

Organizational Management to Favor Educational Influences in the Academic Year Staff in Universities

Gestión organizacional para favorecer las influencias educativas en el colectivo de año académico universitario

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ABSTRACT

Aim: To make a theoretical reflection on the organizational management process of the university academic year group and its educational influences on the educational process.

Methods: Theoretical and empirical research methods were used with a qualitative approach based on the dialectic-materialistic method.

Main results: The organizational management of higher education academic year staff was characterized through three processes: assessment of the organizational context, planning of its organizational structure, and concerted decision making; formative

suitability was defined as its essential quality which is aimed at promoting the development of its members at higher levels of shared and contextualized commitment, collective involvement, and collective-participatory responsibility to improve educational influence on the educational process.

Conclusions: The organizational management of the academic year staff was specified as a process of planning, implementation and assessment that fosters the unity and integrity of the organization, relative stability, self-identity and its sustainability. Its essence is to improve the educational influence on the educational process through functions, relationships and interactions established among its members, the society, and its inherent processes, stressing on the formative appropriateness within a particular socio-historical context.

Key words: organizational management; academic year staff; educational influence.

RESUMEN

Objetivo: Reflexionar teóricamente sobre el proceso de gestión organizacional del colectivo de año académico universitario y sus influencias educativas en el proceso docente-educativo.

Métodos y técnicas: Fueron utilizados los métodos de investigación del nivel teórico y empírico con un enfoque cualitativo apoyado en el método dialéctico materialista.

Principales resultados: Se caracterizó la gestión organizacional del colectivo de año de la educación superior a través de tres procesos: valorativo del contexto organizacional, proyectivo de su estructura organizacional y toma de decisiones colegiadas, y se definió la pertinencia formativa como su cualidad esencial, expresada en promover en sus miembros el desarrollo de niveles superiores de compromiso compartido y contextualizado, implicación colectiva y responsabilidad colectiva-participativa para mejorar las influencias educativas en el proceso docente-educativo.

Conclusiones: Se precisó a la gestión organizacional del colectivo de año académico, como un proceso de proyección, ejecución y valoración, que genera la unidad e integridad de la organización, estabilidad relativa, identidad con esta y su

sostenibilidad, cuya esencia es mejorar las influencias educativas en el proceso docente-educativo a través de las funciones, relaciones e interacciones que se establecen entre sus miembros, la sociedad y sus procesos inherentes; orientado a la pertinencia formativa condicionada por el contexto histórico social.

Palabras clave: gestión organizacional; colectivo de año; influencias educativas, educación superior

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INTRODUCTION

In the current context of social transformations, Rodríguez, Barrios, and Tristá (2018) expressed their concern over the quality of university management, and the role played by professors to achieve their goals with favorable impacts on society.

In that sense, Guzmán, García, and Alarcón (2018) said that among the global trends to improve the quality of university management are the ones referred to changes in their organizational schemes, which have paved the way for different studies that have offered a considerable number of proposals, such as the ones by Hernández and Massip (2017); Fernández, Valiente, and Rodríguez (2018), and Triana, Alarcón, and Quevedo (2019).

All have a high scientific value, and make interesting contributions; however, referring to the university management from multiple management processes is not enough to characterize the role of the academic year staff, with an organizational perspective, as the managing instance that articulates every educational action to run the educational process.

However, Anzola (2019) and Triana *et al.* (2019) concluded that the essential indicator to assess the effectiveness of university management is the quality of educational processes through the academic year staff, in keeping with the strategic objective of

HEI (higher education institutions), in relation to student education, according to the guidelines of the economic and social policy of the Party and the Cuban Revolution (PCC, 2016), and the Cuban National Plan to meet the Goals of Sustainable Development in the 2030 Agenda (Ministry of Economy and Planning, 2020).

Besides, Triana, Recasens, Pérez and García (2016), and Guzmán, García, and López (2018) linked the quality of academic year staff management quality to the compliance of their roles, which are also used as indicators to study their historical performance, and analyze their educational influences in the teaching-learning process.

Thus, the academic year staff is acknowledged as the managing instance within the organizational structure of universities (Guzmán, García, and Alarcón, 2018).

It is the basic cell on which university critical processes become coherent; the unit in which students are formed; and the basic link of university management where general institutional objectives, especially educational objectives, are realized (p. 23).

Likewise, the official documents of the Ministry of Higher Education in Cuba acknowledge the academic year staff as a managing instance of university structure, and classify it as an atypical managing instance, since it shows systemic and integrating relations of different university processes, and demands appropriate pedagogical, methodological, and educational management, though attention should also be given to organizational management oriented to formative pertinence (Ministry of Higher Education [MES], 2018).

The aim of this paper is to make a theoretical reflection on the process of organizational management of the academic year staff in the university, and its educational influences during the educational process.

This article is made in two parts: in the first part, academic year staff management in the university is characterized as a body of university management; in the second, organizational management is dealt with in order to improve the educational influences in the educational process.

The rationale of this theoretical reflection is,

- The dialectical-materialist conception of science to tackle the integrity of explanations, using theoretical and empirical methods, such as document review, analysis of the product of activity, participatory observation in real formation conditions, hypothetical-deductive, analysis-synthesis, abstraction-concretion, and induction-deduction.
- The postulates of Guzmán, García, and López (2019), and Triana *et al.* (2019) in relation to the educational process, as a systemic and harmonic process performed to implement and integrate substantive educational processes (teaching, off campus activities, and research), through activities with an educational influence on students as a historical-concrete subject, as a way to shape their general culture, in keeping with the essential mission of the university to preserve, develop, and promote culture.
- A conception of educational influences suggested by MES (2018), and Castellano and Figuerola (2018), considered as the process through which the academic year staff assist students in the construction of meanings of personal-professional-social-historical, in a given historic context, in concert with their motives, life projects, expectations, and needs of personal and professional realization, seeking a solid political development based on the fundamentals of the Cuban Revolution, with a broad scientific, ethical, legal, humanistic, economic, and environmental culture, competency of professional performance, and the practice of righteous citizenship.

In the conception of educational influences, the proposal made by Guzmán, García, and López (2018) is taken into consideration. They claim that these influences bear customized attention to every student, and educational strategies of subjects are materialized through the educational strategy of the academic year, and the extra university activities of the student group, as a critical, reflexive, problematic, inquiring process that offers activities for personal-professional-social development, in a permanent process of transformation and self-transformation.

DEVELOPMENT

The academic year staff in university management

Although the literature recognizes academic year staff as part of the organizational structure of universities, authors like Guzmán, García and López (2018) unveil several shortcomings in the theoretical conception, namely,

- The definitions identified in terms of university management do not explicitly refer to the academic year staff as an intrinsic part of it.
- It was determined that the quality of university management depends on the quality with which the basic educational work link chooses and prepares principal academic year teachers, and directs methodological work in student formation. However, the need to enhance organizational processes in the achievement of formative pertinence is not recognized.
- The analysis of university management by the academic year staff is insufficient; the dynamics of the organizational structure based on a shared commitment, involvement, and collective responsibility of the actors with the necessary student protagonism in a particular historic-social context, is generally overlooked.
- According to the definition of academic year staff as a structure of management, it is associated to the accomplishment of instructional and educational objectives of the year, depending on the characteristics of the student group, and the historic and social context, by implementing the educational year strategy (management by objectives). However, though management has two dimensions, process management, and people management, emphasis is not placed on the latter.

The same authors coincide in that to improve the educational influences of the academic year staff management, students should be regarded as:

- A historical-concrete subject, stressing on the relations between the internal and the external, individual and social, with sensibility, social and personal value, looking at their future professional performance.

- A key player of a critical, reflective, problematic, inquiring process, engaged in activities for personal development, in constant transformation and self-transformation, with motives, life projects, expectations, and needs of personal and professional realization.

In that sense, the approach of Alonso, Michelena, and Alfonso (2013), and Montes de Oca, Rubio, and Núñez (2016) is assumed. It states that the academic year staff in the university is a process of projection, execution, and assessing, in which projection includes planning and organization, so that assessing is characterized by,

- Being a transversal process that fosters change and synergistic effects.
- Commitment and collective, participatory, and contextualized responsibility.

The scientific literature highlights two sides of the assessing process:

- Triana *et al.* (2019) suggest assessing the organizational scenario as a valuable diagnostic tool; however, diagnostic must also conceive a prediction of management transformation.
- On the other, Reyes and Núñez (2015) suggest assessing decision-making, so they can be collectively analyzed within the work team, which should also be coherent decisions based on dialog, and the projection of improvements in terms of educational influences throughout the educational process.

In turn, Almuiñas and Galarza (2016), defined university management as characterized by proactive interaction with the context, while complying with the mission of the university, and recommended monitoring potential risks, and dialectic interaction between strategic and operating projections, as ways to materialize such management.

In that sense Almuiñas (2019) noted that the proactivity of interaction is materialized in processes of projection and execution, and characterized the managing actors as entrepreneurs with a collective involvement to address the issues that might emerge, using their initiatives with a positive will. However, the definition of Hurtado (2018), who said that the process of execution should be characterized by the collective engagement of all actors, is disregarded.

Lastly, Almuiñas and Galarza (2016) said that university management is a process that favors a balance operation of universities within their contexts, as well as coherent and articulated development of inherent processes, so it can anticipate to changes under the influence of certain historic-social conditions.

Accordingly, the role of the academic year staff in universities is a process of projection, execution, and assessing, oriented to quality formation processes, which is developed through functions, relationships, and interactions established among inherent processes, their actors, and society. It relies on coherent materialization of substantive university processes, responsible, committed, proactive, and participatory performance with a collective engagement of actors, where students take leading roles that contribute to improvements of educational actions, depending on the social and historic contexts.

Organizational management of academic year staff

When referring to research on academic year staff management, Triana, *et al.* (2019) noted that, generally, they have been oriented to managing relationships and interactions established among inherent processes to perform their actions, with emphasis on the pedagogical, methodological, and educational processes, regardless of the fact that these groups are organizations which must be studied as such.

In that sense, these authors refer that there is little theoretical research on relationships and interactions of cooperation and subordination established among their authors to ensure relative sustainability, unity, and identity of these teams. Thus, there is a need to study them as an organization, and conduct research on their management processes with an organizational perspective.

Nevertheless, the proposal made by Hernández and Massip (2017), who studied the academic year as a complementary organizing form that empowers subject formation.

But these theoretical proposals present a general study of the academic year, with an absence of integrated analysis of the relationship between assessing context, projection - redefinition of the organizational structure, and collective decision-making. As a general rule, they are not intended to achieve managing formative pertinence.

Formative pertinence has been defined by the United Nations Education, Science, and Culture Organization (UNESCO, 1998) as one of the dimensions of quality education.

It refers to the need of significant formation to people from different social and cultural layers, and different capacities and interests, so they are capable of acquiring the contents of world and local culture, and form as subjects of society, with autonomy, self-government, freedom, and own identity. (Blanco, 2007, p. 43)

However, UNESCO (1998) did not establish the ways to accomplish it, though several studies, such as the ones by Saborido (2019), and Tamayo, Gil and Carrillo (2019) studied formative pertinence as an inherent quality of university management, and associated it with responsibility, engagement, commitment, and involvement of all HEI actors from a collective, contextual, and participatory perspective.

Accordingly, formative pertinence is assumed within the context of research as a resulting quality from managing, which demands a shared and contextualized commitment from their members, with collective involvement and collective participatory responsibility to improve educational influences in the educational process.

The rationale of this improvement lie on the humanist conception of Jose Mari, who according to Horruitiner (2008), characterized the essence of the educational process as preparing man for life, and the creative transformation of society.

Likewise, the conception of Armando Hart, presented by Leal (2018), who implicitly revealed that educational influences should be oriented to the conservation and renovation of culture to contribute to the formation of new generations, introduce them in the social process actively, and to influence on the formation of personal identities rooted in the national identity, with a deep humanist perspective.

The common theoretical and methodological resource in the unity between the instructive and the educational, which comes along with conceptual bases to design different university degrees (MES, 2018), so, institutionally, the bearing is correct; however, Ortiz and Sanz (2016), Guzmán, García, and López (2018), and Tamayo, Pérez, and Pupo (2020) reported insufficiencies in the ways and modes in which the

system of educational influence is being implemented in the formation of university students to comply with the social demands.

From the perspective of the academic year staff, Ortiz and Sanz (2016), Triana *et al.* (2016), and Guzmán, García, and López (2018), bet on unifying educational and instructional actions intended to develop knowledge, skills, values, attitudes, and behaviors in students, through the integration of teaching-research-off campus activities with a pedagogical model that contributes to the formation of competent professionals that engage in the transformation and improvement of social conditions.

Moreover, Castellano and Figuerola (2018) suggested that the educational influences should focus on students as historic-concrete subjects, by orienting actions from a student perspective, and to articulate personal dynamics and processes with the historical-social process in which the educational process is developed, in a particular historical context.

Although most studies identified are conceived from university management, they do not determine the organizational specificities of the academic year staff as an instance of management, and basic link of university management. Accordingly, Triana *et al.* (2019) explicitly recognized the need of characterizing it as an organization, and determine the specificities of processes inherent to their organizational management to improve educational experiences in the educational process.

Based on the theoretical systematization conducted, and considering the proposal of Mintzberg (2001) as a referent, the following essential traits that characterize the academic year staff as an organization, are identified.

1. It is characterized as a social and open system, with relatively permanent interactions.
2. The people in it are capable of communicating, with the will to contribute with actions to achieve a common purpose that requires collective efficacy.
3. It stems from specialization and division of labor to group and assign functions to specific units interrelated by command lines, communication, and ranking, in order to contribute to the accomplishment of their objectives.

4. It is relatively permanent; it can continue to exist despite changes in the membership.
5. It has a structure that establishes relations and responsibilities.
6. It includes systems and subsystems that perform specific tasks, are interrelated, and work in coordination toward a particular end.
7. It has a structural complexity (horizontal and vertical differentiation).
8. Communication is distinguished by permanence and complexity.
9. It has two common elements: basic (people with different interaction levels), and work (the resources used).
10. It is subject to changes of context, the person who runs it should be able to maintain it and adapt it so it lasts.

Regarding the second aspect, Barnard (1971) established the capacity of people to work with others efficaciously as the main constraint of organizations, which has promoted studies seeking a reduction of such limitation through organizational management.

That is why, organizational management has been defined by several authors, such as Schmal and Rivero (2016), who concluded it is the process that generates unity and integrity of the organization, relative stability, identity, and sustainability.

Other authors, like Montes de Oca *et al.* (2016), referred to management within education, and defined it as the process, form or method to transform the educational institution, and the teaching professional, saying that its intrinsic essence is pedagogical, though from an organizational viewpoint they do not refer to it as a process based on improving educational influences in the educational process.

Besides, there is no coincidence with Montes de Oca *et al.* (2016) with respect to their consideration as a process to transform the educational institution and educators, but a process that generates unity, integrity, and sustainability of the organization, thus leading to formative pertinence in the role of the academic year staff.

The same occurs with the definition given by Horruitiner (2008), who assumed management of the formation process as the process of organizing, planning, developing, and controlling it, which has a didactic essence, though he recognized that

it has administrative elements, but it minimizes the role of the organizational context, and the projection of organizational structures as important aspects to achieve relative stability of the academic year staff, and its sustainability.

Hence, it is important to review the study of management in the context of universities conducted by Medina and Ávila (2002) to understand that organizational management within the university context relies on the theory of administration, which leads to two main perspectives to define it: the one oriented to defining it from the conception of organizational structure, and the one oriented to the study of information, preparation, and decision-making in the educational organization to achieve formative pertinence.

First perspective

In this perspective, Hernández and Massip (2017) studied the academic year as complementary organizational form in the management of the educational process of HEI, as a way of finding more effective and feasible forms through which the year improves its performance, makes a better contribution to the formation of future professionals. It also recommends paying special attention to the design of the organization, and its organizational structure.

Based on the previous, emphasis is made on,

- The need to investigate the process of organizational structure projection, and the process of systematic design, since the academic year staff is a relatively permanent organization, subject to context changes, and must continue to exist, regardless of changes in the people that make it.
- Understanding that every academic year is different, and it is necessary to customize the structure according to the priorities and needs, to integrate, and respond to the institutional strategy, and the functions of the academic year staff, intended to improve educational influences in the educational process.

In that sense, the proposals of Mintzberg (2001), Planellas, and Mendoza (1995), and Tristán (2019) are summarized to define an organizational structure as the form in which the activities of an organization are divided, distributed, and coordinated, where the relations among activities motivate and promote stable interaction between their

members and work, and among the members. Thus, the action of individual variations on the organization can be minimized or regulated so that their conception may determine the success or failure of management.

The previously cited authors also refer that several aspects should be considered to perform proper design and redesign of the organizational structure, as shown below:

- The factors that influence are the size, technology, and context, which, according to Pérez, Triana, Romero, and García (2016), the academic year staff is a small organization that carries out transformation processes with a basic flow of internal operations, which condition the behavior of its members, and must select and codify the context data, and transform them into information to generate decisions that will impact on it.
- The component parts are the operational core, strategic side, intermediate line, techno-structure, support staff, and ideology.
- Its mechanisms of coordination among the parts are mutual adjustment, direct supervision, standardization of work productions, and standardization of worker skills.
- It includes organizational structures (formal and informal), which are permanently interrelated, generally impossible to separate due to continuous interdependencies.
- There are several types of organizations, depending on their component parts, definition of organizational structure, and coordination mechanisms. They are, simple operational structure, machine bureaucracy, professional bureaucracy, divisional, and adhocracy.

Regarding the last in the list, Mintzberg (2001) stated that the university has the professional bureaucracy type; however, from their postulates, and the proposals of Ortiz and Sanz (2016), Guzmán, García, and López (2018), Fernández *et al.* (2018), and Triana *et al.* (2019), the academic year staff can be studied as an organization with a simple operational structure characterized by, (2018) and Triana *et al.* (2019), the

academic year staff can be studied as an organization with a simple operational structure characterized by,

- A single manager, the principal academic year professor (PPAA in Spanish), having a not very formal role, minimum planning, few liaison devices, flexibility, and little support staff.
- Absence of intermediate managers, as coordination is handled by the PPAA, strategic monitoring of potential risks of operation and communicational feedback of actor satisfaction to improve the educational influences of the educational process.
- The requirement of unveiling dialectic relationships between the operational-strategic, formal-informal, and governability-operationability, to improve educational influences in the educational process, with a formative pertinence of management, through shared, contextualized commitment, involvement, and collective responsibility, in keeping with the dynamic and uncertain context of society.

Upon summarizing previous theoretical contributions, it was determined that one of the inherent processes of organizational managing of the academic year staff is the projection of its organizational structure, which is materialized through dialectic pairs (strategic-operational, formal-informal, and governability-operationability). It considers the potential risks of operation, and the satisfaction of their members with the level of management, and collective involvement to improve educational influences in the educational process.

Second perspective

In this perspective, Tristán (2019) considered that organizational managing in HEI is unique and comprehensive; the determination of the organization's operations is aimed to design methods and procedures for more effective management, based on three main aspects: information, preparation, and decision-making.

On the first two aspects, it is important to link information and preparation of organizational management to the assessing process of the context, and shared and

contextualized commitment of the members of an organization, so the need to conceive that process by characterizing an organization is unveiled.

In his doctoral research thesis, Velasquez (2020) emphasizes on the characterization of an organization as an assessing process of the organizational context, in the search for functional and organizational potentialities of the current situation, harmony in the materialization of actions of different formative contexts, to improve educational influences in the educational process, and understanding of the behavior of people, the structure of an organization, and organizational processes.

In the same direction, the proposals of Abu-Saad and Hendrix (2019), Velasquez (2020), and Triana *et al.* (2019) particularize that the assessing process of the organizational context relies on the characterization of the organizational environment, the latter defined by Escobedo (2020) as the perception and appreciation of the members of an organization in relation to the structural aspects, relationships among people, and their influence on the compliance of the functions.

Other authors pay attention to the transforming prediction of context assessing, such as the case of research done by Stiglitz (2010), who explained the relation between efficacy and organizational managing, through anticipation, the need of no waiting for change to set the rules, being able to predict it, and provide a timely proper response, based on shared commitment of all the members of the organization, which in the context of the research should be done in keeping with the objectives of the academic year, the functions of the staff, and the educational strategy of this particular year.

Hence, the organizational context assessing process was assumed as inherent to organizational management of academic year staff, which is manifested through contextual characterization of the organizational environment, and prediction of transformation, with express commitment of its members, aimed to improve educational influences in the educational process.

The third aspect presented by Tristán (2019), regarding decision-making in organizational managing, was assumed by most authors that study university management, particularly academic year staff management. Ortiz and Sanz (2016),

Guzmán, García, and López (2018), Fernández *et al.* (2018), Guzmán, García, and Alarcón (2018), and Triana *et al.* (2019).

As a rule, these authors have assumed the proposals of Mintzberg (2001), who defined decision-making as an inherent process of organizational managing, and specify that it is constant, so it is critical and strategic to achieve greater functionality, and overcome challenges within a complex and changing context.

In turn, Pont and Andre (2016) claimed that in this process the subjective side is key, and there are elements that interfere and determine the logical process in which decisions are constructed and made; for instance, political, economic, and cultural powers, the ones constructed from different disciplines, and formal and informal structures created by high academic positions, and research groups (also pressing groups), and coordinating professors within the faculty.

Other authors, like Salinas and Bejas (2019) associate decision-making with the dimensions of organizational structure, logic, processes, data and information, interaction and communication, from a projecting-regenerating and assessing process of the structure and organizational context, though they overlook the need to homogenize and differentiate the assessment made by the members of academic year staff members, with a collective and participatory responsibility.

In that sense, it is important to consider the dialogic assessment, and alignment of the functional, pedagogic, and organizational, as ways to accomplish such homogenization and differentiation in the assessment of the members of the academic year staff, and also, to minimize subjectivity and interference of the elements stated by Pont and Andre (2016).

Hence, the assessing process of collective decision-making was assumed as inherent to organizational management of academic year staff, which is manifested through dialogic assessing and functional, organizational, and pedagogic alignment, with the responsibility of the members to improve educational influences in the educational process.

In studies conducted by Reyes and Núñez (2015), they identified that most research in organizational management of universities refer to efficacy (the relationship between the

effects observed and the effects expected), and efficiency (the relationship between the effects observed and the investment done), as quality indicators, and cite Ketele (2008), who pointed out that it is not possible to make efficacious and efficient higher education without being socially pertinent, given that the effects desired and observed are useless to society.

Therefore, formative pertinence is assumed as an essential quality of organizational management of the academic year staff, so that it promotes the development of higher levels of shared and contextualized commitment in the members, as well as collective-participatory responsibility, to improve educational influences in the educational process.

CONCLUSIONS

The organizational management of the academic year staff is a process of projection, implementation, and assessment that generates unity and integrity of the organization, as well as relative stability, identity, and sustainability.

Its essence relies in the improvement of educational influences in the educational process through functions, relations, and interactions established among its members, the society, and processes: projective organizational, assessing of the organizational context, and collective decision-making.

The novelty of this reflection consists in favoring educational influences in the academic year staff, which demands significant relationships among the descriptive, projecting, and assessable organizational managing, thus enhancing the sustainability of student formation through this management.

REFERENCES

- Abu-Saad, I. & Hendrix, V. (1995). Organizational climate and teachers' job satisfaction in a multi-cultural milieu: The case of the Bedouin Arab schools in Israel. *International Journal of Educational Development*, 15(2), 141-153. Retrieved from <https://www.sciencedirect.com/science/article/pii/0738059394000231>
- Almuiñas, J. (2019). La Red de Dirección Estratégica en la educación superior: El Núcleo Cuba y su experiencia de trabajo cooperado. *Retos de la Dirección*, 13(2), 222-228. Retrieved from <http://scielo.sld.cu/pdf/rdir/v13n2/2306-9155-rdir-13-02-222.pdf>
- Almuiñas, J. y Galarza, J. (2016). Dirección estratégica y gestión de riesgos en las universidades. *Revista Cubana de Educación Superior*, 35(2), 83-92. Retrieved from <http://scielo.sld.cu/pdf/rces/v35n2/rces07216.pdf>
- Alonso, A., Michelena, E. y Alfonso, D. (2013). Dirección por procesos en la Universidad. *Revista Ingeniería Industrial*, 34(1), 87-95. Retrieved from <http://scielo.sld.cu/pdf/rri/v34n1/rri09113.pdf>
- Anzola, G. (2019). Innovación tecnológica en la gestión universitaria *Revista U.D.C.A Actualidad & Divulgación Científica*, 22(2), 1-4. Retrieved from <https://revistas.udca.edu.co/index.php/ruadc/article/view/1380/1813>
- Barnard, C. (1971). *As funções do executivo*. Recuperado de <http://bibliotecadigital.fgv.br/ojs/index.php/rap/article/download/8287/7064/17960>
- Blanco, R. (2007). *Informe de Educación de calidad para todos: un asunto de derechos humanos. Sobre políticas educativas en el marco de la II Reunión Intergubernamental del Proyecto Regional de Educación para América Latina y el Caribe*. Recuperado de https://unesdoc.unesco.org/ark:/48223/pf0000150272_spa
- Castellano, A. y Figuerola, M. (2018). La formación del profesional universitario: aciertos y desaciertos de su abordaje en el contexto cubano. *InterCambios: dilemas y transiciones de la Educación Superior*, 5(1), 30-39. Retrieved from <https://ojs.intercambios.cse.udelar.edu.uy/index.php/ic/article/view/145>
- Escobedo, F. (2020). Clima organizacional y la satisfacción de los docentes en las MYPES del sector educación Tumbes. *ECA Sinergia*, 11(3), 19-28.

- <https://revistas.utm.edu.ec/index.php/ECASinergia/article/view/2294>
- Fernández, L., Valiente, P. y Rodríguez, J. (2018). Gestión del proceso de formación especializada del profesor principal de año académico. *Didasc@lia: Didáctica y Educación*, 9(6), 23-34. Retrieved from <http://revistas.ult.edu.cu/index.php/didascalía/article/view/829>
- Guzmán, Y., García, M. y Alarcón, R. (2018). Acciones específicas del profesor principal del año académico en las universidades cubanas. *Revista Dilemas Contemporáneos: Educación, Política y Valores*, 6(2), 1-21. <https://www.dilemascontemporaneoseducacionpoliticayvalores.com/index.php/dilemas/article/view/966>
- Guzmán, Y., García, M. y López, A. (2018). Gestión del Profesor Principal del Año Académico de las Instituciones de Educación Superior de Cuba. *Atenas*, 4(44), 127-143. https://redib.org/Record/oai_articulo1709508
- Hernández, Y. y Massip, A. (2017). El colectivo de año en la construcción de poder para la formación de sujetos. *Universidad y Sociedad*, 9(2), 177-183. Retrieved from <http://scielo.sld.cu/pdf/rus/v9n3/rus28317.pdf>
- Horrutiner, P. (2008). *La universidad cubana: El modelo de formación*. Retrieved from <http://eduniv.reduniv.edu.cu/fetch.php?id=311&db=0>
- Hurtado, G. (2018). La proyección de la Universidad Nacional de Colombia como proyecto colectivo en el desarrollo de Nación. *Revista Colombiana de Biotecnología*, 20(1), 4-5. Retrieved from <https://revistas.unal.edu.co/index.php/biotecnologia/article/view/73822>
- Ketele, J. M. (2008). *La pertinencia social de la educación superior*. Retrieved from <https://upcommons.upc.edu/handle/2099/7946>
- Leal, E. (2018). Honrar a Hart: es honrar a Cuba. *Archipiélago*, 25(99), 25-27. Retrieved from <https://go.gale.com/ps/anonymous?id=GALE%7CA553759672&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=14023357&p=IFME&sw=w>
- Medina, A. y Ávila, A. (2002). Evolución de la teoría administrativa, una visión desde la psicología organizacional. *Revista Cubana de Psicología*, 19(3), 262-272.

- Retrieved from <http://files.jacarrizo.webnode.com/200000277-b6e4eb7dd7/PSICOLOGIA%20ORGANIZACIONAL.pdf>
- Ministerio de Economía y Planificación (2020). Agenda 2030 para el desarrollo sostenible. Plan Nacional de desarrollo económico y social al 2030. Cuba: Autor. Retrieved from <https://www.mep.gob.cu/es/documento/agenda-2030-para-el-desarrollo-sostenible-plan-nacional-de-desarrollo-economico-y-social>
- Ministerio de Educación Superior (MES). (2018). *Planes de Estudios*. Retrieved from <https://www.mes.gob.cu/es/planes-de-estudio>
- Mintzberg, H. (2001). *Diseño de organizaciones eficientes*. Retrieved from <https://editorial.tirant.com/es/libro/disenio-de-organizaciones-eficientes-9789500236409>
- Montes de Oca, N; Rubio, J. y Núñez, G. (2016). La gestión didáctica del proceso de enseñanza-aprendizaje de las ciencias básicas en las carreras de ingeniería. *Transformación*, 12(3), 304-315. Retrieved from <https://revistas.reduc.edu.cu/index.php/transformacion/article/view/1455>
- Organización para las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO). (1998). *La educación superior en el siglo XXI: visión y acción*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000116345_spa
- Ortiz, T. y Sanz, T. (2016). *Visión pedagógica de la formación universitaria actual*. Retrieved from <http://articulos.sld.cu/bmn/2018/02/16/monografia-de-nueva-adquisicion-vision-pedagogica-de-la-formacion-universitaria-actual/>
- Partido Comunista de Cuba. (2016). *Lineamientos de la política económica y social del Partido y la Revolución*. La Habana, Cuba: Autor
- Planellas M. y Mendoza X. (1995). *Strategor: Estrategia, estructura, decisión, identidad: política general de empresa*. Barcelona: Masson.
- Pérez, O., Triana, B., Romero, J., García, M. (2016). Gestión de los colectivos de años académicos en la educación superior cubana: tendencias históricas. *Revista Academia y Virtualidad*, 9(1): 41-51.
- Pont, J. y Andre, C. (2016). Toma de decisiones en instituciones de educación superior en la Amazonía: Hacia una síntesis de racionalidades. *Revista Estado*,

- Gobierno y Gestión Pública*, (27), 149-171. Retrieved from <https://revistaeggp.uchile.cl/index.php/REGP/article/view/47261>
- Reyes, Y. y Núñez, L. (2015). La inteligencia de negocio como apoyo a la toma de decisiones en el ámbito académico. *Revista Internacional de Gestión del Conocimiento y la Tecnología*, 3(2), 63-73. Retrieved from <https://www.upo.es/revistas/index.php/gecontec/article/view/1745/1427>
- Rodríguez, N., Barrios, N. y Tristá, B. (2018). Aseguramiento de la calidad educacional en las universidades de América Latina. *Medisan. Revista Médica de Santiago de Cuba*, 22(8), 816-824. Retrieved from <http://medisan.sld.cu/index.php/san/article/view/2172>
- Saborido, J. (2019). Universidad y sistema educativo. Articulación, calidad y pertinencia para el desarrollo. *Islas*, 61(193), 143-159. Retrieved from <http://islas.uclv.edu.cu/index.php/islas/article/view/1172>
- Salinas, C. y Bejas, M. (2019). La toma de decisiones en el clima organizacional desde la gestión directiva del Instituto Técnico Distrital Cruzada Social 2018. *Warisata*, 1(1), 9-21. Retrieved from <https://revistawarisata.org/index.php/warisata/article/view/9>
- Schmal, R. y Rivero, S. (2016). Construcción de un Sistema para la Gestión de Proyectos con Empresas en una Carrera de Ingeniería. *Formación universitaria*, 9(4), 23-32. Retrieved from <https://scielo.conicyt.cl/pdf/formuniv/v9n4/art04.pdf>
- Stiglitz, J. E. (2010). *Caída libre. El libre mercado y el hundimiento de la economía mundial*. Retrieved from <https://www.redalyc.org/pdf/861/86130434009.pdf>
- Tamayo, A., Pérez, Y. y Pupo, Y. (2020). La formación inicial integral de los estudiantes de la carrera licenciatura en Pedagogía-Psicología. *Roca*. 16, 642-654. Retrieved from <https://revistas.udg.co.cu/index.php/roca/article/view/1577>
- Tamayo, M., Gil, J. y Carrillo, J. (2019). Pertinencia de la tutoría: carrera administración de empresas de la Universidad Metropolitana del Ecuador. *Conrado*, 15(68), 7-13. Retrieved from <https://conrado.ucf.edu.cu/index.php/conrado/article/view/976>

- Triana, B., Alarcón, R. y Quevedo, M. (2019). El clima organizacional en los colectivos de años académicos. *Revista Electrónica Formación y Calidad Educativa*, 7(2), 206-217. Retrieved from <http://refcale.uleam.edu.ec/index.php/refcale/article/view/1812>
- Triana, B., Recasens, J., Pérez, O. y García, M. (2016). Gestión de los colectivos de años académicos en la educación superior cubana: tendencias históricas. *Revista Academia y Virtualidad*, 9(1), 4. Retrieved from <http://dx.doi.org/10.18359/ravi.1705>
- Tristá, B. (2019). La orientación del comportamiento humano en las instituciones de educación superior. *Retos de la Dirección*, 13(2), 229-245. Retrieved from <http://scielo.sld.cu/pdf/rdir/v13n2/2306-9155-rdir-13-02-229.pdf>
- Velásquez, M. (2020). Uso del análisis estructural para caracterizar variables de calidad educativa en institución de primaria y secundaria venezolana. *Educación*. 29(56), 170-190. Retrieved from <https://doi.org/10.18800/educacion.202001.008>

Conflicts of interest and conflict of ethics statement

The authors declare that this manuscript is original, and it has not been submitted to another journal. The authors are responsible for the contents of this article, adding that it contains no plagiarism, conflicts of interest or conflicts of ethics.

Author contribution statement

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