

## **Systematic hermeneutic review of the analysis of the academic management process, in cohesion to school management, educational quality and efficiency and effectiveness, for the institutional improvement of a public school in Antioquia, Colombia. Period 2019-2024**

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**Revisión sistemática de carácter hermenéutico del análisis del proceso de la gestión académica, en cohesión a la gestión escolar, la calidad educativa y la eficiencia y eficacia, para el mejoramiento institucional de un colegio público en Antioquia, Colombia. Periodo 2019- 2024**

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### **ABSTRACT**

This systematic bibliometric review article of hermeneutic analytical character arises as a complement to the project "Management of educational projects to optimize institutional processes - Educational project of effective school management for the quality assurance of the quality of education - an approach in the Colombian context-regions"; it analyzes academic management in relation to the categories school management, educational quality, efficiency and effectiveness, as a whole. It is a quantitative research, of non-experimental design, with explanatory, correlational methodology, by means of multivariate analysis, principal components and structuring equations. It is developed in the Institución Educativa Rural El Jordán, in San Carlos, Antioquia, with 420 students, 1 director and 27 teachers, distributed in 12

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sites) the sample corresponds to the main site (151 students and 8 teachers). The purposive sampling technique was used, taking into account the access conditions (rural area). Among the findings, it is found that there is no cohesion between the different related categories in theoretical terms. Furthermore, it can be inferred that the topic of academic management is more reflected in higher education due to accreditation processes or specific programs, while at lower levels it is a topic of institutional organization.

**Keywords:** school management; academic management; educational quality; efficiency and efficacy; education

## RESUMEN

Este artículo de revisión bibliométrico sistemático de carácter analítico hermenéutico surge como complemento al proyecto “Gestión de proyectos educativos para optimizar los procesos institucionales - Proyecto educativo de gestión escolar efectiva para el aseguramiento de la calidad de la educación – una aproximación en el contexto colombiano-regiones”; analiza la gestión académica en relación con las categorías gestión escolar, calidad educativa, eficiencia y eficacia, como un todo. Investigación de tipo cuantitativa, de diseño no experimental, con metodología explicativa, correlacional, mediante análisis multivariado, componentes principales y ecuaciones estructurantes. Se desarrolla en la Institución Educativa Rural El Jordán, de San Carlos, Antioquia, cuenta con 420 estudiantes, 1 directivo y 27 docentes,

repartidos en 12 sedes) la muestra corresponde a la sede principal (151 estudiantes y 8 profesores). Se utilizó la técnica de muestreo intencional, teniendo en cuenta las condiciones de acceso (zona rural). Dentro de los hallazgos se encuentra que no existe en términos teóricos una cohesión entre las diferentes categorías relacionadas. Además, se puede inferir que el tema de gestión académica se ve más reflejado en la educación superior debido a procesos de acreditación o por programas específicos, mientras que en niveles inferiores es tema de organización institucional.

**Palabras clave:** gestión escolar; gestión académica; calidad educativa; eficiencia y eficacia; educación

## Introduction

The Institución Educativa Rural El Jordán, located in a rural area of the municipality of San Carlos Antioquia, like many other educational institutions in Colombia, faces the challenge of improving the quality of education offered to its students. Despite the efforts made by the teaching and administrative staff, as well as the resources available, year after year there is a persistence of similar results in the external tests that evaluate the quality of education in the national context. Addressing this problem is crucial to ensure a better academic and personal future for students and to raise the prestige and effectiveness of the institution in the educational community.

Several studies highlight the importance of academic management, among them we find Owan, Nwannunu and Madukwe (2018) who point out that students' academic performance is influenced by factors such as disciplinary control, classroom management and teacher motivation, but student motivation and support at home should also be considered. Charles and Mkulu (2020) identify multiple factors that affect teaching and learning, such as lack of teachers, insufficient infrastructure, and limited resources, highlighting the need to address these challenges to improve educational quality. Ríos (2021) presents the proposal "Iceberg of Academic

Management" to improve official educational institutions in Monteria, highlighting the importance of academic management in educational quality. Roa and Sarria (2018) develop a model based on processes and protocols to address low academic performance, highlighting the need to adapt these approaches to different contexts. Múnera (2014) proposes a plan to improve academic management in Puerto Triunfo, focused on strengthening teachers' skills and the collaboration of all educational actors. Toro (2020) highlights improvements in the Synthetic Index of Educational Quality (ISCE) in Rioacha, but emphasizes that the ISCE does not automatically guarantee superior performance on external tests. It highlights the importance of considering other factors in the evaluation of educational quality. Ducón (2018) proposes an improvement approach in Yopal, Casanare, focusing on pedagogical design and advocating for coordination between area plans and classroom plans, especially in rural contexts.

Therefore, it became necessary to analyze academic management in cohesion with categories such as school management, efficiency, effectiveness and quality in order to establish an effective model to achieve such quality. As a first step to achieve this end, the present study sought to conduct a systematic bibliometric review of hermeneutic character within the framework of the collaborative applied research project called Management of Educational Projects to optimize Institutional Processes - Educational project of effective school management for the assurance of the quality of education - An approach in the Colombian context - regions of the Universidad Minuto de Dios. The research carried out allowed identifying the shortcomings and needs in the educational context of the educational institution, which led to establish the model of effective academic management for the assurance of educational quality.

Given the above, it was necessary to identify the categories of school management, academic management, educational quality, efficiency and effectiveness. Each of the categories has an important conceptual basis that contributed to this research; however, one of the ideas was to unite them into a single argument that has to do with the assurance of educational quality. In this sense, we start by conceptualizing the categories beginning with academic management, since it is the essence of the work carried out by the educational institution, which is reflected in how it directs its efforts towards the achievement of learning and the development of essential skills in students, covering personal, social and professional aspects (MEN, 2008, p.29).

On the other hand, academic management is responsible for guiding and improving procedures related to the Institutional Educational Project (PEI), which is the guiding document of schools and colleges, detailing, among other elements, the values and

goals of the institution, the educational resources required and available, the pedagogical methodology, the regulations for the teaching staff and students, as well as the administration system (MEN, 2017). In addition, it assumes responsibility for pedagogical practices and processes linked to curricular design, class administration, curriculum structure, academic performance monitoring and the institutional evaluation system. Similarly, these procedures are the foundation of the educational approach and its strategic actions, which are guided by the academic councils and academic coordinations.

Regarding the notion of Management, it can be described as an organized disciplinary field that relates to human activity in organizations, with the fundamental purpose of achieving results (Barrera, 2007). For Cassasus (2000) Management can be interpreted as The ability to create an adequate relationship between structure, strategy, systems, approach, competencies, team and the main objectives of the specific organization. As far as Management is concerned, it can be considered from the perspective of administration, with the objective of organizing and directing teamwork to achieve specific goals.

It is important to recognize that management takes place at various levels and performs various functions. Educational management involves policies, approaches and resources to provide educational services. Academic Management, on the other hand, focuses on aspects such as faculty, curriculum design, teaching methodologies, educational assessment, research and innovation to promote student learning (Barrera, 2007).

Considering the above, it is possible to establish a connection between Educational Management and Pedagogical Management in order to achieve an efficient and successful functioning of the educational system. Thus, the management process is linked to the improvement of the quality of education through the evaluation of competencies applied to all aspects of the educational environment, with the goal of achieving positive results.

For Pereyra (2016), the concept of educational quality originated in the business environment, where it focused on evaluating the conditions in which products were produced with the purpose of satisfying consumer demands. Over time, this approach expanded to other contexts, including education. With the creation of public education, there was a growing concern for its quality. Each government, as it assumes power, introduces its own interpretation of educational quality, which is strongly influenced by economic and regional considerations and the specific needs of communities. Programs designed with this objective in mind seek to be implemented

in educational institutions, with teachers playing a central role as the change agents necessary to achieve the elusive quality standard.

In 2015, the Colombian Ministry of National Education (MEN) through Decree 0325 of February 25 established E-Day, known as Educational Excellence Day, with the purpose that all educational institutions reflect on their processes and educational quality results measured through the Educational Quality Synthetic Index (ISCE) and Minimum Annual Improvement (MMA). The ISCE evaluates four components: progress, efficiency, performance and school environment. Efficiency seeks to balance school performance and passing grades, progress measures improvement in relation to the previous year, performance recognizes the best results in Saber tests, and school environment evaluates the context in which classes take place.

Effectiveness, on the other hand, is related to the progress of its students according to their skills and knowledge to ensure that they achieve success in what they set out to do; an effective school is characterized by achieving a complete progress in each student, which exceeds expectations considering their academic history and the socioeconomic and cultural context of their families (Murillo, 2005). To achieve the above, it is necessary to continuously review the teaching-learning processes in accordance with the policies and educational contexts, taking into account the particular needs of students, for which it is necessary to consider the principle of equity from which each one is offered according to their characteristics, thus recognizing the common needs, but also those that are particular, defending the importance of diversity (Materón, 2016).

For an educational institution to reach higher levels of quality, it is essential that it meets not only the standards of effectiveness and efficiency, but also the requirements of relevance, pertinence and equity, as argued by Aguerrondo (2008). These elements are considered complementary to the concept of efficiency. In any case, research focused on school effectiveness emerges as a valuable source of knowledge that will undoubtedly contribute to the provision of high quality education within the reach of all.

## **Materials and methods**

The research was conducted using a mixed approach, employing a systematic documentary review. Following Sampieri's (2018) perspective, this approach implies approaching the object of study from two different perspectives; one of them is related to the measurement and application of procedures designed to establish connections between predefined variables, and this analysis is based on a hermeneutic approach.



On the other hand, from the qualitative aspect, a bibliometric review is carried out with a descriptive approach with the objective of clarifying its meaning through the review of documents. For the research, the period 2018- 2024 was taken from the Scopus database using the Boolean equation of referential categories thus: Management AND academic, management AND school, educational AND quality, efficiency AND effectiveness, AND education, the results were analyzed from descriptive terms through the frequency of authors, countries, categories and subject matter. We started with 6,236 documents, so the search was limited to key words and 199 of them were analyzed. The VOSviewer analysis platform was then applied to determine the consolidated nodes and networks.

ALL ( academic AND management AND + AND school AND management AND + AND educational AND quality AND + AND efficiency AND effectiveness AND + AND education ) AND PUBYEAR > 2018 AND PUBYEAR < 2024 AND ( LIMIT-TO ( SUBJAREA , "SOC" ) OR LIMIT-TO ( SUBJAREA , "ARTS" ) ) AND ( LIMIT-TO ( EXACTKEYWORD , "Education" ) OR LIMIT-TO ( EXACTKEYWORD , "Efficiency" ) OR LIMIT-TO ( EXACTKEYWORD , "Effectiveness" ) OR LIMIT-TO ( EXACTKEYWORD , "Education Policy" ) OR LIMIT-TO ( EXACTKEYWORD , "Secondary Education" ) OR LIMIT-TO ( EXACTKEYWORD , "Organization And Management" ) OR LIMIT-TO ( EXACTKEYWORD , "Educational Policy" ) OR LIMIT-TO ( EXACTKEYWORD , "Quality" ) ). Next, the hermeneutic approach was applied for the analysis through the understanding and interpretation of the texts found (Palmer, 1969), specifically seeking to give meaning to the results from the categories Management AND academic, management AND school, educational AND quality, Efficiency AND effectiveness. First, the articles that defined the object of the research were identified; then, the articulation with the categories and thematic areas was recognized, concepts were added and analyzed from their proximity, as well as the elements shared among the groups of definitions that were consolidated in the nodes; finally, the final approach to the theoretical framework was generated.

For the development of the hermeneutic application, the study was related according to Table 1, where the object is raised and related to the selection equation, the title, summary, key words, relating the concepts of academic management, where the definitions were recognized in their first element in the selection arranged. For the selection of authors according to the mapping achieved through Vosviewer, the clusters produced by the program were taken as a reference and from each of them the authors with the greatest strength or prominence were selected. From the above, 50 authors were obtained as input, which are housed in a table where they were taken into account to carry out the segmentation firstly by the appearance of categories in

the items title, keywords and abstract. Subsequently, the information obtained was filtered in a new table to continue the search for definitions with respect to the categories and categorized by school. In a last table, the definitions by school and the authors that correspond to the same definition were placed.

## Results

**Table 1.** *Most relevant authors (taken from Vosviewer)*

| Título                                                                                             | Revisión sistemática de carácter hermenéutico del análisis del proceso de la gestión académica, en cohesión a la gestión escolar, la calidad educativa y la eficiencia y eficacia, para el mejoramiento institucional de un colegio público en Antioquia, Colombia. Periodo 2019- 2024. |        |                 |         |                                  |        |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------|---------|----------------------------------|--------|
| Objeto de investigación                                                                            | Establecer un modelo eficaz que permita alcanzar la calidad educativa en una institución pública                                                                                                                                                                                        |        |                 |         |                                  |        |
| Ecuación                                                                                           | Management academic + management school + quality education + efficiency and effectiveness + e                                                                                                                                                                                          |        |                 |         |                                  |        |
| Autor                                                                                              | Nilton Renán Quintero Ortiz                                                                                                                                                                                                                                                             |        |                 |         |                                  |        |
| 1. Número de resultados por la ecuación:                                                           | 6236                                                                                                                                                                                                                                                                                    |        |                 |         | Gestión académica                |        |
| 2. Número de resultados presencia del término o concepto en el título, Palabras claves y/o Resumen |                                                                                                                                                                                                                                                                                         |        |                 |         | Gestión Escolar                  |        |
| 3. Tabla de resultados de # de artículos que definen el término o concepto de investigación: 8     |                                                                                                                                                                                                                                                                                         |        |                 |         | Calidad Educativa                |        |
|                                                                                                    |                                                                                                                                                                                                                                                                                         |        |                 |         | Eficiencia y eficacia            |        |
| IP                                                                                                 | Autor                                                                                                                                                                                                                                                                                   | Título | Palabras claves | Resumen | Posible presencia d definición d | Cuerpo |
| 1                                                                                                  | Jelvys, R., Stumbriene, D., Du                                                                                                                                                                                                                                                          | 1      | 1               | 1       | 1                                | 1      |
| 2                                                                                                  | Stumbriene, D., Jelvys, R., Jilin                                                                                                                                                                                                                                                       | 1      | 1               | 1       | 1                                | 0      |
| 3                                                                                                  | Zheng, H.                                                                                                                                                                                                                                                                               | 1      | 1               | 1       | 1                                | 1      |
| 4                                                                                                  | Agasisti, T., Zoido, P.                                                                                                                                                                                                                                                                 | 1      | 1               | 1       | 1                                | 1      |
| 5                                                                                                  | Agasisti, T., Avvisati, F., Bor                                                                                                                                                                                                                                                         | 0      | 0               | 0       | 0                                | 0      |
| 6                                                                                                  | Luque, M., Marcenaro-Gutié                                                                                                                                                                                                                                                              | 1      | 1               | 1       | 0                                | 0      |
| 7                                                                                                  | García-Jiménez, J., Rodrígu                                                                                                                                                                                                                                                             | 0      | 1               | 0       | 0                                | 0      |
| 8                                                                                                  | Sahlberg, P.                                                                                                                                                                                                                                                                            | 0      | 0               | 1       | 0                                | 0      |
| 9                                                                                                  | Gottfried, M., García, E., Kim                                                                                                                                                                                                                                                          | 0      | 0               | 0       | 0                                | 0      |
| 10                                                                                                 | Hemelt, S'w, Ladd, HF, Clifto                                                                                                                                                                                                                                                           | 0      | 0               | 0       | 0                                | 0      |
| 11                                                                                                 | Thorson, GR, Gearhart, SM                                                                                                                                                                                                                                                               | 0      | 0               | 0       | 0                                | 0      |
| 12                                                                                                 | García, IC, Vicente, J.Á.Z.                                                                                                                                                                                                                                                             | 0      | 0               | 0       | 0                                | 0      |
| 13                                                                                                 | Sant'Ana, TD, Lopes, AV, M                                                                                                                                                                                                                                                              | 1      | 1               | 1       | 0                                | 0      |
| 14                                                                                                 | Kokkinou, A.                                                                                                                                                                                                                                                                            | 1      | 1               | 1       | 0                                | 0      |
| 15                                                                                                 | Giménez, V., Thieme, C., Pric                                                                                                                                                                                                                                                           | 0      | 1               | 0       | 0                                | 0      |
| 16                                                                                                 | Fernandes, R., Menezes-Filh                                                                                                                                                                                                                                                             | 1      | 1               | 0       | 0                                | 0      |
| 17                                                                                                 | Kho, A., Henry, GT, Pham, LT                                                                                                                                                                                                                                                            | 0      | 0               | 0       | 0                                | 0      |
| 18                                                                                                 | Arbona, A., Giménez, V., Lóp                                                                                                                                                                                                                                                            | 1      | 1               | 1       | 1                                | 1      |
| 19                                                                                                 | Bhatnagar, A., Jaiswal, A., Ja                                                                                                                                                                                                                                                          | 0      | 0               | 0       | 0                                | 0      |
| 20                                                                                                 | Lee, BL, Johnes, J.                                                                                                                                                                                                                                                                     | 1      | 1               | 1       | 0                                | 0      |
| 21                                                                                                 | Thapa, A., Panigrahi, J., Ben                                                                                                                                                                                                                                                           | 0      | 1               | 1       | 0                                | 0      |
| 22                                                                                                 | Zajdel, M., Michalciewicz-Kar                                                                                                                                                                                                                                                           | 0      | 0               | 1       | 0                                | 0      |
| 23                                                                                                 | Giménez, V., Thieme, C., Pric                                                                                                                                                                                                                                                           | 0      | 0               | 1       | 0                                | 0      |
| 24                                                                                                 | Sanfo, J.-BMB                                                                                                                                                                                                                                                                           | 0      | 0               | 1       | 0                                | 0      |
| 25                                                                                                 | Thompson, PN, Tomayko, E                                                                                                                                                                                                                                                                | 0      | 0               | 0       | 0                                | 0      |
| 26                                                                                                 | Henriques, CD, Marcenaro-G                                                                                                                                                                                                                                                              | 1      | 1               | 1       | 1                                | 1      |
| 27                                                                                                 | Estriegana, R., Medina-Merc                                                                                                                                                                                                                                                             | 0      | 1               | 1       | 0                                | 0      |
| 28                                                                                                 | Abu-Taieh, EM, AlHadid, I., A                                                                                                                                                                                                                                                           | 0      | 0               | 1       | 0                                | 0      |

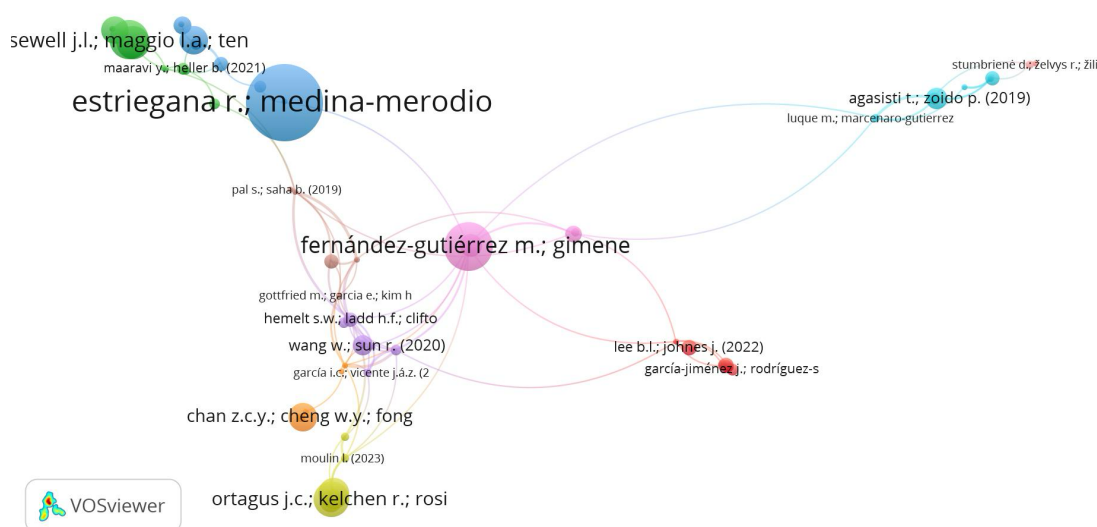
Table 1 shows, differentiated by color, the categories with which some of the selected authors are close to, thus distinguishing green for academic management, yellow for school management, orange for educational quality and blue for efficiency and efficacy. The list of authors was decanted through the Vosviewer program, taking into account the relationship between the four categories mentioned above. The columns



title, key words, abstract, possible presence of the term and body are the places within the documents where there is the presence of any of the categories and the number within them denotes the presence of any of the categories in the article. The table clearly shows that there is no author who speaks of the four categories and also allows visualizing those of greater relevance. Želvys, R. 2021, Zheng, H. 2020, Agasisti, T. 2019, Arbona, A. 2022, Henriques, C. O. 2021 , 2022, Pal, S. 2019, only contain the managements educational quality and efficiency and effectiveness, but very few converge between the two.

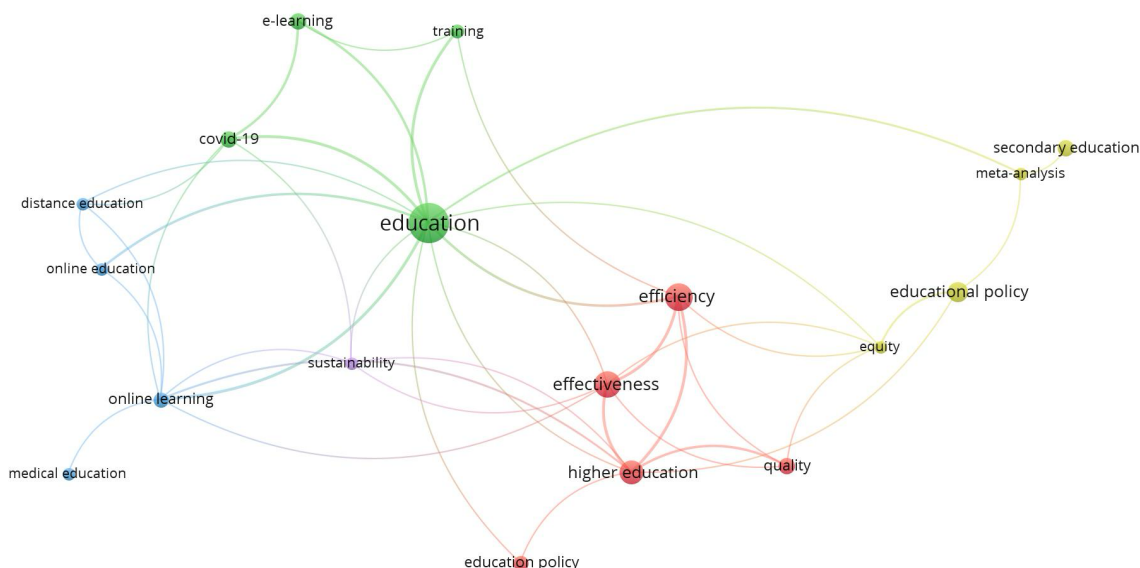
Regarding the bibliometric analysis, we can condense the results obtained through the mapping performed in Vosviewer as follows:

**Figure 1** - Bibliographic linkage by document of the categories academic management + school management + educational quality + efficiency and effectiveness + education. Source. VOSviewer.



The bibliometric coupling by document shown in Figure 1 shows that there are 10 clusters, allowing us to see graphically which authors are the most relevant for the study. The figure shows Estriegana, R, Medina-Merodio as the authors who provide the most information regarding the possible interaction of the four categories in the same article; other authors taken as references are Fernández-Gutiérrez, Ortagus, Sewell, Chan, Agasisti, among others.

**Figure 2** - Map of keyword relationships corresponding to the integration of the main categories. Source. VOSviewer.



It is evident that the most relevant node is education and from there a significant number of emerging issues emerge. One of them is efficiency and effectiveness, which is synergistically linked to higher education, which shows that it is from there that these processes are most important, which could be explained by issues such as institutional accreditation or programs in particular. On the other hand, there is a relationship between the above and quality, marking once again the importance of this issue for higher education institutions, which can be seen in the ISO-type quality certifications that universities seek in order to comply with their improvement processes.

Some of the emerging issues regarding quality, efficiency and effectiveness in school management and specifically in academic management have to do with education that is not located in a specific physical space, but meets the same conditions for the development of skills. New technologies are also revolutionizing the perceptions of time and space (Carneiro, 2009) promoting the education we know today as online education. Within this category, there are several types of approaches and methods that can offer a high quality educational experience. This is how we find the online-learning or E-learning, issues that, as a result of COVID-19, have become more important and should be taken into account if we want to achieve educational quality assurance through academic management.

The information analyzed above also underwent a process of hermeneutic analysis, resulting in the tables presented below.

**Table 1.** *Academic management + school management + educational quality + efficiency and effectiveness + education. Search conducted through the Scopus database.*

| DOCUMENT PARAMETERS                  | DESCRIPTION                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Search words                         | Academic management + school management + educational quality efficiency and effectiveness + education                                                                                                                                                                                                                                      |
| Unfiltered documents                 | 6,236 documents                                                                                                                                                                                                                                                                                                                             |
| Filters                              | <p>Years (2018 - 2024)</p> <p>Subject area (social sciences, arts and humanities)</p> <p>Key words</p> <p>Limit to efficiency</p> <p>Limit to effectiveness</p> <p>Limit to education policy</p> <p>Limit to secondary education</p> <p>Limit to organization and management</p> <p>Limit to educational policy</p> <p>Limit to quality</p> |
| Results with filters                 | 199 documents                                                                                                                                                                                                                                                                                                                               |
| Authors with more publications       | <p>Agasisti, T. (3 documents)</p> <p>Giménez, V. (3 documents)</p> <p>Marcenaro-Gutiérrez, O. D. (3 documents)</p> <p>Prior, D. (3 documents)</p> <p>Henriques, C. O. (2 documents)</p>                                                                                                                                                     |
| Countries with the most publications | <p>United States (37 documents),</p> <p>United Kingdom (17 documents)</p>                                                                                                                                                                                                                                                                   |

|                                                               |                                                                                                                          |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|                                                               | Spain (16 Documents)                                                                                                     |
| Documents by affiliation                                      | Malaga University (4)<br>Autonomous University of Barcelona (4)<br>Harvard University (3)                                |
| Funding Sponsor                                               | Ministry of Economy and Competitiveness (4)<br>National Natural Science Foundation of China (4)<br>Malaga University (3) |
| General subject matter of the documents according to abstract | Social sciences (196),<br>Computer Science (34)<br>Environmental science (33)                                            |

Based on Table 2, according to the limits established in the scopus tool (academic management + school management + educational quality + efficiency and effectiveness in the period 2018 - 2024, and limited to the areas of social sciences, arts and humanities and keywords such as efficiency, effectiveness, education policy, secondary education, organization and management, educational policy and quality) and on the other hand, taking into account the data of 199 documents in the scopus base, it is inferred that the English-speaking countries are those who have a greater contribution with respect to the subject. However, it is interesting to see that two Spanish-speaking universities are the ones with the highest affiliation in terms of documents.

**Table 2.** *Academic management + school management + educational quality + efficiency and effectiveness + education. VOSviewer.*

| BIBLIOGRAPHIC<br>PARAMETERS | COMMUNITY REMARKS                                                                                        |
|-----------------------------|----------------------------------------------------------------------------------------------------------|
| Thematic                    | Academic management + school management + educational quality + efficiency and effectiveness + education |

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Authors more closely linked to the bibliographic databases   | Giménez, V., Thieme, C., Prior, D. Agasisti, T                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Most co-cited author                                         | Hanushek, E. A (78 cit.), Woessmann, L. (27 cit.)                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Category intensity                                           | Quality, efficiency and effectiveness                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Countries with more academic management research communities | Australia                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Category Period                                              | 2018 - 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sources for the bibliographic study                          | Academic management + school management + educational quality + efficiency and efficacy + education                                                                                                                                                                                                                                                                                                                                                                 |
| Mapping result                                               | As a result, it is possible to infer that education in terms of quality, efficiency and efficacy is developed more extensively in universities, which are more concerned with quality certifications. On the other hand, it is an interesting topic to find with greater relevance items such as online education, online learning, distance education, which could be enhanced as a result of covid-19, but which was present before it without the same strength. |

Table 3, created from the data obtained from the Vosviewer program and taking into account the limitation to the keywords Academic management + school management + educational quality + efficiency and effectiveness + education, shows the presence of some authors as possible sources for the coupling of variables. On a practical level, it is evident that in many institutions there is an effort to unify the categories, although not always with the desired results. However, when we explore this search for cohesion

from a theoretical perspective, we find that it is practically non-existent. So how can we move towards improving educational quality when we are theorizing individually, but wish to approach it as a whole?

This imbalance between practical action and theoretical reflection raises a fundamental question: how can we, as a society and educational community, move towards a significant improvement in educational quality? We are in a situation where, on the one hand, tangible efforts are being made to address educational problems, but, on the other hand, we lack a solid theoretical basis to support and guide these actions in a holistic manner. The answer to this question is crucial, as it implies the need for a more integrative and multidisciplinary approach to education. To move toward effective improvement in educational quality, we must not only continue with practical efforts, but also invest in theoretical research that explores the interconnections between the various categories of analysis. Only through a holistic approach and a constructive dialogue between theory and practice can we effectively address educational challenges and aspire to educational quality assurance.

## Conclusions

There is a great deal of information and documentation regarding each of the categories of analysis (academic management, school management, efficiency and effectiveness, educational quality) that allow us to obtain a broad view of the progress achieved in each of them. However, a challenge arises when it comes to establishing connections and relationships between them, since the availability of information for this purpose is significantly limited, which denotes the lack of articulation between key categories when talking about improving the quality of education.

Autonomous learning has become a prominent trend in the field of educational research in current times. This trend has gained significant momentum due to the pandemic, which forced both schools and universities to rethink and improve their academic processes, using for this purpose technological tools such as ICT and study guides to ensure educational continuity in digital environments. This has led to a re-evaluation of teaching methodologies, prioritizing flexible and student-centered approaches that foster autonomy and self-regulation. Educators have faced the challenge of designing effective virtual learning environments and fostering autonomous skills in students. This trend has highlighted the importance of autonomous learning for students to manage their own learning process and has driven greater flexibility and personalization in education.



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