South American Publishing

SAP Dentistry. 2025; 3:204
doi: 10.62486/dent2025204

REVIEW

Education in values from an interdisciplinary perspective in students of the Dentistry degree

Educación en valores desde la interdisciplinariedad en los estudiantes de la carrera Estomatología

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Cite as
Abraham-Millán Y, Montano-Silva RM, Velázquez-Borges Y, Núñez-Pérez BM. Education in values from an interdisciplinary perspective in students of the Dentistry degree. SAP Dentistry. 2025; 3:204. https://doi.org/10.62486/dent2025204

Publication History
Submitted: 28-03-2024
Revised: 01-08-2024
Accepted: 17-12-2024
Published: 01-01-2025

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ABSTRACT

Introduction: the article addresses the professional training of the dentist and the role of the profes-sor in the formation of values in students, in the conditions of a new Cuban university, in a neoliberal globalized world with the predominance of North American imperialism, and its allies.
Objective: to base the training process on values by establishing interdisciplinary relationships in students of the Dentistry career.
Method: methods such as documentary, historical-logical and analytical-synthetic analysis were used. 27 bibliographies were used.
Development: a theoretical framework is proposed to establish interdisciplinary relationships from the Biological Bases of Stomatology to Comprehensive Dentistry with the subjects History of Cuba and Philosophy and Health.
Conclusions: for the formation of values in the Dentistry career, it is necessary to establish interdis-ciplinary relationships in the teaching-educational process as a guarantee for the future performance of students in the practice of the profession, guaranteeing the comprehensive training of the profes-sional that allows him to defend the conquests of the Revolution with an internationalist, humanist, supportive and responsible attitude.

Keywords: Education in Values; Interdisciplinary Relations; Dentistry.

RESUMEN

Introducción: el artículo aborda la formación profesional del estomatólogo y el papel del profesor en la educación en valores en los estudiantes, en las condiciones de una nueva universidad cubana, en un mundo globalizado neoliberal con el predominio del imperialismo norteamericano, y sus aliados.
Objetivo: fundamentar el proceso de formación en valores mediante el establecimiento de relaciones interdisciplinarias en estudiantes de la carrera Estomatología.
Método: se emplearon métodos como el análisis documental, histórico-lógico y analítico-sintético. Se utilizaron 27 bibliografías.
Desarrollo: se propone un marco teórico para establecer relaciones interdisciplinarias desde las Ba-ses Biológicas de la Estomatología hasta la Estomatología Integral con las asignaturas Historia de Cu-ba y Filosofía y Salud.
Conclusiones: para la formación en valores en la carrera Estomatología se necesita establecer rela-ciones interdisciplinarias en el proceso docente-educativo como una garantía para la futura actuación de los estudiantes en el ejercicio de la profesión, garantizando la formación integral del profesional que le permita defender las conquistas de la Revolución con una actitud internacionalista, humanista, solidaria y responsable.

Palabras clave: Educación en Valores; Relaciones Interdisciplinarias; Estomatología.

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INTRODUCTION

Humanity currently faces a globalized world order, rapid advances in science, technology, information technology, and communications, and the development of artificial intelligence. In this environment, it is necessary for underdeveloped countries, Latin American countries, and third-world countries in general to train comprehensive professionals who will enable nations to survive in the present day. This training must offer an education based on solid knowledge of the profession and mastery of professional skills, enabling the development of professional abilities and performance in line with the times.

The training of stomatologists requires that, from the teaching-educational process, interdisciplinary relationships be established from the discipline of Biological Bases of Stomatology to the discipline of Comprehensive General Stomatology, with the subjects History of Cuba and Philosophy and Health, considering that these subjects develop: cognitive-instrumental, affective-motivational, and attitudinal-ideological aspects, based on the ideology of the Cuban Revolution and the pedagogy of developmental learning, which promote a positive attitude towards study and creative work, supported by values, attitudes, and feelings of solidarity, altruism, humanism, resilience, and ethics, among others.

This research aimed to establish the process of values education by establishing interdisciplinary relationships among students in the dentistry program.

DEVELOPMENT

Education in Cuba has become the social instrument par excellence for preparing people for their social performance, which is why educational policy must guarantee the human right to education and the duty to contribute to the training of current and future generations with a comprehensive social vision.[1]

While it is true that the family, political and mass organizations, workplaces, the media, and society as a whole are involved in the educational process in general, the responsibility for directing this process in the training of Cuban professionals lies with the universities, as they are the main cultural centers with the scientific preparation to fulfill this important social mission.[1]

The objectives set out in Cuban Higher Education for the training of professionals are based on the ideological foundations of Martí and Marxist-Leninist principles, as a synthesis of the most advanced thinking of the time, which includes the training of new generations of professionals in the ideas of the founders of the nation and the contributions of all the generations that fought for the achievement of human dignity.[1]

Our National Apostle said: "The divorce between the education received in an era and the era itself is criminal [...] To educate is to deposit in each man all the human work that has preceded him: it is to make each man a summary of the living world up to the day he lives; it is to bring him up to the level of his time, so that he may float above it, and not leave him below his time, where he cannot come to the surface; it is to prepare man for life."[2]

In this way, it is assumed that educating is preparing professionals to successfully defend the creative work of the Cuban Revolution with the economic, political, and social demands of the stage in which they live, based on Martí's ideas on education, referred to above.[1]

In the process of training Cuban professionals, three essential dimensions are identified in the educational policy of the Ministry of Higher Education: the instructional dimension, the educational dimension, and the developmental dimension.[1]

Together, these three dimensions express the need to prepare Cuban professionals for their role in the socialist society being built. That is why the approach to educational work that guides professional training is comprehensive, considering in close dialectical unity the cognitive, affective, conscious, and social commitment aspects, in addition to scientific and technical preparation, humanistic training, the development of philosophical thinking, and training in moral values, to transform the personality of the professional in training by the interests demanded by socialist society.[1]

In this way, the unity between instruction and education, as one of the main guiding ideas of the training process, aims to ensure that graduates take on the challenges of the current era and actively participate in the economic and social development of the country, defending the achievements of the Cuban Revolution. This requires political and ideological training.[1]

It is, therefore, a question of strengthening, in the training of Cuban professionals, the system of values that has characterized Cuban society throughout its history as examples of exemplary patriotism, pride in being Cuban patriots and internationalists with a great sense of responsibility in fulfilling their duty to the nation and humanity. In this unity, anti-imperialism, solidarity, honesty, and the spirit of sacrifice of the Cuban people from the beginning of the struggle for freedom to the present day.[1]

This raises the need for professional training from a perspective that promotes lifelong scientific education, with an awareness of social responsibility and a broad profile based on a comprehensive general culture that enables access to information about the world. This requires a global vision of reality in all its complexity, based on interdisciplinary education as a principle for training.

Armando Hart Dávalos expressed the following on this subject: "[...] the world of science is moving towards an integrative and transdisciplinary vision. From the fragmentation that was necessary at a certain point in history to the humanistic vision of a single science, as Carlos Marx anticipated or as the Cuban thinker José de la Luz y Caballero stated: 'Science is one, we divide it in order to understand it.'"[1,3]

Therefore, comprehensive professional training, starting at the university level, requires the use of interdisciplinary relationships as one of the avenues that offer great possibilities for the training of the professionals that Cuba needs today.

When analyzing the definitions provided by different authors,[4,5,6,7,8,9] interdisciplinarity is considered as the relationship between related or unrelated disciplines for the resolution of professional problems, where the student, as a subject of learning, assimilates the dialectical-materialist method of thinking by reflecting on and resolving these contradictions.

The definition discussed by Núñez-Jover et al.[10] states that interdisciplinarity: "[...] is the encounter and cooperation between

two or more disciplines, where each contributes its conceptual frameworks, ways of defining problems, and methods of integration [...] the interpenetration and intertwining of traditional disciplines, whose barriers tend to dissolve in the face of the need to solve complex problems [...]".

The authors of this research share the concept of interdisciplinarity.

Like interdisciplinarity, problem-based teaching plays an important role in the teaching-learning process, as it contributes to the comprehensive training of students, prepares them for the integration of curricular, work, and research components, and, at the same time, develops skills for debating, defending points of view, and seeking solutions to problems.[11]

The use of coordinated work between interdisciplinarity and problem-based teaching in the classroom enables students to become subjects of their learning, consciously assimilating knowledge and developing skills, abilities, and values, as it constitutes the possible way in which they can appropriate the knowledge provided by the different subjects in their integrated treatment.[12]

The link between interdisciplinarity and problem-based teaching contributes to the development of reflective and constructive reasoning that allows students to get to the heart of the phenomenon being studied, establish connections and relationships, and apply the content to social practice in order to solve problems not only in the educational sphere but also in society in general.[13]

Although activity is considered in its cognitive, communicative, practical, and evaluative functions in the teaching-learning process, it is necessary to assume the processes of introduction, systematization, deepening, and generalization of knowledge and the use of specific intentionality and dimensionality to achieve this as a way of enhancing the use of interdisciplinary relationships.

The Freirian method opposes the unidirectional system of education, conceived as an instrument of oppression, and proposes the establishment of a new link between teachers and their students. There are two types of education: domesticating and liberating. Liberating or "problematizing education," also known as dialogical education, was developed by Freire as an alternative to the former to eliminate the dichotomy between educators and learners, destroying the passivity of the latter and encouraging them to transform their reality.[14]

This education develops critical knowledge, promotes reflection, and enhances thinking. Freire denotes a diagonal exchange between educators and students, in which both learn, question, reflect, and participate in the search for meaning. Paulo Freire's theory of knowledge is an educational approach that seeks people's liberation through education. He believed in an education based on dialogue between teachers and students.

One of the main problems with the institutionalized education process in Cuba today is that students cannot establish interdisciplinary relationships that facilitate their knowledge of specific subjects in the context of vocational training. This is reason enough to reflect on the teaching-learning process that teachers undertake from the conception of their classes.

Let us consider that the teaching-learning process is a: "[...] process of interaction between the teacher and the students through which the teacher directs learning using appropriate activity and communication, facilitating the appropriation of historical and social experience and the growth of the students and the group in the process of personal and collective construction".[10] From the preparation of the different subjects, it is necessary to give importance to interdisciplinary relationships in the teaching-learning process to appropriate the experience of science in Cuban education.

At the university level, there is still a lack of practical demonstrations in the subjects included in the curricula,[15,16,17,18,19,20] which confirms the need to determine actions that will allow these interdisciplinary relationships to be established from the planning stage of the curriculum.

In a study conducted on the Isle of Youth, 12 teachers were interviewed, revealing insufficient integration between subjects in the integrative discipline in 67 % of them. To evaluate the application of interdisciplinarity among students, a knowledge test questionnaire was administered to 67 third-, fourth-, and fifth-year students, with 82 % of them obtaining unsatisfactory results.[21]

The authors of this research believe that this is due to a widespread lack of knowledge of the content of one or more disciplines taught as part of a training program in line with the model of the professional they aspire to train.

This makes it impossible for teachers to establish different actions as part of their self-preparation when preparing their courses. The aim is to strengthen the teaching-learning process and transmit more excellent knowledge to students, contributing more coherently to forming a general and comprehensive culture in students, which requires establishing interdisciplinary relationships with other subjects.

In order to achieve interdisciplinary relationships, it is necessary to start from an in-depth study of the contents that make up each area of knowledge of the disciplines that form the training plans in the professional models, determine the regularities between them, and the contents in which relationships with the different subjects can be established, taking into account the guiding skills and the object of the profession for which the professional is being trained in particular.

It is important to develop methodological activities that enable these interdisciplinary relationships so that the actions planned take into account the relationships between the sciences in the scientific knowledge system. Thus, the content of the teaching is a summary of the sciences, and the methods selected for teaching are the basis for the values and attitudes that are intended to be formed.

Analysis of the program for Biological Bases of Stomatology and Comprehensive Stomatology

The content of these disciplines is distributed in the curriculum across several subjects, which are taught in different academic years of the Stomatology degree program. In all cases, this serves as an integrating axis for the training of this professional.

According to study plan E, the main integrating discipline is Comprehensive Stomatology, which comprises 20 subjects, 14 of which have a clinical focus. These subjects are responsible for systematizing and integrating the knowledge and developing the theoretical and practical skills acquired in the discipline of Biological Bases of Stomatology.

These disciplines provide the basis for the teaching-learning process, which should include three dimensions:

1. Instructional dimension: the system of knowledge and skills.
2. Educational dimension: creative, investigative, and technological abilities.
3. Developmental dimension: the fundamental values of the Cuban university and Cuban professionals.

These dimensions must be addressed for an individual student or a group of students and in the relationship between the student in training and society, also taking into account the values that need to be reinforced from the ethics of the Cuban stomatology professional:[22,23,24,25,26,27] patriotism, internationalism, honesty, solidarity, sincerity, simplicity, humanism, hard work, sacrifice, selflessness, and responsibility.

The curriculum strategies include the following in the program for students in training: educational and ethical work and pedagogical work in the different subjects of the study plan.

Educational and ethical work in the curriculum strategy includes the consolidation of these values (ethics, responsibility) through the personal example of teachers, the stimulation of behaviors that convey these values in students, as well as the combating and rectification of deviations from them (selfishness, irresponsibility); linking high- and medium-performing students to the support and development of low-performing students with social problems, demonstrating values of empathy, cooperation, solidarity, and humanism; the use of clinical cases and problematic situations in teaching activities, as well as in work-based education, that highlight social and human responsibility in their work to promote and prevent health, a fundamental pillar of medical education.

Political and ideological work in the classroom is based on reflections on relevant current political or social phenomena, whether or not related to the class topic, as well as climatic phenomena that entail social, political, and communication problems. The teaching-learning process of these disciplines applies the concept of Fidel Castro Ruz's Revolution based on its defining features.

Both disciplines have undergone various changes for continuous improvement based on the requirements of the health system or in the search for more fantastic teaching and educational development. All this has made it possible to respond to scientific advances worldwide and trends in medical education oriented towards Primary Health Care. There is no doubt that interdisciplinarity from the discipline of Biological Bases of Stomatology to the discipline of Comprehensive Stomatology, taking into account the subjects of Cuban History and Philosophy and Health, guarantees excellence, comprehensiveness, competence, and effectiveness in the skills, knowledge, and ethical-moral values that a stomatology professional must possess.

CONCLUSIONS

For values education in the Stomatology degree program, interdisciplinary relationships must be established in the teaching-learning process as a guarantee for students' future performance in the profession. This ensures the comprehensive training of professionals who can defend the achievements of the Revolution with an internationalist, humanistic, supportive, and responsible attitude.

FINANCING

The authors did not receive funding for the development of this article**.**

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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