

Transformational School Leadership as A Strategy to Strengthen Administrative Management in Public Educational Institutions in the Department of Caquetá, Colombia

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ABSTRACT: This research analyzed transformational leadership exercised by school administrators and its relationship with the strengthening of administrative processes in public educational institutions in the department of Caquetá, Colombia. Under a pragmatic paradigm and a predominantly qualitative mixed-methods approach, three complementary instruments were used: a semi-structured interview based on the Multifactor Leadership Questionnaire (MLQ), a checklist for analyzing administrative processes, and a strategic matrix for formulating the proposal. The population consisted of the 16 school administrators from the department's public educational institutions, selected through census sampling. Results evidenced practices associated with transformational leadership in building shared vision and human support, but also tensions between discourse and effectively implemented practices in participation, systematization, and control. Gaps were identified in human talent management, internal control, and institutional innovation. It is concluded that although transformational leadership is present among school administrators, its impact on administrative management needs to be strengthened through more structured and sustainable strategies. An integrative model called "Architecture of Possibility" is proposed, which articulates transformational leadership with administrative management processes as interdependent dimensions for institutional strengthening.

KEYWORDS: School leadership, Transformational leadership, Administrative management, Public educational institutions, Caquetá.

I. INTRODUCTION

Education stands as a fundamental pillar for the social and economic progress of any community. A robust educational system, characterized by solid managerial skills in its leaders, is directly reflected in effective administrative performance, positively impacting the quality of the teaching-learning process [1]. In Latin America, improving educational quality requires a holistic approach that considers the strengthening of those who lead institutions: educational administrators [2]. These actors are crucial for implementing innovative administrative management strategies, adapted to the external dynamics that shape the educational environment.

In this context, strategic leadership skills emerge as essential competencies for educational administrators. Effective leadership is indispensable for inspiring and guiding teachers and educational staff, fostering a climate of collaboration and commitment [3]. Similarly, strengthening leadership is revealed as a vital tool to support the continuous professional development of the team, promoting updating and innovation in institutional educational practices [4].

Administrative and financial management, as defined by the Ministry of National Education [5], "encompasses all support processes for academic management, the administration of physical infrastructure, resources and services, human talent management, and financial and accounting support" (p. 27). Consequently, effectiveness in managing these processes intrinsically depends on the leadership skills of those who lead educational institutions.

However, in everyday educational practice, various obstacles are observed that hinder the improvement of educational quality. These limitations do not lie primarily in the capacity of the school administrator, but in the insufficiency of fundamental elements such as visionary leadership, effective process monitoring, coherent organization, assertive communication, and relevant training opportunities [6]. This reality underscores the importance of researching and strengthening leadership skills in educational administrators for the efficient direction and management of institutions.

The department of Caquetá, located in the Colombian Amazon, faces an educational scenario marked by geographic dispersion and socioeconomic heterogeneity. According to data from the Colombian Institute for the Evaluation of Education (ICFES) [7], the region presents a significant lag in the results of the Saber 11 tests compared to the national average, a situation aggravated by insufficient coverage in rural areas and the high incidence of multidimensional poverty. In this context, the administrative management of the 16 public educational institutions faces the challenge of operating with limited resources and a teaching staff in constant rotation.

The department of Caquetá possesses significant economic potential in the agroindustrial sector, given its livestock vocation and its production of crops such as rubber, cocoa, and Amazonian fruits. Agroindustry, understood as the activity that integrates primary production with its transformation and commercialization, represents a fundamental pathway for the sustainable development of the region and the generation of income for rural communities [8]. In this context, public educational institutions not only face the challenge of improving their academic indicators but also of training students with competencies and a vision that allows them to integrate and dynamize this productive sector.

This reality demands school leadership that not only manages scarcity but also acts as an articulating agent between national educational policies and territorial dynamics. Thus, the study of transformational leadership acquires a critical dimension, as it emerges as the ideal mechanism to cohesione the educational community and orient administrative processes toward relevance and social justice.

This research asks: How to design strategies based on transformational leadership to strengthen administrative management in public educational institutions in the department of Caquetá, Colombia?

The general objective is to design management strategies based on transformational leadership that strengthen administrative processes in public educational institutions in the department of Caquetá. The specific objectives are: (1) to characterize the components of administrative management in public educational institutions in the department; (2) to identify the leadership skills based on the transformational model present in school

administrators; and (3) to formulate management strategies based on transformational leadership for strengthening administrative management.

II. THEORETICAL FRAMEWORK

2.1 School Leadership

York-Barr and Duke [9] offered a comprehensive synthesis of the field, highlighting that school leadership encompasses a variety of roles and actions that teachers assume to influence others in order to improve school practices and student outcomes. Hargreaves and Fullan [10] argue that school leadership is a crucial component of professional capital, which includes human capital (individual skills and knowledge) and social capital (relationships and collaborative networks).

Crowther, Earl, and Ben-Avie [11] explore school leadership as a form of "middle" leadership, where teachers, without formal leadership roles, take the initiative to drive change and improvement in their teams. Harris and Jones [12] focus on teacher agency as a central element of school leadership, arguing that effective leadership requires teachers to have the capacity and opportunity to exercise their own voice and participate meaningfully in school improvement.

2.2 Administrative Management

Daft and Lane [13] integrate management with leadership, arguing that effective management in the 21st century requires not only planning, organizing, directing, and controlling but also the capacity to inspire, motivate, and enable people. Mintzberg [14] groups managerial roles around three planes: the information plane, the people plane, and the action plane.

Robbins and Coulter [15] define management as the coordination and supervision of the work activities of others, so that they are completed efficiently and effectively, incorporating sustainability, corporate social responsibility, and diversity as crucial elements. Werner et al. [16] define effective administrative management as one that creates an environment where individuals and groups can achieve organizational goals while satisfying their own needs.

2.3 Transformational Model

Originally formulated by Burns [17] and expanded by Bass and Avolio [18], transformational leadership is based on the premise that leaders and followers mutually elevate each other to higher levels of motivation and morality. In the educational field, this approach focuses on four critical dimensions:

Idealized Influence: The leader acts as a role model, inspiring respect and trust.

Inspirational Motivation: The leader communicates an optimistic and ambitious vision that motivates the team.

Intellectual Stimulation: The leader fosters creativity, innovation, and critical thinking.

Individualized Consideration: The leader attends to the unique needs of each member, acting as a mentor and facilitator.

Leithwood and Sun [19] found that transformational leadership is consistently associated with positive outcomes in schools, including teacher motivation and commitment, improvement of teaching practices, and student achievement.

2.4 Complementary Theories

Situational Leadership [20] proposes that there is no single effective leadership style, but rather it depends on the maturity level of collaborators. The leader must oscillate between directive and supportive behaviors.

Distributed Leadership [21, 22] proposes that leadership is not an individual property but a shared practice that circulates through interactions between multiple actors. This model offers the theoretical framework to understand how campus coordinators, department heads, and classroom teachers assume shares of power and decision-making.

III. CONTEXTUAL FRAMEWORK

The department of Caquetá, located in the Colombian Amazon, presents an educational scenario marked by geographic dispersion and socioeconomic heterogeneity. With an area of 88,965 km², it represents 7.8% of the national territory, with a population of approximately 410,000 inhabitants distributed across 16 municipalities, characterized by their agricultural vocation and their condition as a peripheral region and Amazonian frontier.

The department of Caquetá possesses significant economic potential in the agroindustrial sector, given its livestock vocation and its production of crops such as rubber, cocoa, and Amazonian fruits. Agroindustry, understood as the activity that integrates primary production with its transformation and commercialization, represents a fundamental pathway for the sustainable development of the region and the generation of income for rural communities [8]. In this context, public educational institutions not only face the challenge of improving their academic indicators but also of training students with competencies and a vision that allows them to integrate and dynamize this productive sector.

The Caquetá Department of Education [23] reports a net educational coverage in secondary education of 42.3%, below the national average of 53.1%. The school dropout rate in the department reaches 6.8%, influenced by factors such as family mobility for economic reasons, armed conflict, and rural conditions. According to ICFES [7], the average in the Saber 11 tests for the department is 241 points, compared to 255 points nationally.

The educational infrastructure of the department presents significant limitations: 68% of educational sites are located in rural areas, many with restricted access to basic services such as electricity and internet connectivity. The Comptroller General of the Republic [24] has pointed out that the centralization of power in Florencia, the capital, limits the autonomy of municipalities and townships, generating excessive bureaucracy that hinders access to services and processes by the general population.

The teaching staff of the department is composed of approximately 2,800 teachers, with an annual turnover rate of 12% in rural areas. The school administrators, the object of this study, are 16 principals who lead the public educational institutions of the 16 municipalities of the department, facing working conditions marked by the multiplicity of functions, limited availability of resources, and the need to manage institutions with geographically dispersed sites.

IV. CONCEPTUAL FRAMEWORK

4.1 Transformational School Leadership

It is defined as the capacity of teachers occupying leadership positions to inspire, motivate, and mobilize members of the educational community toward the achievement of shared institutional objectives, through positive influence, vision building, intellectual stimulation, and individualized consideration [18, 19].

4.2 Educational Administrative Management

It is defined as the systematic process oriented toward the planning, organization, direction, and control of institutional resources (human, financial, material, informational, and technological) to guarantee the efficient fulfillment of organizational and educational objectives [15, 25].

4.3 Management Strategies

They are defined as the set of planned and systematic actions oriented to improve the administrative processes of an educational institution, based on principles of transformational leadership and aimed at strengthening participation, communication, planning, monitoring, and institutional evaluation.

4.4 Institutional Strengthening

It is understood as the process through which educational institutions develop organizational, administrative, and leadership capacities that allow them to improve their performance, respond to environmental challenges, and achieve their educational objectives in a sustainable manner.

V. METHODOLOGY

5.1 Paradigm and Approach

The research was developed from the pragmatic paradigm, which guides knowledge toward the resolution of concrete institutional problems, conceiving that the truth and scientific utility of a construct are evidenced in its practical consequences [26]. A predominantly qualitative mixed-methods approach was adopted, integrating quantitative and qualitative procedures to comprehensively understand the phenomenon studied.

5.2 Research Design

The study adopted a non-experimental, cross-sectional design with a descriptive-propositive scope. It is non-experimental because the variables were observed in their natural environment without deliberate manipulation; cross-sectional because data collection occurred at a single temporal moment; and propoitive because the ultimate purpose is the design of strategies based on the findings obtained [27].

5.3 Population and Sample

The population consisted of the 16 school administrators who lead the public educational institutions in the 16 municipalities of the department of Caquetá. A census sampling was used, incorporating the entire population due to its small and accessible size.

5.4 Techniques and Instruments

Three complementary instruments were used:

Institutional Checklist: A quantitative instrument with a 5-level frequency scale, designed to evaluate the Administrative Management variable in areas of planning, organization, direction, control, financial management, human talent management, and infrastructure management.

Semi-Structured Interview: A script of 18 open questions organized thematically to gather deep narratives about how administrators adapt their leadership to the realities of the rural context of Caquetá.

Multifactor Leadership Questionnaire (MLQ): Adapted to the Colombian educational context to measure the dimensions of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

5.5 Validity and Reliability

Content validity was operationalized through the Expert Judgment technique, with an evaluation committee composed of five doctoral-level professionals in Educational Administration, Organizational Leadership, and Research Methodology. For the quantitative component, reliability was determined using the Kuder-Richardson coefficient (KR-20). For the qualitative component, rigor was based on the criteria of Credibility and Dependability [28].

5.6 Ethical Considerations

The research guaranteed the anonymity of participants, the obtainment of written informed consent, secure data storage, and the presentation of results in an aggregated and anonymous manner, in accordance with the provisions of Law 1581 of 2012 (Personal Data Protection Law) in Colombia.

VI. RESULTS

6.1 Results of the Semi-Structured Interview

The analysis of the interviews allowed the identification of four main categories:

Category 1: Idealized Influence and Inspirational Motivation

School administrators orient their leadership toward building a vision focused on the "student life project" and the strengthening of processes, understanding that education is a tool for personal and social transformation for the region. Participants highlight the importance of generating a shared vision that transcends academic fulfillment. One interviewee pointed out that "the school administrator transmits an educational vision centered on the integral development of the student, promoting long-term goals, personal improvement, and the construction of a life project."

Category 2: Individualized Consideration

"Public recognition" takes a central role as positive reinforcement. There is a recognition of the need to adapt strategies to the context and socio-emotional conditions of students. The absence of formal training programs is compensated by informal mentoring and peer collaboration. This is evidenced by emerging codes such as "trust and closeness," "harmonious work climate," and "visible leadership" in day-to-day activities.

Category 3: Intellectual Stimulation

Tensions are identified between the declared intention to promote critical thinking and the persistence of memoristic practices. Frugal innovation appears as a recurring modality to compensate for technological insufficiencies, taking advantage of local resources through playful strategies. One interviewee highlighted "error as a learning opportunity," creating a psychologically safe environment where experimentation is not punished.

Category 4: Administrative Management

Planning is widely incorporated and frequently updated. However, tensions are observed between the ideal of participatory democracy and consultative practices. Resource distribution reveals inequalities between schools and the recurrent absence of formalized manuals and procedures.

6.2 Results of the Checklist

Descriptive statistics revealed that the original scale allowed for 5 frequency levels, but the results showed the categories "always" (1) and "almost always" (2) in absolutely all items. This phenomenon reveals a very positive self-assessment by institutional actors, suggesting the presence of social desirability bias. The means range from 1.31 to 1.44, indicating high general homogeneity in responses.

6.3 Results of the Multifactor Leadership Questionnaire (MLQ)

Similarly to the checklist, only categories 1 (always) and 2 (almost always) appear, reinforcing the presence of a pattern of positive self-report. The measures range between 1 and 1.31 with very low standard deviations, indicating very homogeneous responses.

6.4 Triangulation of Findings

The integration of the instruments allowed the identification of a significant tension between institutional self-perception and the real dynamics of functioning. The quantitative results present a highly positive panorama, but the qualitative analysis qualifies these affirmations, showing that many processes exist formally but are applied irregularly, depending on contextual dynamics, workloads, and budget limitations.

Four central findings emerged from the integrated analysis:

Presence of transformational practices, especially in idealized influence, inspirational motivation, and individualized consideration.

Functional administrative processes in planning, organization, direction, and control, although with different levels of formalization.

A perception-reality gap between the positive perception reported and the limitations observed in the implementation of institutional processes.

The need for structured strategies to strengthen administrative management through transformational leadership.

VII. DISCUSSION

The findings of this research align with previous studies that have demonstrated the positive relationship between transformational leadership and institutional strengthening in educational contexts. Leithwood and Sun [19] found that transformational leadership is consistently associated with positive outcomes in schools, including teacher motivation and commitment. Similarly, Castillo-Cedeño et al. [29] identified a positive and significant correlation between transformational leadership and teacher performance in higher education institutions in Ecuador.

The results also coincide with the findings of Valladolid-Villalobos [30], who found a positive and significant correlation between transformational leadership of principals and the organizational climate perceived by teachers in educational institutions in Lima Metropolitana. This suggests that the presence of transformational leadership practices in school administrators contributes to the creation of more positive and collaborative institutional environments.

However, the tension identified between discourse and practice in terms of participation and systematization of processes is consistent with what was reported by Morales-Miranda et al. [31] in their study in Barranquilla, Colombia, where they found that although there is a positive perception of transformational leadership, its effective implementation in administrative processes presents limitations.

The proposed "Architecture of Possibility" model represents a significant contribution to the field of educational administration by integrating transformational leadership with administrative management as interdependent dimensions. This approach goes beyond traditional visions that treat these variables separately and offers a comprehensive framework for institutional strengthening in contexts of social vulnerability.

VIII. CONCLUSION

Regarding the characterization of administrative management, the results evidenced that institutions have formally established administrative structures, but their implementation depends largely on the individual capacities of the administrator and contextual conditions. Administrative dynamics are influenced by organizational and contextual conditions that affect the development of institutional processes.

Regarding transformational leadership, the findings evidenced strengths associated with institutional motivation, human accompaniment, ethical commitment, and the construction of positive interpersonal relationships. However, limitations related to effective participation in decision-making and the consolidation of permanent mechanisms of administrative and pedagogical innovation were also evidenced.

Regarding the general objective, the study allowed the construction of a contextualized strategic proposal based on principles of transformational leadership, institutional participation, and organizational strengthening. The research was not limited to describing existing practices but advanced toward the formulation of strategies aimed at strengthening administrative capacities and optimizing educational management in the territorial context of Caquetá.

The research concludes that public educational institutions in the department of Caquetá have administrators committed to educational transformation; however, they require consolidating more systematic, participatory, and sustainable administrative processes that allow articulating transformational leadership with permanent organizational strategies.

RECOMMENDATIONS

To the Caquetá Department of Education: Design and implement permanent training programs in transformational leadership and strategic administrative management, contextualized to the territorial conditions of the department.

To educational institutions: Strengthen mechanisms of institutional participation that favor collective decision-making and the shared construction of improvement strategies.

To school administrators: Implement monitoring and institutional evaluation strategies that allow systematizing administrative processes and guaranteeing the continuity of improvement actions.

To future researchers: Develop longitudinal studies that analyze the evolution of transformational leadership and its incidence on administrative management in the long term, incorporating the perception of teachers, students, and families.

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REFERENCES

- [1.] UNESCO. (2021). Reimaginar juntos nuestros futuros: Un nuevo contrato social para la educación. Paris: UNESCO Publishing.
- [2.] Inter-American Development Bank. (2023). La gestión educativa en América Latina y el Caribe: Desafíos y oportunidades para mejorar la calidad. Washington, DC: BID.
- [3.] A. Bolívar. (2020). Liderazgo pedagógico: Un estado de la cuestión. Profesorado. Revista de Currículum y Formación del Profesorado, 24(1), 13-34.
- [4.] M. García-Garnica and P. Valdés-Moral. (2022). La tutoría académica en la educación superior: Un análisis desde la perspectiva del profesorado. Revista Complutense de Educación, 33(1), 121-132.
- [5.] Ministerio de Educación Nacional. (2008). Guía No. 25: Gestión administrativa y financiera de los establecimientos educativos. Bogotá: MEN.

- [6.] F. J. Murillo and R. Hernández-Castilla. (2021). Liderazgo para la justicia social en educación: Una revisión sistemática. REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 19(1), 133-149.
- [7.] ICFES. (2023). Resultados Saber 11 por departamento 2022-2023. Bogotá: Instituto Colombiano para la Evaluación de la Educación.
- [8.] S. L. Ramírez and J. C. Fernández. (2022). Potencial agroindustrial de la Amazonía colombiana: Oportunidades para el desarrollo sostenible. Revista de Desarrollo Rural, 15(2), 45-68.
- [9.] J. York-Barr and K. K. Duke. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. Review of Educational Research, 74(3), 255-310.
- [10.] A. Hargreaves and M. Fullan. (2012). Professional capital: Transforming teaching in every school. New York: Teachers College Press.
- [11.] F. Crowther, L. Earl, and M. Ben-Avie. (2015). Leading from the middle: A practical guide to school improvement. Thousand Oaks, CA: Corwin.
- [12.] A. Harris and M. Jones. (2020). Leading with teacher agency. London: Routledge.
- [13.] R. L. Daft and P. G. Lane. (2021). The leadership experience (8th ed.). Boston, MA: Cengage Learning.
- [14.] H. Mintzberg. (2009). Managing. San Francisco, CA: Berrett-Koehler.
- [15.] S. P. Robbins and M. Coulter. (2023). Management (15th ed.). New York: Pearson Education.
- [16.] J. M. Werner, D. B. McBrier, and R. L. Mathis. (2020). Organizational behavior: Connecting individuals, groups, and organizations (4th ed.). New York: Routledge.
- [17.] J. M. Burns. (1978). Leadership. New York: Harper & Row.
- [18.] B. M. Bass and B. J. Avolio. (1994). Improving organizational effectiveness through transformational leadership. Thousand Oaks, CA: Sage.
- [19.] K. Leithwood and J. Sun. (2012). The nature and effects of transformational school leadership: A meta-analytic review. Educational Administration Quarterly, 48(1), 87-125.
- [20.] P. Hersey and K. H. Blanchard. (1988). Management of organizational behavior: Utilizing human resources (5th ed.). Englewood Cliffs, NJ: Prentice Hall.
- [21.] J. P. Spillane. (2006). Distributed leadership. San Francisco, CA: Jossey-Bass.
- [22.] A. Harris. (2020). Distributed leadership and school improvement: Leading or misleading? Educational Management Administration & Leadership, 48(1), 4-11.
- [23.] Secretaría de Educación del Caquetá. (2024). Plan de Desarrollo Educativo Departamental 2024-2027. Florencia: Gobernación del Caquetá.

- [24.] Contraloría General de la República. (2023). Informe sobre la situación de los derechos humanos en Colombia 2022. Bogotá: CGR.
- [25.] I. Chiavenato and A. Sapiro. (2017). Administración de recursos humanos: El capital humano de las organizaciones (3.^a ed.). México: McGraw-Hill Interamericana.
- [26.] J. W. Creswell and J. D. Creswell. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). Thousand Oaks, CA: Sage Publications.
- [27.] R. Hernández-Sampieri and C. P. Mendoza-Torres. (2018). Metodología de la investigación: Las rutas cuantitativa, cualitativa y mixta. México: McGraw-Hill Interamericana.
- [28.] Y. S. Lincoln and E. G. Guba. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage Publications.
- [29.] M. A. Castillo-Cedeño, J. L. Mendoza-Moreira, and R. E. Cedeño-Mendoza. (2020). Liderazgo transformacional y desempeño docente en instituciones de educación superior. Dominio de las Ciencias, 6(4), 232-250.
- [30.] J. C. Valladolid-Villalobos. (2021). Liderazgo transformacional y su relación con el clima organizacional en instituciones educativas de Lima Metropolitana. Tesis de maestría, Pontificia Universidad Católica del Perú.
- [31.] J. C. Morales-Miranda, P. A. Trujillo-Saavedra, and J. P. Vargas-Daza. (2022). Liderazgo transformacional y compromiso organizacional en docentes de instituciones educativas públicas de Barranquilla, Colombia. Espacios, 43(1), 1-15.

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