

Educational Context Diagnosis: Analyzing the Educational Dimension

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Abstract

This research examines the impact of the school environment on instruction and knowledge acquisition, emphasizing the need for a comprehensive methodology that addresses instructional, technological and social implications; including teaching methods, learning materials and plans, evaluation, school culture, and teacher training. The findings indicate that teachers generally perceive their work positively, though discrepancies arise in how educational actors evaluate these perceptions. Additionally, there is a disconnect between technological integration in the classroom and the curriculum's demands, as well as family expectations, challenges in school culture and teacher training require further attention. It can be concluded that strengthening inclusive evaluation, improving teacher training, and expanding access to technology are crucial steps toward enhancing educational excellence and its social relevance, thereby promoting equity and alignment with modern demands.

Keywords: *Critical Diagnosis, Educational Contexts, Education, Evaluation.*

Introduction

Linking educational contexts to learning processes requires significant effort, involving not only intentional approaches but also neuroplasticity processes, where the brain can recover, restructure, and adapt based on presented stimuli (Araya y Espinosa, 2020). In this context, emotions play a fundamental role in learning, exerting a decisive influence on individuals. Therefore, incorporating educational contexts into teaching practices becomes essential, as it entails working holistically with students.

The teacher's role in the student's formative process extends beyond the transfer of knowledge, encompassing biological, cognitive, and emotional changes (Araya y Espinosa, 2020). Teachers play a crucial role in students' academic achievements (Mendoza et al., 2019). But how does the educational context contribute to comprehensive education? We start from the premise that comprehensive education fosters meaningful relationships based on cognitive, affective, social, and contextual aspects among educational actors (Aizpuru, 2008). Addressing contextual factors means acknowledging the environment in which educational activities occur. These factors can be analyzed from two perspectives: the classroom itself and its internal interactions, as well as a broader scope that extends from the classroom to the institutional and social levels (Jornet et al., 2016).

In Ecuador, the Organic Reform Law to the Organic Law of Higher Education (Asamblea Nacional República del Ecuador, 2018) highlights in Art. 93, the Principle of Quality, defining it as a continuous, self-reflective process of improvement, assurance, and collective construction of a culture of quality. This principle emphasizes balancing teaching, research, innovation, and social engagement, guided by integrity, democracy, knowledge production, intercultural dialogue, and civic values. These principles underscore the necessity of incorporating educational contexts into teaching practices, directly influencing educational quality, social development, and national transformation (Patiño, 2007).

A quality teaching practice integrates the characteristics and particularities of the context (Ministerio de Educación, 2021); with a constructivist pedagogical model, where learners interact directly with their subject matter. The constructivist paradigm offers a unique interpretation of reality and its relationship to learning

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(Camargo y Montoya, 2024). Thus, the teacher's responsibility extends beyond imparting knowledge and developing skills; it also involves integrating context to ensure educational quality (Arévalo et al., 2019).

In this regard, it is important to mention that the constructivist model promotes, from psychology, the encounter with oneself, the others (Ríos, 2006); and, with the integral development of the student (Barcelo & Ruiz-Corbella, 2015). It is precisely in this dynamic where in educational context plays an important role so that the student can assert himself, value his abilities, his knowledge and his doing; hence the need to incorporate, as a base methodology, previous knowledge from educational contexts, where it is considered, from first hand, interests, personal and social needs and daily experiences as a means of motivation to improve relations between educational actors to create a climate of solidarity, friendship and commitment aimed at promoting educational quality (Garcia Yeste et al., 2019). Undoubtedly, offering these spaces contributes to self-recognition, reflection, communication and teamwork (Bisquerria, 2012).

However, for this articulation to be effective, it is necessary to be supported by a coherent curriculum that promotes a teaching practice capable of generating spaces for reflection of its own praxis and recognizing the scopes and modifications that adapt to the environment in a relevant manner (Villón, 2018). It is precisely there where, the pedagogical relationship established between the curriculum and didactics generates and arranges attention to the social constructions that are promoted in an educational context. In this dynamic, elements of knowledge are made visible: being, knowing, doing, living together and undertaking (Delors, 1996) which provokes curricular relationships that, from their particular contribution, are configured in the social dynamics; in turn, it seeks the socioeconomic welfare of the collective and the management of knowledge (Molina et al., 2020).

From this perspective, the school's mission is not only based on teaching but on the promotion of intellectual autonomy through the development of skills and their practice in everyday activities to achieve their transfer; that is, the development of critical thinking, learning to learn, through the constant review, evaluation and reflection of knowledge from a problem-solving context and with the interaction with other people. Here again the previous knowledge resulting precisely from the educational context takes on a new meaning and significance anchoring itself to strengthen higher skills as well as the dispositions to learn by developing metacognitive competences and epistemological evaluation, an aspect that has implications not only in learning but also in teaching (López, 2012).

Now, within the educational policy, the context is also considered from a guiding sense of the actions, both of the regulatory bodies at the national level of the educational system and of the educational institutions and their staff; therefore, Executive Decree No. 57 of June 2, 2021 in paragraph b, establishes as a transversal element the community, territorial and cultural approach as a vision that harmonizes the educational system (Ministerio de Educación de Ecuador, 2022).

This denotes the primary interest in education with a social and inclusive approach. In fact, the Ministerio de Educación de Ecuador (2021) promulgates a document called "Educational Context", which describes, in a general way, the index of internet access and coverage, educational results, educational resources and services, and the regional panorama in the educational field, with the purpose of offering an analysis to the educational actors of the different aspects described, thus denoting the importance of considering the educational context for planning and social development; and, especially for the understanding of the complexity that Ecuador lives, as well as its advances and gaps.

In addition, the Development Plan for the New Ecuador 2024 - 2025, in the area of education, enacts public intervention programs that address the legal provisions emanating from the Constitution, which in its dogmatic essence, guarantees the intervention of the State in the search for positioning education as an axis of social transformation, through plans that adhere with pertinence to the diverse social realities of the Ecuadorian territory (Secretaría Nacional de Planificación, 2024) based on the principle that learning is consolidated to the extent that it increasingly complex situations in real educational contexts (Espinosa et al., 2018).

In this sense, access to different levels of education, quality and relevance are analyzed as an agent that catalyzes social relevance (UNESCO, 2019). This fact, refers to the conditions in which improvement programs provide coverage to social needs; this responsibility is addressed to the extent that educational supply strategies are created that bring together the material and human elements that favor a formative process, with quality and permanence guarantee and that generate effective solutions to the social environment (Suarez et al., 2020), hence the need, prior to the proposals, to carry out a diagnosis that provides guidelines to propose or project improvements in teaching practice, as well as to strengthen the interrelation between different educational actors respecting diversities (Ministerio de Salud Pública del Ecuador, 2018).

A preponderant factor at the moment of defining an educational improvement and endorsing such a fact, represents the social resonance with which its positive impact is perceived. In this sense, Luna & Montané (2020) argue that the educational process must be aligned with current social demands; therefore, intervention in teacher management is approached from an integral perspective, which entails focusing the gaze of professional training on aspects related to the social use of knowledge.

Another key aspect in the field of social responsibility refers to quality assurance; according to Alarcón et al. (2020) institutional performance must be optimized by implementing efficient processes. Based on this parameter, standards are established that promote management in close relation to results that make visible a transforming impact on society. Therefore, evaluation must transcend from the desire to consolidate a ranking towards accreditation to the realization of a social dynamic that responds to contextual educational needs (Vallaes, 2021).

In terms of training linked to programming, the curriculum represents the articulation of social aspirations derived from the educational system and its political-pedagogical proposal; this represents attending to cultural and productive contexts in which the institutional proposal is articulated, and from there, managing its sustainable development (Medina et al., 2019). It is in fact this component that refers to the relevance and contextualization of knowledge in correspondence to social demands (Muñoz et al., 2021).

These contributions translate into the social yearning for an educational system that not only addresses the academic dimension, but also transcends the development of skills to respond to social needs. By virtue of this, social thinking is constituted from a critical citizenship committed to improvement, based on a deep analysis of the teaching-learning processes (Ayuste & Trilla, 2024). Therefore, critical pedagogy and emotions are recognized as an articulating concept that makes it possible to theoretically base the intentions of educational improvement with emphasis on social relevance.

Methodology

The objective of the research is to evaluate the perception of the different actors of the educational system (teachers, students, families, school community) regarding the indicators of the educational dimension, which include aspects such as Pedagogy and Curriculum, Didactics and Technology, Evaluation, Culture and Teacher Training. The specific objective is to identify strong and weak areas in the dimension of Education to improve educational practices.

On the other hand, the research is based on a quantitative approach, with a descriptive and correlational design, which will allow to describe the perceptions of the different educational actors and to obtain the different relationships between dimensions and indicators. The study population is aimed at teachers of the Ministry of Education of Ecuador from different educational institutions, from which a sample of 94 participants was taken.

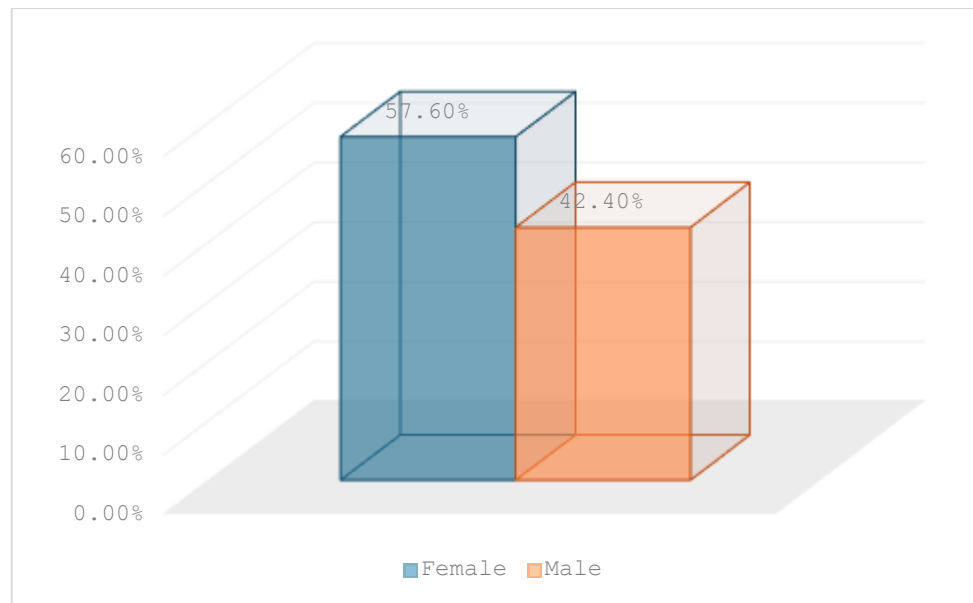
The instrument applied was a Likert-type questionnaire (Never, Almost never, Sometimes, Almost always, Always) to measure 5 indicators of the educational dimension (Pedagogy and Curriculum, Didactics and Technology, Evaluation, Culture, Teacher Training) of the Education dimension, which was evaluated for reliability using Cronbach's Alpha with a value of 0.943, which represents a great consistency in the questions, and as for the validity of the content, it was carried out through a panel of experts from different

countries such as Spain, Brazil and Ecuador, reaffirming the relevance of each question in the instrument. The questionnaire was applied virtually and the participating teachers completed it voluntarily and anonymously in order to ensure the confidentiality of the answers.

Analysis

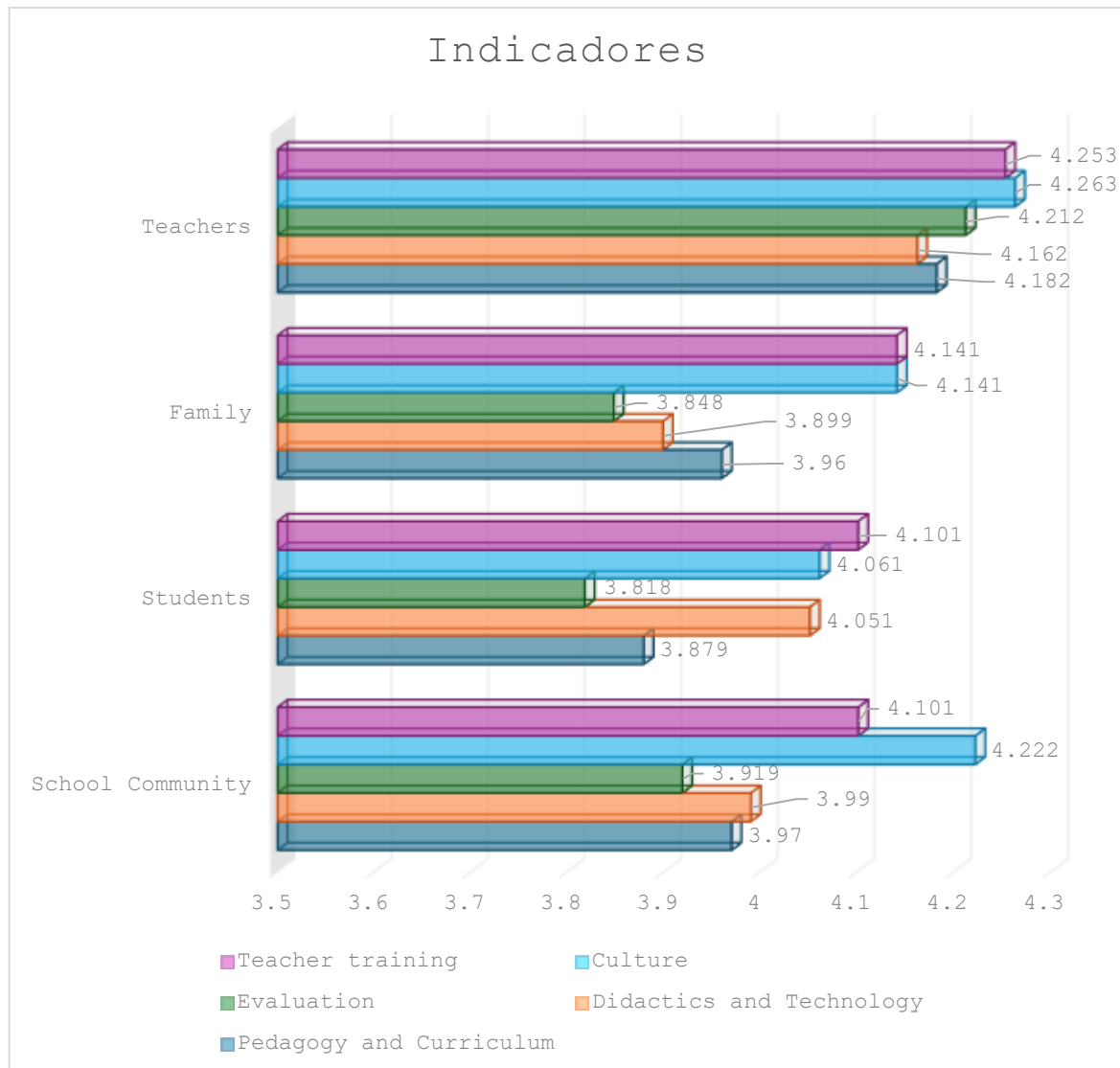
The following is an analysis based on gender.

Figure 1. Gender of Participants



The above graph shows that there is a difference in the perceptions of each of the indicators of the Education dimension between genders, with Female predominating.

Average educational indicators

Figure 2. Indicators of the Educational Dimension

For this analysis, it has been considered convenient to work from each of the indicators, taking into account the four actors (teacher, family, students and school community).

Pedagogy Curriculum

It can be observed that teachers have a high average as opposed to the other categories, which may indicate that they perceive that the pedagogical methods and the curriculum are being developed in the best way, while for families and students they have slightly lower perceptions, which could be that they do not meet their expectations or needs either because the curriculum is not aligned to them.

Didactics and Technology

In this indicator, teachers have a higher valuation, which may be due to the fact that they feel confident in using didactic strategies and technological tools in the classroom, while in the case of families and students they have a lower valuation, which may indicate that they do not have access to the Internet, do not have or do not understand technological tools.

Evaluation

For this indicator, the teacher has a high evaluation, which may imply that he/she is clear and has confidence in the mechanisms implemented for evaluation, while families and students perceive that the evaluation methods are not clear or effective to measure the progress of each student.

Culture

Teachers have a high valuation in terms of culture, while for the school community and families it has a similar perception, unlike students who present a lower perception which may be given by the learning culture feeling that it is only inclusive or attractive.

Teacher Training

It can be observed that teachers have a high perception because they demonstrate that they have the proper training to face the challenges presented by education; on the other hand, families and students have a lower perception because it could represent that the results of teacher training are not always reflected in classroom practice.

It is important to know if the differences in the category averages are statistically significant.

Table 1. Anova

Anova

	Sum of Squares between groups.	Degrees of freedom between groups	Mean square between groups.	Sum of Squares within groups.	Degrees of freedom within groups..	Mean square within groups	F-value	p-value
Pedagogy and Curriculum	5.18	3	1.73	58.93	90	0.65	2.37	0.0698
Didactics and Technology	3.22	3	1.07	61.90	90	0.69	1.55	0.1987
Evaluation	11.63	3	3.88	88.60	90	0.98	3.94	0.0086
Culture	2.16	3	0.72	70.09	90	0.78	0.93	0.4220
Teacher training	2.28	3	0.76	78.56	90	0.87	0.84	0.4722

As observed by the Anova, it is obtained that:

The evaluation indicator presents significant differences between the different categories regarding how the evaluation indicator is evaluated with a p-value= 0.0086.

For the case of Pedagogy and Curriculum, although it is not significant, it can be presented as possible differences since it is based on how the other categories distinguish this indicator 0.0698 since it is close to 0.05.

The indicators with no significant differences are Didactics and Technology, Culture and Teacher Training each with values 0.1987, 0.4221 and 0.4722 respectively.

With this it can be mentioned that the Evaluation indicator is the one that shows significant differences in each of the categories School Community, Students, Family and Teachers, it can be observed that the variation is remarkable.

Table 2. Kruskal-Wallis

Kruskal-Wallis

Indicador	Chi-square	Degrees of Freedom	Sig.
Pedagogy and Curriculum	6.81	3	0.0782
Didactics and Technology	5.99	3	0.1120
Evaluation	11.43	3	0.0096
Culture	3.28	3	0.3511
Teacher Training	2.66	3	0.4468

The results of the Kruskal-Wallis test are confirmed by the ANOVA test:

The test shows a significant difference in the evaluation indicator 0.0096, which may lie in the perception of evaluation in Teachers, Students, Family and School Community. However, Pedagogy and Curriculum (0.0782) although it is close to $p=0.05$ could indicate that there are some variations in how the indicator is perceived, while, for Didactics and Technology, Culture and Teacher Training do not show significant differences which have a value of 0.1120, 0.3511 and 0.4467 respectively.

With this we can mention that the Evaluation indicator reaffirms and shows statistically significant differences in each of the actors Teachers, Students, Family and the School Community, which could be assumed to be one of the key aspects where the necessary corrective measures can be applied.

Discussion of Results

With the above results, it can be observed that there is a positive perception in all indicators on the part of teachers, which could be due to the fact that they are the main actors in the training of students, the same ones who make use of pedagogical methodologies in the classroom, coinciding with the Ministry of Education (2021), which mentions that comprehensive educational practice is generated when the teaching practice is articulated in such a way that the context, including its characteristics and particularities, responds to social requirements.

It is important to mention that Evaluation is a very relevant indicator that based on the perception of stakeholders such as community, family, students and teachers, it is suggested that relevant and clear evaluation methods be implemented, which relate the inclusion of individual needs of students coinciding with Arévalo et al. (2019), who mention that evaluation is a key process that allows the construction of meaningful learning, the key point is to develop mechanisms that involve all stakeholders in the design and implementation of evaluative processes. This implies teacher training for the construction of evaluations that are more inclusive and formative and continuous consultation forums with students and families. Likewise, it is necessary to use educational technologies that can be useful for the management and understanding of evaluation results.

On the other hand, in the pedagogy and curriculum indicator, teachers believe that the pedagogical methods and curriculum are adequate, however, parents and students believe that there is a disconnect between the curriculum and them. This reinforces the idea that a curriculum should be in tune with the expectations and social context of the students, which gives more meaning and participation to the curriculum (Delors, 1996).

As for Didactics and Technology stresses the importance of increasing access to technologies and their application in the education sector, it is necessary to mention that the needs of technological infrastructure and digital literacy may be the key to the persibited inequality, so it is important, the integration of educational technology, which requires continuous education for teachers to ensure the correct use in the classroom and material resources (Garcia Yeste et al., 2019).

For the Culture and Teacher Training indicator, some low ratings are presented in terms of culture, which could point to the need for strategies that promote a more inclusive and captivating learning environment, as mentioned by Barcelo & Ruiz-Corbella (2015) that school culture plays a crucial role in education, affecting its integral growth and its sense of bonding with the educational community. Regarding Teacher Training, despite the fact that teachers believe they are trained, achievements are not always manifested in practice. This finding underscores the relevance of developing professional growth programs that focus on the practical implementation of innovative techniques.

In conclusion, it is crucial to foster educational contexts in the organization and administration of teaching practice in order to enhance the quality of education and ensure its social relevance. This analysis emphasizes fundamental areas of intervention that can function as a foundation for the creation of strategies for constant improvement in the educational system.

Conclusions

This study suggests that evaluation practices should adopt a comprehensive approach, ensuring clarity and fairness for students and their families.

Access to and use of technology should be improved for both students and teachers, with an emphasis on training educators in the effective use of digital tools in educational settings.

Although educators rate their training positively, continuous professional development initiatives are essential to guarantee the correct implementation of new methodologies and technologies.

Learning environments should be designed to foster engagement and participation, creating more inclusive and stimulating educational spaces.

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