

Level of Appropriation of The Fundamental Competencies of Secondary School Students in Santiago

José Luis Rosario-Rodríguez¹

¹Email ID: josel.rosario@isfodosu.edu.do

Email ID: joseluisart28@gmail.com

<https://orcid.org/0000-0002-7068-5557>

Instituto Superior de Formación Docente Salomé Ureña (ISFODOSU), República Dominicana

Cite this paper as: José Luis Rosario-Rodríguez, (2025) Level of Appropriation of The Fundamental Competencies of Secondary School Students in Santiago. *Journal of Neonatal Surgery*, 14 (6s), 370-380.

ABSTRACT

The full development of fundamental competencies is the main objective pursued by the educational system of the Dominican Republic and for this purpose a specialized curriculum has been designed in which a series of contents, strategies, activities are proposed, as well as particular ways of programming and evaluating competency learning. This study focused on describing the level of appropriation of the fundamental competencies of secondary school students in Santiago. The methodology used was based on a quantitative, descriptive and cross-sectional approach. The study population was made up of 5,000 secondary school students and the sample selected non-probabilistically or by convenience was 535 students. To collect the data, the Fundamental Competencies Questionnaire for the Dominican Republic (CCF-RD) instrument was applied. For data analysis, the statistical software IBM SPSS Statistics version 27 was used. The results show an unfavorable level regarding the Problem Solving Competence, which shows a percentage of 50.2%; Likewise, in Ethical and Citizen Competence 48% and in Communicative Competence 54.6%. It was concluded that the students show weakness in their own mastery of Problem Solving, Ethics and Citizenship competencies, in addition to Communication.

Keywords: Appropriation Level; Fundamental Competencies; Students; Secondary Level; Santiago.

1. INTRODUCTION

The Ministry of Education of the Dominican Republic (MINERD) has adopted a mixed approach that combines constructivism, the socio-critical perspective, and fundamental competencies to promote comprehensive intercultural communication, prioritizing critical dialogue about the knowledge built by one's own culture or any other culture that exerts an influence. This approach aims to create spaces for negotiation and cooperation that are humanizing (MINERD, 2016).

As a result, a new teaching-learning framework has emerged, making it essential for young people to be trained to actively participate in the democratic system in which they live, allowing them to engage openly (Palacios & Algarra, 2020). The presence and evolution of democracy serve as an opportunity for citizens to enter a process of abstraction in which they understand and value everything the system offers from the social and political reality constructed to ensure participation for all.

In response, it can be said that the school serves as a particular space that should function as a model for comprehensive education, fostering coexistence, peace, and respect for the human rights inherent to society (Hernández et al., 2017). However, the task of educating should be a shared responsibility among all actors within the educational social collective, including active participation from teachers, who represent the school; students, who are the ones being transformed; and families, who serve as their representatives and guardians (Pedraza et al., 2019).

In other words, the school acts as a mediator throughout the process of constructing the values that form the backbone of individuals with goodwill—capable of identifying with their culture, contributing to the strengthening of their identity, and respecting individual differences as a sign of quality education (Álvarez, 2018).

In this sense, the school employs a set of curricular areas through which students receive the necessary tools to develop the aptitudes, attitudes, and values required. However, Physical Education is considered one of the most significant contributors to students' comprehensive development, as it provides them with opportunities to participate in the community, enhances their competencies, knowledge, and values, and plays an essential role in the development of all fundamental competencies.

Thus, any student who has had the opportunity to participate in well-implemented Physical Education classes should demonstrate broad competency development. That is, they should meet the proficiency levels outlined in the curriculum, which represent the ultimate goal for students as a result of the teaching-learning process. This study, therefore, focuses on describing the level of appropriation of fundamental competencies among secondary school students in Santiago. Specifically, it will examine the development of three competencies: ethical and civic, problem-solving, and communication.

2. CONCEPTUAL FRAMEWORK

Theoretical Construct on Competencies

In the educational field, each country has its own governing body responsible for designing, developing, managing, and implementing a curriculum aimed at the comprehensive education of all its citizens. In this regard, the Ministry of Education of the Dominican Republic (MINERD) is the government entity responsible for drafting, reviewing, and redesigning the document that serves as the fundamental basis of the national education system, namely, the curriculum.

According to the document *Nature of Curricular Areas* (NAC, 2019), the Dominican curriculum is based on three essential paradigms: constructivism, the socio-critical approach, and the competency-based approach.

- **Constructivist Approach:** This is considered the primary framework guiding the Dominican curriculum, as it views learning as a cultural phenomenon manifested in different times, spaces, and cultures (NAC, 2019).
- **Socio-Critical Approach:** This approach seeks to broadly modify the social structures that shape education by fostering individuals' critical thinking skills, enabling them to analyze and objectively assess the information they handle (NAC, 2019).
- **Competency-Based Approach:** This approach aims to develop individuals' ability to act autonomously in various situations and contexts (NAC, 2019).

The components of the *Curricular Design* include fundamental and specific competencies, content, teaching-learning strategies, activities, achievement indicators, learning resources, and assessment methods.

Competency

Competency refers to an individual's ability to perform a task efficiently and effectively. It involves the development of a set of knowledge, cognitive, physical, and emotional skills, as well as attitudes and values that enable a person to navigate different contexts and situations. Depending on the domain in which competency is applied, it takes on a particular meaning—whether in the professional, economic, sports, or educational field.

Regarding competency, MINERD (2017) states that it is "the ability to act effectively and autonomously in diverse contexts by integrating concepts, procedures, attitudes, and values" (p. 38).

Consequently, MINERD (2017) emphasizes that these competencies should be developed gradually, meaning that it is a lifelong process aimed at achieving personal fulfillment, improving quality of life, and contributing to social and environmental development.

Furthermore, in the *Curricular Design*, MINERD (2017) states:

"Fundamental Competencies express the most relevant and significant educational intentions. They are transversal competencies that meaningfully connect the entire curriculum. They are essential for the full and integral development of human beings in their various dimensions, based on the principles of Human Rights and universal values. They describe the necessary capacities for individuals' self-realization and their appropriate contribution and participation in democratic processes." (p. 38)

To shape this national plan, MINERD recognized the importance of addressing each aspect of human life. Consequently, it based the curriculum on the socio-cultural, socio-critical, and competency-based paradigms, establishing seven fundamental competencies, including:

Ethical and Civic Competency: This refers to an individual's ability to establish respectful boundaries concerning the human rights of others, emphasizing equity and social justice as essential elements of citizens' dignity (MINERD, 2016). It involves the ability to discern between right and wrong, meaning the recognition and respect for social rules and values established on human, social, and constitutional levels.

Communicative Competency: This is the ability to understand and express ideas, emotions, and cultural values in various

communication contexts, using diverse systems to secure identity, build knowledge, comprehend reality, and establish meaningful relationships with others (MINERD, 2016, p. 68). Communicative competency enables individuals to connect with others through oral, written, or gestural mechanisms to effectively transmit their ideas, emotions, or feelings while also receiving similar information from their environment (Ojeda, 2021). It encompasses all possible means of expressing thoughts and emotions in a way that others can decode, as well as understanding the externalized expressions of others.

Logical, Creative, and Critical Thinking Competency: This is "the ability to process mental representations, data, and information to build knowledge, reach logical conclusions (...), establish novel goals and means to achieve them, and examine the validity of judgments and opinions" (MINERD, 2016, p. 70). This cognitive skill allows individuals to recreate logical information and establish inferences that validate assessments of specific situations.

Problem-Solving Competency: This refers to "the ability to recognize the existence of a fact or circumstance that hinders the achievement of a desired goal, determine its nature, and develop strategies to provide creative and innovative responses according to the context" (MINERD, 2016, p. 71). It facilitates coping with situations of certain difficulty through the use of cognitive skills tools, which act on the situation with the aim of solving it.

Scientific and Technological Competence is the ability of a person to "propose, explain, interpret, design experiments, and solve situations present in the natural and social environment based on their perception of it, applying concepts, models, theories, laws, Information Technologies (...) and scientific methodologies" (MINERD, 2016, p. 72). This competence promotes the management and implementation of experimental methods, which, combined with the use of technological tools, serve the purpose of seeking new solutions to current situations.

Environmental and Health Competence is the ability of a person "to act for the benefit of their own comprehensive health and that of their community, in interrelation, preservation, and care of nature and the social environment, to counteract the negative effects generated by human action," to prevent further damage, and to autonomously and sustainably promote life and the health of the planet (MINERD, 2016, p. 73). This competence advocates for the recognition of principles that ensure the maintenance of healthy lifestyles, the care of bodily integrity, and the respect, appreciation, and protection of everything that is an integral part of the environment as a fundamental part of human life.

Personal and Spiritual Development Competence is the ability of a person "to act assertively, trusting in themselves, integrating their family and personal history, their feelings, qualities, strengths, and limitations in interrelation with others and their environment, building from their spiritual being" (MINERD, 2016, p. 74). This competence seeks to encourage individuals to participate actively and positively in social and community life, receiving benefits that strengthen them intellectually, emotionally, affectively, socially, and professionally, while also contributing to the community, thus experiencing a sense of pride, joy, and personal fulfillment.

3. LEVELS OF MASTERY

According to the document *Curricular Adaptation for the Secondary Level* (2022), each fundamental competency has its own level of mastery, which, in the case of secondary education, corresponds to Level III. Consequently, this study will describe the fundamental competencies that represent the object of this research: **Problem-Solving Competency, Ethical and Citizenship Competency, and Communicative Competency.**

Level III Mastery for Ethical and Citizenship Competency

According to the *Bases for Curriculum Review and Updating* (2016):

"The individual interacts with others with respect, justice, and equity in personal, social, and institutional settings; critically questions practices that violate human rights and the use of violence in any situation; and transforms relationships and social norms based on the principles of participatory democracy." (p. 68)

Level III Mastery for Communicative Competency

According to the *Bases for Curriculum Review and Updating* (2016):

"The individual understands and expresses ideas, feelings, and cultural values in different communication situations, using various systems to strengthen their identity, build knowledge, comprehend reality, and establish meaningful relationships with others." (p. 76)

Level III Mastery for Problem-Solving Competency

According to the *Bases for Curriculum Review and Updating* (2016):

"The individual recognizes the existence of a fact or circumstance that hinders the achievement of a desired goal, determines its nature, and proposes strategies to provide creative and innovative responses according to the context." (p. 86)

Level of Appropriation

The level of appropriation refers to the degree of recognition, appreciation, and choice that an individual makes regarding certain values. In this context, appropriation is a term used to indicate that an individual has made something their own (Dávila-Rodríguez, 2020); in this particular case, they have embraced each of the dimensions that make up the fundamental competencies. Similarly, Calánchez and Vera (2022) state that appropriation is linked to the conscious engagement and application of knowledge acquired by an individual.

For secondary school students, their journey through the educational system implies an appropriation of fundamental and specific competencies, demonstrated through the practical application of each of the dimensions that make up these competencies, as verified in the levels of mastery and the graduate profile.

In this regard, Roque Rodríguez (2023) states that this appropriation can be measured through indicators organized on a scale from 0 to 100. When the score is between 1 and 50, it is considered a low level; from 50.1 to 80, it is considered a medium level; and from 80.1 to 100, it corresponds to a high level.

Nature of the Physical Education Area

According to the curricular document *Nature of Curricular Areas NAC* (2019), which presents the approaches and perspectives that guide the construction of knowledge and the achievement of full competency development in the national education system, certain considerations and contributions from Physical Education have been taken into account as an academic or curricular area that directly engages with students.

Considerations and Justifications Regarding the Area

According to *NAC* (2019), there are several reasons why Physical Education was recognized and incorporated into the curriculum as an academic area, and its contribution is considered essential for the comprehensive development of students at all educational levels. Some of these reasons are as follows:

"The Physical Education Area deepens the knowledge of motor behavior as a way to understand human behavior, develop skills and abilities that enhance and increase movement capacity, and adopt attitudes, values, and norms related to the body and movement." (NAC, 2019, p. 91)

Motor behavior represents the primary dimension on which Physical Education focuses in its development process. This contributes to strengthening other essential capacities that form part of the integrality of human beings as social, emotional, cognitive, and sentimental entities who experience varied sensations that allow them to understand the world in which they live and coexist with others.

As a pedagogical discipline, Physical Education focuses on the body and movement as the fundamental axes of educational action. Its teaching should promote and facilitate students' meaningful understanding of their bodies and their movement potential, enabling them to act competently in various motor situations throughout life, improve their quality of life, enjoy leisure time, and establish meaningful and fluid interactions with others. (NAC, 2019, p. 91)

The pedagogical and didactic approach of Physical Education centers on the body-movement duality as essential elements of its action, always aiming for one to develop in dependence on the other. This occurs through participation in activities that simulate real-life situations and problems that must be solved, allowing students to prepare for future life challenges while also enjoying the learning experience.

Secondary School Graduate Profile

According to the *Curricular Design for the Secondary Level DCNS* (2017, pp. 67-68), a secondary school graduate should demonstrate the following qualities:

Knows and responsibly cares for their body, practices healthy lifestyle and eating habits aimed at promoting physical, emotional, and mental health.

Thinks logically, analytically, and reflectively, allowing them to adopt coherent and relevant stances.

Thinks independently, develops creativity and talents within the framework of personal and social values, and engages in dialogue through various artistic expressions.

Demonstrates the ability to construct valid arguments using research methods and techniques and knowledge-building strategies following the logic of scientific thought, applied to real-life contexts with ethical commitment.

Is capable of engaging in dialogue with different contexts and seeking solutions to real-world problems, aiming to improve community quality of life and environmental sustainability.

Defines their life project and makes meaningful decisions when facing personal, family, and institutional challenges with autonomy and assertiveness.

Commits to contributing to the achievement of common goals to promote democratic coexistence and well-being within

family, community, and social contexts.

Respects and values the diversity of living beings on the planet and assumes a commitment to the continuous preservation of the environment as a fundamental collective heritage.

Recognizes themselves as part of both the national and global community and reflects with historical awareness on the quality of social, economic, political, and cultural coexistence. Based on this, they freely adopt a citizen, participatory, and transformative commitment with a sense of justice, responsibility, and solidarity.

Adopts a critical stance toward various cultural heritages, whether local, national, or global.

Communicates ideas and feelings effectively in their native language, in other languages, and through various codes, with an inclusive perspective and in different intervention scenarios, using diverse forms of expression, tools, and resources.

Values and effectively utilizes technologies for learning and problem-solving.

Acts with a sense of prevention and proactivity in unforeseen situations or in the event of disasters.

Engages voluntarily in recreational activities and experiences free time as an opportunity to expand different dimensions of their being.

Values and trusts themselves, recognizing their strengths and weaknesses, and interacts with others while respecting their dignity, abilities, and feelings.

Recognizes themselves as part of a greater whole, deepens their understanding of the meaning of existence, and promotes universal ethical, moral, social, cultural, and spiritual values based on the Universal Declaration of Human Rights for active citizenship.

Protects and cares for the environment by practicing the principles of recycling, reusing, and reducing.

Plans their life project in alignment with their interests, possibilities, and aspirations.

4. METHODOLOGY

The methodology employed in this study was based on a quantitative, descriptive, cross-sectional approach, aiming to describe the level of appropriation of fundamental competencies among secondary-level students in Santiago. The population consisted of 5,000 students from public or government schools. The sample was selected non-probabilistically or by convenience and amounted to approximately 535 students.

The data collection instrument was chosen after a search in which several instruments capable of assessing fundamental or civic competencies— as they are referred to in some countries—were identified. These instruments included: the **Questionnaire for the Assessment of Transversal Competencies of Undergraduate Students (CECTGRA)** (Martínez & González, 2018); the **Civic Competence Questionnaire (CCC)** (Prada, 2018); the **Citizen Competency Scale Questionnaire** (Soriano, 2006); and the **Fundamental Competencies Questionnaire for the Dominican Republic (CCF-RD)** (Prada, 2019). From these four, the latter was selected as it was best suited to the Dominican educational context, specifically measuring the appropriation of fundamental competencies among Dominican students.

The **Fundamental Competencies Questionnaire for the Dominican Republic (CCF-RD)** consists of 19 closed-ended Likert-type questions that identify the level of appropriation of fundamental competencies through: four questions assessing **Norms and Violence-Environment-Dialogue**; five questions gathering information on **Bullying**; three questions collecting data related to **Complaints**; and seven questions surveying **Communication** (Prada, 2019). For validation, the questionnaire was subjected to expert judgment, who validated its content through the **Delphi method**. Additionally, a **Kaiser-Meyer-Olkin (KMO) factor analysis** was applied, yielding a score of 0.841, placing it within an acceptable range, meaning it can be applied in scientific studies, particularly those related to the level of appropriation of fundamental competencies.

For the administration of the instrument, authorization was requested from the **District Directorate 08-03 of Santiago de los Caballeros**, allowing its application in the selected educational centers. The intentions of the intervention were presented, and it was explained that the process adhered to an ethical protocol. Additionally, an **informed consent form** was provided and explained to parents, ensuring they understood the study's objectives and signed the document authorizing their children's participation.

The collected data were analyzed using **IBM SPSS Statistics 27**, where they were categorized according to response levels. The **negative category** included responses from the "Never" and "Almost Never" scales; the **intermediate category** included responses from the "Sometimes" scale; and the **positive category** included responses from the "Always" and "Almost Always" scales. This classification facilitated the identification of the most typical response frequencies for each analyzed competency: **Ethical and Civic Competence, Communicative Competence, and Problem-Solving Competence**, for subsequent descriptive analysis.

To determine the level of competency appropriation, the **scale proposed by Roque Rodríguez (2023)** was adopted. This

scale assigns numerical values from **0 to 100** and a nominal classification of **low, medium, and high**: **Low level**: 1 to 50, **Medium level**: 50.1 to 80, **High level**: 80.1 to 100

5. RESULTS AND DISCUSSION

Table 1: Data Related to Ethical and Citizenship Competence

Level	Dimensions and Percentages				
	Norms (%)	Bullying (%)	Equity (%)	Participation (%)	Complaints (%)
Low	12.8	88.4	22.8	50.5	43.9
Medium	23.8	5.8	33.3	18.7	16.9
High	63.4	5.8	43.9	30.8	39.2

Source: Percentage values derived from SPSS Statistic 27.

Regarding Ethical and Citizenship Competence, at the low level, the Bullying dimension has the highest percentage (88.9%), followed by Participation (50.5%). Similarly, at the medium level, the Equity dimension has the highest percentage (33.3%), followed by Norms (23.8%). Likewise, at the high level, the dimensions with the highest percentages are Norms and Non-violence (63.4%), followed by Equity (43.9%). Based on these results, it can be inferred that students seek to solve problems by respecting rules and laws and prefer dialogue over violence when faced with conflicts.

Table 2.: Data Related to Communicative Competence

Level	Dimensions and Percentages			
	Communication (%)	Dialogue (%)	Non-violence (%)	Discrimination (%)
Low	30.5	38.8	20.3	28.4
Medium	25.5	27.8	16.35	15.5
High	44	33.5	63.4	56.1

Source: Percentage values derived from SPSS Statistic 27.

Regarding Communicative Competence, at the low level, the Dialogue dimension has the highest percentage (38.8%). At the medium level, the highest percentages are in Dialogue (27.8%) and Communication (25.5%). At the high level, the Non-violence dimension has the highest percentage (63.4%), followed by Discrimination (56.1%). These results suggest that students prefer to engage in dialogue rather than act violently when facing conflicts.

Table 3.: Data Related to Problem-Solving Competence

Nivel	Dimensiones y porcentajes				
	Comunicación (%)	No violencia (%)	Ambiental (%)	Diálogo (%)	Denuncias (%)
Bajo	30.5	20.3	22.4	30.7	43.9
Medio	25.5	16.4	9.3	26	16.9
Alto	44	63.4	68.4	43.3	39.2

Fuente: Valores porcentuales emanados del SPSS Statistic 27.

Regarding Problem-Solving Competence, at the low level, the highest percentage is found in the Complaints dimension (43.9%), followed by Communication (30.5%). At the medium level, the highest percentages are in Dialogue (26%) and Communication (25.5%). At the high level, the Environmental dimension has the highest percentage (68.4%), followed by Non-violence (63.4%). These results indicate that students avoid littering in the streets, oceans, or rivers to prevent environmental pollution and prefer dialogue over violence when resolving conflicts.

Table 4.: Arithmetic Mean Analysis of Ethical and Citizenship Competence

Level	Mean (\bar{x})
Low	30 %
Medium	21.8 %
High	48.1 %

Note: Own elaboration based on the arithmetic mean \bar{x} .

Based on the arithmetic mean calculated from the percentages of the dimensions of Ethical and Citizenship Competence, it can be highlighted that students at the high level, categorized as Almost Always and Always, engage in actions that respect norms; oppose bullying; uphold equity; accept diversity; participate peacefully against social disadvantages; and report cases of sexual abuse or physical violence. However, the percentage obtained is not significantly representative of the expected outcome.

Table 5.: Arithmetic Mean Analysis of Communicative Competence

Level	Mean (\bar{x})
Low	46.5 %
Medium	18.7 %
High	34.9 %

Note: Own elaboration based on the arithmetic mean \bar{x} .

Regarding the arithmetic mean of Communicative Competence dimensions, it can be observed that students at the high level, categorized as Almost Always and Always, express emotions and feelings without fear of judgment, share their ideas with others, sometimes raise their voice when angry, engage in dialogue before resorting to violence, and speak out against discrimination. However, the percentage obtained is not significantly representative of the expected outcome.

Table 6.: Arithmetic Mean Analysis of Problem-Solving Competence

Level	Mean (\bar{x})
Low	29.6 %
Medium	18.8 %
High	51.6 %

Note: Own elaboration based on the arithmetic mean \bar{x} .

Based on the arithmetic mean of Problem-Solving Competence dimensions, it is noted that students at the high level, categorized as Almost Always and Always, express emotions and feelings without fear of judgment, share their ideas with others, prefer dialogue to resolve conflicts without violence, avoid littering to protect natural resources, raise their voice when angry to dominate others, report cases of sexual abuse or physical violence, and recognize the strengths of others. However, the percentage obtained is not significantly representative of the expected outcome.

6. DISCUSSION

According to the results of Ethical and Citizenship Competence, the most prominent dimension was Norms, which relates to respecting established rules and laws as a means of solving problems. In this regard, MINERD (2016) states that Ethical and Citizenship Competence represents a skill developed by individuals within a society to establish boundaries of respect for human rights. Similarly, the **Bases for Curriculum Review and Updating (2016)** indicate that, in accordance with Level III proficiency, secondary school students should engage with others under principles of respect, justice, and equity in all settings, while critically evaluating violations of rights or the use of violence within social interactions, based on democratic participation principles.

The **DCNS (2017)**, in its high school graduation profile, asserts that students should recognize themselves as social beings and critically reflect on the quality of their coexistence, which should be based on respect in all aspects. In this context, **Regalado (2023)** states that: *"When living in a community, it is essential to respect norms and fulfill certain obligations for everything to function properly"* (p. 3).

However, schools still experience issues that challenge the adherence to norms, such as fights, failure to wear uniforms, non-compliance with schedules, and lack of respect for teachers and school authorities. Nevertheless, **Rodríguez-Buitrago (2018)** asserts that: *"Norms serve as an educational resource to facilitate coexistence and achieve goals; they do not completely prevent conflicts but can help alleviate them"* (p. 14). Furthermore, **Rojas (2025)** concludes that national leaders and organizations have not prioritized the development of this competence, emphasizing the need to promote it in order to foster assertive interactions and healthy coexistence through the dissemination of values.

According to the results of Communicative Competence, the highlighted dimension was Nonviolence, which relates to establishing dialogue in the face of a problem rather than acting violently. Regarding this, MINERD (2016) states that communicative competence is the ability of individuals to establish meaningful relationships with others through the articulation of ideas and the understanding of what is perceived from established cultural values. Similarly, in the **Bases of the Curricular Review (2016)**, it is established that in Domain III, students must understand and express their ideas, feelings, and emotions while adhering to the cultural values set for various forms of communication, particularly in establishing assertive relationships with others. The **DCNS (2027)**, in its high school graduation profile, states that students demonstrate the ability to engage in dialogue when facing real-world problems.

All of this contrasts with the findings of **Baldera (2024)**, who explains that in the Dominican Republic, in 2023, homicides were recorded at a rate of 6.6% per 100,000 inhabitants, all caused by social conflicts. Furthermore, records from the Ministry of Interior and Police certify that 58% of homicides result from social conflicts occurring in various communities across the country. According to **Fernández (2024)**, the significant wave of brawls in educational centers in Santiago has put authorities on high alert. In response, **Santana (2024)** reports that an altercation occurred within a school in Santiago de los Caballeros, where a student assaulted another with scissors, causing an injury. Likewise, **Encarnación (2024)** states that in the Hato Mayor district of Santiago, two students were involved in a fight outside the school, resulting in one suffering significant spinal damage due to the blows inflicted by the other.

According to the results of Problem-Solving Competence, the highlighted dimension was Environmental Awareness, which relates to avoiding littering on the ground, in the sea, or in rivers, as these actions pollute natural resources. Regarding this, MINERD (2016) states that this competence is defined by individuals' ability to detect an adverse circumstance that prevents them from reaching a set goal and, accordingly, to find a way to solve it. Similarly, the **Bases of the Curricular Review (2016)** specify that in Domain III, students must be capable of recognizing any situation that hinders their achievement of set objectives and, based on this, develop strategies to respond creatively in a contextualized manner. The **DCNS (2027)**, in its graduation profile, states that students should show interest in caring for and respecting the environment, value the diversity of living beings, and solve problems effectively and positively.

In contrast, **Guzmán and Vásquez (2021)** report that in populous areas of Santiago, there are makeshift dumps where people dispose of all kinds of waste, contributing to the pollution of the environment where residents are at risk of contracting illnesses. As a result, the **Santiago Municipal Council (2024)** issued a report on the "clean points" program, in which selected educational centers received plastic containers and were guided and supervised in the creation of a recycling culture.

Another significant dimension is Nonviolence. Regarding this, **Matos (2024)** states that violence has become normalized in the Dominican Republic to the extent that mistreatment among people, especially against women, occurs daily. In the school environment, **Arias (2023)** highlights that Dominican schools report hundreds of violent incidents, including verbal, physical, and even sexual aggression. In 2023, a total of 20,120 cases were recorded within and outside educational centers, involving both teachers and students. Supporting this statement, **IDEICE (2017)**, based on PISA 2015 data, states that the Dominican educational system faces one of its most serious problems—violence experienced by secondary students in the form of physical assaults, bullying, threats, and derogatory nicknames. Consequently, **Pacheco-Salazar (2018)** emphasizes that in the Dominican Republic, violence as a disciplinary mechanism has become an accepted culture, with the number of victims and aggressors significantly higher than in other Latin American and European countries. Finally, **Pacheco-Salazar and López-Yáñez (2019)** stress that "School violence should always be understood as a reflection of the violence occurring in the broader

social context" (p. 364).

Regarding the Level of Competency Appropriation

Based on the arithmetic mean or average of each competence, the following results were obtained: Ethical and Civic Competence had an unfavorable outcome, with only 48.1% of students at a high level; Communicative Competence had 34.9% at a high level; and Problem-Solving Competence was the most favorable, with 51.6% at a high level. In response, Dávila-Rodríguez (2020) and Calánchez and Vera (2022) state that appropriation is the ability of individuals to assume knowledge, make it their own, and use it as a response to a need or situation. Consequently, Roque Rodríguez (2023) establishes that appropriation can be measured on a scale where values range from 1 to 50 for a low level, 50.1 to 80 for a medium level, and 80.1 to 100 for a high level.

7. CONCLUSIONS

Based on the results of each fundamental competence studied and in alignment with the definitions of competencies, mastery levels, and graduation profiles, the following conclusions are presented:

- Although Ethical and Civic Competence showed favorable results in terms of rule adherence (respect for established norms and laws), other dimensions such as Bullying, Equity, Participation, and Reporting were not equally favorable. Additionally, the final average for this competence was unfavorable according to the assumed scale. Thus, it is concluded that students' level of appropriation for this competence is low.
- In Communicative Competence, Nonviolence and Non-Discrimination were favorable, meaning that students engage in dialogue without violence and treat others with respect regardless of their condition, race, or ideology. However, other dimensions were not equally favorable. Furthermore, the final average obtained for this competence, according to the scale, was also unfavorable. Therefore, it is concluded that students' level of appropriation for this competence is low.
- In Problem-Solving Competence, the Environmental Awareness and Nonviolence dimensions were favorable, meaning that students refrain from littering in public spaces and solve problems without resorting to violence. However, other dimensions were not as favorable. Given that the final average for this competence was moderately favorable according to the scale, it is concluded that students' level of appropriation for this competence is medium.

ACKNOWLEDGMENT

A very special acknowledgment is extended to the Instituto Superior de Formación Docente Salomé Ureña (ISFODOSU) for providing the opportunity to participate in the Master's Degree in Integral Physical Education (MEFI), which has been highly beneficial both academically and professionally.

FUNDING

No funding sources were available.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

AUTHORSHIP CONTRIBUTION

Conceptualización, Análisis formal, Investigación, Redacción-borrador original: José Luis Rosario Rodríguez

REFERENCES

- [1] Adecuación Curricular Nivel Secundario (2022). <https://ministeriodeeducacion.gob.do/docs/direccion-general-de-curriculo/IgwQ-adequacion-curricular-nivel-secudariopdf.pdf>
- [2] Álvarez, A. C. R. (2018). Actitudes e ideologías lingüísticas de docentes de español: entre la corrección y el valor de la diversidad. *Análisis. Revista Colombiana de Humanidades*, 50(92), 95-117. <https://www.redalyc.org/articulo.oa?id=515558288006>
- [3] Arias, S. (2023). La violencia en las escuelas como reflejo del deterioro de la sociedad dominicana. *Diario Libre*. Recuperado el 10 de marzo 2025 de: <https://www.diariolibre.com/actualidad/educacion/2023/06/15/violencia-en-escuelas-reflejo-de-la-sociedad/2345266>
- [4] Ayuntamiento del Municipio de Santiago (2024). Informe del programa puntos limpios agosto 2024. SISMAP. Recuperado el 10 de marzo 2025 de: <https://sismap.gob.do/Municipal/uploads/evidencias/638628623517864410-1.01.20-25-9-2024-informe-puntos-limpios-1.pdf>

- [5] Baldera, E. (2024). Una ley de convivencia ciudadana. Periódico El Caribe. Recuperado el 10 de marzo 2025 de: <https://www.elcaribe.com.do/opiniones/una-ley-de-convivencia-ciudadana/>
- [6] Bases de la Revisión y Actualización Curricular (2016). Ministerio de Educación. <https://www.ministeriodeeducacion.gob.do/docs/direccion-general-de-curriculo/PnHJ-bases-de-la-revision-y-actualizacion-curricularpdf.pdf>
- [7] Calánchez, A., & Vera, K. J. C. (2022). Apropiación social de la tecnología: una necesidad como consecuencia de la COVID-19. *Revista Tecnología, Ciencia y Educación*, (21), 183-198. <https://dialnet.unirioja.es/servlet/articulo?codigo=8228577>
- [8] Dávila-Rodríguez, L. P. (2020). Apropiación social del conocimiento científico y tecnológico. Un legado de sentidos. *Trilogía Ciencia Tecnología Sociedad*, 12(22), 116-136. http://www.scielo.org.co/scielo.php?pid=S2145-77782020000100116&script=sci_arttext
- [9] Encarnación, I. (2024). Estudiante sufre lesiones en la columna tras pelea con compañero de clases. De último minuto. Recuperado el 10 de marzo 2025 de: <https://deultimominuto.net/nacionales/estudiante-sufre-lesiones-en-la-columna-tras-pelea-con-companero-de-clases/>
- [10] Fernández, E. (2024). VIDEO | Alto nivel de violencia en centros educativos de Santiago genera preocupación a las autoridades. Intervención del Ministerio de Educación en casos de violencia escolar. *Diario Libre*. Recuperado el 10 de marzo 2025 de: <https://www.diariolibre.com/actualidad/educacion/2024/04/19/preocupacion-por-violencia-en-escuelas-de-santiago/2679212>
- [11] Guzmán, T. D. y Vásquez, V.J. (2021). Principales problemas medioambientales que afectan la ciudad de Santiago de los Caballeros, la República Dominicana y el mundo. <https://es.scribd.com/document/739937916/Principales-problemas-medioambientales-que-afectan-la-ciudad-de-Santiago-de-los-Caballeros-la-Republica-Dominicana-y-el-mundo>
- [12] Hernández, I., Luna, J. y Cadena, M. (2017). Cultura de paz: una construcción desde la educación. *Historia Educativa Latinoamericana*, 149 -172. http://www.scielo.org.co/scielo.php?pid=S0122-72382017000100009&script=sci_arttext
- [13] IDEICE (2017). Reporte de acoso y violencia escolar en República Dominicana. Visión panorámica con los datos de PISA 2015. Instituto Dominicano de Evaluación e Investigación de la Calidad. Recuperados el 10 de marzo 2025 de: <https://ideice.gob.do/descargas.php?ruta=cGRmL3B1YmxpY2F0aW9ucy8=&nombre=MjAxODA0MTcxMTMxMjYucGRm&descarga=Reporte%20de%20acoso%20y%20violencia%20escolar%20en%20República%20Dominicana:%20Visión%20panorámica%20con%20los%20datos%20de%20PISA%202015&return=20180417113126>
- [14] Martínez Clares, P., y González Morga, N. (2018). Las Competencias Transversales en la Universidad: Propiedades Psicométricas de un Cuestionario. *Educación XX1*, 21(1). <https://www.redalyc.org/pdf/706/70653466011.pdf>
- [15] Matos, K. M. (2024). Olvido del buen trato, normalizando la violencia. *Word Vision*. Recuperado el 10 de marzo 2025 de: <https://worldvision.org.do/olvido-del-buen-trato-normalizando-la-violencia/>
- [16] MINERD (2016). Bases de la Revisión y Actualización Curricular, Santo Domingo, D.N., (2016). <https://www.didactica.edu.do/wp-content/uploads/2018/02/Bases-de-la-Revisi%C3%B3n-y-Actualizaci%C3%B3n-Curricular.pdf>
- [17] MINERD (2017). Diseño Curricular Nivel Secundario Modalidad Académica. Segundo Ciclo 4to., 5to. y 6to.. Versión Preliminar para Revisión y Retroalimentación. <https://www.ministeriodeeducacion.gob.do/docs/direccion-general-de-curriculo/An9x-secundaria-segundo-ciclo-modalidad-academicapdf.pdf>
- [18] Naturaleza de las Áreas Curriculares (2019). Versión Preliminar para Revisión y Aportes. <https://www.ministeriodeeducacion.gob.do/docs/direccion-general-de-curriculo/2fPZ-naturaleza-de-las-areas-curriculares-2020-web-1pdf.pdf>
- [19] Ojeda, A. M. M. (2021). Competencias comunicativas del estudiante de básica primaria a través de la comprensión lectora: una mirada desde la inteligencia emocional. *tesis doctorales*. <http://espacio-digital.upel.edu.ve/index.php/TD/article/view/248>
- [20] Pacheco-Salazar, B. (2018). Violencia escolar: la perspectiva de estudiantes y docentes. *Revista electrónica de investigación educativa*, 20(1), 112-121. https://www.scielo.org.mx/scielo.php?pid=s1607-40412018000100112&script=sci_arttext

-
- [21] Pacheco-Salazar, B., & López-Yáñez, J. (2019). "Ella lo provocó": el enfoque de género en la comprensión de la violencia escolar. *Revista de Investigación Educativa*, 37(2), 363–378. <https://doi.org/10.6018/rie.37.2.321371>
- [22] Palacios, L. L., & Algarra, E. J. D. (2020). El profesor posmoderno de Ciencias Sociales: Un modelo de buenas prácticas en educación patrimonial. *REICE: Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, 18(1), 27-45. <https://dialnet.unirioja.es/servlet/articulo?codigo=7182196>
- [23] Pedraza, A., Cabrera Yaguana, M. B., Ángel Florez, A., & Leal Velásquez, M. A. (2019). Concepciones de padres, profesores y estudiantes, sobre la escuela como escenario de paz. *Revista Interamericana de Investigación, Educación y Pedagogía*, 12(2), 181-209. <https://www.redalyc.org/articulo.oa?id=561068684007>
- [24] Prada, R. M. J. (2018). Descripción de las competencias ciudadanas que presentan los jóvenes y adolescentes. *Revista Caribeña de Investigación Educativa (RECIE)*, 2(1), 51-66. <https://doi.org/10.32541/recie.2018.v2i1.pp51-66>
- [25] Prada, R. M., (febrero de 2019). Validación del Cuestionario en Competencias Fundamentales para la República Dominicana CCF-RD. En X. Dopico (Presidencia), *La innovación en la educación física, el deporte y la salud*. Conferencia llevada a cabo en el III Congreso Iberoamericano de Actividad Física, de la Red Euroamericana de Actividad Física, Educación y Salud (REAFES), Santo Domingo, República Dominicana.
- [26] Regalado, R. (2023). Protocolo entre vecinos. Normas de cortesía para compartir las áreas comunes. *El Nuevo Diario*. Recuperado el 10 de marzo 2025 de: <https://elnuevodiario.com.do/protocolo-entre-vecinos-normas-de-cortesia-para-compartir-las-areas-comunes/>
- [27] Rodríguez-Buitrago, A. G., (2018). CONSTRUCCIÓN DE NORMAS: UNA EXPERIENCIA DESDE EL CLIMA DE AULA. *Revista Eleuthera*, 18(), 13-30. <https://doi.org/10.17151/eleu.2018.18.2>.
- [28] Rojas, L. (2025). La convivencia social en República Dominicana. *Periódico Hoy*. Recuperado el 10 de marzo 2025 de: <https://hoy.com.do/la-convivencia-social-en-republica-dominicana/>
- [29] Roque Rodríguez, E. (2023). Indicadores e índices para evaluar el uso y apropiación tecnológica en docentes de licenciatura. *RIDE. Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 14(27). <https://www.ride.org.mx/index.php/RIDE/article/view/1735/4839>
- [30] Santana, N. (2024). Educación interviene escuela donde un niño hirió a otro en un pleito. *Periódico La Información*. Recuperado el 10 de marzo 2025 de: <https://www.lainformacion.com.do/ciudad/santiago-de-los-caballeros/educacion-interviene-escuela-donde-un-nino-hirio-a-otro-en-un-pleito>
- [31] Soriano, E. (2006). Competencias ciudadanas en el alumnado de segundo ciclo de educación secundaria obligatoria de Almería. *Revista de Investigación Educativa*, 24(1), 119- 146. <https://revistas.um.es/rie/article/view/97331>
-