

# Impact of public policy on higher education in Cuba

Miriam Alpízar Santana\*

Ministry of Higher Education, Cuba

\*Corresponding author.

E-mail address: [malpizar@mes.gob.cu](mailto:malpizar@mes.gob.cu)

---

**Abstract:** This article analyzes the background, results, and predictions of public policies accompanying the transformation of higher education in Cuba since the victory of the revolution. It shows how this process marks an improvement in the quality of education at different levels in the country, especially in higher education, and has had an impact on overall social indicators, especially higher education, which currently focuses on the Millennium Goals and the 2030 United Nations Agenda goals.

**Key words:** public policies; higher education; university

---

## 1 Introduction

In assessing the achievement of the Millennium Development Goals by 2015, the United Nations General Assembly took into account the considerations outlined in the *2030 Agenda for Sustainable Development* and established the goals outlined in 17 sustainable development goals, of which 169 were comprehensive and indivisible, covering the economic, social, environmental, and cultural fields of development.

Education is a human right, and everyone has equal access to free, compulsory, and high-quality education; Education is a universal public good that the state is responsible for. And gender equality is strictly related to the right to education to ensure the empowerment of girls and boys through equal education. It reinforces the responsibility of governments and underscores the commitment to strengthen science, technology and innovation, with the recognition that information and communication technologies should be used to strengthen education systems at different levels of education.

The sustainable, cultural, socio-economic, and ecological development of individuals and communities, territories, and countries largely depends on the influence of universities, which has been proven in the history of the past eight centuries. Designating training and research programs to address water supply issues, access sustainable energy, address the causes and impacts of climate change, work towards food sustainability, address housing shortages, protect consumable natural resources, and develop and guide policies to reduce inequality, illiteracy, and poverty among other important issues facing humanity will ensure that universities play the most active role and contribute to solving the urgent problems of today's society.

Higher education is crucial for striving to achieve the future vision set out in the *2030 Agenda* and the *2030 Education Action Framework*, as it has potential academic and scientific capabilities and strength in universities and research

centers. Studying, characterizing, and showcasing the progress and achievements of higher education in each country help to assess trends, behaviors, diversity, and scope, and identify the main challenges faced by the development of higher education, which have an impact on social transformation and the progress of all humanity.

Emphasizing the need for a harmonious integration of economic, social, environmental, and cultural development perspectives, it is required to project an innovative and relevant university based on sustainable and inclusive development, fundamentally because of its impact on economic growth and its contribution to the development of the economy and society of each nation and each of the territories by emphasizing local development.

Universities in Latin and Central America integrate various spaces into their networks, associations, forums, and activities, as well as academic and scientific experiences and exchanges in projects, conferences, seminars, exchanges with experts, and collaborative visits to world universities, all of which are necessary references for the work goals and proposed goals of each field within the university's scope of competence, especially in the improvement programs, in which transformations are projected to increase the quality of training programs, research projects and university-society interaction.

The challenge faced by universities is to play a role in preserving, disseminating, and producing new knowledge in a globalized environment, where there is a gap between the development of some countries and the backwardness of others, with the latter being those that accumulate the highest levels of poverty in the world. In the new conditions related to the development of scientific research and innovation programs, qualified human resources are provided to guide production and social processes. These reasons force countries to have truly relevant and innovative universities.

In June 2017, the National Assembly approved the economic and social policy guidelines adopted by the Seventh Congress of the Communist Party of Cuba, leading to the construction of a socialist, prosperous, and sustainable society with economic and social models being updated. In the approved documents and policy construction, universities play an important role because of their scientific and academic strength, as well as the potential for research centers in most knowledge fields, which has been the result of public policy during the revolutionary era since the early 1960s.

The work goals proposed for each period of higher education development in Cuba fully meet the requirements of the country's economic and social development, and identify key variables for improving quality, especially the preparation of the faculty and comprehensive training for young people.

The purpose of this work is to evaluate the background, outcomes, and predictions of public policies related to education, especially higher education in Cuba, as well as their impact on general social indicators, especially education.

## **2 Public policies for Cuban higher education**

At the beginning of the 20th century, the so-called "Varona reforms" began, which referred to the need to match university studies with the requirements of the nation, specifically requiring the training of agronomists and engineers, practical teaching and an increase in the number of students and professors.

These ideas could not thrive in that society, and building a new university required more than mere words. The echo of Cordoba's (Argentina, 1918) reform was quickly and effectively responded to by Cuban college students, including Antonio Mella, founder of the FEU in July. His vision made him understand that without a social revolution, there would be no university revolution.

The reform in Cordoba, Argentina, in 1918 was a model of revolutionary assumptions about historical moments, and also a defense of the original conceptions of the university. For Latin America, it was a series of requirements and positions for "strengthening the social function of universities (...), showing university culture to the people, and paying attention to national issues" (UNESCO, 2008).

Campaigns similar to the reform of the University of Cordoba have taken place in Mexico, Peru, Cuba and other countries. Their goals have exceeded the requirements of students and have taken increasingly clear steps towards the profound rejuvenation of Latin America; The students joined the movement to spread Marxist ideas in the region and the Popular Universities were created. The task was carried out by the student youth under the leadership of Mella. They also formed the vanguard of the movement that began the struggles against the tyrant Machado. They proposed the creation of the José Martí Popular University, which linked students with the working class and laid the foundations of the struggle for continental unity (Tabares, 1993).

After nearly a century of development, today people talk about "connection" as the so-called "third task" of universities, because it plays a positive and direct role in the social development and economic growth of various countries, and marks the significant importance of university/society, university/production sector interaction (UNESCO, 2008).

The first benchmark of Cuba's education strategy was expressed long before the victory of the revolution, which was a historic self-defense claim that "history will forgive me" and the self-defense of the undefeated Commander in Chief Fidel Castro Luz. After the attack on the Moncada military camp on July 26, 1953, the true strategy had already been brewing.

The literacy movement of 1961 was the first action of this strategy, which improved the reading and writing abilities of one million Cubans and initiated a broad process of cultural inclusion, allowing citizens with the necessary knowledge to enter university classrooms.

In 1962, the university reform began, announcing the main concepts and guidelines that laid the foundation for the new universities in Cuba. Firstly, the Higher Council of Universities was established, followed by the establishment of the Deputy Department of Higher Education under the Ministry of Education, which formed the organizational structure used by the revolutionary government to guide the basic transformation of higher education in Cuba. This was a dream that had been realized, allowing all citizens to enter the university classroom with the minimum required knowledge. With the combination of different objective factors and the new principles and methods that can only be intertwined in socialist society, the university has expanded its work to various parts of the country (Alpizar, 2012).

In 1976, due to the increasing emphasis placed by the state on higher education as a means of ensuring specialized attention in the establishment of new political administrative departments and organizational restructuring, the Ministry of Higher Education and later expanded institutional networks were established. The expansion and construction of university capabilities, especially in the 1980s, achieved a new career structure to meet the increasing enrollment rates of various professions and meet economic and social needs [2].

The amount of funds provided by the Cuban state is a huge investment effort, including the establishment or expansion of over 50 higher education institutions and the provision of funds in equipment, furniture, and other aspects. The significant changes in the political, social, and economic fields of the country have increased the demand for qualified professionals who are in line with economic and social development. Due to the recognition of the strategic importance of higher education for national social development, the university governance system has undergone changes, incorporating students in decision-making. As institutions expand to various parts of the country, these systems have been strengthened. A university scholarship system has been established, and with the opening of new professions, the tuition structure has been changed according to the needs of the country, with the principle of establishing a learning-work relationship.

Significant efforts have also been made to train and develop the teaching staff, with over 50,000 teachers currently, over 10% of whom are specific science and/or doctoral students, and over 55% are masters of science. In addition, professionals and technicians who prepare and dedicate themselves to social projects are part of the country's extremely strong workforce (Alpizar, 2017). The development of scientific research has been stimulated, establishing scientific

research centers and capabilities in different institutions, which has begun to achieve outstanding results in a short period of time, many of which have been consolidated over time.

Education in Cuba is a constitutional right, and every citizen has free and high-quality lifelong education, from preschool, primary and secondary to higher education, receiving over 20% of the public budget annually from the national education budget (Alpizar, 2012).

There is no doubt that in this era of discussing teaching reform, we will embark on what may be the world's largest educational revolution. This is not to say that we plan to do things better than others, but rather that some things are indeed done well, and it is natural for us to feel optimistic in this regard. (Castro, 1969, p. 8)

Over the past 40 years, with the improvement of quality and the response to economic and social needs, the career structure of undergraduate students, graduate students, and science, technology, and innovation policies have undergone systematic and continuous changes, with a focus on the municipalization of universities, the establishment of science, technology, and innovation entities, the integration of universities, and the informatization of processes, internationalization, a wide network of professors, cultural and sports institutions, museums, and outstanding art and sports to respond to government policies and receive material and financial support from the national budget.

The establishment of the Ministry of Higher Education and its institutional network mark the beginning of a profound restructuring of university education, and the higher education system has significantly expanded nationwide.

### **3 The impact of the Millennium Development Goals, *the 2030 Agenda for Sustainable Development*, and the world conference on higher education on Cuba**

In the past 15 years, based on the assessment of achieving the Millennium Development Goals, there has been insufficient progress, uneven distribution, and unacceptable levels of poverty and social inequality, including in industrialized countries. The gap between North and South has widened, and wealth is polarized. The wealth of the 62 wealthiest people in the world is the same as that of 3.6 billion people (the poorest half of humanity) [3].

By assessing the implementation of the Millennium Development Goals, the Latin American region has made progress in scientific production and mobility, as well as access to higher education, but has also been unable to make progress in economic growth.

The considerations set by the United Nations General Assembly in 2015 made it possible to establish new goals and targets for sustainable development.

*The 2030 Agenda for Sustainable Development*, adopted by 193 United Nations Member States at the United Nations Summit in September 2015, includes 17 sustainable development goals and 169 economic, social, and environmental goals for a period of 15 years. Another characteristic of the *2030 Agenda* is that it addresses the social, economic, and environmental factors of development in a comprehensive manner, and strongly emphasizes inequality and discrimination. It is very powerful at the local level, promoting cooperation between countries.

The commitments of each country include providing 12 years of high-quality and equitable primary and secondary education under public funding, of which at least 9 years must be free and compulsory, strengthening science, technology, and innovation, particularly recognizing the need to use information and communication technology to strengthen education systems (*2030 Agenda for Sustainable Development Goals*, United Nations).

The new strategy will guide global development plans for the next 15 years. Through this resolution, countries commit to mobilizing the necessary means to implement the resolution through alliances that specifically focus on the needs of the poorest and most vulnerable groups. In addition to ending poverty, it also includes achieving high-quality education; promoting sustained economic growth; taking emergency measures to address climate change; promoting peace

and promoting access to justice.

*The 2030 United Nations Agenda for Sustainable Development* (UNESCO, 2015) includes an action plan that benefits people, the planet, and prosperity, aimed at strengthening universal peace and access to justice. People realize that the biggest challenge in today's world is to eradicate poverty, and without achieving poverty, sustainable development cannot be achieved. In this effort, education has a particularly decisive task.

In the commitments announced in the United Nations development strategies and programs, universities are decisive in helping to meet the great challenge of eradicating poverty and achieving sustainable development. This important role begins by ensuring inclusive and quality education. The mission of universities is to change the world through active interaction in curriculum modernization and research projects related to practical social science issues at the national, regional, and local levels. This is the main contribution to development solutions, which makes universities crucial.

The 1998 and 2009 World Conferences on Higher Education held in Paris, preceded by the preparatory Regional Conferences, have had a special significance for education policies [4][5]. These conferences serve as a space for communication in building a unified America in Latin America and the Caribbean, as well as a space for protecting the cultural roots of the people emancipated from the colonies that submerged them in backwardness up to the present day. The 1996 regional conference was held in Havana, and the 2008 regional conference was held in Cartagena [6][7]. The purpose of these activities is to bring together university authorities, scholars, teachers, students, and representatives of many government and non-governmental organizations related to higher education, analyze and discuss their situation, and develop a 10-year action plan. Although all of these are driven by UNESCO, the Latin American regional conference is different from the world conference.

The background of the 2018 Regional Conference on Higher Education in Argentina was a similar conference held in preparation for the World Conference. The third Regional Higher Education Conference (CRES-2018) was the most important regional event, bringing together principals, directors, scholars, workers, students, networks, professional associations, research centers, trade unions, representatives of government and non-governmental organizations, friends of higher education in the African continent. Actors gathered to discuss standards, formulate recommendations and action plans, and consolidate higher education as a social asset, human rights, and universal rights of national responsibility. The conclusions integrated the Declaration and Plan of Action that Latin American and Caribbean countries would take to the World Conference on Higher Education to be held in 2019 at UNESCO headquarters in Paris, France.

The preparatory process for the conference was related to the work of various committees, which prepare status reports and recommendations around the strategic axis, containing the main aspects of higher education in the 21st century:

- Higher education is a part of the education system in Latin America and the Caribbean.
- Higher education, cultural diversity, and cross-cultural diversity in Latin America.
- Higher education, internationalization, and regional integration in Latin America and the Caribbean.
- The role of higher education in addressing social challenges in Latin America and the Caribbean.
- Scientific and technological research and innovation are the engines of human, social, and economic development in Latin America and the Caribbean.
- The strategic role of higher education in sustainable development in Latin America and the Caribbean.
- The new declaration of Latin American higher education 100 years after the reform of Cordoba University.

In order to evaluate, improve, and implement Cuba's public policies, the *Economic and Social Policy Guidelines* (PCC, 2017) were adopted, marking the economic and social changes that were taking place in Cuba. In May 2017, the Third Plenary Session of the Central Committee of the Communist Party of Cuba passed these resolutions and received

support from the National People's Congress in June 2017. After extensive public debate and consensus, the preliminary proposal was passed at the 6th Congress of the Communist Party of Cuba in 2011.

In 2017, the conceptualization of Cuba's socialist economic and social development model was also approved, and the foundation of the *National Economic and Social Development Plan By 2030* was determined: a far-reaching joint work document on "National Vision, Strategic Axis, and Sectors", socialist planning as the main economic tool for guiding the economic guidance system under different planning perspectives (ANPP, 2017).

*The National Economic and Social Development Plan by 2030* expresses the country's policies, objectives, strategies and general economic and social guidelines. These policies, objectives, strategies and guidelines are designed in a comprehensive and consistent manner to guide the operation of society. This is a long-term policy document that defines the purpose, overall strategy, and main policies of national development. It determines the direction of a transformative future society through strategic and thematic axes.

The six (6) strategic axes that constitute *The National Economic and Social Development Plan by 2030* have a horizontal nature and are closely related to each other. They are the core of the general definition of economic and social development proposals. They form the backbone and are the driving force for structuring, concretizing, and implementing development strategies and achieving national visions.

- Human development, equity, and social justice
- Human potential, science, technology, and innovation
- Infrastructure
- Production transformation and international integration
- Natural resources and environment
- Socialist, effective, efficient and socially inclusive government

As such, the nine (9) thematic axes that constitute the *National Economic and Social Development Plan by 2030* are the main aspects that constitute the socio-economic, political, social, and environmental landscape, the fundamental interrelationships, and a comprehensive and systematic approach to development strategies:

- Environment and natural resources
- Society and culture
- Territory
- Demography
- Infrastructure
- External departments
- Currency, finance, and finance
- Production, technology, and human potential
- Government, defense, and domestic security

The strategic focus of the *National Economic and Social Development Plan by 2030*--human potential, science, technology, and innovation includes specific goals: to ensure the development of universities, their human resources, and infrastructure, in order to promote the formation of high-quality human potential and the generation of new knowledge; to foster a greater incorporation of students into natural, exact, technical and pedagogical science careers in correspondence with the national and territorial productive pattern to which we aspire, as well as the demographic dynamics; to guarantee greater efficiency in the training process and job placement; to design study programs and promote the granting of higher education training scholarships for young talents in universities and technological institutes that respond to the

requirements of the introduction of advanced technologies, in correspondence with the demands of economic and social development.

#### **4 Achievements and prospects of higher education in Cuba**

The achievements of the Cuban education sector have been supported by the national budget as a public good, and the development has been an uninterrupted reality throughout the 60 years of the revolution, making it possible to achieve the Millennium Development Goals by 2015. The education system in Cuba is public, and all those eligible can receive higher education (Alpizar & León, 2012).

For over 55 years, education in Cuba has achieved development and transformation, which is the result of the Cuban government's annual budget policy aimed at ensuring the level of activity and complying with the constitutional right of everyone to receive free education during the preschool and graduate stages. Higher education is one of the achievements of the revolutionary process, characterized by the provision of funds and allocation of resources by the state for substantive processes and the renewal, expansion, and maintenance of infrastructure (Alpizar, 2013).

Cuba stands out in the region because public expenditure on general education accounts for over 11% of GDP, while public expenditure on higher education accounts for nearly 3%. This means that significant efforts have been made in the face of international economic crises, resource scarcity and limitations, mainly due to the blockade imposed by the United States government. The infant mortality rate is below 4.3% per 1000 live births, with one teacher per 49 residents and 125 doctors being important indicators. 12.9% of the population is college graduates, and 222 out of every 1000 economically active labor force are college graduates (22.2%). The education level in the 11th grade is the highest in Latin America and the Caribbean, and also the highest in the world [8].

The primary school net enrollment rate is 99%, the primary school graduation rate is 99.7%, and the secondary school gross enrollment rate is 89.4%, which is the basic basis and result of public education policies. According to data from the United Nations Development Programme (PNDE), several indicators rank Cuba as one of the high human development index countries, with 9 indicators ranking 68th out of 188 countries [9][10].

More than 1.4 million professionals graduated from Cuba, more than 50,000 foreigners, and more than 100,000 people are currently studying. They are preparing to graduate with recognized high-quality majors, and receive training in high morality and humanism principles in higher education institutions (Alpizar, 2018a).

The National Commission of Scientific Degrees, the National Accreditation Board and a wide network of technical advisory councils for careers, science, technology and university extension, among other collegiate bodies of stable and permanent operation, were created more than thirty years ago, in order to systematically increase the quality of higher education and its improvement, and measures were taken to facilitate enrollment, curriculum improvement and university integration across generations (Alpizar, 2012).

The Municipal University Center was established in the early 2000s, leveraging the strength of human resources trained over the years to work in municipal authorities, as well as the wealth of teaching and methods created to respond to face-to-face courses in undergraduate and graduate courses and lead local development projects. In the past 20 years, the institutionalization of the expansion of higher education to cities has affected the local development of some of these cities (Alarcón, 2013).

Over the past thirty years, the strategic planning process of the Ministry of Higher Education has aimed to change the position of each university in terms of relevance and ability to fulfill its mission. They are strategic units that are key development areas in all cases, planned to last for 4 to 5 years, and appropriate goals are set annually based on the progress of their achievements. The results are included in measurable variables that translate the positions of each institution and

the entire organization into results. By approving measures and action standards evaluated at the end of each period, improvement plans can be determined for each situation based on the evaluated variables.

Comprehensive training for students, science, technology and research, graduate students, human resources, and collaboration with management officials have been announced as key achievement areas, with each management official setting goals and measurement standards that are adjusted according to the conditions and development stages of each institution.

The current fiscal year from 2017 to 2020 announced four key achievement areas and eight goals, all of which were related to the economic and social policy guidelines adopted by the Seventh Congress of the Communist Party of Cuba (see Annex 1). The main development strategies to ensure the achievement of the goals had also been identified, as they had a cross cutting nature within each goal, such as computerization, internationalization, and material and financial security for annual planning and evaluation. Each was accompanied by actions and control systems. At the same time of strategic planning, corresponding economic forecasting and planning were also carried out according to the required and possible resources (Alpizar and Ramos, 2018).

The continuous blockade of the country over 50 years ago, as well as insufficient maintenance of buildings in the country, has resulted in serious material impacts on infrastructure, equipment, and modernization. Under these unfavorable material conditions, efforts to maintain the quality of training have promoted the implementation of the initiative, as well as important support from production and service departments, providing convenience for students to enter the laboratory and teaching laboratory internship facilities. The material and technological foundation of Cuban universities has improved over the past decade, but they have not yet overcome material shortages and obsolescence, which is a huge challenge and a prioritization for the Cuban state within the framework of the general economic circumstances the country is going through.

One of the most important challenges faced by higher education in Cuba is obtaining funding to support technological development, infrastructure improvement, and the continuity in the qualification of the faculty, in order to promote the production, dissemination, and application of knowledge in the economy and society. Since 2013, policies to ensure the human resources and infrastructure needed to improve the quality of higher education have been approved and are being implemented (Alpizar, 2018b).

The formulation and approval of public policies, among other aspects, stipulate that policy recommendations are formulated in a multidisciplinary manner by a temporary working group composed of specialists and experts from different institutions of the central national administrative department and senior business management organizations, with the final version of each working group. It is submitted for review by the Evaluation Committee of the Standards Implementation and Development Committee, which proposes relevant suggestions and corrections, and evaluates them after implementation for final approval by relevant agencies.

The content of the policies includes the proposed legal norms to be issued upon approval according to the corresponding rank: Law, those approved by the National Assembly of the Council of Ministers; Laws and regulations approved by the State Council; Decrees issued by the Council of Ministers, presidential orders, decisions of the Chairman of the Council of Ministers, and resolutions issued by the Minister and the Chairman of the Central State Administrative Agency. These legal instruments are published in the digital site of the *Official Gazette of the Republic*, for the general and obligatory knowledge of all citizens, the institutions of the state sector and the non-state forms of management of the economy, and are accompanied by an extensive system of training and communication through different channels that helps in informing the population and the workers involved in a general sense, with periodic evaluation of the results.



Table 1 provides an overview of the policies entrusted to the Ministry of Higher Education, with several institutions of the national central administrative authority and members of the working committee for the implementation and development of Cuban standards participating in the formulation and approval of these policies.

Table 1. Public policies related to higher education

No.	Política	Aprobación
1	Política para asegurar los recursos humanos e infraestructura requerida para el incremento de la calidad de la educación superior.	2013
2	Perfeccionamiento de las escuelas ramales y centros de capacitación subordinados a los organismos de la administración central del Estado, entidades nacionales y administraciones locales.	2014
3	Perfeccionamiento de la Enseñanza del Inglés en las universidades cubanas.	2014
4	Perfeccionamiento funcional, estructural y de composición del Ministerio de Educación Superior (MES).	2016
5	Sobre el estudio de los trabajadores utilizando el tiempo laboral por interés estatal. Perfeccionamiento del Sistema Nacional de Grados Científicos y la formación académica de posgrado.	2018
6	Nivel de Educación Superior de Ciclo Corto.	2018
7	Responsabilidad de los Organismos y Entidades en la Formación y Desarrollo de la Fuerza de Trabajo Calificada.	2018
8	Sobre la Tipología de las IES.	2018
9	Alternativas de utilización de las capacidades disponibles en la Universidad de las Ciencias Informáticas (UCI).	2018
10	Creación de los parques científico-tecnológicos y los vínculos de las Universidades y Entidades de Ciencia Tecnología e Innovación (ECTI) con las entidades productivas y de servicios.	2018

(Source: Self made)

## 5 Conclusion

Successful public policies on the production, dissemination and use of knowledge in universities are based on results of education and social indicators in general, which make it possible for the network of actors involved in the formation, generation and application of new knowledge to become active and achieve the deployment of educational, training and scientific research actions in their widest extension to regions and localities with conditions created for this purpose.

The Sustainable Development Goals of the United Nations, the World Conferences on Higher Education and *The National Plan for Economic and Social Development by 2030* in Cuba, strengthen the priority of higher education, emphasizing the development of a horizontal strategic axis guided by humanistic, modern, and universal university models to develop human potential with science, technology and innovation; integrating into society, production sectors, territories, communities and committed to developing advanced social projects.

The economic and social policy guidelines adopted by the Cuban Parliament in 2017 set out a comprehensive approach to economic, social, environmental and cultural development, including policies targeting the social sector with a high emphasis on education.

The main strength of public policy in higher education in Cuba is the consolidation of institutional networks, trained teacher faculty, admissions and university graduates over the past 60 years, as well as education funded by the national budget. Its foundation is an internationally comparable system and continuous quality improvement program, which successfully recognizes over 80% of higher education programs and institutions, with certification and excellence categories.

The basic problem for achieving sustainable development goals and their objectives is the insufficient financial means to implement them. The Third International Conference on Financing for Development, held in Addis Ababa in July 2015, approved the commitment of the most industrialized countries to allocate 0.7% of their gross national income to development assistance. However, this action only involves countries, and a large portion of the world's resources are in the hands of private owners.

Although Cuba spends a quarter of its public budget on education, it has not overcome this deficiency. However, restrictions on international trade funds limit Cuba's ability to acquire advanced equipment and technology and meet quality standards in existing infrastructure.

In addition, regular but guaranteed expenses are not sufficient to meet the needs of each process, especially the salaries and benefits of teachers and workers.

### **Conflicts of interest**

The author declares no conflicts of interest regarding the publication of this paper.

### **References**

[1] Alarcón Ortíz, R. (2013). Hacia un mayor impacto de la educación superior en el desarrollo local. *Revista Cubana de Gestión Empresarial: Nueva empresa. Universidad y desarrollo local*, 9 (3), 8.

[2] Alpízar Santana, M. & León Guerra, M. (2012). La financiación de la Revolución Cubana al desarrollo de la Educación Superior a medio siglo de la Reforma Universitaria. En *La Reforma Universitaria de 1962: Medio Siglo de impacto en la Educación Superior Cubana*. La Habana: Editorial Félix Varela.

[3] Alpízar Santana, M. & Ramos Carrillo F. (2018). La financiación como soporte de la educación superior cubana. *Revista Economía y Desarrollo*, 159 (1).

[4] Alpízar Santana, M. (2012). La Educación Superior Cubana y su Financiamiento: Situación Actual y Perspectivas de desarrollo futuro. *Revista Pedagogía Universitaria*, XVII (5), 8-9.

[5] Alpízar Santana, M. (2017). Perfeccionamiento de la gestión económico financiera de las universidades adscriptas al Ministerio de Educación Superior en Cuba. *Folletos Gerenciales*, XXI (4), 197-207.

[6] Alpízar Santana, M. (2018a). Resultados y desafíos de la universidad cubana en el desarrollo humano sostenible". *Revista Estrategia y Gestión Universitaria*, 6 (1).

[7] Alpízar Santana, M. (2018b). La gestión económico-financiera en el desarrollo actual y prospectivo del Ministerio de Educación Superior y su red de instituciones. *Revista Cubana de Finanzas y Precios*, 2 (2), 51-62. [http://www.mfp.gob.cu/revista\\_mfp/index.php/RCFP/article/view/10\\_V2N22018\\_MAS](http://www.mfp.gob.cu/revista_mfp/index.php/RCFP/article/view/10_V2N22018_MAS)

[8] Castro Ruz, F. (1969). Discurso pronunciado en la escalinata de la Universidad de La Habana el 13 de marzo de 1969". La Habana: Oficina de Publicaciones del Consejo de Estado.

[9] Oficina Nacional de Estadísticas e Información(ONEI) . (2016). *Anuario Estadístico de Cuba*. La Habana: ONEI.

[10] Partido Comunista de Cuba (PCC). (2017). *Lineamientos de La Política Económica y Social del Partido y la Revolución*. La Habana: PCC.

[11] Tabares J. A. (1993). *La Revolución Universitaria de 1923. Compilación Cuba: La Educación Superior y el Alcance de una Reforma*. La Habana: Editorial Félix Varela.

[12] Unesco (2008). *Declaración de la Conferencia Regional de Educación Superior en América Latina y el Caribe*. <http://www.education.unesco.org>.

[13] Unesco (2015). *Agenda 2030 para el Desarrollo Sostenible*. Unesco.

**Annex Key achievements and target areas. Ministry of Higher Education (2017-2020)**

1.
  - Objective 1: To cultivate comprehensive professionals with deep humanistic awareness and ideological and political determination; Because they have the ability, education, and dedication to revolution. (Relevant guidelines 115, 117, 118, 119, 121, and 122. Objectives of relevant political parties: 52, 56, 62, 63, 64, and 65.). The foundation of *The National Social Economic Development Plan by 2030*, relevant paragraphs: 280, 281, and 282).
2.
  - Objective 2: By promoting the participation of young talents dedicated to revolution and working in different fields of knowledge, and promoting the training of doctors, we aim to ensure the continuity and necessary succession of foreseeable development for the organization and the country. (Relevant guidelines 104, 106, 107, 115, 125. The foundation of *The National Social Economic Development Plan by 2030*, with related goals: 13, 15, 16, 17, 18).
  - Objective 3: To contribute to the performance of professionals in both national and non-state sectors, in accordance with the requirements of national economic and social development, and to meet the needs of self-improvement and graduate students in a high-quality manner as part of their continuing education. (Relevant guidelines 104, 107, 115, 116, 117, 125). The foundation of *The National Social Economic Development Plan by 2030*, with related goals: 13, 15, 16, 17, 18)
  - Objective 4: Ensure the monthly allocation of functions in the new cadre preparation and promotion strategy to implement the cadre training and retention policies of national institutions, central national administrative institutions, and local people's power institutions. (Contact lines 104, 122, 254, 269 PCC's related goals 73, 77, and 78).
3.
  - Objective 5: According to the MES policy of "Strengthening STI and doctoral training", increase the achievements of R&D and innovation management, so that they can play a decisive role in the national economic and social development. (Relevant guidelines: 13, 98, 100, 101, 102, 103, 106, 110, 159, 161). Conceptualization of economic and social patterns, Chap. 1 and Chap. 2 *The National Social Economic Development Plan by 2030*, paragraph 19; 91; 138; 140; 148; 152; 156; 157; 181).
  - Objective 6: To achieve the impact of the comprehensive university process on local economic and social development by consolidating universities as strategic partners in local development strategy management and achieving a solid productive economic foundation in the context of ongoing changes in government management. (Related guidelines: 17, 91, 120, 121, 124, 125, 136, 151, 152, 157, 165, 166, 173, 191, 196, 233, 234, 255, 262, and 265). Conceptualization of economic and social patterns, sections 1.2.4, 3. a, and 4.1. Bases of *The National Socio-economic Development Plan before 2030*: relevant paragraphs 35, 49, 65, 66, 92, 128, 153, 169, 194, 215, 216, 248).
4.
  - Objective 7: To achieve superior results in the work for the excellence of the staff and workers, prioritizing commitment, satisfaction and training that leads them in their performance to be activists of the ideology and policy of the Cuban Socialist Revolution. (Related guidelines: 104, 105, 117, 118 and 122. Related Party Objectives: 42, 47, 50, 56 and 66).
  - Objective 8: Make progress in selecting, promoting, preparing, improving, stabilizing, and controlling the disciplinary and ethical behavior of cadres and reserve personnel, which contributes to the development of the higher education system. (Link line: 270. Related PCC targets: 73, 74, 75, 76, 77, 78, 79, and 82).

#### Notes

[1] 2010 Digital University White Paper. Chapter 4

- [2] The number of Cuban higher education institutions in the 1976-1977 academic year was 28, and it increased to 42 in the 1986-1987 academic year.
- [3] Report from Oxfam. In 2016.
- [4] Special attention must be paid to the role of higher education in serving society, especially in activities aimed at eradicating poverty, intolerance, violence, illiteracy, hunger, and environmental degradation. Diversification of educational models is necessary to meet the needs of cultural, social, economic, and political development, provide a foundation for students, and strengthen strict abilities needed to enter the twenty-first century". Unesco World Conference, Paris, 1998.
- [5] Higher education, as a public interest and strategic priority at all levels of education, is also the foundation of research, innovation, and creativity, and must receive responsibility and financial support from governments of various countries. UNESCO World Conference, Paris, 2009.
- [6] CRES, UNESCO, Havana, 1996. "Higher education is an indispensable element for social progress, production, economic growth, recognition of cultural identity, maintenance of social cohesion, poverty eradication, and promotion of a culture of peace.
- [7] CRES, UNESCO, Cartagena, 2008. "Higher education, as a public good in society, is a human and universal right, and an obligation of the state, always serving the progress of our people".
- [8] Statistical Yearbook of Cuba, 2016. National Office of Statistics and Information (ONEI).
- [9] Human Development Index.
- [10] Human Development Report 2016. Human Development for All. UNDP.
- [11] Statistical Bulletin 2017, Month.