

How to Cite:

Zea, M. P. C., La, C. I. A. O., & Calvente, A. C. (2022). Social need for citizenship education in pre-university students. *International Journal of Health Sciences*, 6(S3), 11311–11326. <https://doi.org/10.53730/ijhs.v6nS3.8669>

Social need for citizenship education in pre-university students

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Abstract---A society transformed by science and technology requires competent citizens who can handle different scientific and technical knowledge. The purpose of this article is to reflect, from the STS perspective, on the social need for the treatment of citizenship education in Pre-university Education students. A non-experimental methodology was used, with an exploratory-descriptive scope, using empirical methods such as the survey and the interview. Eight teachers and 30 students of the 11th grade belonging to the IPU: “Roberto Ramírez Delgado” of the municipality of Niquero participated. The results obtained demonstrate the need to prepare individuals capable of assuming the challenges of society, the realization of new scientific research related to citizenship training and social change lies in introducing a model and a pedagogical strategy structured in phases, directions, and actions to concretize the theoretical postulates that propitiate an adequate social behavior.

Keywords---citizenship education, science, technology, society.

Introduction

Studies on Science, Technology, and Society (STS) constitute an important guide for understanding the various scientific-technological phenomena that occur in

the social context. For this reason, there is a demand for individuals who are increasingly prepared to take on the challenges that development itself imposes, which is only possible through the implementation of educational policies and projects that respond to quality education. From STS approaches, education has as its objective the scientific and technological literacy of citizens, because to achieve a society transformed by science and technology, competent citizens are required to manage the different scientific and technical knowledge, whether professional, utilitarian, democratic, operative or even metaphysical and playful. Therefore, STS-oriented education is aimed at developing scientific and technological knowledge in students so that they can make important contributions to society. It also provides them with a better understanding of the various social impacts that science and technology can have on society.

As mentioned above, the relationship between science-technology and society is an expression of development, therefore, it involves the sharpening of contradictions and social and environmental impacts that take place in the world. It is for this reason that society demands the formation of citizens with the capacities and abilities to carry out the labor, economic, and social life of a country. In Cuba, as a particular case concerning the rest of the world, a humanistic use is given to science and technology, based on the foundations of Marxism, as well as the work of José Martí, Ernesto Che Guevara, and Fidel Castro; where special attention is given to social economic and scientific-technical development. Despite the scarcity of resources, scientific and technological activities are carried out in a planned manner according to the economic and social development of the country, as well as the needs and interests of the nation.

In the case of pre-university education, students are provided with a comprehensive approach to science, to develop a critical sensitivity towards the social and environmental impacts generated by new technologies, since it is hoped that they will be able to participate in any institutional debate on the subject. Therefore, it requires the formation of students willing to assume the challenges imposed by scientific-technological development as citizens committed to the social progress of their country. However, many socializing elements intervene in the formation of students that do not always have a positive influence: the difficulties of daily life, the cult of foreign brands, and contemporary technological advances have repercussions on their behavior and social practice. It is for this reason that the school is primarily responsible for the citizenship training of future generations.

In the bibliographies consulted on the topic under study, it was evidenced that several authors have made significant contributions, at the international level we can cite the research of García (2016); who has been related to citizenship training from different edges, highlighting its link with cooperative learning from a social perspective, through various meanings given by managers, teachers, and students; as a need in learners and the legal level of society. However, there are shortcomings regarding the work of citizenship training from extracurricular activities, it is not linked to a specific subject, they are directed more deeply towards teachers, limiting the role of students, and study methods are used that

yield little credible results, in addition to not adopting their own and critical criteria regarding concepts such as citizenship and citizenship.

On the other hand, Calderius (2010) focuses his contribution on Cuban universities, agreeing on the need to prepare university students for a correct professional performance as promoters of citizenship. However, these authors have not presented a theoretical-methodological logic that allows the development of citizenship training based on the link with the different social elements. Other Cuban authors offer their theoretical and practical contributions to other teachings, such as Venet (2003), who develops citizenship training from an educational strategy for first cycle students, and Ruiz (2011), who offers a didactic system that contributes to the theoretical-methodological preparation of teachers for the management of citizenship training in Basic Secondary Education. The research examines ways in which teachers act and the need for their ongoing training to ensure correct behavior; likewise, the importance of the link with cultural identity is highlighted. Despite this, the relationship between the individual and the social is not intensely promoted (Miguel Medina Romero, 2021).

Benítez-Arias *et al.* (2018), elaborate on a pedagogical strategy for axiological formation in Pre-university Education, taking into account the school-family relationship. While Expósito-Unday *et al.* (2018), provide an educational project directed toward students who aspire to obtain pedagogical careers and who are inserted within the Pre-University Institution. They take into account in each of the above-mentioned researches the importance they confer on citizenship training at this level of education to ensure the education of students who respond to social interests. However, they focus on the formation of moral values, they do not take into account the civic culture as an element that should be deepened both by the family and the school, since it guarantees a sense of belonging and recognition of duties and citizen rights by the students; the formative systematization, which makes possible the critical vision of the events that occur around the students, is not recognized.

In addition to the above, and taking into account the diagnostic study conducted on the process of citizenship training in Pre-university Education students, it was corroborated that there are limitations in their adequate social behavior. The results are evidenced in the non-compliance of measures determined by the center for the good performance of the same, as is the case of the school rules, the incorrect use of the norms of formal education, evidenced in the lack of courtesy towards teachers and students and incorrect way of dressing, the insufficient collaboration in tasks that lead to the transformation of the social context, the scarce recognition of the importance of citizenship training for their development in the social context, scarce involvement in the development of social activities linked to the national progress and show inadequate behavior in public places. One of the fundamental causes of this situation turned out to be the insufficient and ineffective didactic-methodological approach to the process of citizenship training in Pre-university Education, manifested in the limited articulation of the ways and procedures for its development and the role of students, by not valuing as an essential objective of this process, the relationship between teaching activities and extracurricular activities.

Hence the social need and the relevance of research aimed at the application and use of active teaching methodologies that will contribute to solving the shortcomings and limitations previously mentioned. This has allowed the author to reveal an existing contradiction between the demands of the Pre-university Model in terms of citizenship training, the demands of society, and the manifestations of students in different social contexts. This requires a greater level of deepening concerning the influences exerted by society on the development of scientific activity in the educational sphere, as well as its impact on the citizenship training of Pre-university Education students, which enables the researcher to carry out scientific research in the field of pedagogical sciences to contribute to the solution of the following STS problem: how to contribute to the social need for the treatment of citizenship training in Pre-university Education students? Taking into account what is stated in the STS problem exposed, the influence exerted by society in the formation of citizens according to the historical moment is demonstrated, so the objective pursued by the work is to reflect, from the STS perspective, the social need for the treatment of citizenship training in students of Pre-university Education.

Development

Science and technology from a social approach

The scientific-technological transformations faced by society require rethinking the goals of science education today. In this scenario, Levinson (2010) points out the need to overcome the dogmatic teaching of science to train citizens capable of understanding science-technology-society (STS) relationships and making informed decisions about the consequences of human actions in the environment. Regarding the close relationship between science and technology, it is stated that “science and technology have since ceased to project themselves into life as independent activities, but as an integrated system of science, technology and production, where each of the elements of the system modifies the others, without being able to establish an absolute hierarchical correlation between them, both in the production of knowledge and in the questions they provoke”(García, 2014, p. 129).

Thus, according to Núñez (1999), “contemporary technological society has placed a large part of science in terms of technological priorities” (p. 36). Science has been defined in multiple ways, however, Núñez (1999) states that what is essential is that the concept adopted opens the door to the social study of science. Science today is increasingly oriented towards practical objectives, promoting technological development and with-it innovation, as well as getting closer and closer to the interests of application for economic or social purposes. So, science can mean several things, for example, it can be understood as: a systematic research process and the knowledge resulting from it (1), a body of knowledge ordered in principles, laws and theories that explains the natural world around us: matter, energy and life..., (2) an organization of people (scientists) who have ideas and use methods and techniques to develop new knowledge (3). Modern science from its birth had a clear interest in finding the causes of natural phenomena to technically control their production and to achieve mastery of nature.

In this regard, the author assumes the definition of science by Martínez (1999) in which she states “a multifaceted and complex social phenomenon that is essentially expressed as a specific form of human activity, which manifests itself simultaneously as an accumulative and summary tradition of logically structured and theoretically and/or practically demonstrated knowledge; science is also a special method of knowledge and a factor in modeling man's beliefs and attitudes about the universe and himself; it is constituted, in short, as a specialized social institution, already converted in our time into a powerful transforming social force” (p. 39).

According to the above, science has its expression in the social context and interacts with its most diverse components, both in industry, services and consulting work. Science is an institutionalized professional activity that involves prolonged education, internalization of values, beliefs, and development of styles of thinking and acting; it is a whole culture and should be studied in this way. On the other hand, the revolution of technologies has taken great importance in social development, since they are applied in almost all economic and social sectors. In addition, globalization, information, knowledge and information technologies are terms frequently used by students. Science and technology are called upon to play a strategic role in the development of countries, and their policy and management become decisive in bringing about a gradual growth in their capacity to respond to economic and social demands. In this sense, the construction of indicators that reflect the convergence of science and technology activity with social development becomes a particularly important need for developing countries.

The science-technology-society relationship involves the sharpening of contradictions and social, economic and environmental movements that are generated on the planet, this development deepens the existing polarization between poverty and wealth, which generates an exclusionary social process, where there is no human solidarity or equality, this is manifested in a crisis of human values, which is important in the field of education, where these trends are also manifested with an economistic orientation, which promotes a technocratic and competitive education. According to what has been analyzed so far, science and technology have always been human products and, as the cultural forms they are, they incorporate the values and priorities of the societies in which they have developed. However, their current development is of such magnitude that it has generated radical attitudes since on several occasions it has been attributed as the cause of all the ills that afflict us. Even so, it must be recognized that both are essential for human life.

A true scientific culture implies the development of competencies to achieve the participation of all citizens in decisions related to what is expected, desired and needed from science and technology, therefore, these should not be alien to the commitment and social responsibility. In this sense, the scientific and technical advances achieved lead to the need to improve educational systems to guarantee the preparation of citizens capable of assimilating scientific information and new technologies. Therefore, in the world declaration of “Education for All”, a call is made to raise the quality of educational processes, which implies a challenge for the training of new generations in the use and application of new methods in the

teaching-learning process. The use of new technologies in education is undoubtedly fully justified considering that one of the basic objectives of education must be the preparation of the subject to be a citizen of a technologically advanced society. It is for this reason that the successful incorporation of the New Information and Communication Technologies as curricular content, and also as a didactic means, is essential.

The learning of technology at school has been, in general, something marginal, isolated and of low category; there are several factors that have contributed to this marginality: firstly, the social image, which has traditionally related it to preparation for specific trades or occupations, of a vocational nature and with labor intentions in some branches of production; secondly, the conception of technology as an application of science, which, despite the large amount of empirical evidence that refutes the above, has a strong influence on the structure of the school curriculum; thirdly, the Western cultural vision, which undervalues practical activity and, despite the fact that technology education implies a theoretical-practical relationship, reflection on its importance has not yet had a place in the school; fourthly, the presence of technology education in the school curriculum, which has a strong influence on the structure of the school curriculum; fourth, the presence of information technology and computers in all areas, both everyday and specialized, has led to a strong tendency to consider Technology Education as synonymous with computer literacy or learning computer principles (Rodríguez & Leuro, 1993)

The vertiginous advance of science and technology and their consequent social impact, have changed the perspectives regarding scientific and technological knowledge, and the ways of transmission, construction or development of the same. Particularly in the theoretical conception of the current educational model, the scientific-technological conceptualization is expressed as a determining element and fundamental component so that, to the extent of its knowledge, mastery and application, it becomes a generating principle of independence and sovereignty. Students should be shown that science and technology are accessible and important for citizens since they reflect their desires, interests, and values. Thus, they should be provided with conceptual tools that allow them to understand the world in which they live and engage them with the idea that decisions about the direction of scientific knowledge or technological transformations affect everyone equally. Likewise, to encourage citizens to give their opinions, contrast and judge the different existing alternatives concerning the development of science and technology; to accustom them to find the ethical, political, aesthetic, economic and, in general, evaluative dimensions present in many of the problems presented as technical; and to foster habits of rational discussion, negotiation and democratic decision-making with the concrete problems in which science and technology have social consequences.

Promoting social learning for public participation in issues related to science and technology in the educational context is highly relevant. Likewise, educational institutions are not the only ones where initiatives for the dissemination of scientific culture in favor of citizen participation in science and technology can and should be promoted, but they are one of the most appropriate places to develop actions consistent with these purposes. During the last decades, in many

parts of the world, including Cuba, considerable resources have been invested to improve infrastructures and increase the quantity and quality of teaching materials, as a result of which numerous innovative pedagogical experiences have been carried out.

In this regard, work is being done to revolutionize the education system and, to advance steadily, it is essential to specify the reasons behind the changes and the conditions that make them possible. Because of the urgent need to consider the impact of science and technology on socio-economic development and the welfare of society, and as part of the continuous improvement of the National Education System, work is being done to improve the quality of the pedagogical process to ensure that citizens' modes of action reflect: the quality of knowledge, the development of capacities, skills and habits, and the formation of patriotic and revolutionary convictions. The achievement of these objectives is favored by the use of methods that favor the independent action of the students, either in themselves or in the teaching-learning process.

In Cuba, the social impact of science and technology is a current issue of particular interest, since the development of this activity has as its main objective society and, therefore, the man himself. It has been established that the social impact of science and technology should contribute to raising the levels achieved by the country in education, health, and sports, as well as to the development of the general integral culture of the population, through concrete results. In general, it should support the improvement of the welfare of the population and its quality of life, without neglecting the material aspects related to it, such as food, housing, transportation, communications, and all the economic infrastructure activity that is essential for the country's development. In this research, the author proposes a solution of significant practical applicability due to its transforming capacity related to the STS problem; which as a practical contribution refers to a pedagogical strategy structured in phases, directions, and actions to concretize the theoretical postulates in the improvement of citizenship training in students of Pre-university Education, which favors an adequate social behavior in correspondence with contemporary Cuban society.

The social need for citizenship training in Pre-university Education students

From the philosophical point of view, the dialectical-materialist approach of the Marxist-Leninist theory is assumed, which serves as a basis for the interpretation and explanation of the phenomena and processes of objective reality. The premises of the Marxist-Leninist theory of knowledge allow understanding of the role of practice in the formation of personality as a mode of existence, transformation, and development of the social reality in which the individual interacts. Practical activity is an important process that allows revealing the essence of the objects of the material world as the sole criterion of truth. The value activity is of special importance in the process of citizenship education because in it the student interprets the world taking into account his material and spiritual needs. It is precisely in this form of activity, that the student manifests his interests, motivations and aspirations, with the social environment that surrounds him.

In this social environment, the relationship between the subject-subject and the subject-object takes place. In the subject-object relationship, the student transforms the social reality and transforms himself, achieving an improvement in his formation, however, this is not enough if the subject-subject relationship is not taken into account, that is, the social relationships that take place between students and teachers. In these relationships, there is a transmission and appropriation of knowledge and skills that favor a civic culture. The study of the above considerations indicates that citizenship training is inserted in the individual's system of relationships, which favors their performance as persons; however, sometimes the subject finds himself in the contradiction between "being" and "should be", which response to the link he establishes with the social environment that surrounds him.

The above shows that citizenship education is a process that takes place in a historically determined social context in which there are various educational influences, with the school bearing the greatest responsibility for its achievement, since they have ethical, political, legal, economic, cultural, family and professional implications, which act on the social conscience of the students. Hence, citizenship training responds to a social demand, which is why the sociological foundations regarding the conception of the student to be trained as a social being are correct. In this sense, the conceptions of Blanco (2001), regarding the relationship between education and society, are assumed since citizenship training integrates a broad system of influences that mediate the development of the learner's personality, in which the teacher-student relationship is fundamental to guarantee modes of action following social demands.

Citizenship education is a process that takes place at school, is carried out by teachers, and involves various socializing agents, among them the family, the community, political, social, and student organizations, as well as information and communication technologies and society in general. Special importance is given to the family since it is the creator of habits, norms, customs, forms of relationship and communication, as well as educational patterns that serve as a formative or distorting model of the students' personality; hence Fabelo et al. (2013), give it a special value as the primary form of human organization, within the system of social relations. Together with the family, the community also plays an important role in the system of social relations, since it is the bearer of everything that society has accumulated up to that moment. Blanco (2001) defines it as "the most concrete social environment of existence, activity and development of man" (p. 114)

In this direction, the individual-society relationship is taken into account, or what is its expression: individualization and socialization as parallel processes, in which the first allows the subjectivation of social contents as a purely individualized process, of personal character, in which each student processes reality in a very particular way, contributing the results of his re-creation, as an active social entity, as appropriation by the student of the valid social contents; and the second, its objectification, expressed in communication and forms of behaviors accepted by society (Blanco, 2001). It is society, as a source and framework for action, where the components that are part of citizenship education are strengthened. Baxter *et al.* (2003) point out that "society can be

conceived as the system of relationships created by man and in which he develops his life (...) it is the environment where man lives, works and develops” (p.145). In a broad sense, it is necessary to educate for life in society, hence the need to train responsible citizens from an early age, which highlights the role of the educator as a protagonist in the process of social transformation.

It is indisputable the importance that has gained nowadays the need to promote citizenship training in students to achieve a behavior in accordance with the society that is being built. In this sense, Reyes & Castillo (2011) agree when they state that “the school cannot be preparing for the future social life of citizens if it does not relate the student early on with the social context in which he/she develops. Social life, the family and the community generate concerns and problems that are very different from those they have to solve in the curriculum proposed by the school” (Reyes & Castillo, 2011, p. 34). The above is of great importance in the conception of the citizen and his or her formation since it offers the possibility of understanding his or her actions within the framework of certain social relations.

In the psychological aspect, the genetic Law of cultural development or Law of double formation of development of the historical-cultural paradigm of Vigotsky (1981) is assumed, in which he points out that “In the cultural development of the child, every function appears twice: first, in the social sphere, and later, in the individual sphere; first between people (interpsychological) and then within the child himself (intrapsychological)” (p. 94). During the process of citizenship formation, interpsychological relationships are established between teachers-students, student-student, student-class group, student-family and student-community; which allow the knowledge of the sociocultural context. Intrapsychological relationships take place when the student can absorb that knowledge, taking a decisive role in the motivations, expectations, attitudes and interests. This results in the students of Pre-university Education internalizing and making their everything that was initially transmitted by others, first at the interindividual level and later at the intraindividual level, according to the Social Situation of Development (SSD), taking into account the internal processes and external conditions that influence the students and determine their behavior as citizens.

The combination of internal and external factors, according to the SSD, enables students to establish relationships with objects (subject-object), with people (subject-subject) and with the social context (teachers, family and community); which establishes the regulation and self-regulation of social behavior. Social behavior has been dealt with by numerous authors, among them Ribes-Iñesta et al. (2008). It is worth mentioning that the term is frequently used in psychological research aimed at the Higher Level, however, it is treated to a lesser extent for students of Pre-university Education, so it is necessary to deepen its study in this type of education. In relation to the above, the author assumes the concept of social behavior is given by Howar *et al.* (2011), who state that it is:

The set of behavioral patterns that organize the relationship between the individuals that make up a group, the way it acts, as a whole, with respect to the environment in which it lives, with a purpose of character that makes

it one of the essential keys to the evolutionary process, as it is constantly subject to the variation of selective criteria and, therefore, to the direct selectors of change (p. 14)

The author agrees with the above and also points out that social behavior is how an individual behaves in the course of life, this can be positive or negative, adequate or inadequate for certain norms, taking into account the characteristics of their actions. It is important to consider that, in the process of citizenship training, students experience different interpersonal relationships, which are developed under the influence of the socio-historical and socio-cultural context; therefore, it is necessary for the teacher to know the characteristics of each of these contexts, so that he/she can plan activities that guarantee adequate conduct of the student in each social scenario in which he/she develops. Pre-university education teachers have the mission of carrying out teaching activities that stimulate and favor the collective and personal interests of each student, as well as the development of attitudes, values and convictions; all this knowing the psychological particularities of each student. Students at this level of education should not be oblivious to the changes occurring around them, which is why, in their formation as citizens, the unity between instruction, education and development should prevail.

In the pedagogical order, it is important to analyze that the development of educational work is not done in isolation, but demands close coordination between the different socializing agencies, where the school plays a fundamental role in the integral education of students. Citizenship education begins at home through the family and the community and is perfected at school through different instructional and educational actions. The teaching-educational process that takes place in the school has as its essential purpose the integral formation of the student's personality, it constitutes the fundamental way to acquire knowledge, procedures, norms of behavior and values; that is to say, it guarantees its adequate interaction in the dissimilar social contexts.

In Pre-university Education, this process must be carried out dynamically by the teachers who teach the subject Citizen Preparation for Defense, enabling students to play an active role in each of the socialization processes carried out, guaranteeing their adequate transformation as citizens according to the objectives outlined in the Pre-university Model. In the present research, the process of citizenship training of students in Pre-university Education is based on the principles of teaching (Labarrere & Valdivia, 2002) and the laws of Didactics (Álvarez de Zayas, 1999). The principles of teaching constitute general norms valid at all levels and in all subjects; they are based on the Marxist-Leninist theory of knowledge and pedagogical practice. They make it possible to explain citizenship training in an interdisciplinary way, both in its theoretical and practical expression, since they govern the behavior of students through their daily activities.

For this reason, the research takes into account: the principle of the educational character of teaching, the principle of the scientific character of teaching, the systematization of teaching, the relationship between theory and practice, the conscious and active character of students under the guidance of the teacher, the

solidity of knowledge, skills and habits; in addition to the principle of the audiovisual character of teaching: union of the concrete and the abstract (Labarrere & Valdivia, 2002). Each of the above principles makes explicit the role of the teacher in carrying out the teaching-educational process, taking into account that it can be carried out both inside and outside the educational institution, as long as it fulfills its objective: the training of the new generations consistently and efficiently, according to the requests made by society.

The teaching-educational process, according to Alvarez de Zayas (1999), is “the school formative process that most systemically is directed to the social formation of the new generations and in it instructs, develops and educates” (p. 19). He also states that this process is part of the formative process in general, and has, like the latter, the instructive, developmental and educational functions as a single integrating and globalized process. The training category has been approached by different authors, such as Testa & Pérez (2003), among others. These authors agree that training is a systematic process aimed at preparing man as a social being, with the purpose of his instruction, education and development according to social demands. However, in most of their research, the analysis concerning socializing institutions is somewhat absolute and reduced.

The research assumes the concept of training given by Álvarez de Zayas (1999), who defines it as a process aimed at preparing man in all aspects of his personality, integrating three processes, functions, and dimensions: educational, instructive and developmental. For this reason, training is assumed as a process that takes place in a historically determined social context in which the human-society relationship is essential since its active, conscious and motivational character is recognized and places the student at the center of the educational process. As can be seen, the formation of the citizen is considered a social yearning, in whose public performance shows their interests as well as those belonging to their civic group or community. It is for this reason that students, in their civic performance, become aware of the elements they must emphasize, without ever renouncing their personal construction.

The topic in question has been addressed by various authors at the international level like Garcia (2016). On the other hand, at the national level are Venet (2003), Benítez-Arias *et al.* (2018), and Expósito-Unday *et al.* (2018). The authors highlight the efficient nature of citizenship training in the different spaces of social coexistence, likewise, they point out its insufficient treatment in educational institutions, which is evidenced through inadequate social behaviors. However, citizenship culture has not been addressed as part of the training of students, which is a limitation. Venet (2003) understands citizen training as “the continuous and systematic process of individual appropriation of a system of knowledge and values that determine the active and creative vital position of the social and individual subject in public life and is expressed in the relationships established in the spaces of coexistence” (p.12).

For his part, Silva (2003) states that “citizen training is part of the socialization process that develops in society, to shape personalities capable of coexisting and participating in social development, from a conscious and self-regulated ethical, political and legal perspective”. For Vargas (2012), citizenship education is civic

moral education or civic values education that takes shape in specific competencies and is promoted by the community. From this project, values are promoted by making the subjects develop until they reach sufficient autonomy to question even this project. According to the educational project of the Universidad Nacional Autónoma de México and quoted by González (2016), citizen training is the acquisition of knowledge, the development of skills and the incorporation of values that allow the student to participate, influence and improve the life of his group, his community and his country. It implies the capacity for reflection and questioning. They see it as relevant for high school and university.

In these cases, the different authors cited to establish a relationship between values and citizenship training as the basis for the integral formation of students, since they emphasize their link with society. Despite this, according to the purpose of the present research, there are limitations such as they are fundamentally restricted to the value part and the formative systematization of the civic culture in its relation to the students' formation is not praised. From what has been addressed so far, the author assumes the concept of citizenship training outlined by González (2016), which states that citizenship training "is a systematic, intentional and continuous process of socialization, where the school is the main agent, which aims to promote in the person his condition of citizen, developing in him the possibility of being an actor, of producing his existence, through full participation and from his interpretation of the reality he experiences, without ignoring the historical memory, perceiving the possibility of exchange in the intersubjective space, with a critical, reflective and creative attitude to transform his community and his country around human welfare. It contains contents that are oriented to the most integral formation of the students".

As it has been analyzed, the process of citizenship training has been the subject of several types of research, resulting in limited those directed towards students of Pre-university Education, taking into account the characteristics of this level of education and the dynamic, systematic and socializing character of this process. It is a matter of making the student aware as a citizen in formation, taking into account the role he/she has to play in his/her social environment. For this reason, citizenship training is conceived from each teaching process carried out in the educational institution. Following the above, the research takes into account the two laws of the teaching-educational process enunciated by Álvarez de Zayas (1999, p. 11), the first of which is the relationship of the teaching-educational process with the social context: The school in life. This is manifested in the link that society establishes with the school, which has the mission of training students capable of playing active roles in society as exemplary citizens. The second law expresses the internal relationships between the components of the teaching-educational process: Education through instruction. It is evident in the different problematic situations that the student has to face in his social life, which is why the educational institution must prepare him for each subject, taking into account his psychological characteristics and the different types of families to which he belongs.

According to what has been analyzed, the teaching-educational process is carried out by the school in close relationship with society, since it is subordinated to its

interests and needs. Pre-university education has the mission of training students who can face everyday life and participate in the construction of society. Social commitment is fulfilled when the student can play an active role in the social context, with characters that correspond to social interests. In this teaching, this process is planned to take into account the system of subjects and disciplines presented in the study plan, taking into account not only the academic part but also the labor and professional aspects.

Methodology

In the research conducted, a non-experimental methodology with an exploratory-descriptive scope was applied. Empirical methods such as the survey and the interview were used, allowing the collection of data for subsequent processing. The population consisted of teachers and students of the IPU: "Roberto Ramírez Delgado" of the municipality of Niquero. The sample consisted of 8 teachers of the Humanities Department and 30 students of 11th grade.

Results

In the interview conducted with the professors of the Humanities Department, it was found that in the methodological work directions, the treatment given to citizenship training as a social need is scarce, both from the curricular and extracurricular aspects. There are decontextualized criteria concerning the citizenship training of students since sometimes there is an attempt to train young people with characteristics similar to those of previous generations, without taking into account the specific historical and social conditions. In addition, in the pedagogical process carried out, the integrative and interdisciplinary approach given to citizenship training is insufficient, which results in a lack of comprehensiveness and systematicity, since it is carried out implicitly. Likewise, the interview showed the scarce interest on the part of the professors to carry out studies and research related to citizenship training as a social need, which is detrimental to the development of citizenship culture in the institution under study.

Likewise, the study carried out showed the scarce approach that exists on the part of the educational institution to the community, since activities that involve the community environment are not organized and planned. Teachers focus more on the academic part and little use is made of the potential of the research component to promote citizenship training in students. The students' survey showed a lack of knowledge of elements related to citizen participation, national identity, behavior in public places, laws of the Constitution and social coexistence. There is little interest in activities related to their formation as citizens, as they consider them unattractive, which results in the prevalence of modes of action not following the exercise of citizenship, such as the use of violence to solve conflicts, lack of courtesy habits, individualism, and social alienation.

The above-mentioned inadequacies show the need to deepen the topics related to the formation of citizens, taking into account that it involves not only values but also patriotic, scientific, technological, aesthetic, legal, sexual, labor, and

economic education. Teachers should have a permanent preparation on these topics, as citizens and as educators of them, they should be an active example and put into practice coherent actions from the subject they teach. From the reflections made to solve the STS problem, the author of the paper will conduct doctoral research whose theme will be: Citizenship education in students of Pre-university Education. The objective of this research will be to elaborate a pedagogical strategy, based on a model of the same nature, of formative systematization of citizenship culture, for students of Pre-university Education, which favors an adequate social behavior in correspondence with contemporary Cuban society.

Among the main contributions to the pedagogical theory and practice are a pedagogical model of the citizenship training process in Pre-university Education students and a pedagogical strategy structured in phases, directions, and actions to concretize the theoretical postulates of the model in the improvement of citizenship training in Pre-university Education. The research is framed in the current transformations of Cuban education; it responds to one of the priorities of the National Ministry of Education "Citizenship education in schoolchildren", and the connotation of belonging to the research project entitled "Cultural Identity and Local Development in Educational Processes". Besides, it is inserted in the Third Improvement of Cuban education by responding to its stated objectives.

Conclusions

The studies carried out for the development of this article reveal the importance of providing a solution to the STS problem and allow to conclude that:

- The development of citizenship training in students of Pre-university Education constitutes an indispensable premise to respond to the social need to prepare individuals capable of assuming the challenges of society.
- The realization of new scientific research related to citizenship training in students is a social necessity for the implementation of educational transformations according to social demands.
- The social change is proposed, by introducing a pedagogical model of the citizenship training process in Pre-university Education students and a pedagogical strategy structured in phases, directions, and actions to concretize the theoretical postulates that propitiate an adequate social behavior in correspondence with contemporary Cuban society.

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