Strengthening School Coexistence: Learning Ethical Values Through Icts

William Orlando Álvarez Araque [1] , Aracely Forero Romero [2] , Bertha Yolanda Botia Rodríguez[3]

Abstract

In contemporary society, specialists in ethical and moral education have identified an acute crisis in ethical values, which is manifested in the deterioration of school coexistence and the perception of its loss. However, it is crucial to clarify that this is not an intrinsic loss of values, but rather the absence of adequate educational guidance for their acquisition and application. In order to address this problem, a study has been carried out aimed at redefining the teaching of ethics education in a group of students in the sixth grade of basic education belonging to the Santo Tomás de Aquino educational community, in the municipality of Duitama, Boyacá, Colombia. To achieve this objective, an innovative educational environment has been implemented focusing on the use of educational multimedia as a teaching-learning strategy. This research has been carried out using a qualitative approach with a descriptive scope and an educational action research design. The results significantly indicate that the incorporation of multimedia has led to significant improvements in the acquisition and application of ethical values. These advances have translated into a more harmonious and peaceful school coexistence.

Keywords: *School coexistence, School, Multimedia, ICT, Ethical values.*

Introduction

In the school environment, interpersonal relationships often arise that are not always constructive. According to research by Grajales and Caicedo (2017), it has been found that students often face conflicts with peers, friends and sometimes even with their teachers. These conflicts can have negative repercussions both individually and socially. Research literature suggests that these tensions often originate due to a lack of understanding and application of ethical values, which can trigger acts of physical, verbal and emotional aggression, as well as detrimental effects on the social dynamics present in various environments of interpersonal interaction.

[1] Grupo de investigación SIMILES. Magister en Tecnologías de la Información y la Comunicación aplicadas a las Ciencias de la Educación, Universidad Pedagógica y Tecnológica de Colombia. ORCID: https://orcid.org/0000-0002-1955-3815.
E-mail: William.alvarez01@uptc.edu.co
[2] Doctora en Multimedia Educativa Universidad de Barcelona – España. Líder y Directora del grupo de investigación **SIMILES**. https://orcid.org/0000-0002-9750-3952.E-mail: Aracely.forero@uptc.edu.co
[3] Grupo de investigación SIMILES. Msc Ciencias Agrarias, Universidad Pedagógica y Tecnológica de Colombia, Duitama , Boyacà Colombia. ORCID: https://orcid.org/0000-0002-7696-9892. E-mail: bertha.botia@uptc.edu.co
Universidad Pedagógica Y Tecnológica de Colombia Seccional Duitama.

Educators have highlighted significant problems related to a lack of respect, poor practice of active listening and delayed conflict resolution, factors attributed to students' insufficient ability to demonstrate resilience and empathy.

It is increasingly evident that the absence of ethical values is leading to a marked increase in conflicts in various contexts, such as the family, educational institutions and communities, among others. This phenomenon arises because individuals tend to promote their personal perspectives and interests, which leads to the emergence of multiple dilemmas and challenges. It is therefore necessary to promote education in ethical values as a means of addressing and resolving conflicts in the school environment. This approach seeks to enable individuals to manage conflicts constructively, avoiding the use of violence and pursuing the well-being of all parties involved, as proposed by Chaux in his 2004 work.

However, it is important to emphasise that conflict is a common reality in the school environment, arising from the diverse perspectives and behaviours of students. Therefore, educators should consider conflict as an opportunity to foster communication and interpersonal skills in order to address them constructively. In this sense, conflict resolution in education demands a multidisciplinary approach that embraces the incorporation and practice of ethical values as an integral component of values education. This approach requires the implementation of pedagogical strategies, methodologies and tools that stimulate the teaching of ethical values as fundamental elements for the cultivation of a just and dignified life in society.

From this perspective, the focus of the present research is on strengthening and promoting the acquisition of ethical values and the promotion of good habits among sixth grade students of basic education belonging to the Santo Tomás de Aquino Educational Institution, located in the municipality of Duitama, Boyacá, Colombia. The main objective of this study is to motivate and involve students through the application of innovative pedagogical approaches, with a special emphasis on the use of information and communication technologies (ICT). More specifically, emphasis is placed on the use of educational multimedia resources. This strategy seeks to create a learning environment that differs from conventional methodologies, with the purpose of facilitating the understanding of various ethical values through practical and concrete examples, which in turn contributes to improving their coexistence in the school context.

It should be emphasised that, in the education of students, both school and family play a fundamental role as primary environments. Both share responsibility for instilling values, as education encompasses a holistic approach involving the acquisition of norms and rules, as well as the development of social and moral skills. Given the challenges associated with school violence, it is imperative to promote ethical values in the educational context so that students can internalise and apply these principles in their daily lives, whether in their social, family or school environment.

For this research, it is essential to strengthen values education, since at present children have stopped giving due importance to this process due to several factors, such as the lack of knowledge or the negative attitude of parents and teachers towards the promotion of values. This situation is worrying, because adults should be an example for children. Therefore, educational institutions have the task of forming individuals capable of integrating properly in different social contexts, respecting the norms and values that are widely accepted by society and that allow the development of a peaceful and harmonious coexistence in which the unique characteristics of each person are valued.

Literature review

The literature review focuses on two concepts essential to the present study: ethical values and school coexistence. These terms play a central role in the theoretical basis of the research, providing a clear understanding and an accurate interpretation of the object of study for the reader.

Importance of Ethical Values

Ethical values, as Rivas (2014) points out, are closely related to the individual, who is the only being capable of following principles and good habits that affect his or her integral development. On the other hand, Ortega et al. (1996) argue that these values are understood as fundamental beliefs that give meaning both to the world and to one's own existence, focusing especially on those values that are intrinsically linked to the human being and that are contemplated in the Universal Declaration of Human Rights. According to (Teja, 2011; Arthur and Carr, 2013; Briones and Lara, 2016; Isidori and Cacchiarelli, 2017) it is relevant to highlight that these values have a deeper nature, as they are directly related to the individuality of the person. In this context, education plays a fundamental role in the promotion and development of these values.

Hernández (2002) emphasises that ethical values occupy a place of primordial importance as they have the capacity to guide our life trajectory and serve as support in the construction of our individual identity. Indeed, these values constitute the pillars on which the personality of each individual is built. On the other hand, Carreras (2009), in his work "How to educate in values", argues that ethical values represent the interaction between the individual and his environment, exerting a direct influence on his behaviour, modelling his convictions and conditioning his emotional responses. This concept is characterised by its dynamism and its capacity for transformation, although on the surface it suggests a free choice on the part of the individual between various options. However, these ethical principles are closely linked to what has been assimilated throughout the socialisation process, and, consequently, to the perceptions and mentalities that are inculcated through the various stages of socialisation.

From this perspective, the importance of ethical values in human life is highlighted, given that they contribute to the strengthening of various dimensions. These include the axiological dimension, where the individual is recognised as a being of intrinsic worth and dignity; the ethical dimension, where ethical values relate to the moral norms that guide human conduct and behaviour in various social contexts; and the moral dimension, where ethical values are interpreted by the individual as criteria for evaluating whether an action is right or wrong.

Ethical values have an eminently social character, since their application is manifested in various social contexts. In this sense, Gimeno (1999) argues that, in society, values play a crucial role by providing guidelines and norms that regulate people's conduct, with the purpose of promoting appropriate behaviour and emotional stability. Consequently, society establishes norms that govern its functioning, which incorporate ethical values, thus facilitating the construction of satisfactory interpersonal relationships. According to Ortega and Míguez (2001), these norms, which are framed by ethical values and embedded in everyday life, are not imposed coercively, but derive from the process of learning and social modelling that each individual experiences. Furthermore, each society recognises and practices these values through its understanding, attitudes and beliefs.

It is important to highlight that ethical values are an intrinsic part of the everyday life of human beings, as they are not restricted to a specific group, but are manifested in all individuals as a natural consequence of our value condition. According to Morales et al. (2013), ethical values have been, are and will continue to be a constant presence in all societies, and

can manifest themselves in a positive or negative way, in the latter case known as antivalues. Furthermore, these authors argue that, in everyday interactions between people, a variety of values are generated, which underlines their everyday character. Values are expressed through attitudes that allow individuals, in their daily lives, to take positions that lead them to adopt positive values or anti-values. For example, a person may choose to be honest or dishonest, diligent or lazy, respectful or disrespectful. In their daily lives, people, being aware of these dualities, can discern what is appropriate behaviour and adjust their behaviour in accordance with social norms and rules by adopting a middle position when necessary.

In addition to the above, it is relevant to highlight that ethical values pursue the attainment of happiness through the appropriate behaviour of human beings. However, Orizo (1996) points out that for every value there is a corresponding anti-value, which denotes that ethical values have a dual nature and are governed by the dialectic of opposites or contraries. From this perspective, it can be stated that ethical values have both positive and negative aspects, and there is no complementarity between them. In contemporary society, actions that embody positive values generate admiration, such as honesty, while anti-values, such as dishonesty, arouse repudiation and rejection.

The Role of the School in Ethical Values Formation

School plays a fundamental role in the lives of students, as it represents the second environment in which they spend most of their time and receive guidance and support from educators. For this reason, as Puig (2003) notes, educational institutions are considered to be an ideal context for the promotion of values education among young people. In this context, the new perspective of the school as a social institution implies that it becomes a space for individuals to re-evaluate their own hierarchy of values. Therefore, teachers have the responsibility to transmit and inculcate ethical values that contribute to fostering a high level of social coexistence among students, such as love, respect, truth, honesty and justice, which should be considered essential elements in their daily coexistence.

According to Ahumada and Martín (2018), the role of schools in the formation of ethical values is of great importance, although its scope is considered limited compared to the family's responsibility in this area. However, the educational institution has valuable resources at its disposal to support this work in a continuous and sustainable way. To achieve this, it is essential that the school operates as a true community, in which values are embedded in its environment, organisational structure and in the people who make up the school, especially its teaching and management staff.

The role of the teacher plays a crucial role in shaping students' thoughts, dispositions and perceptions of reality. However, as pointed out by (Althof and Berkowitz, 2006; Dahlbeck, 2017; Bernal et al., 2019; Bleazby, 2020; Bock et al, 2021) it is necessary to keep in mind that no value can be taught by someone who does not possess it. It is therefore essential that the teacher plays the role of a role model in putting into practice the values that are intended to be transmitted to students. While adopting new values may require effort and will, it is not an insurmountable task.

In the school environment, the role of the educator plays a key role in the formation and promotion of ethical values, given his or her position and authority vis-à-vis students. According to Latapí (2009), the teacher represents the values that are considered desirable, acting as a role model and becoming a point of identification for students. However, some often focus exclusively on the cognitive aspects of learning, which are crucial for acquiring competences in disciplinary areas of the school curriculum, while neglecting human development itself. This lack of attention can weaken the ability to instil values in students.

Values formation plays a fundamental role in the education of students, and it is the responsibility of the educational institution to create an appropriate environment to foster this development. As Schmelkes (2004) points out, this responsibility lies with all teachers, not just those who teach specific subjects. On the other hand, parents also play a significant role in value formation, especially in relation to media content. It is imperative that parents are aware of their children's actions in the media, so that they can accompany them in the interpretation of information, particularly information of a negative nature that could influence their educational process.

The teacher, on the other hand, must assist students in organising the information, mitigating the negative aspects and providing them with cognitive tools to make beneficial or at least non-harmful use of it (Savater, 1998). The media, such as television, the internet and other social platforms, exert a considerable influence on young people and children, who can be influenced by models that are alien to their reality and adopt negative behaviours. Consequently, the importance of promoting values education that encompasses all areas of life, including the school environment, the home and interaction with the media, is emphasised.

Therefore, the promotion of values in the school environment is presented as an essential strategy to build a promising future. Values education aims at the integral development of students and the construction of a society characterised by respect, democracy and humanisation. In this sense, it is suggested that the school, with the active collaboration of its directors, teachers and parents, develop an educational project that establishes long-term goals and the necessary resources to achieve them. In addition, this project should give significant priority to ethical education.

Ethical Values and School Coexistence

The term "coexistence" refers to the interaction between individuals who share the same social space and is mainly used to describe a peaceful, respectful and harmonious coexistence, where differences are accepted and valued. This interaction is regulated by norms and values that establish the foundations for mutual treatment and coexistence in society (Carbajal, 2013). In education, according to the perspectives of Torrego and Moreno (2007), Caballero (2010) and Sandoval (2014), the concept of "school coexistence" has been adopted as an approach to reduce levels of violence in schools. This is because, in the past, some schools employed authoritarian practices that generated a structure of violence, where students were subjected to repression and punishment by teachers and principals, which promoted passivity among students. Therefore, school coexistence implies a horizontal relationship between teachers and students, in which dialogue and the active participation of students in the construction of a healthy and respectful school environment is encouraged.

It is essential to highlight that violence is a problem of great prevalence globally and manifests itself in various ways in educational institutions, being known by terms such as bullying, school violence, harassment, bullying, school bullying, aggressive school behaviour and, more recently, cyberbullying. In this context, Garro (2014) warns that, if effective measures are not implemented to address this problem, school coexistence will be compromised, negatively affecting the well-being of students. In the same vein, (Brabeck and Rogers, 2000; Trianes, 2000; Colombo,2011; Cañizalez and Pulido,2015; Hamilton and LaVoi, 2017; Darnell et al., 2019; Chi-Kin, 2021; Han et al.,2022) highlight that values education plays an essential role in promoting peaceful coexistence by teaching to recognise and accept others in an increasingly globalised and multicultural world. Furthermore, these researchers argue that values education is crucial for humanising education and that the acquisition of ethical values is essential both for personal development and for the enhancement of individuals' participation in society.

Life entails an active commitment to collective well-being, and learning to live together must ensure that each individual not only cares for his or her own well-being, but also for that of others and the environment in which he or she lives. From this perspective, Llopis and Ballester (2001) and Úriz and Salcedo (2017) emphasise that school should be viewed through the paradigm of care, which focuses on what is good and desirable as an ideal of life, i.e. caring for others. In order to achieve peaceful coexistence, it is essential to be an ethical person, which implies the adoption of ethical values oriented towards doing good to others, beyond simply complying with rules and acting in accordance with morality. This requires understanding the connection between oneself and others through the concept of responsibility. It is important to note that, from the paradigm of care, care for others is not limited only to human beings, but extends to all living beings. Furthermore, responsibility is not restricted to family or school activities, but is projected towards future generations. It is therefore essential to assess how current generations are acquiring living skills and the crucial role that ethical values play in building a just and dignified society.

Following this line of thought, Del Rey et al. (2009) argue that school coexistence requires an empathic reflective ability, which implies an intelligence capable of transcending individual interests and reflecting on situations that involve not only other human beings, but also all living beings. Consequently, strengthening coexistence through the practice of ethical values is not exclusively the responsibility of the school, even though it is the space where relationships are forged, affections are expressed and interaction takes place with people other than those who are part of the closest family circle. It is essential to examine how ethical values influence coexistence and to establish alliances with families to promote their internalisation.

Generally speaking, coexistence in the school environment and ethical values have a close intrinsic relationship. The school, as Fisher and Kettl (2003), Ochoa and Peiró (2010), De Lellis and González (2012) have pointed out, plays a multidisciplinary role that encompasses not only the pedagogical, but also the ethical, the aesthetic and the political. Its role is to foster empathy towards others, sensitivity towards others and cooperation for the collective well-being. It is the school's responsibility to remember the humanistic ideal of caring for oneself, for others and for the environment we share. Despite the complexity of this task, every crisis must be seen as an opportunity for creation and renewal. It is not enough to impart the latest technological innovations or to improve the quality of education, but students must also be guided to learn to live together in community, since the future of society and future generations depend to a large extent on this skill.

Materials and Methods

The research process of this study is based on the qualitative research approach, which aims to interpret students' opinions regarding ethical values in social, family and school contexts, before and after applying a didactic intervention strategy. In terms of scope, descriptive research is used to contextualise the object of study. Danhke (1989) points out that description allows the researcher to detail phenomena, situations and events analysed and interpreted in relation to the characteristics of groups, communities or individuals that make up the unit of study in an investigation. From this perspective, the descriptive method is used in this study to detail the facts related to the categories of study proposed.

In terms of research design, it is framed in the context of educational action research. This approach has found applications in a variety of educational contexts, including school curriculum development, vocational training, school improvement programmes and educational policy formulation. Kemmis and McTaggart (1988) have extensively examined this approach. From the perspective of these authors, action research, when implemented in school

settings, proves to be an effective tool for addressing specific problems, improving communication, facilitating the adoption of innovations, promoting strategies related to learning, assessment, motivation, discipline and classroom management, and strengthening relationships between teachers and specialists.

Unit of Study

The participants in this research are sixth grade students of the Santo Tomás de Aquino Educational Institution, located in Duitama, Boyacá, Colombia. The total population comprises 70 students, from which a purposive sample of 30 students was chosen, using convenience sampling. The criteria detailed in Table 1 were taken into account to select these participants.

Table 1 Factors considered for sample selection (convenience sampling).

Sample selection	Selection characteristics of participants
In the specific context of this research, a sample of 30 students was chosen from among the students in the sixth grade of basic education in the educational institution under study.	The factors used for the selection of the sample are as follows: - be a student currently enrolled in the educational institution. - The informed consent form, duly signed by the parent or guardian, authorising participation in the study. - Present records of calls for attention from school staff due to inappropriate behaviour or actions that affect school coexistence. - Have constant access to the internet and adequate devices to participate in the activities proposed in the didactic intervention.

Note: The table provides a detailed description of the criteria considered during the study unit selection process.

Categories of Study

Since this research is mainly based on qualitative approaches, categories of analysis have been defined in order to explore the interpersonal dynamics of the students, their coexistence in the school environment and the implementation of ethical values by the sample students. The proposed categories of analysis are detailed in table 2.

Table 2. Study categories

Category	Criteria	Purpose of the category	Technique/Instrument
School coexistence	- What is coexistence like in the school context? - What actions are promoted to strengthen it? - What level of knowledge do students have about the coexistence manual as a tool to regulate their behaviour?	The purpose of this category was to analyse and characterise the school coexistence of the sample subjects in the educational setting.	- Opinion survey Structured questionnaire - Participant observation Field diary

| **Practice of ethical values in the educational context** | - How can not putting ethical values into practice affect the school environment?
- How does not recognising guidelines that enable them to put some ethical values into practice affect students? | This category was formulated with the intention of interpreting students' knowledge of ethical values, the possible conflicts that may arise from their omission and how this affects their school coexistence. | - Opinion survey Structured questionnaire
- Participant observation Field diary |

Note: The table presents the study categories that were examined in the course of the research.

The proposed categories aim to understand how the study subjects recognise ethical values and apply them in the educational environment. In addition, they seek to identify possible factors or causes that could influence their adoption.

Phases of the research process

As previously mentioned, the design of the study is framed within the framework of educational action research, and is developed in four phases:

- **Phase one: Analysis or diagnosis**

In this phase, following Elliot's (1989) perspective, the aim is to define the research problem as precisely as possible. To achieve this, a diagnosis of the situation was carried out in order to understand the origin and evolution of the problem and the position of the people involved in the research. In this context, the following objectives were pursued:

- To analyse the students' level of knowledge of ethical values in the family, school and social spheres.
- To describe students' school coexistence through the analysis of their attitudes towards their classmates and teachers.

- **Phase two: Designing the action plan**

Once the situation was understood and the problem defined, the action plan was drawn up, which focuses on fulfilling the third objective of the research: to create an innovative educational environment that incorporates the use of multimedia to transform teaching in the area of ethics and values education.

- **Phase Three: Observation and analysis**

In this phase of the research process, the focus is on analysing the attitudes of the students involved in the study in relation to the incorporation and application of educational multimedia tools as a means to strengthen the acquisition of ethical values and the understanding of how to put them into practice.

- **Phase Four: Reflection**

This phase of the study is aligned with the perspective presented by Elliot (1990), who suggests that at the conclusion of the educational action research process, it is essential to reflect on whether the problem in question has experienced improvements or found solutions through the development of the previous stages. Therefore, a reflection was carried out to assess

whether the incorporation of educational multimedia tools has contributed to the improvement and transformation of the situation identified in the analysis or diagnosis phase.

Results

The findings derived from the research process are aligned with the achievement of the objectives and the stages set out in the methodological design.

- **Phase one**

During this phase, an opinion survey with open-ended questions was implemented to explore school coexistence and students' adoption of ethical values in their interactions with peers and teachers. Once data collection was completed, coding was carried out using the qualitative research software AtlasTi 7.0. A semantic network was generated that allowed for the identification of the emerging categories and subcategories, as illustrated in Figure 1.

Figure 1 Semantic Network Disrupted school coexistence.

Note: The figure presents the categories and subcategories derived from the results of the opinion survey.

Discussion student opinion survey

Once coding was completed using Atlas Ti 7.0 software, emerging categories were identified and will be analysed below.

- **Disrupted school coexistence**

From the results of the opinion survey administered to students during the diagnostic phase, the presence of aggressive behaviour among students was identified, which impacts on their school coexistence. Some of the most significant responses include:

Student 1: Peers often use nicknames and resort to verbal aggression instead of engaging in a dialogue...

Student 12: I have experienced cyberbullying, as they make fun of me because of my weight, do not allow me to participate and exclude me...

Student 23: Some classmates show disrespect, even towards teachers. They sabotage online classes and have conflicting interpersonal relationships with other students...

Student 8: Empathy is low among peers. They show no interest in the suffering of others and do not practise ethical values...

Student 5: Despite our youth, we face problems. It would be beneficial if we were taught strategies to solve them...

Students also stated that they do not have a detailed understanding of the school's coexistence manual and that teachers do not implement measures to reduce incidents of aggression and disrespect among peers. They consider it imperative to introduce strategies aimed at improving coexistence in the school environment, noting that only occasionally do teacher coordinators make an effort to foster an environment based on communication, collaboration and ethical principles, with the aim of strengthening relationships both between teachers and students and between students themselves and their families.

- **Practice of ethical values absent**

Students point out that, in the school environment, even when lessons take place in virtual environments, ethical values are rarely put into practice. They note that some classmates do not use expressions such as "please", "thank you", "good morning" and the like. In addition, they note that some of their peers are impulsive and lack good habits and appropriate behaviour.

Students also mentioned that inappropriate behaviour and sometimes lack of order in the virtual classroom affect their ability to pay attention in class, which has a negative impact on their academic performance. Some relevant responses include:

Student 14: During classes, even if they are virtual, some classmates sabotage and make annoying jokes. They do not mute their microphones, which generates noises that make it difficult to concentrate. .....

Student 18: In the sixth grade, it seems that most of the students are completely unaware of ethical values. Many of my classmates are rude in their speech and often use foul language. Sometimes I feel exhausted by such lack of discipline. .....

Student 13: I hope that taking part in this research will help us to improve our behaviour through the appropriation of ethical values...

Student 22: As young people, society expects us to be role models. It is time to learn to live in community and put ethical values into practice at all times, and this is something that we can learn from our teachers. .....

In general terms, during the analysis or diagnosis phase, it was observed that students have difficulties in fully understanding ethical values in the social, school and family contexts. Moreover, from their comments, conflictive situations have been identified in their school coexistence that sometimes affect it negatively. In these situations, dialogue and the application of ethical values and good practices that could strengthen relationships between teachers and students, as well as among students themselves, are often neglected.

- **Phase two**

Based on the results derived from the diagnostic phase, a technopedagogical strategy was designed that incorporated educational multimedia as a means of transmitting knowledge related to ethical values in the social, family and school environments. Students focused on watching videos, followed by discussions and the exchange of ideas to build knowledge in a collaborative way. In addition, students participated in a virtual forum as part of this strategy. It was observed that they showed a high level of motivation during the development of the various activities proposed.

The activities of the didactic intervention strategy were carried out in a total of 16 sessions, each lasting two class hours. The main objective was for students to understand the fundamental concepts of ethical values and to recognise how to apply them in different social contexts, as well as the implications when they are not applied. Figure 2 shows the graphical interface of some of the activities designed to strengthen the understanding of ethical values.

Figure 2 Interface of activities to promote and strengthen ethical values.

Note: The figure shows the graphical interface of some activities designed to strengthen the understanding and application of ethical values in social, school and family contexts.

Se creó un ambiente de aprendizaje innovador utilizando lenguaje HTML, donde se incorporaron recursos digitales que incluyen elementos de multimedia educativa con el objetivo de mantener la motivación de los estudiantes.

- **Phase Three**

After designing the techno-pedagogical strategy of didactic intervention, it was implemented. The conceptual understanding of ethical values and the execution of the practical activities were carried out following the Blended Learning model, as tasks involving students and their families were assigned at home to encourage family participation.

The aim of the integration of educational multimedia was focused on giving students autonomy in the acquisition of ethical values. The homework assignments were adapted to each student's learning style, as illustrated in Figure 3.

Figure 3 Development of the techno-pedagogical strategy for didactic intervention

Note: The Figure exemplifies the implementation process of the pedagogical innovation strategy focused on the internalisation of ethical values in social, school and family environments.

In order to assess the changes, improvements or challenges experienced by the students in relation to the acquisition of knowledge related to ethical values, the participatory observation technique was used through a systematic record in field diaries.

As a result of the implementation of the pedagogical intervention strategy, which focused on the use of educational multimedia resources, significant improvements in the students' understanding of ethical values in the social, school and family spheres were evidenced. These improvements were manifested in three dimensions specifically:

- **Personal Dimension:**

The use of educational multimedia resources generated a positive change in the students' attitude towards learning in the area of ethics and values. Students showed greater interest and motivation in the activities related to these topics, in contrast to the lack of enthusiasm they had previously expressed in relation to traditional teaching methodology and resources. In addition, the relationship between teachers and students was strengthened, and a more courteous treatment of each other was observed. Friendships between students were also fostered through these activities.

- **Cognitive Dimension:**

The integration of multimedia resources allowed students to strengthen cognitive processes such as analysis. They were able to examine each ethical value in depth, understand its meaning and, above all, identify concrete actions to apply them in practice. Learning was not limited to memorisation, but was enriched by integrating previous knowledge with new knowledge, which facilitated meaningful learning. Moreover, by addressing real-life situations, students were able to contextualise their learning, recognising the differences between applying ethical values and not doing so.

- **Social Dimension:**

This research contributed to transforming the pedagogical approach at St. Thomas Aquinas Educational Institution, especially in the area of ethics and values in basic education. It moved from a traditional teaching method to the integration of educational technology, which motivated students and allowed teachers to change their pedagogical practices. This innovative pedagogical approach had a significant social impact on the educational community in the municipality of Duitama, Boyacá. Although there are few experiences that integrate educational technology for pedagogical purposes in this area, the positive results suggest that this didactic strategy could improve educational quality and student performance. Therefore, this educational experience could be replicated in other schools facing similar challenges in the area of ethics and values. The integration of multimedia resources in other disciplines of the school curriculum could also be considered to enrich the educational process.

- **Phase Four**

In this phase of the research process, after implementing the techno-pedagogical intervention strategy, the main objective was to interpret the perception of the students who participated in the study about their educational experience. To achieve this purpose, a final opinion survey was conducted, and subsequently, the results were analysed using the qualitative research software Atlas Ti 7.0, which resulted in the identification of the following categories:

- **Development of cognitive processes**

Students expressed their satisfaction with the use of multimedia digital resources as part of the strategy to improve ethical values. Some of them mentioned that the use of these resources gave them the opportunity to foster their creativity, while others highlighted more effective communication through tools such as the online forum. Overall, the introduction of pedagogical innovations in the school environment allowed students to develop cognitive skills, such as argumentation, reflection and creativity, which contributed to the strengthening of ethical values and, consequently, to the improvement of their interpersonal relationships and school coexistence.

- **Improved academic performance**

The students involved in the research expressed their satisfaction with the educational experience in which they played an active role in the construction of their own learning. They argued that they have a preference for working with the support of ICT rather than following the conventional activities of a traditional classroom environment. They emphasised that the educational multimedia resources generated a dynamic learning environment in which they were actively involved in tasks related to the acquisition of ethical values in social, school and family settings.

- **Interactive learning**

The sample students highlight that the use of multimedia resources has had a significant impact on the redefinition of learning activities. This has enabled them to assume a central role in their training process. In their opinion, educational innovation through ICT gives greater meaning to the educational process, as activities are carried out with enthusiasm, unlike conventional methodologies. In addition, they point out that ICT provides ample opportunities for communication, which enables them to strengthen their ethical values and cultivate positive interpersonal relationships with their teachers and peers.

- **Willingness to work**

The use of ICT, in particular the FORVAE (Training in Ethical Values) website, provided students with the opportunity to carry out the assigned activities in an engaging and stimulating way, fostering their creativity. The students surveyed expressed that the use of interactive programmes and tools motivated them and facilitated their learning process compared to the traditional textbook-only approach in the classroom. They also highlighted that ICT enabled them to access relevant information to complete the proposed tasks. Specifically, they expressed their wish for these technologies to be integrated into all areas of study, as they consider them to be a pedagogical strategy that promotes active participation in educational activities.

The construction of knowledge related to ethical values was carried out collaboratively, with the participation of the teacher, occasionally the parents and the students themselves. During the implementation of the pedagogical strategy, constant communication was maintained. From this study, it can be concluded that the use of virtual communication channels in the school environment encourages interaction between students, teachers and classmates, allowing them to express their emotions and feelings through non-verbal means, such as chat and forum. This shows that these communication channels, through codes, languages and meanings, have the potential to help students develop stronger social skills, which, in turn, improves school coexistence and their ability to cope with societal challenges.

Discussion

Teaching in the area of Ethics and Values Education is sometimes limited due to the use of traditional methods, which restricts students' active participation in understanding and applying ethical values in various social contexts. It is therefore relevant to reconsider didactic approaches for this purpose.

The incorporation of educational multimedia as a learning strategy has generated significant changes in students' attitudes and behaviours. Collaborative activities based on multimedia have improved interpersonal relationships, as they have been carried out in a mutually supportive environment, which fosters communication among students. In addition, it was observed that students in virtual learning environments, through audiovisual productions, were able to better understand the concepts of ethical values and how to apply them.

As for the multimedia resources used in the teaching strategy, students have seen them as an opportunity to communicate with their classmates and teachers and to resolve controversial situations in a dialogical way. This, in turn, has contributed to the development and strengthening of ethical values, as conflict resolution has focused on the students' ability to listen to others and understand different perspectives, as Chaux (2004) argues.

The educational experience has strengthened ethical values in students and improved school coexistence by reducing conflict situations. The presentation of real-life cases involving the transgression of ethical values has allowed students to analyse, outline and propose solutions using various digital multimedia resources.

Overall, this research supports the effectiveness of educational multimedia in the acquisition of ethical values. In order for students to internalise these values and apply them in their daily lives, it is essential to rethink the didactics used in the teaching of Ethics and Values Education, abandoning the theoretical approach and encouraging the analysis of exemplary situations that promote debate, argumentation and reflection among students. These cognitive actions can become effective strategies for the understanding of ethical values.

Conclusions

Social changes towards a dignified and just society, characterised by positive relationships, healthy coexistence and peace, must begin in schools. Therefore, it is essential to educate students to become well-rounded citizens with their own values and respect for the values of others, through the practice of ethical values. This was the objective of this study, which focused on strengthening ethical values in social, family and school contexts through the use of educational multimedia. From this experience, the following has been concluded:

Harmonious living in educational environments is possible if ethical values are not only understood conceptually, but also lived and applied in the various areas of students' lives: social, family and school.

In the daily life of schools, situations arise that disturb healthy coexistence, many of which originate in the lack of practice of ethical values. Therefore, it is crucial that students acquire habits and customs that allow them to establish healthier interpersonal relationships with their peers and teachers. Only through the practice of values can peaceful coexistence in the classroom be achieved.

In today's society, the application of ethical values is often neglected, resulting in situations that undermine human dignity. There is an urgent need to revalue these values in educational institutions.

Despite changes in society, ethical values have existed and will continue to exist. However, it is necessary to rethink how they are taught, and it is not enough to provide a theoretical conceptualisation. It is essential that students understand and internalise them in order to apply them in practice.

Traditional teaching methods have not proven to be effective in teaching ethical values in a changing society. Teachers, as key actors in the educational process, must seek meaningful strategies and methodologies that enable students to learn these values as a means for peaceful coexistence.

The study showed that when ethical values are taught using traditional methods, the understanding and application of these values remains at a basic level. In contrast, the use of active methodologies, such as educational multimedia, allowed students to experience situations that illustrated the lack of ethical values. Through reflection and critical thinking, students were able to build their understanding of these values, identify actions to apply them and recognise behaviours contrary to these values.

In sum, the educational experience was meaningful and facilitated the students' acquisition and application of ethical values. Therefore, this methodology can be replicated in other educational institutions facing problems of conflictive school coexistence.

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