutions to their questions. The distribution of responses among the teachers surveyed reveals a variety of approaches and practices in this regard. The fact that 50% of teachers consider that they always allow students to question their learning and seek alternative explanations or solutions indicates a strong commitment to the development of critical thinking and student autonomy. This approach suggests an openness to exploration, experimentation and debate within the classroom, which can foster a dynamic and developmental learning environment (see table 2).

Another important finding from the teacher survey is the fact that only 20% of teachers responded that they develop innovative practices in the teaching-learning process, suggesting that innovation is not yet a widespread feature in education. This may be due to a variety of factors, such as lack of training in new pedagogical methodologies, resistance to change, or lack of resources and institutional support for the implementation of educational innovations (see Table 2).

The innovative strategies most frequently used in the classroom by teachers are: Project Based Learning (PBL), Educational Gamification, Cooperative Learning and Technology Integration; and the least used are: Flipped Classroom, Adaptive Teaching and Virtual and Augmented Reality.

The preference for these innovative strategies reflects the growing importance of student-centred pedagogical approaches and the use of digital tools to enhance the educational experience and foster meaningful learning. Project Based Learning (PBL) is a strategy that engages students in solving real-world problems through the completion of projects; on the other hand; Educational Gamification incorporates elements such as challenges, rewards and competitions, gamification increases student participation and engagement with their learning. Cooperative Learning promotes collaboration among students to achieve common goals. This strategy fosters teamwork, effective communication and the development of social skills, while promoting a supportive and comradely atmosphere in the classroom; and the Integration of Technology in the classroom is fundamental to prepare students for the digital world in which they live.

Another result obtained, in relation to learning environments, specifically the use of laboratories, indicates that few teachers use laboratories for lectures and/or practicals. The fact that 52% of the teachers surveyed do not use the laboratories for lectures and/or practicals suggests a significant under-utilisation of these resources. Laboratories provide a practical and experimental environment that can complement and enrich theoretical teaching in many disciplines, from the sciences to the arts. The lack of utilisation of these spaces can limit opportunities for hands-on learning and active exploration of concepts and theories by students (see table 2).

Within the Pedagogical Management criterion, the response to the last question indicates that more than 50% (see table 2) of the teachers surveyed agree that pedagogical management, educational innovation and learning environments complement each other and

ensure quality education. The consensus among the majority of teachers surveyed on the relationship between these components highlights the importance of a holistic approach to ensure quality education.

Pedagogical management is fundamental in laying the foundations for an effective learning environment. On the other hand, educational innovation encourages the use of new methodologies, technologies and pedagogical approaches that promote meaningful and developmental learning. Innovative practices in education enable the design of inclusive educational programmes and the implementation of active, participatory and collaborative teaching methods. Educational innovation challenges traditional practices and seeks to optimise the teaching-learning process in order to improve educational processes. Learning environments play a crucial role in educational success. A good learning environment promotes active student participation, fosters collaboration and the exchange of ideas and experiences, and creates opportunities for exploration and discovery. Together, effective pedagogical management, educational innovation and appropriate learning environments complement each other to ensure quality education.

**Table 2.** *Pedagogical management survey results.*

| 1. ¿Realizas diagnóstico como punto de partida para la Planificación Curricular? | | |
|---|---|---|
| Siempre | 22 | 24% |
| A veces | 42 | 47% |
| Nunca | 26 | 29% |
| 2. ¿Diseñas materiales de estudio y recursos didácticos, de acuerdo con la planificación curricular? | | |
| Siempre | 51 | 57% |
| A veces | 34 | 38% |
| Nunca | 5 | 5% |
| 3. ¿En las clases promueves la reflexión, la indagación, el análisis y el debate? | | |

| | | |
|---|---|---|
| Siempre | 32 | 35% |
| A veces | 52 | 58% |
| Nunca | 6 | 7% |

4. ¿Promueves el uso adecuado de las TIC dentro del proceso de aprendizaje los estudiantes?

| | | |
|---|---|---|
| Siempre | 44 | 49% |
| A veces | 32 | 36% |
| Nunca | 14 | 15% |

5. ¿Los estudiantes cuestionan su aprendizaje y buscan alternativas de solución a sus cuestionamientos?

| | | |
|---|---|---|
| Siempre | 52 | 50% |
| A veces | 33 | 42% |
| Nunca | 5 | 8% |

6. ¿Desarrollas prácticas innovadoras en el PEA?

| | | |
|---|---|---|
| Siempre | 18 | 20% |
| A veces | 63 | 70% |
| Nunca | 9 | 10% |

7. ¿Utilizas los Laboratorios para la impartición de clases y/o prácticas?

| | | |
|---|---|---|
| Siempre | 17 | 19% |
| A veces | 26 | 29 % |
| Nunca | 47 | 52% |

8. La gestión pedagógica, la innovación educativa y los ambientes de aprendizaje se complementan y garantizan educación de calidad.

| | | |
|---|---|---|
| Muy de acuerdo. | 27 | 30% |
| De acuerdo. | 51 | 57% |
| Ni de acuerdo ni en desacuerdo. | 7 | 8% |
| En desacuerdo. | 3 | 3% |
| Muy en desacuerdo | 2 | 2% |

In relation to pedagogical accompaniment, it can be said that, despite the fact that it is integrated as a component in the Ecuadorian curriculum model, only 31% of the teachers surveyed indicate that their schools offer this type of support. In contrast, 29% indicated that no pedagogical support and accompaniment processes are carried out in their institutions, while 40% acknowledged that it is carried out only occasionally. These data indicate that the process of pedagogical accompaniment is not yet fully institutionalised in schools, which limits the continuous improvement of teaching practice and has a direct impact on the academic performance and comprehensive development of students.

According to the data obtained in the survey, 65% of teachers indicate that their merits are not recognised by educational institutions; the fact that most teachers feel that their merits are not recognised has negative implications for the quality of teaching, and can lead to demotivation among teachers, teacher desertion, and a working environment that is not conducive to ensuring quality and equity in education. Hence the importance for educational institutions to develop actions to value and recognise the achievements of their teachers, thus fostering a positive working environment conducive to professional growth and student success.

The majority of the teachers surveyed acknowledged that the institution has a professional development plan for teachers. However, 48% consider that this plan does not respond to the actual training needs of teachers. This discrepancy suggests a mismatch between supply and demand for professional development, and may

be the result of a lack of understanding on the part of managers of the real needs of teachers or a disconnect between institutional priorities and the needs of teaching staff. There is a need for a process of in-service training that encourages the active participation of teachers and takes into account the relationship between the individual needs of teachers, institutional demands, socio-cultural characteristics and the requirements of Ecuadorian Basic Education.

Analysis and discussion of the main results of the survey of DECE professionals and Basic Education teachers.

The results obtained by teachers and educational psychologists in relation to school coexistence are as follows:

In 58% of the educational institutions participating in the research they have a Student Counselling Service Department, the rest (42%) do not have this department, according to the respondents usually an educational psychologist attends them once a month. The reality is that students face a variety of emotional and psychological challenges that are reflected in their behaviour at school, ranging from academic performance to personal and family problems. Having a Student Counselling Service Department in an educational institution is essential because it offers emotional and psychological support to students by professionals specialised in this area.

According to the data obtained in the survey, 46% of the teachers and educational psychologists state that the educational institutions where they work have a plan of action for prevention and attention to situations that violate the rights of children and adolescents; a significant fact is that 34% of those surveyed do not know if such a plan exists and 20% state that in the educational institutions where they work there is no plan of action for prevention and attention to situations that violate the rights of children and adolescents. These data underline the importance and urgency of implementing and socialising with the educational community the plans of action for prevention and attention to situations that violate the rights of children and adolescents in educational institutions. The implementation of these plans contributes to creating a culture of respect, inclusion and protection throughout the educational community.

Other highly relevant information obtained in the survey is that only 31% of teachers say they are sufficiently prepared to identify any case of violation of the rights of children and adolescents; 27% say they are poorly prepared and 22% say they are not prepared to identify cases of violation of the rights of their students. This

information represents a significant challenge that requires urgent attention; it is essential to provide teachers with the necessary training, support and resources to ensure the comprehensive protection of students and to promote a safe, inclusive and respectful school environment.

Forty-seven per cent of respondents indicate that records of students with special educational needs are kept in educational institutions, while 23% lack knowledge on this issue and 30% state that there are no such records. Regarding the registration of students in vulnerable situations, the results do not differ significantly, with 40% of respondents stating the existence of such registers, 32% being unaware of their existence or absence, and 28% indicating that their educational institutions do not register students in vulnerable situations. These data reveal a worrying situation: having registers of students with special educational needs and in vulnerable situations in educational institutions is fundamental to guarantee inclusion and equitable access to education. These registers provide key information on the specific needs of students and enable appropriate measures and resources to be implemented to support their learning and all-round development.

The last indicator to be evaluated within school coexistence is related to the educational actions developed by educational institutions in the community for the prevention and care of students with SEN and in situations of vulnerability. The results obtained lead us to reflect on this problem. The fact that only 23% of those surveyed responded that educational institutions do carry out activities with the community for the prevention and care of students with SEN and in situations of vulnerability demonstrates the gap that exists between educational institutions and the community and the need to promote a culture of inclusion and respect for diversity through the educational community.

The rights of children and adolescents in Ecuador are supported by the Constitution of the Republic, international treaties, the Code of Children and Adolescents, and the LOEI, among others. Developing educational actions for the prevention and care of students with SEN and in vulnerable situations is a requirement to comply with these legal and regulatory obligations, and to ensure that the rights of all students are respected.

Analysis and discussion of the main results of the survey of students in Basic Education.

29% of the students surveyed consider that reflection, enquiry, analysis and debate are promoted in classes; 35% say that sometimes this is achieved, while 36% of the students perceive that reflection, enquiry, analysis and debate are never promoted in classes (see table 3). These data reveal a significant discrepancy between students' and teachers' perceptions regarding the promotion of reflection, enquiry, analysis and discussion in the teaching-learning process. Although, students' perceptions may be subjective and influenced by multiple factors, such as their individual expectations, previous experiences and learning preferences, it is necessary for both teachers and students to recognise the importance of developing these skills in order to achieve meaningful learning.

Another piece of information obtained in the survey that merits in-depth analysis is related to virtual learning environments, where only 9% of the students say they strongly agree that VLEs favour the construction of knowledge and 23% agree, the rest of the students surveyed responded unfavourably (see table 3). Students' perception of the effectiveness of VAS for knowledge construction is crucial, because this can influence their engagement, motivation and academic performance.

In relation to the use of technological resources by teachers to favour the construction of learning (see table 3), the results demonstrate the need to raise awareness among managers and teachers about the role of ICT in contemporary education; technological resources enrich teaching by providing access to diverse educational resources, facilitate communication between teachers and students, and foster collaboration and creativity. It is important to consider that the use of ICT is not enough to simply incorporate technology in the classroom; it is essential that it is used, but in a thoughtful way and with a clear educational purpose. The fact that more than 60% of the students surveyed rate their teachers' use of technology as fair to very poor suggests inconsistencies between the way these tools are used in the teaching-learning process and the pedagogical approach assumed by the Ecuadorian educational model.

Among the technological resources most used by teachers in the teaching-learning process, according to the students surveyed, are videos, PowerPoint presentations and social networks; and among the least used are discussion forums, infographics, software and Prezi; this fully coincides with the teachers' response and indicates that the potential of ICT in the educational process is not yet being fully exploited; it is necessary to explore new tools that enrich the

educational experience and meet the needs of students in the digital era.

In relation to the innovative teaching resources used by teachers in the classroom, the data obtained in the survey (see table 3) is very significant, revealing a problem that requires exhaustive research: the notable discrepancy between the perception of students and teachers in relation to the implementation of innovative teaching strategies and resources in teaching practice, a fact that can have a negative impact on the quality of the educational process. According to the students and coinciding with the teachers' answers, the most used innovative strategies in the classroom are Project Based Learning (PBL), Educational Gamification, Technology Integration and Cooperative Learning; the least used are Universal Design for Learning (UDL), Adaptive Teaching, Virtual and Augmented Reality and Flipped Classroom.

It is important to stress that all innovative strategies have the potential to improve educational quality and promote meaningful learning for students. The choice of the appropriate strategy depends on the specific needs and characteristics of each group of students and the educational context in general.

The perception of the quality of education that students receive is a very relevant issue; data from the student survey reveal that 21% of students consider the education they receive to be very good, 23% rate it as good, 28% perceive it as average. However, what is most worrying is that the rest of the students surveyed, who comprise a significant percentage, rate the quality of education as poor to very poor (see Table 3).

**Table 3.** *Student surveys.*

| **1. ¿Las clases son espacios que favorecen la reflexión, la indagación, el análisis y el debate?** | | |
|---|---|---|
| **Siempre** | 67 | 29% |
| **A veces** | 82 | 35% |
| **Nunca** | 84 | 36% |
| **2. ¿Los ambientes de aprendizajes virtuales favorecen la construcción del conocimiento?** | | |

| | | |
|---|---|---|
| **Muy de acuerdo.** | 21 | 9% |
| **De acuerdo.** | 52 | 23% |
| **Ni de acuerdo ni en desacuerdo.** | 89 | 38% |
| **En desacuerdo.** | 33 | 14% |
| **Muy en desacuerdo** | 38 | 16% |

**3. ¿Los docentes utilizan recursos tecnológicos para favorecer la construcción de tu aprendizaje?**

| | | |
|---|---|---|
| **Siempre** | 47 | 20% |
| **A veces** | 84 | 36% |
| **Nunca** | 102 | 44% |

**4. ¿Cómo calificas el uso de la tecnología por parte de los docentes?**

| | | |
|---|---|---|
| **Muy bueno** | 46 | 20% |
| **Bueno** | 33 | 14% |
| **Regular** | 61 | 26% |
| **Malo** | 52 | 22% |
| **Muy malo** | 41 | 18% |

**5. ¿Los docentes utilizan recursos didácticos innovadores en clases?**

| | | |
|---|---|---|
| **Siempre** | 32 | 14% |
| **A veces** | 98 | 42% |
| **Nunca** | 103 | 44% |

**6. ¿La IE cuenta con laboratorios?**

| | | |
|---|---|---|
| **Si** | 123 | 53% |
| **No** | 110 | 47% |
| **7. ¿Cómo calificas la educación que recibes en tu escuela o colegio?** | | |
| **Muy buena** | 49 | 21% |
| **Buena** | 54 | 23% |
| **Regular** | 65 | 28% |
| **Mala** | 47 | 20% |
| **Muy mala** | 18 | 8% |

En la relación al aprendizaje y la motivación hacia el estudio, se les pide a los estudiantes encuestados ordenar cronológicamente las asignaturas que más les gustan, enumerando del 1 al 7, siendo 1 la que más le gusta y 7 la que menos; según los resultados obtenidos, las asignaturas que más les gustan a los estudiantes y a las que le dedican más tiempo de estudio son: Matemática, seguida de Educación Física, Lengua y Literatura e Idioma extranjero; con relación a las que menos les gustan a los estudiantes, están: Ciencias Sociales, Ciencias Naturales y Educación Artística.

Datos que en cierta medida concuerdan con los estudios realizados por (Díaz, 2022) que en su investigación identifica entre las asignaturas de mayor preferencia de los estudiantes la Matemática, la Lengua Extranjera (inglés) y la Lengua y Literatura. En cambio, los estudios realizados por (Vázquez y Massanero, 2007; Cuevas, Hernández, Leal, y Mendoza Torres, 2017; Toma, Ortiz-Revilla, y Greca, 2018), las ciencias atraen más a los estudiantes de Educación Primaria que a los de otros niveles, situando a la asignatura de Matemática en los puestos más altos (Valero & Coca, 2021).

(Ricoy & Sánchez, 2016) realizan un estudio de las asignaturas favoritas y las que le producen hostilidad al alumnado, por género; donde se evidencia que las materias favoritas de las alumnas son las de Lenguas, mientras que los estudiantes (masculino) presentan una predilección por las de CC EE; datos que no coinciden con los obtenidos en esta investigación, pero que resultan de gran interés y ameritan de un estudio más profundo.

Análisis y discusión de los principales resultados de las entrevistas realizadas a directivos de la Educación Básica.

La percepción de los directivos entrevistados sobre la calidad educativa en la institución que dirigen refleja cierta similitud con relación a los factores que inciden en el proceso educativo. La mayoría de los entrevistados destacan como un aspecto sólido y efectivo la gestión pedagógica; esto indica que la institución cuenta con un enfoque educativo bien estructurado y ejecutado, lo que contribuye significativamente a la calidad de la enseñanza y el aprendizaje. Este reconocimiento por parte de los directivos indica un compromiso con la excelencia académica y el desarrollo integral de los estudiantes.

Sin embargo, los directivos también reconocen que la calidad educativa no se limita exclusivamente a la gestión pedagógica. La infraestructura física y tecnológica juega un papel crucial en el entorno de aprendizaje. Un ambiente adecuado y equipado con recursos tecnológicos actualizados facilita la implementación de metodologías educativas innovadoras y el acceso a información relevante, enriqueciendo así la experiencia educativa de los estudiantes.

Con relación a la innovación educativa, los directivos entrevistados no muestran mucho interés en este tema, en sus respuestas no se logra distinguir los ámbitos temáticos o tipos de innovación educativa que más utilizan los docentes en el proceso de enseñanza aprendizaje; estos consideran que hay otros aspectos más urgentes o prioritarios en la gestión educativa de la institución, como la mejora de la infraestructura, el desarrollo profesional del personal docente y la optimización de los recursos disponibles.

Según los directivos entrevistados los recursos tecnológicos más utilizados por los docentes en el aula son Vídeos y Presentación PowerPoint; este resultado subraya la necesidad de actualizar a docentes y directivos sobre el uso de las TIC en el ámbito educativo. Si bien los vídeos y las presentaciones en PowerPoint son herramientas valiosas, existen otras tecnologías y recursos digitales que pueden enriquecer aún más la enseñanza y el aprendizaje. Estos incluyen plataformas de aprendizaje en línea, aplicaciones interactivas, simulaciones, juegos educativos, herramientas de colaboración en tiempo real, entre otros.

Análisis y discusión de los principales resultados de la Revisión Documental.

Los documentos objeto de revisión son la Planificación Curricular Institucional (PCI), la Planificación Curricular Anual (PCA) y la Planificación micro curricular.

Se puede constatar en esta etapa del diagnóstico que las Planificaciones Curriculares Institucional (PCI) revisadas se fundamentan en el Currículo Nacional y las normativas vigentes. Aunque, no queda muy claro en este documento el tratamiento a la inclusión, la interculturalidad y el uso adecuado de las TIC; siendo esto un hecho muy preocupante para los investigadores.

En relación con la Planificación Curricular Anual (PCA), se verifica que responde a la planificación Curricular Institucional. Sin embargo, se identifican otros problemas que van desde su concepción hasta su puesta en práctica, dentro de los que caben citar:

Falta de elementos de adaptación curricular para los estudiantes con NEE.

Por lo general no se contempla desde el PCA el uso adecuado de las TIC.

No siempre los docentes que imparten las asignaturas participan en el diseña del PCA.

Estos resultados son alarmantes, el PCA es fundamental para asegurar que el currículo responda a las necesidades, intereses y características específicas de la comunidad educativa. Esto implica tener en cuenta el contexto sociocultural, económico y geográfico en el que se encuentra la institución, así como las características individuales de los estudiantes. Por otra parte, es esencial que desde el PCA se contemple el uso adecuado de las TIC, lo que requiere de enfoques pedagógicos diferenciados y estrategias de enseñanza innovadoras. La falta de estos elementos en el PCA puede resultar en la exclusión de los estudiantes, lo que va en contra de los principios de equidad e inclusión establecido como principios de la educación ecuatoriana. Por otro lado, la falta de participación de los docentes en el diseño del PCA es un problema que puede afectar la calidad de la enseñanza.

La principal limitación del PCA radica en su naturaleza generalizada y predefinida. Al ser diseñada antes de que los docentes tengan la oportunidad de interactuar con sus estudiantes carece de información detallada sobre las habilidades, intereses, estilos de aprendizaje y necesidades particulares de cada estudiante.

El PCA puede no ser lo suficientemente flexible como para adaptarse a las dinámicas y desafíos específicos que surgen en el proceso formativo. Pero, en contraste la Planificación Microcurricular se realiza en función de las características del estudiante y del grupo, lo que la hace más adaptable y sensible a sus necesidades y a los cambios del entorno; su flexibilidad indica que los docentes pueden realizar ajustes en función de las observaciones áulicas, los resultados de las evaluaciones y las necesidades emergentes de los estudiantes; lo que favorece aprendizaje significativo.

Sin embargo, en la planificación micro curricular se pudo constatar dificultades, tales como:

- Objetivos que no se derivan de otros más generales y por tanto no obedecen al proceso como tal.
- Clases y otras actividades sin objetivos formulados o declarados desde la planificación o determinados, pero mal formulados.
- Incorrecta determinación de la destreza con criterio de desempeño.
- Limitado uso de métodos de enseñanza activos y estrategias metodológicas sin relación con las destrezas.
- Poco conocimiento de los instrumentos de evaluación.

## Discussion

From the data provided by the teacher survey it was clearly demonstrated that a significant proportion of teachers feel that they lack sufficient preparation to effectively use ICT in the teaching-learning process, develop innovative educational practices, and create learning environments that favour reflection, enquiry, analysis and debate; fundamental elements for the development of critical thinking, problem-solving skills and the development of meaningful learning.

The majority of teachers stated that they sometimes develop innovative practices in the teaching and learning process, which showed a degree of openness towards innovation, but also revealed that these practices are not an integral part of their educational approach, reflecting a willingness to experiment with new ideas and approaches, but also the existence of obstacles that limit the constant adoption of innovative classroom strategies.

The majority of managers showed little familiarity with the concepts and practices related to educational innovation, which may be due to a lack of specific training on this topic, resistance to change and/or to the adoption of new methodologies or educational approaches.

The diagnosis revealed a significant discrepancy between students' and teachers' perceptions of the quality of the education they receive, the effective use of ICT, the development of innovative strategies, and learning environments that favour reflection, enquiry, analysis and debate; demonstrating the urgent need to address these perceived deficiencies and work towards improving educational quality.

In the documentary review, problems were identified from the PCI to the micro-curricular design; fundamentally related to the initial diagnosis, the determination and formulation of the non-personological components of the teaching-learning process; the insufficient use of ICT, active methodologies and innovative strategies; and the lack of knowledge of curricular adaptations for the attention of students with SEN; showing that in general the curricular plans are decontextualised, do not respond to the particularities of the students nor to the social demands, which is detrimental to an educational process with quality.

In order to guarantee an education that meets social needs and expectations, it is necessary to have a solid and effective pedagogical management, appropriate infrastructure to develop the educational process, technological resources that facilitate learning, a continuous training process that contributes to the professional development of teachers, which translates into efficient pedagogical performance; and learning environments based on respect, attention to diversity, and centred on the active participation of students in the construction of knowledge.

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