_____

# Strategies For Support Based on The Articulation of Secondary and Higher Education in Accordance with Educational Gaps

## Fernando Augusto Poveda Aguja Ed[1,] Edgar Olmedo Cruz Mican[2,] Lugo Manuel Barbosa Guerrero[3] , Luis Bernal Hidalgo[4] , Juanita Ruiz López[5]

[1]*Post-doctorate in curriculum, discourse and research training, PhD. Educational in Technology education, Doctoral student in Administration, Universidad de la Salle, Corporación Universitaria Minuto de Dios, Bogota- Colombia.*
[2]*D. in Business Administration/Posdoctorate in Education, Social Sciences and Interculturality Corporación Universitaria Minuto de Dios, Bogota- Colombia*
[3]*Doctorate in Administration Universidad de la Salle, Research Professor Universidad Colegio Mayor de Cundinamarca.*
[4]*Post-doctorate in Education, Social Sciences and Interculturality, PhD in Social Sciences, MA in Social Studies, BA in Social Sciences. Research Professor of the Doctorate in Education. Universidad Santo Tomás, Bogotá - Colombia.*
[5]*Master in Commercial Law. Lawyer, Research Professor -Fundación de Estudios Superiores Monseñor Abraham Escudero Montoya -FUNDES.*
*Email: fpovedaa@uniminuto.edu.co[1] , ecruz@uniminuto.edu[2] , lmbarbosa@unicolmayor.edu.co[3] , luisbernalh@ustadistancia.edu.co[4] , juanita.ruiz@fundes.edu.co[5]*
*ORCID ID: 0000-0001-8149-9963[1], 0000-0001-8581-3104[2], 0000-0002-0871- 8637[3], 0000-0001-8206-1461[4], 0000-0001-8243-7684[5]*

*\*Corresponding author's E-mail: fpovedaa@uniminuto.edu.co*

## 1. Introduction

The importance of articulation in secondary education as a curricular and formative mechanism to advance towards higher education is the subject of interest of this article focused on the implementation of the different educational offers that give continuity to the training processes of secondary education students up to working life. Consequently, the basis of articulation in secondary education in Colombia is directed to the continuous process that the last grades of secondary school should have in order to facilitate the full development of cognitive and professional skills for the good of society. Indeed, the Ministry of National Education (MEN) states that "educational institutions that offer secondary education, state or private, through the education secretariats of the former and their legal representatives or owners of the latter, may enter into agreements with institutions of education for work and human development" (Decree 1075 of 2015).

In this sense, one of the most important aspects of the sectors in today's society is the challenge to provide a good service and quality, in this same sense, the education sector participates for the same interest in directing its course for better quality and coverage, in this way, the basis of this interest is sustained in the educational policies mentioned in Article 4 of the education law, "The State shall permanently address the factors that favor the quality and improvement of education; In particular, it shall ensure the qualification and training of educators, teacher promotion, educational resources and methods, educational innovation and research, educational and professional guidance, inspection and evaluation of the educational process" (Law 115, 1994). Consequently, the tension and eagerness to achieve these objectives requires official and private institutions to create new mechanisms and educational policies that allow for quality education and adequate articulation at the different levels of education, so that students can access higher education from their continuity at the beginning of secondary education. The commitment to quality education implies several management, curriculum and pedagogical processes that have to be included and adjusted in the institutional educational project when society demands changes to face the questions of today's world. In this sense, access to higher education for the Colombian context has been one of the objectives to be achieved within educational policies, for this, the state has favored resources and spaces from some development plans it has on the articulation of secondary education to give continuity to students to a higher education. Educational policy in Colombia requires greater continuity and sustainability in practice, educational reforms take time before generating an effect on teaching and learning in the classroom (OECD, 2018). However, many educational institutions have not taken advantage of this resource due to lack of management or ignorance of the benefits that can be obtained in technical or vocational educational offerings.

Thus, the articulation in the different levels of education seeks that, undoubtedly, all students get the benefit of a continuous and free education, so it is necessary to mention that this process involves teachers, managers, students and parents who build through good decision making, the timely use that students need to base their life projects. It is concrete, the role played by articulation in secondary education, which is based on the educational institutional horizon, which implies a better development in all areas of management and pedagogical management. For the National Ministry of Education (MEN, 2010) determines that: The articulation process has a series of administrative implications for educational institutions. In the first place, management takes on a new connotation, since it is necessary to establish mechanisms for reading and relating to the environment in order to define the needs of the productive world (p. 22). The above clarifies an existing reality within the educational context that seeks to improve its capacity to create an articulated axis between secondary and higher education. To achieve this purpose, it is important the self-evaluation and analysis of the strategic processes that lead the institutional guidelines that are presented in the operation of the educational management area, whose performance, directs the strategies that can be worked in some components such as leadership and articulation to achieve a quality education and a good process in the articulation of secondary education. However, when there is evidence of a lack in the articulation processes and, likewise, the expected results are not obtained in everything related to the areas of educational management in relation to the strategic direction, the question arises: How important is directive management in the processes of articulation of secondary education with higher education to facilitate the continuous improvement of educational quality?

For Morales, and Poveda (2022) the previous question, raises the intention of understanding the importance of the articulation program as a topic of interest for its proper management in the directive management of a school, therefore, a general objective is raised to determine the importance of the directive management in the processes of articulation of academic secondary education with the entrance to higher education in order to improve the educational quality in district public schools. In this average, it would include the specific means to work to examine the management processes used by the educational institution against the current development on the articulation of secondary education to higher education. As well as to identify the impact that the articulation of secondary education has had on the student population going to higher education and finally to propose an improvement plan from the strategic direction in order to strengthen the articulation of secondary education towards the entrance of higher education. When the purpose of education is to achieve continuity in the academic training of eleventh grade students, who receive their high school diploma towards higher education, whether at the technical, technological or professional level, it becomes conditional to consider expanding new perspectives of knowledge. And, at the same time, to build a professional profile that will lead them to occupy employment positions, with better salary offers or, in the best of cases, to become entrepreneurs who form micro-enterprises or businessmen. In other words, the implementation of effective articulation processes brings benefits to high school students

by facilitating their approach to higher education. Or, as they note Montenegro (2016) articulation provides options for low-income learners who were once invisible to them and who saw little or no opportunity for access to professional education. What has been said up to this point assumes that, as a training institution for students, public schools play a fundamental role in the reorganization and implementation of formal professional education spaces. For this reason, the objective of this work in determining the process of strategic direction that articulates the academic secondary education with the entrance to higher education, from the strategic direction of the educational institution; is to seek to create new opportunities for formal preparation, for students in tenth and eleventh grade, from the emphasis of the institution that is in research and technology and that by including a base curriculum plan, helps to sensitize and raise awareness throughout the educational community about the importance of taking advantage of these spaces for academic training, a reflection that has validity in the research by Núñez (2019). In this way, the aim is to encourage students to enter formal education, which has the character of continuity and homologation of the knowledge acquired in their secondary education. Specifically, this research seeks to benefit, firstly, the apprentices of the educational institution, who will be able to have an additional training and probable degree, in order to be able to enter higher education through the figure of homologation of their previous learning, thus reducing the academic semesters taken at a university. Secondly, it benefits the public school as an educational entity, because, through the strategic direction it is feasible to improve its vision, mission and projected goals, towards an articulated education that opens spaces to different entities of higher education and manages to reduce the existing communication gap between the university and the bachelor. This measure also supports the entire educational community, including teachers, who will have the opportunity to expand their field of research and improve the final training of young apprentices leading to a technical training degree and not only academic. Finally, parents and others related to the environment of the institution, may have new training options within it, which will promote and strengthen human values, social and emotional relationships and improve the educational level.

Now, at the research level, there are other antecedents that relate the management of articulation in an international vision that corresponds to Cid, Barrientos, Bravo, & Silva (2019). who published a scientific article on A model of articulation from the university to secondary education through the management of teaching English language learning. In this scientific article, they determined the level of teaching-learning of English language students in secondary education through an articulation model. The methodology was based on a qualitative approach, descriptive type, with a sample of forty-four learners, belonging to the first to fourth grades of Secondary Education in the city of Antofagasta, Chile. The program designed was Blended Learning or blended learning, implemented by the Language Department as an annex to the inclusion program carried out by the Directorate of Curriculum Development. Portela, Guarnizo & Poveda (2021) recognize in the paper of the previous results, it was highlighted that the percentages of approval of the course by the students, obtained an improvement in a high percentage, due to the linkage in the project between the high school and the Universidad Angosta, demonstrating with this, that the students acquire a greater responsibility over their actions to acquire knowledge and at the same time, opens a space for the entrance to higher education. In this measure, the proposal presented is related to the current one, from the perspective of the importance of linking universities of higher education, that is, it provides a working model that serves as a basis for proposing a scheme, where these professionalization entities reach the school and not the other way around. Thus, it allows the integration of different universities that have within their projects, access to this education from the link between secondary and higher education as a strategy to strengthen and encourage the articulation and technical training.

Considering the above, it is important to address the basic and fundamental notions for the understanding of the current research. For this, it is necessary to address the articulation in academic secondary education with higher education, the middle school articulation, definition, models, importance and its status in Colombia will be addressed. As well as, the topics of strategic direction in secondary education, educational management in secondary education and the parameters presented in the guide 34 as a proposal for self-evaluation to improve the appropriate processes that must be in a process of improvement of any educational institution. According to Barcos (2020) the articulation in academic secondary education with higher education the educational institutions forge the articulation of secondary education with higher education, as a process of academic improvement that seeks to ensure the continuity of students in higher education, whether technical, technological or professional. Taking into account that the immediate passage to higher education provides new options that enrich the student's life project, consolidating in turn the productive sector of society. With the articulation, educational institutions propose to train young people with job skills, seeking to

increase their chances of continuing their educational cycle in higher education programs and improve the quality of education through awareness, diagnosis, planning, management, monitoring and adjustment of the proposal. Regarding articulation, it is necessary to indicate that it is a peculiar public policy in Colombia, which aims to link the secondary and higher education subsystems in order to generate synergies that facilitate the transition and access to higher education, expand opportunities for young people to enter the labor market and improve the quality of educational processes within the framework of protection, promotion and restoration of rights and human development (Gutiérrez, 2013). On the other hand, a fundamental reference in this research is the articulation model in Colombia, which focuses on the relations between secondary education and higher education, which aim at allowing students to access higher education in conditions of equity and to increase their possibilities of entering the labor market. There is a structural difference and a low internal difference; a low degree of curricular diversification; a type of training for work that is offered fundamentally juxtaposed to the secondary education curriculum and is mandatory in the articulated educational institutions; with similar transition mechanisms for all students and with a low level of institutional differentiation in higher education (Gutiérrez, 2013).

The programs or models that can be articulated in secondary education are as follows: The Technical Labor Programs offered by the Entities of Education for Work and Human Development and Institutions of Higher Education, duly registered with the Secretary of Education and certified in the Colombian Technical Standard (NTC) that applies to each program. Undergraduate programs offered by Higher Education Institutions with qualified registration and in accordance with the provisions of Article 6 of Law 749 of 2002. The labor technical programs offered by SENA are designed with chain criteria to facilitate the mobility of graduates from articulation to the professional technical or technologist level. The trends, needs and requirements identified by each actor in each region are taken as references for these programs. (MEN, 2013). The articulation of education in Colombia began as an offer of the National Government in compliance with the guidelines of the Major Project of Education for Latin America and the Caribbean (Rubio, 2015) led by UNESCO; The purpose of this project is to achieve continuity between secondary education and higher education, as well as to prepare students for work, with the intention of qualifying the labor force and expanding coverage in higher education, developing the number of young Colombians in technical, technological and higher education in order to partially solve the problem of unemployment, with skills for insertion into the labor market, and promoting sustainable development of regional economies. It is necessary to know the fundamental conditions of the secondary education levels, therefore, it is necessary to deepen in such levels of high school, from tenth grade to eleventh grade, as well as the professional technical, technological and higher levels established in the existing education coverage and in the competencies that are being taught, seeking to provide a quality education in accordance with the needs of the labor market.

For this reason, there are traditionalist options that point to this articulation system in the academic secondary education where the only objective is the passage to higher education and another oriented to the training of trades that would provide immediate access to the labor market, especially for the poorest. In this sense, it is necessary to have equal opportunities for all young people, which is why this level is not compulsory in many countries, including Colombia, as it is a vital scenario for the formation of adolescents, avoiding the division of the education system and generating scenarios of educational equity (Aguirre, 2015). Cities such as Bogota, which maintain social criticality in certain vulnerable sectors, has led it to undertake a new policy, which consists of articulating secondary education with higher education. This strategy seeks to have young people from official schools take subjects from specific technical and technological higher education programs from their tenth grade and throughout their secondary education, with the subsequent purpose of having them recognized as credits taken once the students graduate with their bachelor's degree and decide to continue with the program they have started. This means that they simultaneously attend high school and higher education, implying that they are initiated in a specific program when they are fourteen or fifteen years old (Díaz, 2012). Strategic management within an educational institution becomes an interactive and holistic process of formulation, implementation and control of the strategy, containing inputs that seek to be transformed to obtain various results that impact on the satisfaction of various types of demands of the environment within the institution itself. It is therefore necessary to be equipped with technical tools, a good treatment of the human factor and a minimum of resources, which direct the way to achieve the proposed objectives and fulfill the institutional vision and mission. In this sense, the application of this orientation in basic and middle school institutions becomes a necessity, especially in public entities. Moving multiple spheres in a vulnerable, dynamic and uncertain environment. These strategies are structurally integrated by very heterogeneous and independent units

or dependencies in relation to decision making. They are oriented to the promotion of quality and management excellence, the latter as key success factors. Thus requiring a process of reflection on their actions and the inclusion of medium and long term orientations in their agendas. This wants to have control over strategic actions to ensure that basic and secondary educational institutions in the least unstable as possible and to obtain the expected results trying to seek the best possible balance of the organization with the environment (Abesada & Almuiñas, 2016). On the other hand, educational management in secondary education is seen as the management of the internal environment of the educational entity towards the achievement of its objectives. Some authors and organizations relate it to the aspects of new trends and educational innovation, total quality and the use of technologies in its development. Likewise, the Ministry of Culture and Education of Argentina since 1996 considers it as "the set of processes, decision making and execution of actions that allow carrying out pedagogical practices, their execution and evaluation (Vidal Ledo et al, 2008) cited by Farfán, Mero and Sáenz (2016).

In this sense, Figueroa (2018) is taken into consideration, when he says that an appropriate educational management of secondary education will respond for the success of its objectives, taking into account the following four dimensions. The organizational dimension: Teachers and managers, as well as students and parents, develop their educational activity within the framework of an organization, together with other colleagues, under certain institutional norms and requirements, such as the formal structure (organization charts, distribution of tasks and division of labor, use of time and space). The pedagogical-didactic dimension: The educational institution's own activities that differentiate it from others and that are characterized by the links that the actors build with knowledge and didactic models: teaching modalities, teaching and learning theories that underlie teaching practices, the value and meaning given to knowledge, and the criteria for evaluating processes and results. The community dimension: Promotes the participation of each of the different actors in decision-making within the institution. Considering the cultural perspectives in which each institution considers the demands, requirements and problems it receives from its environment (links between school and community: demands, requirements and problems; participation: levels, forms, obstacles, limits, organization; rules of coexistence).

The administrative dimension: It considers government actions that contain strategies for managing human and financial resources and the time required, as well as the management of significant key information for decision making. Hence, this dimension is linked to the tasks required to provide, in a timely manner, the human, material and financial resources available to achieve the objectives of an institution, as well as to the multiple daily demands, conflicts and negotiation, in order to reconcile individual and institutional interests (Zúñiga, 2020). In this sense, it is also important to highlight that since 2008, the MEN formally published Guide No. 34, which leads to the progressive improvement of the institutions. This Guide is organized in three stages: institutional self-evaluation, elaboration of improvement plans, monitoring and evaluation of the improvement plan, as will be seen below. Guide No. 34, focused on institutional evaluation, shows the evolution of educational institutions from being closed to having their autonomy. In other words, new forms of management are needed to meet their proposed goals and objectives. Institutional management must account for four areas of management, which are: directive management, academic management, community management, administrative and financial management. The management approach refers to the way in which the educational establishment is oriented. This area focuses on strategic direction, institutional culture, school climate and governance, as well as relations with the environment. In this way, it is possible for the rector or principal and his management team to organize, develop and evaluate the overall functioning of the institution (MEN, 2008, p. 28).

Therefore, the directive management is responsible for guiding the educational institution in the process of strategic direction, school climate, school governance, relations with the environment and institutional culture. Therefore, it is feasible that the rectors of each institution with their management team organize, develop and evaluate the functioning of the institution. Therefore, educational institutions have to generate spaces where teachers and school managers evaluate the strategic direction process, which has to be periodically in various chronological spaces during the school year in order to comply with the proposed goals and objectives. In this sense, the directive management will promote the action plan, monitoring plan and annual operational plan based on the proposal of Guide 34. In the same way, academic management is the essence of the work of the educational establishment, it indicates how its actions are focused to ensure that students learn and develop the necessary competences for their personal, social and professional performance (MEN, 2008, p.29). On the other hand, academic management is responsible for guiding and improving the processes of the Institutional Educational Project (PEI) and pedagogical processes. Likewise, it assumes the processes

of curriculum design, class management, academic curriculum, academic monitoring and the institutional evaluation system. In the same sense, these processes are the basis for the study plan that give rise to the pedagogical approach and its lines of action oriented by the academic councils and academic coordinations. Similarly, in Guide No. 34, it mentions the area of administrative and financial management that supports the institutional work as a support to all academic management processes, administration of the physical plant, resources and financial and accounting support (MEN, 2008, p.27). Taking into account the above, financial management evaluates the resources available to the institution, whether physical, economic or human. This management has to keep in mind as a priority the processes related to the purchase of technological and pedagogical instruments that will be used for the institutional educational conditioning, as well as the resources for the provision of teachers and the constant maintenance of the physical part of the institution. Likewise, Community Management is in charge of the institution's relations with the community; as well as participation and coexistence, educational attention to population groups with special needs under a perspective of inclusion, and risk prevention. Within these areas there is a set of processes and components that must be evaluated periodically, in order to identify progress and difficulties, and thus establish actions to overcome problems (MEN, 2008, p. 27). Now, starting from the clarification of guide 34, we must proceed to visualize the Model of educational strategic management of secondary education, for this, the models according to Mata (2016) quotes Johnson-Laird (1983), lead to understand and explain physical and social systems with which we interact consecutively and, in this way, anticipate and predict their behaviors.

Hence, an educational model becomes a representation of conceptual character of the complex educational reality; born from the successive approaches to the interactions and practices that occur in it; allowing the understanding of a part of reality, requiring an effort of classification, qualification and recovery of common elements in a highly representative group, which can be transferred for its application in similar scenarios, given its generic nature. For the case of the Strategic Educational Management Model (MGEE), which is based on strategic management, relating to organizations that are grouped in the attention of substantive issues and develop practices and relationships that deal with ensuring the expected results (Chilón Hernandéz, 2021). The MGEE is based on Article 3 of the Colombian National Constitution, which states that the education provided by the State shall develop all the faculties of the human being and shall foster love for the homeland and international solidarity, independence and justice; Law 115 of 1994 - General Education Law", which orders the organization of the Colombian General Education System, which considers that the development of an educational process is based on principles of freedom and responsibility, ensuring harmony between students and educators, promoting group work, communication and dialogue between students, educators, parents and educational institutions. As for the Principles of Quality and Educational Management, they are the platform on which the MGEE is maintained. One and the other as referents of the practices and relationships of the educational actors in their daily dynamics. A fundamental reference to guide educational management is integrated by the standards, for the purpose of this Model and in particular of school management we have the Management Standards for Secondary Education, contributing to the recognition of what should be being done (starting point) and likewise expose what should be achieved (point of arrival) in the classroom, teacher performance and school management (Vázquez, 2010).

Now, the characteristics of the strategic educational management model are based on a set of activities and practices that are developed by school actors, including principals, teachers, parents, students, counselors, supervisors and support staff that lead to create, strengthen and consolidate the various actions to optimize the efficiency and effectiveness, as well as the relevance and relevance of educational action. This implies a change of focus in which the organization must be visualized and forged as a mission where joint efforts result in a common benefit. Likewise, educational planning in secondary education becomes dynamic, interactive and aimed at having an impact on the community (Cruz, 2020). In this same way, the educational management model allows to abort a fundamental issue such as strategic planning in secondary education, understood as the adequacy of the activities of an organization to its environment and its resource capacity (Chiavenato, 2017). On the other hand, for Serna (2017), strategic planning is the process through which decision makers in an organization obtain, process and analyze relevant internal and external information, in order to assess the present situation of the company, as well as its level of competitiveness in order to anticipate and decide on the direction of the institution towards the future. The first identifies the needs of the organization, its purposes, mission and objectives in order to direct resources and activities towards the achievement of the vision through long, medium and short term strategies. The second stage, the application stage, develops the actions foreseen in the planning. The third stage evaluates the results obtained and

controls possible alterations (Rico, 2016). The fundamental purpose of all strategic planning in secondary education is the analysis of the internal and external environment, with micro and macro structural perspectives. Educational institutions identify their weaknesses, opportunities, strengths and threats, as well as their competitive environment, with which they establish strategies aimed at solving problems that favor the achievement of institutional objectives. It is a way how the strategy is made explicit and socialized at different levels to facilitate academic, administrative and financial management (Franyutti, 2018).

## 2. Materials And Methods

In relation to the research problem, this methodological design is based on the qualitative paradigm. For authors such as Hernández, Fernández, & Baptista (2010:17), they define that: "qualitative research provides depth to the data, dispersion, interpretative richness, contextualization of the environment or setting, details and unique experiences. It also provides a "fresh, natural and holistic" point of view of the phenomena, as well as flexibility".  Having said the above, the position of qualitative research, the observations and the study of the contexts made to a group of subjects can be developed in multiple ways or perspectives, which the authors call dispersion, this favors the perception and interpretation of the observed phenomena without having limiting or determining factors that can categorize the reality of the context of the participants in a structured or standardized paradigm, as it usually happens in quantitative research.

On the other hand, in the process of this research it is necessary to identify the type of population selected for the development of this research corresponds to the group of eleventh grade high school students belonging to the district school with afternoon shift and teachers. The group of students selected for this research project has the characteristic of belonging to the last year of secondary education, with which, we want to investigate about the appropriation of topics about articulation and its pedagogical processes. Especially, their experience as students throughout their academic life. Likewise, for the development of this research, the participation of two (2) teachers who are leaders of the Comprehensive Secondary Education project, six (6) teacher-tutors of research and two (2) teachers of Basic Education is taken into account. The above, with the intention of knowing the perspective that the teachers of this institution have regarding the processes and practices of the articulation of secondary education, and educational management, at a general level and from their own area of work.

The approach given to the instruments was based on the data collection techniques used for the research process, which are the interrogation or questioning and the survey instrument for teachers and students. According to Paramo (2008:55), he defines the questionnaire as the most widely used data collection technique in social research, mainly because it can be used to collect a large amount of data on attitudes, interests, opinions, knowledge. As well as demographic and socioeconomic data. Likewise, a curricular plan that articulates academic secondary education with the entrance to higher education, management and curriculum processes is analyzed. The impact of middle school articulation aimed at secondary education.  In this research, three research categories were established in order to know the different opinions of teachers and students regarding articulation and models in secondary education, strategic direction of educational management and management models and educational quality.

**Table 1:** *Categorization Note* Table 1. Description of research categories and subcategories. Source: own elaboration

| Specific objectives | Research categories | Subcategories | Instruments |
|---|---|---|---|
| To identify the impact that the articulation of secondary education has had on the student population going to higher education. | Media articulation, conception, models and its status in Colombia. | - Articulation in academic secondary education with higher education. <br> - Models of the middle joint. <br> - Importance of articulation in vocational media. <br> -Media articulation in Colombia. | Questionnaire with open-ended multiple choice response options. Survey |
| Target <br><br> -Propose an improvement plan from the strategic | Strategic direction around Educational Management. | -Strategic management in secondary education. <br> -Educational Management in Secondary Education. | Questionnaire with open-ended multiple choice |

| | | | |
|---|---|---|---|
| direction that seeks to strengthen the articulation of secondary education towards the entrance of higher education. | | - Guide No 34, for institutional improvement. | response options. Survey |
| Target<br><br>To examine the management processes used by the educational institution in the face of the current development on the articulation of secondary education to higher education. | -Educational Quality and Management Models | - Educational Management Models.<br>- Strategic Educational Management of Secondary Education.<br>-Components of the Strategic Educational Management model. - Strategic planning applied to educational management in secondary education.<br>- Educational Quality | Questionnaire with open-ended multiple choice response options. Survey |

## 3. Results and Discussion

In order to analyze the results, the proposal proposed by the author Elio Eisner (1998) was taken into account, which is based on four fundamental dimensions through which the data are analyzed, and in this research process they were applied in the following manner: Description, Interpretation, Appraisal and Thematization. The results obtained are the product of the surveys applied to teachers and students, elaborated from ten questions, each one of them with four answer options, with the purpose of analyzing and interpreting the information collected, three categories were established to recognize the conceptions that teachers have regarding the processes and practices of articulation in secondary education. All this was framed in the following categories:

- CATEGORY No. 1: Media articulation, conception, models and its status in Colombia.

- CATEGORY No. 2: Strategic direction in educational management.

- CATEGORY No. 3: Educational Management and Quality Models

For category one of concludes from the surveyed teachers, common features are analyzed, they have knowledge about the process of articulation given in the educational institution, it is found in common in front of this topic *"Articulation is an important factor for the transition to higher education in young people". In other* words, articulation is a process of continuity used in the formation from secondary to higher education. It also forms labor competencies in students in order to strengthen their life project. Consequently, this reality is not evident in the institution when observing that teachers do not conceive the importance of the homologation process on the subjects that are deepened in the secondary education program provided by the school. The institution does not provide credits for a technical or professional career curriculum. Likewise, there are no business and labor practices that favor an experience appropriate to the students' skills. As for category two, the survey applied to the second category of strategic direction in educational management, it is evident as a common feature, that all institutions must have this same categorization, for this reason, it is important to propose a new research that focuses on the analysis of the strategic direction of several educational institutions in Bogota.

In other words, the institutions carry out the strategic direction process with the components mission, vision and principles of the institutions, but not all of them have evidence such as minutes socialized with the educational community, where they develop a characterization, parents' meeting, a monitoring plan, analysis of instruments. There is no periodic evaluation of the fulfillment of goals and objectives. However, there is an updated PEI and a three-year improvement plan. It is evident that teachers consider the strategic direction as strategies to achieve the proposed objectives. In turn, some build their improvement plan by elaborating and reviewing the results of the institution, such as the monitoring and evaluation of the improvement plan, they do not use guide No. 34 as a mechanism for institutional self-evaluation and many teachers are unaware of it. The institution and the Secretary of Education are lacking in training the teaching staff. Finally, the third category indicates that the management models and educational quality, carried out in the third part of the survey, establishes a common theme analyzed in this aspect *"Processes of continuous improvement".* That is, some teachers share the idea that it is necessary to involve knowledge and action processes in the school. It can be observed that teachers understand strategic planning as a systemic and systematic process for

continuous improvement. Likewise, teachers understand that external results have to be evaluated, planning short-term objectives. However, there is no rigorous review at the beginning of the year of all processes and all actions are not fully complied with. The minutes of evaluation, cross-cutting projects, academic council, coexistence and in general are not socialized to seek continuous improvement.

Based on the answers given, it can be observed that students, in a high percentage, consider the articulation of secondary education to higher education as a process of academic improvement that seeks to guarantee the continuity of students to higher education, whether it is of a technical, technological or professional nature. However, not all students have access to higher education, due to their socioeconomic context, lack of professional orientation by the articulation program offered by the educational institution. At the same time, there is not a large offer of technical and higher education that allows students to choose according to their interests and conditions. It is also clear that for a minimum of students the articulation is considered as a transition mechanism between academic and working life. Thus, they are aware that upon completion of their higher education studies they can be linked to the labor field, improving their quality of life.

Now, it is clear that, for other students, in a smaller percentage, they consider that the general objective of the articulation is to propose to vulnerable young people the priority of acquiring specific competencies at the technical level that will make it possible to enter the productive sector. This conception of the main objective of the articulation is very accurate. Thus, in the process of articulation, the institution must be strengthened in terms of educational management. In the inquiry of the roll as a student, it can be perceived that the vast majority of students have as a primary objective of the articulation to strengthen their life project from their development of skills. This means that the student recognizes that one of the fundamental needs to work with the articulation is the work of cognitive skills that will favor the construction of a life project. For another sector of the respondents, the objective is to strengthen compulsory areas in order to provide students with greater preparation. For two of the students surveyed, the objective is a professional orientation towards higher education programs.

However, the students of the Rodeo school do not work on articulation from some skills and abilities. On the other hand, it is necessary to work on areas other than the fundamental ones that are part of their strengths. Likewise, it is vital to orient them to technical or professional careers in order to motivate them to higher education and the labor field. In this order of ideas, it is evident that half of the students surveyed state that the school has managed the articulation with other institutions of higher education. That is to say, that the students have is inaccurate in reality given that the majority of graduates do not pursue higher education, therefore, it is not an effective process in which this objective is made practical. The other students are governed by the programs offered by the Secretary of Education. The articulation program offers curricular content such as research and deepening in science and technology. However, the program must have other contents that are closer to their interests and entrepreneurial skills and have business and labor practice spaces that allow them to enter the labor market and continue with their technical and professional studies. In the same direction, it is observed that the program is guided by internal teachers but not external ones. In the same way, the students express that the subjects can be oriented according to the profile of the teacher, the articulation program together with the educational institution does not offer courses or homologation of credits.

## 4. Conclusion

The analysis of the information collected and the rigorous review of the theoretical framework, allows to raise the understandings about the middle school articulation, models and their status in Colombia that the teachers of the educational institution have, to examine the processes of educational management used by the institution from middle school to higher education. In academic institutions, articulation is conceived as a process of academic improvement that seeks to guarantee the continuity of students in higher education, be it technical, technological or professional. Taking into account that the immediate transition to higher education provides new options that enrich the student's life project, consolidating in turn the productive sector of society. However, the processes of articulation in the institution are neither sufficient nor constant to provide students with a homologation prior to their higher studies. Similarly, another factor to improve is the openness of the experiences developed through internships. In the same way, with the articulation, educational institutions propose to train young people in labor competencies, seeking to increase their possibilities of continuing their educational cycle in higher education programs. It is necessary to insist that the purpose of this articulation policy is to strengthen skills for the labor field. In reality, the institution does not have

business and labor practices. Likewise, it would have to manage offers from public and private universities with careers according to the interest of the students. In this same direction, it is concluded in the fieldwork that teachers do not conceive the existence of a process of homologation on the subjects that are deepened in the secondary education program provided by the school, which has the purpose of contributing in the student a visualization to the continuation of higher education. Likewise, at El Rodeo school, the articulation is focused on technology and the environment. It has a wrong view of the articulation process, they do not take into account the other disciplines so that students have a greater choice according to their interests and life project. It is of utmost importance that students in their articulation process have to develop work competencies and advance academic credits of a curriculum of a technical, technological or professional career.

So far we can conclude that the importance of vocational middle school articulation. It is the academic process that develops entrepreneurship in the student that enables him/her to carry out processes and growth in his/her life project. Thus, teachers are clear that the articulation favors entrepreneurship in young people, with the purpose of improving their life project. In this sense, teachers have to look for pedagogical strategies to change the students' conception of the benefits of continuity that higher education brings with it. Likewise, it is necessary to insist that a good articulation can provide students with the opportunity to become social agents with leadership, critical thinking, entrepreneurship and new options that enrich their life project. It is concluded, from the research field with the group of students, that there is clarity in the conception of articulation in secondary education, where they consider that it is a process that allows continuity to technical or professional education. Others mention that the articulation is the passage to the labor field, which is evidenced by the vulnerable population with few labor and professional opportunities. In the same way, students state that the articulation is important because it enables them to grow in their life project. In this way, it can be conceived that the students state that the school has managed the articulation within the process of effective linkage in public universities, a situation for which this statement is erroneous. The university linkage process does not exist with public universities

**References:**
Aguirre, J. O., & Pabón, A. P. (2020). Justicia y derechos en la convivencia escolar: Análisis de la jurisprudencia de la Corte Constitucional de Colombia sobre los derechos fundamentales de los estudiantes frente a los manuales de convivencia de las instituciones educativas. Ediciones UIS.
Abesada, B. & Almuiñas, J. (2016). Strategic management in higher education institutions. Necessity of its evaluation. Cuban journal of higher education. Centro de Estudios para el Perfeccionamiento de la Educación Superior (CEPES), 35 (3), 137-147.
Arcila, F. M. (2015). Fundamental criteria for the design and analysis of curricular articulation. Revista Ciencias De La Educación, 25 (45), 85-96.
Barcos Ramos, M. P. (2020). Barriers in the access and permanence of the visually impaired population to higher education in Colombia: an approach to the problem of Cartagena de Indias (2013-2019) (Master's thesis, Universidad Internacional de Andalucía).
Chilón Hernández, Y. L. (2021). Educational management model to develop managerial skills in the public Higher Institute of Education "13 de Julio de 1882" of the district of San Pablo, Cajamarca region-2018.
Chiavenato, I., & Sapiro, A. (2017). Strategic planning. McGraw-Hill Interamericana.
Carrión Pérez, D. C., & Cendales Forero, C. (2017). Analysis of the management areas of the Liceo Carrión (Doctoral dissertation, Corporación Universitaria Minuto de Dios).
Casanova, M. (2012). Curriculum design as a factor of educational quality. REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación.10, 7-20.
 Cruz, L. C. (2020). social representations on cultural-educational conditions for water renaturalization. environmental public policy and social actors (Doctoral dissertation, Universidad de la Amazonia).
Cid, D., Barrientos, B., Bravo, G., & Silva, C. (2019). A model of articulation from the university to secondary education through the management of teaching English language learning. Revista Electrónica de Investigación En Docencia Universitaria, 1(1), 38-55. Retrieved from.
Díaz, C. (2012). The policy of articulation between secondary and higher education. The case of the programs of the secretariat of education of Bogotá. Investigación y desarrollo, 20 (2), 1-12.
Daza, J. (2010). Challenges and recommendations for strategic planning in universities. Revista Iberoamericana de Educación, 52 (2), 1-16.
De Bogotá, C. D. C. (1993). Law 115 of 1994. Article 4. http://www.secretariasenado.gov.co/senado/basedoc/ley_0115_1994.html#:~:text=ART%C3%8DCU LO%204o.,entidades%20territoriales%2C%20garantizar%20su%20su%20cubrimiento.
From Bogotá, C. D. C. (2015). Decree 1075 of 2015. https://www.mineducacion.gov.co/portal/Normatividad/
González, F. J., Barros, C. I., Iglesias, P., & Rugel, C. I. (2017). Analysis of the applications of the game theory in the process of strategic administration and direction of companies. Paper presented at the CISCI 2017 - Decima Sexta Conferencia Iberoamericana En Sistemas, Cibernetica e Informatica, Decimo

*Available online at: https://jazindia.com*

Cuarto Simposium Iberoamericano En Educacion, Cibernetica e Informatica, SIECI 2017 - Memorias, 362-366. Retrieved from www.scopus.com

Eisner, E. W. (1998). The Enlightened Eye. Qualitative Inquiry and the Improvement of Educational Practice. Barcelona: Paidós Educador.

Farfán, A., Mero, O. & Sáenz, J. (2016). General considerations about educational management. Revista científica ciencias de la educación, 2 (49), 180-190.

Franyutti, M. A. L. (2018). Challenges of Strategic Planning for shaping Curricular Projects in Higher Middle School Education. Logos Boletín Científico de la Escuela Preparatoria No. 2, 5(10).

Guevara, R. (2017). La Calidad, Las Competencias y las Pruebas Estandarizadas: Una Mirada desde los Organismos Internacionales. Bogotá: Universidad Pedagógica Nacional.

Guerrero, M. A., Martínez, B. J. A., & Guazmayán, R. C. A. (2012). Articulation between secondary and higher education: Universidad de Nariño. Magis, 4(9), 741-753.

Gutiérrez, C., & Sánchez, J. C. (2013). Studies on Secondary Education in Bogotá. Bogotá. Experiences on school articulation and entrepreneurship. Institute for Educational Research and Pedagogical Development -IDEP-. Bogotá: Compiled.

Montenegro, J. C. (2016). Conceptions around variational thinking in middle school mathematics teachers.

Herrera, A., & Didriksson, A. (1999). Curriculum construction: innovation, flexibility and competencies. SemanticScholar, 10 (2), 2-24.

Huertas, V. M. E., Mejía, H. E., & Rubio, R. G. A. (2015). Articulation of secondary education with higher education: administrative instrument for the educational sector of the city of Ibagué. Revista Praxis, 11, 76-88.

Machuca, R. G. (2016). Estudio sobre el impacto del proceso de articulación de la educación media a la educación superior desde el programa de ciencias administrativas del colegio Tabora I.E.D 2010-2015 (Thesis specialist in Management and social projection of education. Universidad Libre de Colombia, Faculty of Education, Bogotá.

MEN, (2008). Guide for institutional improvement. From self-evaluation to the improvement plan. In Serie Guías No. 34. Ministry of National Education, Republic of Colombia. Retrieved from https://www.mineducacion.gov.co/1621/articles-177745_archivo_pdf.pdf

MEN, (2010) Orientations for the articulation of secondary education. Retrieved https://repository.usta.edu.co/bitstream/handle/11634/3068/Orientaciones%20para%20articular%20la%20educaci%C3%B3n%20media.pdf?sequence=33&isAllowed=y

Morales, Luz Mila Romero, and Fernando Augusto Poveda Aguja. "Glimpses of technological mediation vis-à-vis educational quality after the COVID-19 pandemic." University and Society 14.S3 (2022): 624-629.

Nuñez, Y. I. (2019). Interculturality, higher education and labor market: a journey through the trajectories of Guarani university students and graduates from the Province of Misiones (Argentina) and the State of Paraná (Brazil). Retrieved from: https://rid.unam.edu.ar/handle/20.500.12219/2173

Pedrozo, Z., Fernández, P. & Raspa, G. (2018). Characteristics of the strategic educational management model in public institutions. Praxis, 14 (2), 125-133.

Portela Huertas, Mirtha Celedonia, Fredy Javier Guarnizo Ante, and Fernando Augusto Poveda Aguja. "Analysis of the processes of social appropriation of knowledge of psychology graduates." Conrado 17.83 (2021): 98-108.

Rico, A. (2016). Educational management: Towards the optimization of teacher education in higher education in Colombia. SOPHIA, 12 (1), 55-70.

Zúñiga, M. A. R. (2020). Educational management and teaching practice: reflections on the research dimension. Science and Education (ISSN: 2707-3378), 1(2), 59-75.