

Translated from the original in Spanish

System of actions for the education of responsibility and social commitment

Sistema de acciones para la educación de la responsabilidad y el compromiso social

Sistema de ações para a educação da responsabilidade e compromisso social

Josefa Azel Jiménez¹



http://orcid.org/0000-0001-6592-6785

¹Universidad Central "Marta Abreu" de Las Villas. Cuba.



josefaa@uclv.edu.cu

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ABSTRACT

This article is a scientific result of a qualitative research of a pedagogical nature, whose objective was to develop a system of actions for the education of responsibility and social commitment in the first-year students of the Civil Engineering career of the Central University. "Marta Abreu" of Las Villas. The materials used were the Professional Model, the Study Plan E of the career, the Teaching-Methodological Work Regulation, the Director Program for the strengthening of

fundamental values in Cuban society and the most up-to-date definitions of the social commitment concept. 70 students were taken as a sample. The research methods used were at the theoretical level, historicallogical, inductive-deductive, analysis and synthesis, ascent from the abstract to the concrete and systematization; from the empirical level, analysis of documents, observation, semi-structured interviews; other measurement techniques were used, such as surveys and sentence completion. The main actors of the teaching-educational process were involved to determine the educational needs, the proposal of the system of actions was elaborated and its implementation began, the results were evidenced in the significant achievements achieved, since it positively influenced the formation of the future university graduate that Cuban society aspires to. The objective proposed in the investigation was fulfilled satisfactorily and caused its impact in the university context. The practical contribution consisted in the introduction and validation of the scientific result obtained that can be extended to other university careers with similar characteristics presented, through a comparative study.

Keywords: social commitment; students; teaching-educational-process; responsibility; system of actions.

RESUMEN

El presente artículo es el resultado científico de una investigación cualitativa de corte pedagógico, cuyo objetivo consistió en elaborar un sistema de acciones para la educación de la responsabilidad y el compromiso social en los estudiantes de primer año de la carrera de Ingeniería Civil de la Universidad Central de Las Villas "Marta Abreu". Los materiales utilizados fueron el Modelo del Profesional, el Plan de estudio E de la carrera, el Reglamento de Trabajo Docente-Metodológico, el Programa Director para el fortalecimiento de valores

fundamentales en la sociedad cubana y las definiciones más actualizadas del concepto compromiso social. Se tomó como muestra a estudiantes. Los métodos investigación empleados fueron, del nivel teórico: histórico-lógico, inductivodeductivo, análisis-síntesis, ascenso de lo abstracto a lo concreto y sistematización; del nivel empírico: análisis de documentos, observación, entrevistas semiestructuradas. Se utilizaron otras técnicas de medición como encuestas y completamiento de frases. Se involucraron los principales actores del proceso docente-educativo para determinar las necesidades educativas, se elaboró la propuesta del sistema de acciones y se inició su implementación. Los resultados se evidenciaron en los significativos logros alanzados, pues influyeron positivamente en formación del futuro egresado universitario a que aspira la sociedad cubana. El objetivo propuesto en la investigación se cumplió satisfactoriamente y impacto el su en universitario. El aporte práctico consistió en la introducción y validación del resultado científico obtenido, que puede hacerse extensivo a otras carreras universitarias con características similares presentadas, a través de un estudio comparado.

Palabras clave: compromiso social; estudiantes; proceso docente-educativo; responsabilidad; sistema de acciones.

RESUMO

Este artigo é o resultado científico de uma pesquisa qualitativa de natureza pedagógica, cujo objetivo foi desenvolver um sistema de ações para a educação da responsabilidade e do compromisso social nos alunos do primeiro ano da carreira de Engenharia Civil da Universidade Central de Las Villas. "Marta Abreu". Os materiais utilizados foram o Modelo Profissional, o Plano de Estudos E da carreira, o Regulamento de Trabalho Metodológico de Ensino, o Programa Diretor para o fortalecimento de valores

fundamentais na sociedade cubana e as definições mais atualizadas do conceito de compromisso social. 70 alunos foram escolhidos como amostra. Os métodos de pesquisa utilizados foram, no plano teórico: histórico-lógico, indutivo-dedutivo, análisesíntese, ascensão do abstrato ao concreto e sistematização; do nível empírico: análise de documentos. observação, entrevistas semiestruturadas. Outras técnicas medição, como pesquisas e preenchimento de frases, foram usadas. Os principais atores do processo ensino-educativo foram envolvidos para determinar as necessidades educativas, foi elaborada a proposta do sistema de ações е iniciada sua implementação. resultados Os foram evidenciados nas conquistas significativas realizadas, pois influenciaram positivamente formação dos futuros graduados universitários a que aspira a sociedade cubana. O objetivo proposto na investigação foi cumprido satisfatoriamente e causou sua repercussão no contexto universitário. A contribuição prática consistiu na introdução e validação do resultado científico obtido, que pode ser estendido a outras carreiras universitárias com características semelhantes apresentadas, através de um estudo comparativo.

Palavras-chave: compromisso social; alunos; processo ensino-educativo; responsabilidade; sistema de estoque.

INTRODUCTION

As a result of neoliberal globalization, values are being dismantled and national identities are being attacked. This requires an axiological approach to the problems of the contemporary world, but always keeping in mind the essential and determining role of man in society.

Every day, Cuban society demands more strongly the training of professionals capable of efficiently solving the problems of professional practice; but, above all, it is necessary that they achieve an ethical, responsible professional performance and with a full sense of the social commitment assumed. Responsibility and social commitment as values associated with the performance the profession of therefore, linked to the competence of the professional are the focus of attention in the training process that takes place in universities today.

Hence, the educational and political-ideological work constitutes the guiding idea of Cuban higher education, its main teacher strategy. In accordance with this idea, the youth of today must be a participant in social evolution, but how to fulfill the inescapable duty of educating man? As the Master said: "conform him to his time" (Martí, 1991, p. 430) and achieve at the same time, "depositing -in them- all the human work that has preceded it" (Martí, 1991, p. 281).

What is the role of the teacher? How can the university enhance and enrich what has been achieved by the family and the school? The education of man is the most powerful weapon to create, foster and develop conscience, the sense of duty, social commitment, discipline, responsibility; although it is stated that the latter is educated from very early ages; this does not prevent university teachers from guiding them through educational work. " The educational work process at the university directly involves a group of subjects (professionals), who as part of their performance must carry out personalized attention actions with university students" (Lazo, Márquez and Ordaz, 2019, p. 457).

However, the persistence of certain difficulties is evident, since the students come from upper secondary schools and carry with them some deficiencies in their training. They present insufficiencies in the degree of development of values to assume their own professional training on their own, they are not aware of their influence on the development of the personality and, despite abiding by them as principles in the oral plane, they are not capable of taking them to practice in their behavior; for example: certain manifestations of irresponsibility towards the study, disrespect and indiscipline that occurred in the student residence.

The analysis of the problematic situation described above allowed formulating the following research problem: how to contribute to the education of responsibility and social commitment in the students of the Civil Engineering career?

The revised bibliography coincides with the criteria of education in values and social commitment. Baffursón and Figueroa (2013) state that the school contributes to generatereinforce, at all educational levels, education that students trains responsibility and social commitment. Tamarit (2016) points to university social commitment as a set of variants inherent to the activities of higher education in the 21st century, in connection with society and its problems.

2020)According to Ruiz, it is necessary to promote on the universitary student body the learning of competences and values for an active citizenship; _ competences and values from personal and interpersonal type I. Ramírez, Moctezuma, González (2017) point out that the social responsibility of the university should be to orient the general and specialized formation_ and of the students towards the promotion of the just and sustainable development, thus creating a new profile of the university student Likewise, Navarro, Rubio, Minnicelli (2017) specify that the social responsibility is understood as the capacity and obligation to answer to the society by actions or omissions

as common good .Espadas (2017) states that the Social commitment of the university is bound to the vision from Who they work on it and adds: "a university that is not linked to the needs of the people is condemned to live in a social plot" (p. 2). For his part, Martín (2019) points out that the higher educational level offers the appropriate responses to the society where the educational institution is located. According to Gazzola (2021) "Social responsibility or community, from linking the University with the society in which it is inserted, is its ability to establish -local, regional, nationals and international alliances" (p. 45).

The cited investigations provide valuable criteria around the research topic. However, the absence of concrete actions for the education of responsibility and social commitment in university contexts is observed.

Therefore, from the research problem raised, the challenge of educating, training, transmitting, cultivating values from the contribution given by previous generations that made up the Cuban nation arises before the teacher. Hence the proposal of the following objective: to develop a system of actions for the education of responsibility and social commitment in the first-year students of the Civil Engineering career at the Central University of Las Villas "Marta Abreu".

MATERIALS AND METHODS

Among the materials used are: the Model or profile of the professional (2017), the Study Plan E of the Civil Engineering career (2017) and the Teaching-Methodological Work Regulation of the Ministry of Higher Education (MES) (2018), with the purpose of obtaining information about the official provisions that support the teaching-educational process in the career.

In the Model or profile of the professional, the importance of responsibility and social commitment of the Civil Engineering graduate was underlined. In Study Plan E, excellence was found in the training of students in this career for their future performance. In the Teaching-Methodological Work Regulation, it was confirmed that the professional training model has a broad profile, based on two guiding ideas: "the unity between education and instruction... and the link between study and work..." (MES, 2018, p. 648).

In addition, the regulation states in its first article that the training of higher level professionals developed on the institutions from Higher education guarantees the comprehensive preparation of the university students, ended on a solid training scientifictechnical. humanistic and from ideological values, politicians, ethical and aesthetic, the end of achieve with revolutionary professionals, cultured, competent, independent and creative, for its successful performance in the various sectors of the economy and society in general.

Likewise, the following materials were used: the Director Program for the strengthening of fundamental values in Cuban Society (PCC, 2013) and the most updated definitions of the concept of social commitment.

In the Director Program, responsibility was highlighted as a fundamental value, defined as the fulfillment of the commitment contracted before oneself, the family, the group and society. Hence, the definition given to the value of responsibility agrees with the ethics of the National Hero of Cuba, José Martí, when he said: "It cannot be: seeing a duty and not fulfilling it is failing it" (Martí, 1991, p. 327).

The social commitment materializes in the participation of the individual in the social, addressing the problems and social facts that

make man a beneficent actor, endowed from an own culture, capable from create identity and rethink the international events in correspondence with what it is proposed by the United Nations Organization for Education, Science and Culture (UNESCO 2008).

Special relevance was given to the perspective of the actors in the process: professors and students involved in the teaching-educational process of the first year of the Civil Engineering career in the 2019-2020 academic year.

Table 1- Population and sample.

CAREER: Civil Engineering										
Group	Students		%	Bachelors		Medium Technicians		selected sample		9/0
	М	F		м	F	м	F	м	F	
1	32	4	33,028	30	4	2	-	21	2	32.86
2	31	5	33,028	31	5	-	-	20	3	32.86
3	32	5	33, 94	28	6	3	-	19	5	34.28
Total	109		100	104		5		70		100

Table 1 offers information on the population (109 students, enrollment) and the randomly selected sample of the first year of the Civil Engineering degree (70 students representing 64.2% of the enrollment and, therefore, of the population).

The qualitative methodology was assumed as a research paradigm, considering it more appropriate for research, with the objective of knowing the impact of the system of actions for the education of responsibility and social commitment in the first-year students of the Civil Engineering career.

The research methods of the theoretical and empirical level that served to form the present research study

Theoretical level methods

 Historical-logical: the work with this method was predominant for the reconstruction of the historical scenario. It was also used for textual analysis.

- Inductive-deductive: made it possible to analyze the diagnosis of student needs, to determine the structuring of the system of actions, as well as to arrive at partial and final conclusions.
- Analysis and synthesis: it was used in the study of the bibliography that guided the research work on the subject to analyze interviews and surveys and, in all cases, to extract the essence of the ideas, organize it into an organic whole to arrive to generalizations and conclusions.
- The ascent from the abstract to the concrete: we started from the analysis of the abstract in the diagnosis of needs and their educational possibilities and went up to the concrete in the implementation of the system of actions for the education of responsibility and social commitment.
- Systematization: it was used to classify and order elements derived from the diagnosis, from the surveys and interviews, with a character of system in its interrelation, dependency and hierarchization to later confront them, as well as to arrive at the structuring of the system of actions and the conclusions.

Empirical level methods

- Document analysis: essential for the search and analysis of documentary sources on responsibility, social commitment and the regulatory documents of the Ministry of Higher Education (MES). All the information offered by each document was used without losing sight of the contextualization.
- Observation: to explore and describe the context and the main actors of the teaching-educational process, to identify behaviors and attitudes, and delve deeply into the social situations of the students.

 structured interview: applied to professors and the head of the Civil Engineering department, to obtain direct and reliable information related to the value of responsibility and social commitment.

Measurement and/or data collection instruments

- Surveys: questionnaires were used to measure the influence of the variables, friendship relationships and classmates, on their behavior.
- Sentence completion: it was used to assess the degree of knowledge they have about social commitment.

In the study, anonymity was required in the interviews, surveys and completion of sentences, to achieve greater reliability in data collection. All this made it possible to accumulate valuable materials to form the system of actions of education of responsibility and social commitment.

Both the bibliography on the subject and the documentary bibliographic sources were subjected to criticism, as part of the work of identification, classification and analysis of the sources through empirical methods.

RESULTS

Successfully achieve social responsibility and commitment in the university institution is subject to the complementary training of the teacher, around the importance of assuming these approaches. It agrees with Aburto (2020) when he states: "... Today the role of the university professor has changed his role in the sense that he prepares his students to train them as professionals capable of rebuild their own environment and the country" (p. 70).

Hence, the teacher contributes to the professional competence of the future university graduate, since this should not only consist of the knowledge and skills to correctly solve professional problems, but also because he feels and reflects on the need and commitment to act accordingly with them in a flexible, responsible, dedicated and persevering way in solving the problems demanded in professional practice. That is, to have a committed social behavior.

The aforementioned demonstrated the need to educate in the value of responsibility and social commitment. The study was developed in three stages:

- 1. Diagnosis of needs of the students of the first year of the Civil Engineering career.
- 2. Structuring of the system of actions for the students of the Civil Engineering career in the university context.
- 3. Implementation of the actions system.

The structuring of the system of actions was based on the real criteria derived from the diagnosis. The instruments used in the sample allowed achieving the maximum protagonism in the students, so it was possible to penetrate their knowledge, emotions, feelings, ideals, perceptions and satisfactions that drive their behavior. The following evidence is presented below:

Student survey

The questionnaire presented a first specific question that specifically addressed the value of responsibility, in order to assess their knowledge. What characteristics does a responsible student possess? The minority of the students answered: studious, fulfiller of their integrative tasks and persevering; were placed at a high level. The majority stated: studious and that each one feels as their own the obligation to fulfill their duties, placing them in the middle level. The others, who

responded succinctly: studious, characterized themselves at the low level.

The second question was: which of those features would you like to develop and how do you plan to do it? Most of them agreed in answering: studying daily; the rest expressed: studying more and more and making a great effort to fulfill the assigned integrative tasks. An approach towards the self-improvement of responsibility and social commitment was evidenced.

In the third question: in what circumstances has it been most difficult for you to act responsibly as a university student? Why? 100% of the sample argued serious illness or family problems, major economic problems faced at a given time, pregnant girls, but who made the decision to continue their studies despite these difficulties. Therefore, motivation was analyzed with a high score.

Regarding the fourth question: how do you assess your behavior assumed in these circumstances? All students agreed on the answer, expressing that their behavior was: correct, positive or the best in those circumstances.

The sentence completion

Five inducing phrases were offered where knowledge, attitudes and ways of manifesting social commitment in students were expressed. All students completed the sentences. The evaluation of this instrument was qualitative and, therefore, an assessment was made in each of the sentences; it was verified that the answers offered were evaluated as non-conflicting.

It was possible to appreciate the knowledge they have about social commitment, through the content exposed in the inducing phrases about the study, the culmination of study and the profession. Knowledge is, in most cases, average. Personal elaboration was also manifested at a medium level, in most of the

sentences. The emotional orientation was revealed in almost all of these in a not very adequate way, evidenced in the manifestations of mixed optimistic and pessimistic feelings at the same time.

Semi-structured interview with teachers

Cognitive deficiencies were observed in the theoretical-practical order around education in values, although they did not present a total ignorance when associating them with positive qualities and behaviors, but reduced their expressions to the subjective sphere.

In the investigation it was found that the majority did not have clarity about the attitudinal potentialities of its contents or the ways to use for its development, since they do not take into account that the method is a carrier of affectivity in the teachinglearning process, in addition to constitute the cell to form values from the subjects. They pointed out political information as the main way to form values. In the same way, when expressing their opinion about the activities to be carried out to contribute to the improvement of the education responsibility and social commitment in the career, the allusion to political activities, morning meetings and brigade assemblies was evident in the responses.

They recognized the educational nature of the teaching of the country's history and the role played by the main professor of the academic year as the main conductor of the teaching-educational process of the group to strengthen the value studied and social commitment. However, in the declaration the class is omitted, as the fundamental means to contribute to education in values and specifically that of responsibility.

They considered that their students, in a general sense, had a low-level gradation of responsibility value and social commitment, since many had failed at least two control

assignments during the first semester. However, they had others, such as: collectivism, camaraderie, honesty, and modesty. The role played by morality in social development and how it penetrates the different spheres in which man carries out his activity was reaffirmed.

The limited mastery of educational methods to solve the problems presented was confirmed; they only referred to persuasion, encouragement and intimidation. addition, the non-existence of the demands of the different educational activities, the fundamental spheres towards which the methods and the educational needs of the subjects are directed, were revealed. It was inferred, therefore, improve to preparation of teachers on the subject of educational methods to objectively conduct the teaching-learning process.

When inquiring about the aspects addressed in the methodological preparation as a fundamental way of teacher improvement, it was verified that the fundamental issues were related to certain subjects of the new study plan. The allusion to education has been generalized. The theoretical and methodological aspects to be dealt with were not specified, which prevented it from compensating for the deficiencies presented in this direction by the teachers. It was considered important to highlight that the methodological preparation promotes its systematization through the path of self-improvement.

They understood the need to perfect their preparation in the education of responsibility and social commitment with topics related to the Methodology of Educational Work, Professional Ethics, Educational Communication, Axiological Theory of Education, Psychology and Pedagogy that should be attended by different ways and forms of overcoming. They attached great importance to the projected research with the aim of achieving the education of

responsibility and social commitment in the career, recognizing that so far, no action has been carried out in this regard, they also offered their cooperation for its growth.

Semi-structured interview with the head of the Civil Engineering department

In an interview with the head of the department with the aim of exploring the projection of the system of actions for the education of responsibility and social commitment, as well as the recommendations to carry out the action plan, the consideration of essential and its application was immediately obtained. The following criteria were expressed: for us in the career it is important that students are educated in values, since they must be responsible and committed to attendance, in their teaching results, in research activities, since they are necessary requirements for their vocational training; This develops in them not only the specific competence as a student, but also the necessary skills for their professional performance.

Observation of the teaching-learning process

The observation was made to ten curricular activities. In the development of the class (conference, seminar, and practical class) it had the objective of verifying in the natural setting the characteristics of driving and the treatment of responsibility and social commitment in the aforementioned face-toface activities. They were carried out through an observation protocol and the following indicators were verified: organizational aspects, discipline, interpersonal relationships, use of language and driving styles.

The observations showed: compliance with the teaching schedule, attendance control and the class plan; the classrooms were conditioned and with the necessary materials

for the development of the activity. However, in the organizational conception of the teaching-educational process, the lack of leadership on the part of the students was denoted; they had to stop being a passive subject to become an active subject, protagonist of the learning process. The need for change was demonstrated.

In general, it was found that they do not present serious problems with discipline. 20% of the students did not comply with the assigned tasks, despite having been guided the teacher. However, individual treatment in some cases was inadequate, which caused negative behaviors and responses by not using educational methods that would enable students to understand the need for change. They resorted more frequently to the method of intimidation, fundamentally associated with giving him a 2 in the evaluation and assuring him that he would fail the year, although in most cases persuasion was used to convince him. Poverty in the use of educational methods reduces the educational possibilities of the teaching-educational counselor of the process and could condition simulated behavioral expressions of the subjects, which would hinder the process of subjective internalization of responsibility and social commitment.

good The existence of interpersonal relationships established between students and, at the same time, with the teachers was verified. An affective, adequate treatment was evidenced, with satisfaction for the activity carried out and respect towards the teacher; excellent companionship relationships among students, so that the emotional environment could contribute to developing responsibility and social commitment, to the extent that the activities carried out are assumed by them with respect and responsibility.

The language used was appropriate, the technical terminology was used correctly,

which had a positive impact on the students' knowledge of the different topics addressed in the different subjects. Explanations were offered about the link with other sciences applied to the subject. Its systematization will favor the adoption of more conscious, responsible and committed behaviors, in accordance with the demands of higher-level studies.

The managerial conception in the conduct of the teaching-educational process was evidenced. Therefore, it is necessary that they assume the precepts of non-directive pedagogy, where the student is an active subject and constructor of their own learning and that they use productive methods to induce conscious reflection to solve problems, which will facilitate consensual work and the democratization of the process.

Observation in the History Forum

Participation in the court of the History Forum confirmed that the students worked responsibly in the presentations presented with interesting themes of national and local history, exposed with great fluency. The results obtained were very satisfactory.

Observation to labor Practice

At the beginning of the first semester of the 2019-2020 academic year, the students were not located in any work center to carry out the Labor Practice, so the main professor of the academic year was assigned to coordinate with the construction companies, according to the existing needs in the territory and the profile of the future professional.

The 70 students began their work practice in: Hydraulic Resources (20), Project Company (25) and Construction Company of Architectural Works (25); They worked a four-hour day. The results of the five observations corroborated absences, lateness, non-compliance with the tasks

entrusted, incurred in the lack of consecration, perseverance and were systematicity. These situations analyzed in the brigade assemblies; they were warned to rectify their attitude, but they cited justifications for their irresponsible actions. What was raised above demonstrated the insufficiency of educational work. It is inferred, therefore, the appropriation of suitable methods by teachers, which allow the education of responsibility and social commitment.

Observation in extension activities: Sports Games and Fan Festival

It was confirmed that participation in the Sports Games and Amateur Festival (career level) is still very insufficient, since the fulfillment of duty was not internalized in the students. Only five students, of the thirty committed, participated: two in table tennis, two in swimming and one in chess. The worst situation was evident with the fans, only three students had committed: one in music as a solo singer and two recites, but none attended.

When carrying out the analysis in the assembly of the brigade of these attitudes inconsistent with responsibility commitment, it was evidenced that they assumed a justifying attitude before the facts; but, in addition, the small number of participating teachers meant that the students did not adequately reflect on their poor or non-existent participation in these extracurricular activities. The limitation was demonstrated with the application of different methods and ways to access education and thus promotes the active participation of students.

Observation in sociopolitical activities

Student attendance and participation in brigade assemblies was satisfactory. In the five assemblies observed, their concerns about teaching problems, class quality, and the need for consultations were evident. However, when carrying out the analysis of the evaluative results in the different subjects, they did not show interest or commitment in improving them, they simply accepted them, and so the educational work about the evaluative judgments in their reflections should have been insisted on, as well as helping them to develop a self-critical attitude.

The five morning sessions observed were directed by the dean and the heads of departments, together with some professors, but with very low participation by the student group. Only in one did they play a leading role, directing it with the purpose of offering information on the University Student Federation (FEU). The weakness of the student group was corroborated as they did not feel committed in their actions, since they did not identify themselves as true university students, as members of the FEU.

Regularities of the diagnosis to configure the system of actions

Next, the main characteristics assumed by the process are presented, based on the methodological triangulation by sources and methods, as well as by the deductions and generalizations of the researchers.

- 1. Insufficient methodological guidelines for the work of education in values in career meetings.
- 2. Positive dynamics of relationships; the main priority was given to the professor-engineer, considering him as an example to follow.
- 3. Recognition of the place occupied by civil engineers in society.
- 4. Declaration of fundamental aspirations with the willingness to graduate as engineers. They considered her the most

influential in their development and career goals.

- 5. Acknowledgment of lack of systematic and deep study.
- 6. Recognition of their deficiencies in the preceding academic training.
- 7. Inability to understand that the brigade meeting is the most important way to carry out educational work.
- 8. Technocratic thought, by relegating sociohumanistic training subjects to the background.
- 9. In the motivational hierarchy, the existential and fulfillment motives reached greater emotional weight, emphasizing their projections in relation to the future and life projects.
- 10. Motivation for sport, but lack of motivation in culture, expressed in the participation in the first and nullity in the festivals of amateur artists.
- 11. Recognition of the attitudinal possibilities of the investigative activity, despite the insufficient disclosure about the impact on its comprehensive evaluation.
- 12. Ignorance, almost generalized, of the values on which current Cuban society is based and their corresponding definitions, as well as their modes of action.
- 13. It was evidenced that the students abide by the value of responsibility as a principle in the oral plane, but in most of them this statement remains in the expressive plane and is not put into practice in the effective regulation of their behavior or in their modes of action.

- 14. Most of the students limited the education in values to political activities, morning sessions or brigade meetings.
- 15. The vast majority of students do not understand social commitment as part of their responsibility and daily action.
- 16. Insufficiencies in the theoretical and methodological preparation of some teachers to face the process of education of responsibility and social commitment.
- The aforementioned corroborates real insufficiencies in the students, but since they are young and are permeable to educational work, it can be positively influenced, since there are potentialities to work on it.
- In order to perfect the education of responsibility and social commitment in the students of the Civil Engineering career, the system of actions was proposed, although before structuring it, it was necessary to carry out the following tasks:
- 1. The main professor of the academic year made an assessment of compliance with the indicators established for the social commitment of each student, with their corresponding characterization.
- 2. The psychosocial diagnosis was integrated to the diagnosis of knowledge made by the teacher of the History of Cuba subject, to trace the educational actions.
- 3. The analysis of the main problems concentrated in the study, research, university extension activities and sociopolitical ones was carried out. They were discussed by the students at their brigade meeting after the diagnosis.

With these elements, the student brigade project was developed, based on the characterization of individual and group needs and potentialities. In this way, they established their social commitments:

- Maintain at least 95% class attendance.
- Obtain an academic index of 4.
- Form study teams.
- Participate in award exams.
- Participate in the Student Scientific Conferences.
- Participate in the History Forum.
- Participate correctly in the Labor Practice.
- Participate in the Creole Games.
- Participate in the Fan Festival.
- Participate in the morning meetings and in all the political acts convened.
- Actively participate in social work.
- Keep its active incorporation on defense.
- Responsibly carry out the student guard.
- Participate in blood donations.
- Maintain correct discipline in the student residence.

To structure the system of actions, the ways addressed by the teachers, based on flexibility and communication, considered as key elements for a real approach to the spiritual world of young people, without losing sight of how difficult it can be in some cases. However, the true keys to all the ways and procedures were found in the line of thought and Cuban pedagogical practice, whose expression is the universal thought of José Martí, the Apostle of Cuba's independence.

In order to fulfill the objective of the research, the following system of actions was developed, based on the conceptualization offered by De Armas (2011), when he defines this scientific result as: a set of actions to facilitate pedagogical practice (teaching, educational, methodological, etc.), which organizes them systematically based on certain theoretical or empirical criteria. The cited author also considers that these actions have a systemic organization when their components have the following characteristics: they are distinguished from each other (differentiation) and are related to each other (dependence).

Thus, the actions in question are the following:

- Selection of content that faithfully exemplifies the best national traditions, in a way that allows the attitudinal potential of the content to be exploited. It is carried out in the teaching-learning process of the subjects (teacher- students); Teaching aids are used such as: textbooks, digitized materials, films, audiovisual clippings, blackboard, among others.
- Integration of the contents taught in the different subjects, making explicit their practical value for the professional life of the students. In the course of the teaching-educational process, the integrative tasks of different subjects (teachers-students) are oriented and executed; teaching aids are used such as: textbooks, digitized materials, complementary bibliography for in-depth study, and others.
- Instrumentation of the activity and the independent work of the students in a differentiated way in each subject, according to the levels of development of each one. It is carried out in the teaching-learning process of each subject (teachers-students); teaching aids are used such as: textbooks, digitized materials, exercise tasks, among others.

- Creation of work groups to stimulate the interaction of students among themselves and with the teacher of each subject in teaching-educational activities (teachersstudents); teaching aids are used such as: textbooks, digitized materials, and

blackboard.

- Evaluation in each evaluation cut of the semester of the influence of the educational component in the evaluation issued to the student, especially because an important weight is given to the attitude assumed in the classroom in each teaching activity, its discipline, responsibility and commitment to learning individual, so it is intended to involve the faculty and political organizations and youth masses. Therefore, the search for said unity through the clarification of the role of each one and persuasion is proposed in the meeting of the year of the career. It is carried out during the school year (teachers and students).
- Analysis in the brigade meetings of the systematic educational work that will promote awareness of the responsibility and social commitment of all students in their professional preparation and in the real possibilities of acting together in the achievement of different educational goals. Teachers-students in the course of the teaching-educational process.
- Use of the dialogical method, controversy and debate to establish uninterrupted communication with students inside and outside the classroom, with dissimilar topics of conversation that will have an educational impact. Teachers and students. It is carried out in the course of the teaching-educational process (teachers and students).
- Application of actions in the educational strategy that favor the involvement of the group in solving individual problems. It is carried out in the course of the teaching-educational process (teachers and students).

- Systematic analysis, in the brigade meetings, of the fulfillment of the tasks of the defense, the student guard, morning meetings and activities of patriotic-military and internationalist education. It is carried out by students on campus during the school year.
- Definition of individual and collective commitment for student participation in the Creole Games of the University, sponsored by the University Student Federation (FEU). It is carried out on the scheduled dates (teachers and students).
- Identification of students for their participation in the movement of amateur artists and in the amateur festivals sponsored by the University Student Federation (FEU). It is carried out on the scheduled dates (teachers and students).
- Development of a work of persuasion to make students aware of the noble task of voluntary blood donations. It is done once a year; teachers and students participate.
- Development of educational activities on coexistence in the student residence. Throughout the course of the school year (educational instructors, teachers and students).

As a consequence of the system of actions implemented, significant achievements were obtained, although certain deficiencies persist, so it is necessary to emphasize these actions without stopping working with the entire system permanently. It is worth highlighting the results achieved in a single course:

- The student group (the three groups) maintained 97.8% of class attendance.
- The formation of the study teams contributed to carrying out work for the integrating tasks, the Student Scientific Conference and the History Forum.

- Integrative tasks were carried out in: Introduction to Civil Engineering-Chemical-English, as well as History of Cuba-Computing.
- The average academic index of the sample was 4.2.
- Promotion in final tests of 97.6%.
- 100% full promotion. Five students took an extraordinary exam: one in Mathematics (obtained 4) and four in Physics (obtained 3).
- Participation in award exams. From 17 committed students, participation increased to 22 in the following subjects: Introduction to Civil Engineering (5), English (5), History of Cuba (5), Chemistry (2) and Computing (5).
- Participation in the Student Scientific Conference with a total of 18 papers, of which correspond: four to Introduction to Civil Engineering; eight to English; two to Political Economy; three to Homeland Security and one to Physical Education.
- Participation in the Faculty-level History Forum with twelve papers. Three of them were selected for the university forum.
- All 70 students (100%) consciously participated in social work.
- 100% of the students participated in the Labor Practice with correct discipline.
- Participation of 60 students (85.71%) in the Creole Games.
- Participation of 10 students (14.28%) in the FEU Amateur Festival.
- Voluntary blood donation by 24 students (34.28%).

- All students are incorporated into the defense (100%).
- 100% carry out the student guard with full responsibility.
- Some absences or late arrivals persist for morning meetings and political activities.
- Despite giving less importance to sociohumanistic training subjects, participation was achieved in: award exams, History Forum and Student Scientific Conference.
- Up to now, the disrespect and indiscipline presented in the student residence have been eradicated.
- Deficiencies persist in the brigade meetings and in the comprehensive assembly when analyzing the results of the semester, since they do not yet assume a true critical and self-critical attitude.

The consensual work of the teachers through their educational experiences and the enormous work of the main professor of the academic year allowed increasing the emotional thinking of the students, while the established system of actions made possible positive changes in the students. Its continuous application will allow achievement of harmony and integrity of feeling, thinking and doing in their daily actions, based on responsibility and social commitment. In this way they will be able to out an effective professional carrv competence in the future.

DISCUSSION

The research carried out, of a pedagogical nature, demonstrated the importance of educating first-year students of the Civil Engineering career in responsibility and social commitment, through the proposed

system of actions. Hence, its scientific novelty.

Self-respect and personal dignity are terminal values that are achieved through action committed to the highest social and moral values. Therefore, it is important to educate the value of responsibility and social commitment in university students in order to achieve it.

From a theoretical point of view, it agrees with the criteria proposed by the authors of the reviewed bibliography:

- Baffursón and Figueroa (2013): the school, at all educational levels, contributes to generating-reinforcing an education that trains students in responsibility and social commitment.
- González (2017): the social responsibility of the university should be to orient the general and specialized formation and of the students towards the promotion of the just and sustainable development, thus creating a new profile of the university student.
- (2020): it is necessary to promote on the university student the learning of competences and values for active citizenship.
- Swords (2017): The Social Compromise from the college I know find bound to the vision from Who they work on her.
- Tamarit (2016): university social commitment is characterized by its link with society and its problems.
- Navarro, Rubio and Minnicelli (2017): the social responsibility is understood as the capacity and obligation to answer to the society by actions or omissions the towards common good.
- Martín (2019): the higher educational level offers the appropriate responses to the

society where the educational institution is located.

- Gazzola (2021): Social responsibility from linking the University with the society in which it is inserted, is its ability to establish -local, regional, nationals and international alliances.

It is considered that the study carried out has scientific and methodological rigor, since it responds to the diagnosis of the educational needs of the students in the sample; the implemented actions enriched the educational work planned for the year. There is a level of coincidence of evaluative criteria among the participants in the research; there was a transformation in modes of action, of the students who point to the achievement of traits of responsibility and commitment.

The practical contribution consists of the introduction and validation of the System of actions for the education of responsibility and social commitment in the first year of the Civil Engineering career at the Central University of Las Villas "Marta Abreu".

The system of actions applied in the Civil Engineering career can be replicated to other university careers that present insufficiencies and/or similar characteristics through a comparative study.

The objective proposed in the research to develop a system of actions for the education of responsibility and social commitment in the students of the Civil Engineering career was satisfactorily fulfilled and achieved its impact in the university context, since it works for the development of the substantive processes of the university campus: teaching, research and university extension, which complement each other and on the of responsibility and basis social commitment, allow directing efforts to maintain the excellence granted to the

Central University of Las Villas "Marta Abreu".

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The author has participated in the writing of the work and analysis of the documents.



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