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The classroom, a favorable space for strengthening citizen and technological competencies

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Abstract

This article is the result of an investigative exercise called teaching styles and pedagogical use of information and communication technologies -ICT-, for strengthening citizen and technological skills in the classroom, in third grade of primary school; and in teachers in their training process at the Superior Normal School of Quindío (ENSQ), an Educational Institution that aims to publicize the findings of this process during the execution of the research pedagogical practice developed by teachers in training, during IV and V semester, whose objective was framed in the identification of didactic strategies mediated by ICT and teaching styles, in order to develop citizen-technological competencies. That research was carried out based on a qualitative research approach, applying the methodology of action research. This process made it possible to take a look at the challenges demanded by today's society from education, in order to configure from the classroom other relationships around knowledge; and the need to incorporate ICT into pedagogical practice, where the development of technological competencies of teachers must be a task that cannot be postponed.

Key words: Citizen competencies, technological competencies, teaching styles and ICT.

Introduction

The current world demands in training processes more preparation and mastery of knowledge and competencies on the part of both teachers and students; this implies from them capacity for change and adaptation. Thinking about change and adapting to these demands involves visualizing the need to promote pedagogical and didactic processes in classrooms that contribute to developing skills and abilities, not only to access, apprehend and use knowledge and information, which be available to all in an agile way, but also for coexistence, which implies from the school to establish flexible methods and to use tools based on ICT that contribute to the consolidation of critical students, with the possibility of interpreting and transforming their environment, where it is recognized that the computer and other technological available tools can be used to communicate and relate (among ourselves), obtain information, expand knowledge, analyze, interpret, create, re-create, innovate, solve problems; and for the exercise of citizenship, among others. Chaux, Lleras and Velásquez (2004) indicate that training in citizenship:

(It) is fundamental today in any society in the world. However, in our context, this work is even more necessary and urgent, given that Colombia still has one of the highest rates of violence in the world. The same applies to corruption and other social problems, such as inequity and discrimination of various kinds. Sadly, we cannot say that the Fundamental Rights of human beings are guaranteed in our

country. Although, in principle, our Democracy is relatively solid and our 1991 Constitution stands out in many aspects from other constitutions in the world, what happens in the daily life of millions of Colombians is still far from what we expect of a true democracy and from what our Political Constitution proposes. Faced with this situation, it is practically a consensus that education has a fundamental role to fulfill. A transformation in the way we act in society, how we relate to each other or how we participate to achieve the changes required by the children and young people of our society; and that the coming generations (may) receive a training that allows them to exercise their citizenship constructively. (p.10)

Assuming this challenge on the part of education involves some aspects, such as focusing on looking at and working with students, and in turn on the pedagogical practice of teachers, in such a way that be possible to develop scientific, technological and citizen competencies; on the other hand, thinking about teachers' practice requires analyzing, among other aspects, the teaching styles, the latter understood as Martinez puts it:

The categories of teaching behaviors that teachers usually exhibit in each phase or moment of the teaching activity, which are based on personal attitudes that are inherent to them, which have been abstracted from their academic and professional experience, which do not depend on the contexts in which they are shown, and which can increase or lessen

the imbalances between teaching and learning (Martínez, 2007: 89).

The school as scenario conducive to training in competencies

Citizens' competencies

From research processes performed in third grade courses of *Escuela Normal Superior del Quindío*, it was possible to show that the school is one of the different scenarios that has the possibility of promoting the development of citizen competencies, based on the relationships woven in it around knowledge, which is viable if it is possible to transcend from relationships organized by current norms towards relationships/interactions between the subjects that are being co-existent, where the subjectivities are put into play, which according to Espitia and Valderrama are: "Decisive in the construction of social identities, since they expand the need for participation, transform the current political culture and enable the emergence of new subjectivities" (Espitia and Valderrama, 2009: 174).

This way, teachers in their condition of actors (one of them) of the educational process should generate spaces for the intersubjective encounter in favor of citizenship competencies, for which they require, among other aspects, to keep in mind that the students who enter the school today are going through a moment in which they are permeated by globalization, consumerism, ICT, the various types or configuration of families, new social groups established on the network, new forms of communication (chats, *WhatsApp*, video calls), immediate access to information, among other aspects, where borders have been blurred.

Consequently, with the above, it is understood then that the school is no longer a primary issue for the existence of children and young people, because they can access knowledge and information in an agile way according to their needs and desires. A generation that is not configured from identifications of models, styles and experiences of ancient traditions that define the culture, but from the connection and disconnection, for example, of the interfaces games and all those tools that are within their reach, at an increasingly updated and fast way. Before this panorama, there arises the

question: How can the school form for citizenship and coexistence, taking into account the diversity of beings that inhabit it, and its multiple interactions? Perhaps an approximate answer is how Castañeda and Cáceres expose it, protecting diversity, since they affirm:

Diversity is part of the human condition, and as such each person is unique, singular and unrepeatable, even if there are characteristics of the species that resemble us. "Diversity is a complex reality that is not limited to certain groups of society. In addition to the difference between groups (socioeconomic level, cultures, gender, etc.), there are individual differences within each group (abilities, interests, motivations, conceptions of the world) and within each individual (people acquire multiple identities throughout life, through the coexistence of new experiences)" (Blanco, 2009). Therefore, obviating these differences when thinking about children from early childhood can lead to inequalities in the access and enjoyment of resources, the empowerment of the human being and, ultimately, around what a person wants to be or do. But still, in addressing such differences, public policy can impregnate inequalities by favoring ones more than others, or by restricting the action options of certain groups, when in reality it should be designed to guarantee the exercise of the rights of all citizens. (Castañeda and Cáceres, 2012: 6).

For that reason, the school should be thought of as a place to enable relationships that empower the being from the development of civic competencies, where students are valued under equal criteria (equity), treated as human beings with diverse faculties, with similar shortcomings, yearnings and life projects; where shared values are developed, among other aspects, giving way to the development of their capacities to freely choose, to be autonomous and with the faculty to build themselves based on their beliefs and desires, and the relationships that they establish with the others, aspects that will contribute to the configuration of more just, tolerant and respectful societies, because as Chau and others affirm, in the school:

"The members of the educational community participate effectively in important decisions for the school, building harmonious and peaceful relationships, recognizing the richness of difference and committing to the promotion of human rights" (Chau, Lleras and Velásquez, 2012: 84).

Technological -digital competencies

Speaking of technological or digital competencies in education implies analyzing the relationship with managerial and citizen competencies, since both pose the need to develop diverse cognitive, emotional and communicative skills in the subjects. In front of the first ones, the managerial ones, Maduro and Rietveldt pose that they are: “A set of elements or factors associated with success in the performance of people” (Maduro and Rietveldt 2009: 44). Which in turn affect the processes of construction of citizenship; in addition, it would be expected that a competent citizen also be a digital citizen; this implies among other skills, an appropriate use of ICT, where respect and value for others, for knowledge and context are evident, since technology should not only contribute to satisfy needs and solve problems of humanity, but also to transcend towards communication and the recognition of the other and others, based on rules of behavior in virtual environments or cyberspace, access and use of the information available on the web in a responsible and ethical manner, among other aspects, that lead to the configuration of societies or communities that self-regulate for the common welfare; therefore, Bauman points out:

If there shall be a community in a world of individuals, it can only be (and has to be) an interwoven community based on sharing and mutual care; a community that attends to and takes responsibility for equality, the right to be human, and equal opportunities to exercise that right. (Bauman, 2009: 147).

A mutual care that involves putting citizen competencies into play in all contexts, including cyberspace and telecommunications; in other words, the use of TICs, since these have generated other modes of communication and relationships among subjects; in this case, teacher-student. That is why it is necessary that from the school environment, teachers recognize these new elements that make up the communication that circulates in the classroom; in words of Torres:

The good use of information and communication technologies in the school environment depends on the quality and the teaching aptitude to assume the new pedagogical challenges posed by their introduction in school and the classroom. (Torres, 2000: 20).

The current educational dynamic requires the appropriation of ICT; as Granados affirms:

The students currently present in the classrooms are not like those a few years ago, since they are (now) immersed in the management of some technological tools that can facilitate their teaching-learning process, they have cell phones, graphing calculators, mini laptops, tablets (Granados, 2015: 145).

The school and the classroom are scenarios where students appropriate the discourse and languages necessary to achieve literacy; as Bibiana Vélez says: “*We are not wrong to say that education is the discourse of each era, and that language is the enunciation of the social goals that are replicated in the classrooms*” (Vélez, 2017: 29).

The school: citizen and digital training

Taking into account that the school makes possible citizen education from its various processes, and that it seeks to achieve better relationships, actions and ways to resolve conflict in an adequate and constructive manner, among other aspects, the Ministry of National Education of Colombia proposed the *Curricular Standards in Citizen Competencies*, which have forged the route for citizenship training, a training that is even more necessary today given the conditions of our context, because we cannot overlook that Colombia is still classified as one of the countries with high levels of violence in the world. Thinking about training in citizenship implies the mutual care of all the members of the community, be it a country, school or sector, among others; as Bauman (2009) puts it, an intertwined community, taking into account that mutual care is decisive, seeking equality as human beings and the possibility of claiming it.

Then, generating processes of citizen construction in and from the school allows betting on human development, where the other and others be recognized as subjects of rights and duties, with psycho-social, cultural and ethical-political capacities to relate with others and their environment, a context that is currently facing relationships mediated by ICT, where the physical closeness to the other and the others is increasingly distant, as emotions and feelings are expressed in the vast majority of cases through social networks, chats and emoticons, among others. This panorama generates a new challenge to the school in terms of citizenship training, leading it to investigate how to take advantage of ICT to train not only in academic knowledge, but also in citizenship and

technological competencies, the latter understood as the ability to select and use in an adequate, pertinent, responsible and efficient way a variety of technological tools; as Gros and Contreras state:

The training of new generations cannot be left out of the digital society and, as we have already mentioned, it is not only about providing access to ICT, but about training for proper use. The digital society has created new forms of literacy that we cannot ignore if we think that citizenship training also involves participation in the network; communications through electronic means are important elements for the development of citizen competencies (Gros and Contreras, 2006: 107).

It is from these new forms of relationship that pedagogical practice should be conceived, which should be focused on solving everyday situations in the classroom and the possibility of generating others around knowledge, previously agreed upon, where, as Trujillo puts it, «*The activity of agreement has meaning for those who execute it, but it also has meaning for its recipients, achieving the proposed goals is the shared commitment, the responsibility and the sense of commitment are increased*» (Trujillo, 2005: 56); the above will lead to form in citizenship and digital citizenship from the classroom.

Teaching styles, citizen and technological competencies

Today, the school is called to the configuration of pedagogical practices that allow students not only to approach knowledge, but also to face uncertainty, chaos and loneliness, among other aspects, a task that is possible as long as it is conceived as human, socializing and integrated, where the voices of children, youth and teachers take place, a democratic school; therefore, a teacher who be committed to a democratic teaching style, where oppression has no ground, where the teacher is not the only possessor of knowledge, to what Freire called banking education:

Knowledge is a donation of those who judge themselves wise to those they judge ignorant. A donation that is based on one of the instrumental manifestations of the ideology of oppression: absolute ignorance, which constitutes what we call alienation from ignorance, according to which this one is always (present) in the other (Freire, 1992: 77).

It is understood that knowledge is the product of interactions, and that it is constructed and re-built; it is possible to democratically establish relationships in the school. That is why the classroom has a privileged place in the construction of citizenship competencies from the established relationships, where teachers are called to learn new knowledge, to experience them with their students in a way that they manage the appropriation of it from experiences and processes that they encourage; as Ruiz and Chaux state:

Training on citizenship skills is based on communication (Dialogue) and seeks the development of moral sensitivity, moral judgment and critical thinking to guide action. The education that enables the development of civic competencies aims at influencing the will of individuals to act under the idea of participating in the construction of a truly democratic society in which everybody be considered for their human dignity and have the right to participate in the public sphere in conditions of equality (Ruiz and Chaux, 2005: 57).

On the other hand, it is necessary that from the educational context, propitious spaces be generated in order to establish social relations that enhance the intersubjective encounter, where the voice of all its members take place, even from the use of technological tools, given that some students have found that in this way they manage to communicate in some way with others and bet on a positive school climate; in this regard, Glebber indicates: “The relationships in the group-classroom and in their case within the school environment are closely interconnected with each other and they can promote a good internal climate or, on the contrary, cause discomfort and distrust and aggressiveness” (Glebber, 2000: 29).

That aspect, in light of the dynamics of the current world, also requires to articulate into the classroom other forms of communication that are given from the use of ICT, where the work of the teacher from a commitment to a democratic teaching style form for the use and appropriation of technological tools that contribute to learning and the development of citizen and technological competencies. Which implies that teachers also enhance their technological skills to give pedagogical use to ICT. In this regard, the Ministry of National Education formulated in 2103 the ICT skills that teachers must develop, in order to bet on pedagogy and

a didactics that lead to processes of educational innovation; they are:

Technological competence: ability to select and use in a relevant, responsible and efficient way a variety of technological tools, understanding the principles that govern them, the way to combine them, and their use in the educational context.

Pedagogical competence: ability to use ICT in order to strengthen teaching and learning processes, recognizing the scope and limitations of the incorporation of these technologies in the comprehensive formation of students and in their own professional development.

Communicative competence: ability to express oneself, to establish contact and to interact in virtual and audiovisual spaces through various media and with the use of multiple languages, synchronously and asynchronously.

Management competence: ability to use ICT in the planning, organization, administration and evaluation of effective educational processes; both at the level of pedagogical practices and institutional development.

Investigative competence: ability to take advantage of the possibilities offered by ICT for knowledge management (Ministry of National Education, 2013: 32-33).

This is how the challenge for teachers is not only to bring ICT into the classroom, but also to appropriate them, in order to give them pedagogical use that makes it possible to develop citizen and technological competencies in students, based on the diverse relationships that are established, hopefully from a style of democratic teaching. If students use ICT properly, they may be able to use it not only to access information or knowledge, but also to communicate assertively and respectfully with others; cyberbullying can be prevented, among others, by betting on citizen competencies.

In the same way, it is necessary that teachers analyze in a more detailed way the context of their classroom and their community, in order to achieve evidence of how the technological tools are being used, as it is stated by Guzmán and Aguaded: “It happens that there is a lack of real debate and socio-educational knowledge about the didactic and curricular use of the same” (Guzmán and Aguaded, 2011: 202).

Consequently, with the above, the role of teacher has changed, and following Freire, it is necessary a:

Critical educator, committed to life: [...] who cannot be a neutral man in front of the world, a neutral man facing dehumanization or humanization, facing the permanence of what no longer represents the ways of the human or the change of these paths [...] The option that makes [he pointed out] will determine his role, his methods and techniques of action. It is naive to think of an abstract role, a set of neutral methods and techniques for an action that occurs among men in a reality that is not neutral (1979: 16-17).

This new challenge has a great option to be configured from the classroom, from the relationships that are woven around knowledge, from the staging of a democratic teaching style; and hopefully, mediated by the pedagogical use of ICT, where there are required the attitude and commitment of the teacher; and in turn, that students, as proposed by Sánchez, identify that it is: “necessary in school to learn to share and to be in solidarity with the partner, in a framework of equal interaction” (Sánchez 1997: 102), since the pedagogical relation is not only with the teacher, but with their classmates, and in many cases, they are mediated by ICT.

In turn, Trujillo indicates:

ICT have the ability to transform and offer possibilities for effective intervention to innovate, they train in an essential way to survive in the Knowledge Society, and allow reflexive-critical postures in their use. To attend to the ultimate objectives of education, showing itself as a tool for transformation and social change. (Trujillo, 2011: 4).

That is why from the Ministry of Education, from various policies, it is committed to the training of teachers, so they can face these challenges of effectively incorporating ICT in their pedagogical processes, in favor of the quality of education; and therefore, of training in citizenship and technology competencies; UNESCO 2010 (cited by Colombia Learns 2013):

It sets a precedent in this regard: ICT, as tools of knowledge management and facilitators of global communication, play an important role in the acquisition of knowledge (...) since they can improve learning opportunities, facilitate the exchange of scientific information and increase access to linguistically and culturally diverse contents. (Colombia Learns, 2013: 12).

Materials and methods

Taking into account that this research was carried out based on research pedagogical practice, it was framed under a qualitative approach, applying the methodology of action research, since it was sought the transformation of the classroom practice, the improvement of learning and the development of citizen and technological competencies, where the subjects became involved by contributing to this improvement from their reflections and proposals. The participants of the project were teachers in training process and third grade students of primary school of the ENSQ, taking a sample of 4 groups from the total of the third grade courses of the educational institution, and 10 teachers in training, there were used research techniques such as surveys, participant observation and field diaries, which allowed us to configure and develop the stages of the Action Research, namely: problem identification, preparation of the plan, implementation and evaluation of the plan, and finally, feedback.

In the identification phase of the problem, the teachers in training from the pedagogical practice detected the need to train third grade children in terms of citizenship competencies, since they showed in these groups that the relationships established by the students among them and with their practicing teachers showed some features of intolerance, disrespect and poor management of some rules of urbanity, sometimes generating conflicting situations in the co-existence in the groups (these aspects were detected by teachers from the observations made by them, and were registered in their respective field journals).

This first moment allowed several discussions to take place in the working group (the teacher of pedagogical practice and teachers in training) around the way of dealing with the detected problems, establishing that it was pertinent to train citizenship competencies from the different areas, and the possibility of doing so using ICT, framing the whole exercise from the democratic teaching style, since teachers in training consider that this encourages citizenship from the same teacher; on the other hand, it was analyzed that by forming citizenship, it could be formed in digital skills, and these in turn will help us to prevent cyberbullying.

This way, the planning stage began with the collection of information (preparation of a

diagnostic survey aimed at grade 3 students) to identify if the children had access to computers or tablets at home, if they had access to Internet and what uses they gave to these teams. It was evident that the vast majority of children had computers in their homes; and some of them, tablets. With access to the internet, most of them declared using them for playing; only 10% use them to perform tasks assigned at school. That (finding) made it possible to identify that the master teachers in the classroom (third grade) did not have an ICT tool established to strengthen the learning processes and/or train in citizenship or technological skills, among others, (which) in turn allowed to establish that it was necessary to identify the ICT competencies that teachers in training must develop, in order to incorporate ICT into their classroom processes.

This way, there were started the whole theoretical foundation and the recognition of antecedents, which contributed to formulate actions to be carried out. It was found out that it was necessary to articulate ICT to the classroom, and create or develop tools based on new technologies, which would enable not only the appropriation of knowledge, but to train in technological and citizen competencies, everything from a commitment to a democratic teaching style.

For the above, there were established the criteria to be taken into account when using some technological resources, which were given by easy access and mastery by both the teacher and students, language management according to the age of the students, types of equipment with which the institution counts, and those that the students possess, identification of ICT tools that require or do not a connection to the internet and that are friendly; this understood as tools that attract attention and children like.

It was then established the elaboration of the plan or the action: starting with the use of *PowerPoint* slide presentations and educational videos, where the objective was to identify the use that could be given to them, in order to strengthen knowledge; various strategies were generated to work with the students, taking them to the formation of citizen competencies, referred to: paying attention to what is exposed in *PowerPoint* or video, listening to the points of view of others at the time of reflection or analysis, waiting their turn to participate, analyzing what is proposed through the resource of agreement with the theme that was being worked

on, asking for the word, not interrupting the other, and treating their peers with respect. In the first exercises using these tools, it was evidenced that students showed themselves motivated by knowing the content of the presentations, and especially the videos; but they did it in disorder, everybody wanted to be located in the front (although they could see and hear, if it was the case, from anywhere in the classroom), they all spoke at once when analyzing the video, rarely asked for the word, and the teachers in training had to constantly organize the groups in order to continue with their work. It was evident here that using technological resources facilitated student learning, and it was an opportunity to continue forming citizenship.

Once some citizenship competencies were achieved with the ICT tools brought to the classroom in order to strengthen knowledge, the use of tablets in the educational institution began (where the fear of the teachers in training was evident in the beginning, since the management and use of the tablets was their responsibility); however, it was seen as a great opportunity to train citizenship, develop ICT competencies: proper handling of the tablets, entering, using and exiting the indicated applications in a correct way, searching and accessing information, applying some tools of the tablets, according to indications of the teachers in training, articulated to the themes that were being worked on.

The use of tablets in the classroom generated a positive impact on third grade students, since they showed great interest in knowing the work to be done, they evidenced that could develop various activities in them, and demonstrate not only knowledge but mastery of technological skills. For teachers in training, it was significant because they showed that the students, at being motivated by knowledge from the interaction with tablets or computers (students were taken to the systems rooms when these devices were being used by other groups), they were able to develop the expected competencies and a significant learning; in addition, it allowed them to stage a democratic teaching style. (This is evidenced in the report of the observations made, and the records in the field journals.)

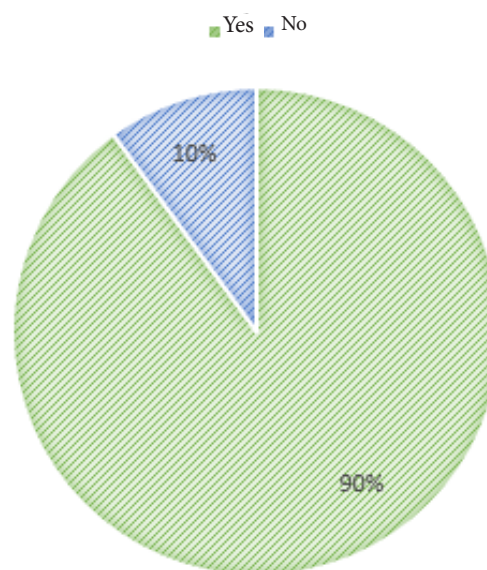
After giving pedagogical use to ICT tools in the classroom, in order to strengthen knowledge and the development of technological and citizenship skills, the teachers in training decided to apply a

survey to another 10 teachers in training, in order to know their technological competencies (defined by the MEN), since they considered that from this exercise that was being developing, it was necessary that teachers in training and in practice (were able) to develop ICT skills, in order to be able to incorporate them into the classroom, because it is not only about changing in the classroom the board by a computer, a presentation or a video, in order to account for the technological competencies and the appropriation of ICT in the educational process.

These surveys showed, among other aspects, how it can be evidenced in the following graphs:

Graph 1. Answers of the teachers in training of the PFC, in front of the incorporation of the ICT in their classroom processes

Do you use ICT for developing your classes?

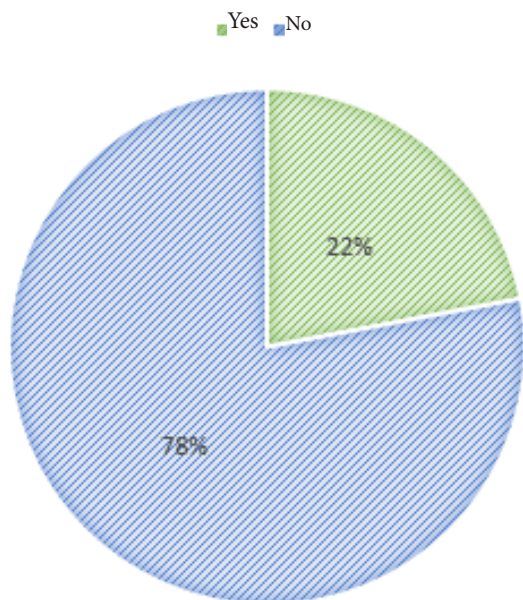


Source: self-made

90% of the students of the complementary training program use technological tools to carry out their classes, while 10% express that they do not use them because they do not have easy access to them, being the most used technological artifacts for them: Video beam, tablet, dvd, computers or tv. That allows us to deduce that it is still conceived that incorporating ICT into the classroom is to use some technological tools.

Graph 2. Response of teachers in training of the PFC in front of the development of digital contents to be developed in their teaching processes

Have you designed virtual contents in order to work with your students?



Source: self-made

This graph shows that 22% of teachers in training have designed digital content such as: didactic games, workshops, animated videos; while 78% have not designed this type of virtual content to work with their students. This invites us to reflect on the need to strengthen ICT training in the academic processes of the PFC, for the development of virtual learning environments, which may lead to the development of the technological competencies proposed by the MEN.

In order to continue with the evaluation stage of the plan, the teachers in training analyze that the tools used have favored the construction of knowledge, ICT and citizen competencies, but that it is necessary to bet on designing and/or using ICT tools that allow interacting with the students inside and outside the classroom, in such a way that they could continue to develop cognitive (knowledge), citizen and technological competencies, not only from the investigative pedagogical practice, but also from the use of the tool by the teacher in charge of the course, who could continue taking advantage of this resource in favor of significant learning and others that he considers.

Consequently, with the above, the teachers in training proposed and designed web pages and *edmodo platform*, for work with students, which

before their implementation were made known to third grade students, which motivated the students to use them.

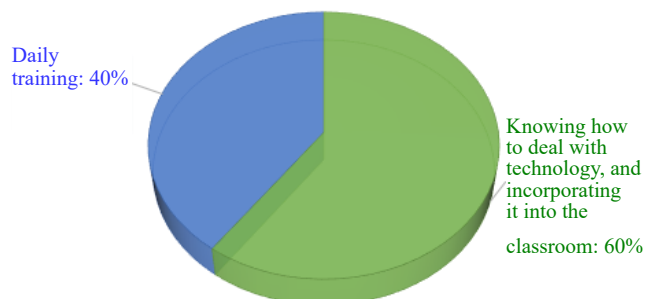
From their implementation (with the) students, teachers in training could observe that the students entered the pages and performed the activities and workshops that were directed to strengthen the academic knowledge and the citizen and technological competencies.

It is important to note that some of the activities on the platforms were carried out in school time and others at home (days were assigned in which they had to work on the platform); however, it was taken into account that those students who did not have a computer at home, or access to the Internet; they carried out their workshops and activities in the classroom, or received a photocopy of the workshop. These resources were used to promote good relations based on mutual respect, where the prevention of cyberbullying was strongly worked on, not mentioning school bullying as such, but indirectly, recommending the use of communication mechanisms only for the academic year and that messages should only be positive, in favor of a healthy coexistence, since here the civic competence is highlighted.

Arriving at the feedback or reflection stage, the findings of the process carried out were analyzed, for which a survey was applied to third grade professors of the ENSQ, in order to know their level of competence for the use of ICT, where it was evidenced, among other aspects:

Graph 3. Teachers' responses to the perception of teachers' technological competencies

What technological or digital competencies do you consider teachers must have or develop in order to incorporate ICT in the classroom?



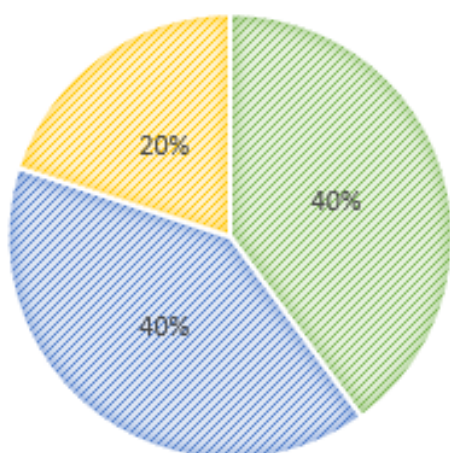
Source: self-made

As the graph shows, it can be seen that 60% of teachers consider it important to know how to manipulate technology and incorporate it into the classroom, and 40% of teachers believe that it is important and necessary daily training, in order to make this process easier. In addition, they indicate that in order to work with ICT, it is important to be well trained in the subject, and to know how to use the tools in an appropriate way.

The following graph shows the difficulties that teachers find when implementing ICT in the classroom:

Graph 4. Teachers' response to the perception they have of the difficulties for incorporating ICT into their classes

- Internet connection.
- Improper use of technological tools.
- Amount of technological tools.



Source: self-made

In this graph, it can be seen that 40% of teachers consider that one of the biggest difficulties when implementing ICT in the classroom is the Internet connection; 40% consider that it is the misuse of technological tools; and 20% state that the greatest difficulty is the amount of some technological tools. Similarly, they say that although there are some tools, sometimes they do not properly work, or they do not know how to handle some contents, which creates fear and insecurity in teachers to work in the classroom.

On the other hand, it was necessary to involve the parents, for this reason, it was used the parents'

meeting for the third academic period, in order to make them aware of the process carried out from the investigative pedagogical practice, and the mechanisms used from ICT to develop academic, citizenship and technological competencies in their children, where it was emphasized that accompaniment at home is fundamental, that it is important that they know what their children do and how they use the computer, tablets and the internet in favor of their integral formation. This is how the parents were told how to access the web pages or edmodo platform, this exercise was very fruitful given that the participants were motivated by the work that is being done and the day after the meeting it was evident that more children from the third grades visited more pages and platform.

On the other hand, in this stage of reflection and evaluation, it was evident that the teachers in training need to further enhance their technological competencies, in such a way that they can effectively take the ICT to the classroom and establish other communication and training mechanisms through them, and achieve significant learning, as well as contribute to the proper use of ICT by students.

Conclusions

To ensure that the classroom becomes a favorable place for the development of citizenship and technology skills, it is necessary that the activities implemented through ICT be articulated to the contexts and the daily life of the students; in addition, it is necessary to forge relationships based on dialogue and mutual respect. Which is achieved from a democratic teaching style.

From the pedagogical use that teachers give to ICT, it is possible to build new knowledge and create teaching strategies to train citizenship and technology skills, thus generating a space in the classroom conducive to comprehensive training.

The action research made it possible to reflect on the positive impact of the democratic teaching style mediated by ICT in the formation of citizenship and technology skills in third grade children, thus promoting a classroom conducive to co-existence and recognition of the other.

The teachers in training of the Superior Normal School of Quindío need to develop their technological competencies, integrating innovative ones, according to the levels established by the MEN.

From the implementation and design of technological tools by teachers, such as web pages and edmodo, it is possible to train primary school students not only in knowledge, but in civic and technological skills, and prevent them from improper use of these and other tools.

If the school forms citizenship in addition to knowledge from the pedagogical use of ICT, it will promote intersubjective relationships based on values; and bullying and cyberbullying can be prevented, which in the present time is manifested in the vast majority of educational institutions.

It is recognized that today it is required that teachers develop and enhance their technological skills for the achievement of significant learning in students, understanding that being innovative is not just changing the board or texts by videos, presentations; or using a video beam or computers.

The pedagogical use of computers and tablets has been effective for the development of citizen and technological competencies that students must possess, since this achieves an adequate or favorable environment for the relationships that are established.

When working with the edmodo platform, students acquire a responsible management of the contents published in it and enrich their knowledge through different strategies, such as: crossword games, word searches and online questionnaires, among others.

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