

Teaching pedagogical strategies for leadership development in high school students

(es) Estrategias pedagógicas docentes para la formación del liderazgo en estudiantes de bachillerato
(port) Estratégias de Ensino Pedagógico para Treinamento em Liderança em Estudantes de Bacharelado

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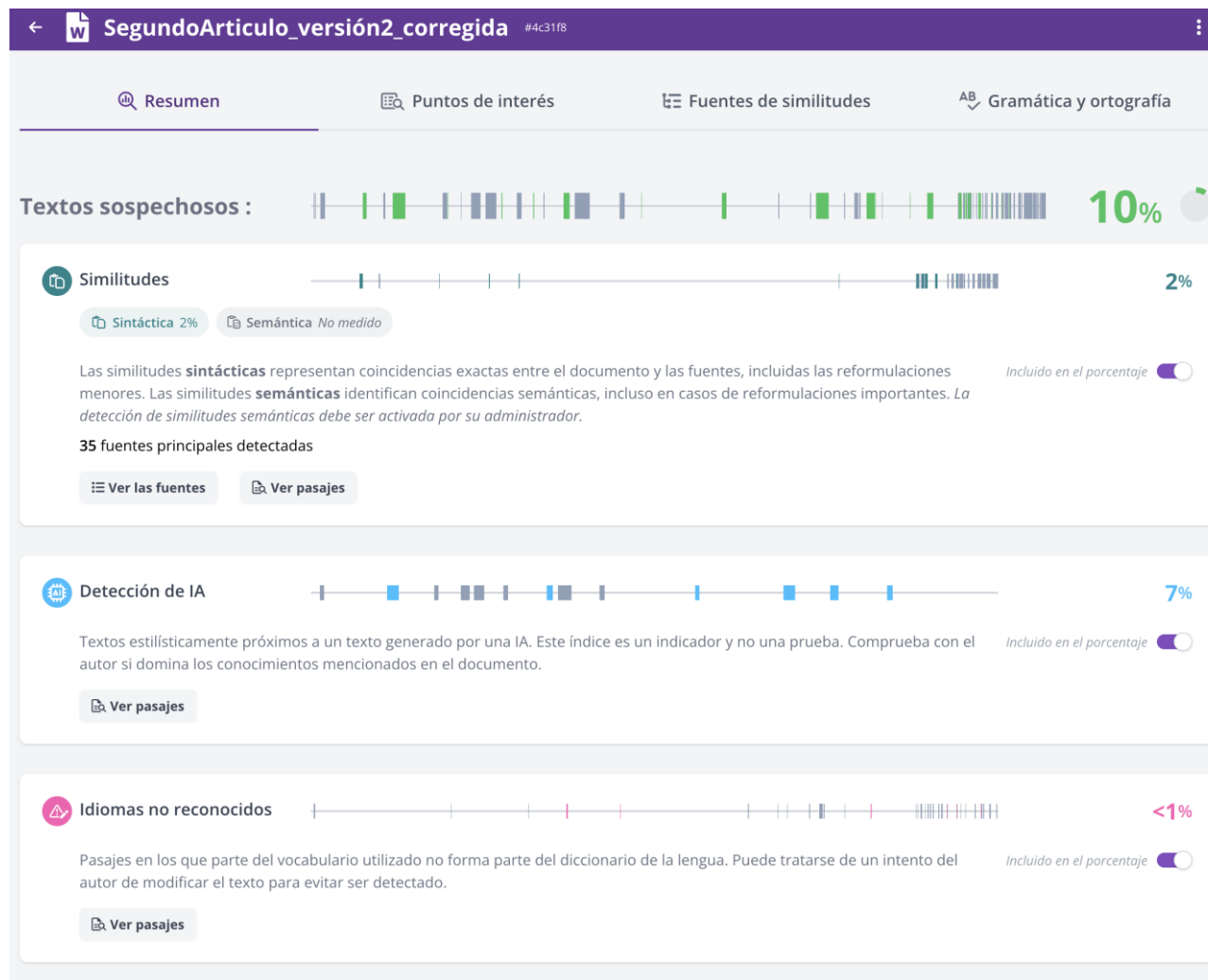
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Abstract

Student leadership development in Ecuadorian technical upper secondary education is constrained by intermittent and unsystematic teaching practices, despite teachers' basic conceptual knowledge. This situation limits the development of autonomy, decision-making, collaboration, and social responsibility. This study aimed to analyse teachers' pedagogical strategies for developing leadership among final-year technical upper secondary students at Unidad Educativa Yahuarcocha in Ibarra, Imbabura, Ecuador. A mixed-methods approach with quantitative predominance, an analytical-explanatory scope, and a non-experimental design was adopted. Teacher surveys assessed knowledge and practices related to educational leadership, while student surveys examined the frequency with which pedagogical strategies were implemented. A structured observation checklist was also used to examine alignment between theory and practice. The findings revealed insufficient implementation of pedagogical strategies supporting leadership development, corroborated by students' perceptions that active learning methods, collaborative work, and opportunities to assume responsibility were provided only occasionally. Based on these findings, a teacher professional development proposal was formulated, incorporating contextually relevant active learning and socio-emotional strategies to strengthen student leadership and promote holistic, transformative education.

Keywords: Educational leadership; educational strategy; Ecuadorian high school.

Resumen

La formación del liderazgo estudiantil en el bachillerato técnico ecuatoriano enfrenta una aplicación docente intermitente y poco sistemática, pese a la existencia de conocimientos conceptuales básicos. Esta situación limita el desarrollo de autonomía, toma de decisiones, trabajo colaborativo y responsabilidad social. El estudio tuvo como objetivo analizar las estrategias pedagógicas docentes para formar el liderazgo en estudiantes de tercero de bachillerato técnico de la Unidad Educativa Yahuarcocha, ubicada en Ibarra, Imbabura, Ecuador. Se empleó un enfoque mixto, con predominio cuantitativo, alcance analítico-explicativo y diseño no experimental. Se aplicaron encuestas a docentes para diagnosticar sus conocimientos y prácticas sobre liderazgo educativo, y a estudiantes para identificar la frecuencia de aplicación de las estrategias pedagógicas. Asimismo, se utilizó una ficha de observación para contrastar la práctica con la teoría. Los resultados evidenciaron una aplicación insuficiente de estrategias pedagógicas orientadas al liderazgo, corroborada por la percepción estudiantil sobre el uso ocasional de metodologías activas, trabajo colaborativo y oportunidades para asumir responsabilidades. A partir del diagnóstico, se formuló una propuesta de formación docente basada en estrategias activas y socioemocionales contextualizadas, orientada a fortalecer el liderazgo estudiantil y promover una educación integral y transformadora.

Palabras clave: Liderazgo educativo; estrategia educativa; bachillerato ecuatoriano.

Resumo

O presente estudo teve como objetivo analisar a relação entre o uso de Recursos Educacionais Abertos (REA) e a Prática Docente Transformadora em professores dos níveis de educação secundária superior e ensino superior. A metodologia adotada foi quantitativa, com delineamento correlacional não experimental, utilizando um questionário validado e confiável, com coeficiente alfa de Cronbach de 0,920, aplicado a uma amostra de 501 docentes desses níveis de ensino. Os resultados quanto aos níveis de desempenho indicaram que a maioria dos docentes se encontra em níveis elevados de uso de REA, destacando-se o acesso e o uso pedagógico (70,9%), enquanto a promoção desses recursos apresentou um nível ligeiramente inferior (60,1%). As correlações entre as dimensões de uso de REA e a prática docente foram positivas e estatisticamente significativas, sendo mais intensa a relação entre a promoção de REA e a prática docente ($r = 0,762$; $p < 0,001$). Conclui-se que, quanto maior o nível de utilização de REA, maior o desenvolvimento de práticas pedagógicas orientadas à transformação, inovação e melhoria educacional nos níveis de educação secundária superior e ensino superior. Por fim, estabelece-se um marco conceitual e orientações para a formação docente nas dimensões da prática docente, evidenciando a necessidade de políticas institucionais que promovam práticas educacionais abertas em diferentes níveis educacionais.

Palavras-chave: Liderança educacional; estratégia educacional; ensino médio equatoriano.

Introduction

Educational leadership has acquired increasing relevance in contemporary academic discourse, both globally and in Latin America, as one of the indispensable competencies to prepare students for the challenges of the twenty-first century. In the educational sense, it is understood as a process of normative and relational influence that promotes a shared vision, facilitates the articulation of collective goals, and guides the configuration of effective learning environments. In this sense, it is not limited to institutional administration, but encompasses pedagogical, ethical, and community dimensions, constituting an engine of transformation of the educational system (Moreno & Mosquera, 2021; Weinstein & Muñoz, 2018).

The student's education represents an essential component of integral development, as it goes beyond the mere acquisition of cognitive content, integrating socio-emotional skills, the ability to work collaboratively, critical thinking, decision-making and social commitment. These competencies are increasingly in demand by contemporary labor markets and social environments, in which adaptability, creativity, and civic responsibility set a prevailing standard (Sotomayor et al., 2024). In this way, promoting this type of action in students contributes to forming conscious, autonomous and proactive citizens, capable of assuming roles of responsibility in their communities and in the professional context.

Leadership is defined as a dynamic process of social influence aimed at mobilizing individuals and groups towards the achievement of shared objectives, based on values, interpersonal skills, cognitive abilities that are progressively developed in formative contexts (Palacios et al., 2023). From this perspective, it is recognized as a fundamental soft skill and at the same time as a transversal competence insofar as it integrates socio-emotional, communicative, ethical and cognitive dimensions that allow the individual to interact effectively with others, make responsible decisions and generate a positive impact on their environment. In the educational field, this concept transcends the traditional conception of hierarchical authority to be configured as a relational and transformative practice that prioritizes collaboration, pedagogical innovation and the empowerment of the school community (Cuéllar et al., 2023).

At the baccalaureate level, leadership acquires a particular strategic relevance, since this educational stage coincides with a critical period in the personal, social, and vocational development of adolescents. During high school, students consolidate their identity, strengthen their capacity for autonomous decision-making, and expand their interactions with peers and teachers, which makes the school environment a privileged space for learning and exercise. The formation of this competence in pre-university stages contributes significantly to the development of critical thinking, social responsibility, and the ability to work collaboratively, essential elements for active and conscious citizen participation (Barba & Delgado, 2021).

The importance of leadership at this level lies not only in the preparation for future formal positions, but fundamentally in its ability to promote a school culture based on co-responsibility, mutual respect and democratic participation. When it is cultivated from the classroom, academic self-esteem, self-regulation of learning and the sense of institutional belonging of students are strengthened, factors that directly affect their performance and school permanence (Correa et al., 2025). Thus, student leadership is configured as a transversal competence that articulates socio-emotional, ethical and cognitive dimensions, allowing students to assume active and leading roles within their educational community (Del Toro & Henriques, 2024).

This relevance is intensified in the specific context of the technical baccalaureate, where training transcends academic objectives to integrate direct preparation for the world of work and community life. In this framework, leadership is associated with key competencies such as initiative, effective communication, problem-solving, and adaptability, all of which are necessary to face complex productive and social scenarios.

Recent research underscores that early development of these competencies supports a more robust transition to higher education or the workplace by equipping students with tools to manage responsibilities, work in a team, and make informed ethical commitments (Palacios et al., 2023). In short, the baccalaureate emerges not only as a strategic capacity to influence and motivate, but as an integrating axis that links academic development with personal and social growth, preparing young people to exercise active, ethical and transformative citizenship in their future environments.

The formation of student leadership in high school is a complex process that transcends the mere transmission of content to be located in the field of intentional pedagogical mediation. Recent scientific literature shows that the development of this competence depends to a large extent on the implementation of active and participatory pedagogical strategies by the teacher. Research such as Sánchez's (2025) They highlight that methodologies such as project-based learning, collaborative problem-solving and shared decision-making promote the protagonist participation of students, stimulating skills such as initiative, coordination and group responsibility.

In this approach, the role of the teacher as facilitator is fundamental, because by acting as a guide and counselor, he creates conditions for students to build knowledge in an autonomous and reflective way, as Burbano points out (2023) Collaborative work, in particular, has proven to be an effective strategy, finding that its implementation significantly increases student participation and favors the emergence of shared and democratic leaderships, away from authoritarian models.

As in the case of Pedraja's study (2021) In which it is highlighted that transformational leadership models in school management generate institutional conditions that favor student participation and formative commitment, in the bibliometric-analytical analysis, they found that the models presented significant positive associations ($r > 0.50$) with institutional participation variables, showing statistical differences ($p < 0.05$) compared to traditional styles. In the classroom, this translates into participatory and democratic approaches where the student's voice is valued. Inclusion and recognition of diversity are key aspects in this framework. According to Zepeda, et al., (2025) argues that an intercultural and difference-sensitive pedagogy not only improves learning, but fosters a direction based on respect and collaborative management in heterogeneous environments. The model moves away from the centralization of authority to embrace distributed leadership, where the capacity for influence and decision-making are shared among educational actors.

The success of these strategies depends to a large extent on the classroom climate and teacher mediation. Quantitative research, such as that of Torres et al., (2021), demonstrated a significant positive correlation ($r > 0.45$, $p < 0.05$) between a positive classroom climate, characterized by open communication and respect, and the willingness to assume leadership roles, observing that approximately 38% of students in such environments showed greater active participation, this being characterized by open communication, mutual respect and trust, and higher levels of participation and willingness to lead. In this favorable relational environment, formative feedback emerges as a crucial mediation mechanism. Cabana et al., (2022) report that

its continuous application increases student self-confidence, likewise, constant teaching accompaniment, understood as guidance and personalized support, strengthens the student's autonomy and responsibility.

Collaborative work, on the other hand, acts as a facilitator of social skills that are pillars of student leadership. Aguasada and collaborators (2024), emphasize that, through the collaborative teaching guide, it is possible to align individual efforts towards common goals, improving not only academic performance but also group cohesion. Team learning forces high school students to negotiate, delegate and motivate their peers, which is a real practice. As Harris mentions (2025) and reinforced in the revisions of the compendium, this approach displaces the vision of the leader as a single figure and promotes a collective phenomenon where responsibility is shared, allowing diverse talents to emerge according to the needs of the project.

In addition, problem-solving and shared decision-making represent the highest level of autonomy in these strategies. According to Montiel (2025) y Cerón (2025), when teaching strategies are coherent and linked to the real context, the student develops the ability to analyze complex situations and propose effective solutions. To this, it is necessary to consider that an approach to socio-scientific and historical scientific controversies stimulates critical thinking. When faced with problems that do not have a single answer, the student is forced to make decisions based on evidence, to defend his points of view with solid arguments and to lead the debate, which is fundamental for the formation of an ethical leader who is aware of his social reality (Moreno & Mosquera, 2021).

For all the above, the following question was raised as a scientific question of the research: What are the pedagogical teaching strategies that configure the leadership training process in students of third year of technical baccalaureate?, this led to the general objective followed: To analyze the pedagogical teaching strategies for the formation of leadership in students of third year of technical baccalaureate; the steps to be followed for their fulfillment were traced through specific objectives such as: Identify the main teaching strategies for the formation of leadership in students of third year of technical baccalaureate, based on the review of the academic literature; diagnose the current situation regarding the knowledge, perceptions and practices on leadership of teachers of third year of technical baccalaureate taking the sample for diagnosis in the Yahuarcocha Educational Unit, finally describe training strategies aimed at teachers, aimed at strengthening educational leadership, in order to enhance its development in students of third year of technical baccalaureate.

Methodology

It was developed under a mixed approach, with a quantitative predominance of analytical and explanatory scope, aimed at examining the effect of pedagogical strategies for training teachers on the development of student leadership at the technical baccalaureate level. Therefore, this approach allows the integration of theoretical documentary analysis with the collection and analysis of empirical data through interviews and surveys, guaranteeing a comprehensive understanding of the phenomenon studied (Zou & Xu, 2024).

The study adopts a non-experimental design, with a propositional component aimed at the diagnosis of teaching practices and the design of a training guide for the strengthening of leadership competencies in technical high school students. In this sense, teaching strategies are considered as an independent variable and

student leadership in students in the third year of technical high school are considered as a dependent variable. For this, the type of design is methodologically relevant when seeking to analyze changes produced by a specific pedagogical intervention, without artificially manipulating the conditions of the educational environment (Hernández & Mendoza, 2023).

As an initial phase, a documentary component is incorporated aimed at identifying and systematizing from the specialized academic literature the main teaching strategies used for training in the technical baccalaureate. The review made it possible to theoretically support the design of the training intervention aimed at teachers, guaranteeing its pedagogical coherence and its alignment with contemporary approaches. Subsequently, the diagnostic phase is developed, in which the knowledge, perceptions and practices related to educational leadership in third-year teachers of the technical baccalaureate of the Yahuarcocha Educational Unit are evaluated. Therefore, this stage is executed through the application of 3 research techniques. A survey was applied to 5 teachers to diagnose their knowledge and practices in the educational context, a survey to 26 students to identify the frequency of strategies and participation in the classroom and finally a structured observation sheet to contrast the information obtained with the real pedagogical practice and strengthen the triangulation of the results. (Hernández & Mendoza, 2023).

Then, the design of the training proposal is carried out in which activities aimed at teachers are proposed, designed from the findings collected from the instruments and the theoretical review. These are aimed at strengthening education through the use of active methodologies, the development of socio-emotional skills, the promotion of transformative and inclusive approaches, the improvement of the classroom climate and the incorporation of innovative pedagogical practices. The dimensions respond to an analytical categorization built inductively, which allowed the intervention to be organized in clearly defined pedagogical axes.

Results and Discussion

Next, the analysis of the information collected through the instruments applied in the study is presented, specifically the survey aimed at teachers, the survey applied to students and the structured observation sheet. In this section, the data obtained are examined in an integrated way, allowing to contrast perceptions, pedagogical practices and evidence observed in the classroom, in order to understand how the training processes are configured in the technical baccalaureate.

Results of a survey of teachers.

The results obtained from the survey applied to 5 teachers of the Yahuarcocha Educational Unit who teach in the area of technical baccalaureate, the analysis allowed to identify the level of conceptual and pedagogical knowledge, as well as the predominant perceptions around the teaching strategies associated with their training.

In relation to the years of teaching experience, it is evident that most of the participants have a consolidated professional career. 40% of the teachers have between 11 and 15 years of experience, while another 40% have more than 15 years of professional practice. On the other hand, 20% correspond to teachers with between 6 and 10 years of experience, with no participants with less than five years of teaching work

registered. The profile suggests that the perceptions collected come mostly from teachers with medium and high experience, which gives solidity to the diagnosis made.

The results show theoretical knowledge on the part of teachers regarding the principles that underpin educational leadership. In all the conceptual items evaluated from question 1 to 11, 100% of correct answers were recorded, which indicates absolute consensus around contemporary pedagogical approaches. Specifically, all teachers correctly identified that active pedagogical strategies are characterized by student participation through projects, problem solving, and collaborative work. Likewise, they all agreed that project-based learning with defined roles directly favors student development. The findings coincide with what was stated by Cabana et al., (2022) who argue that the teacher's pedagogical knowledge of active methodologies and their relationship with student participation is a key factor for the promotion of training processes.

In the socio-emotional field, all respondents recognized that emotional self-regulation implies the student's ability to recognize and manage their emotions in academic situations, and that assertive communication and empathy contribute to leadership by facilitating respect, cooperation, and positive influence within the group. Similarly, transformative leadership was correctly identified by 100% of teachers as one that motivates, inspires, and promotes positive changes through student participation. Therefore, the same level of consensus was observed in the definition of the favorable classroom climate, the role of the teacher as a mediator, pedagogical innovation, unconventional methodologies, and institutional support and continuous teacher training as key factors to strengthen student leadership. According to Espinoza and Gallegos (2020), who highlight the centrality of socio-emotional skills and pedagogical accompaniment in the consolidation of transformative educational practices

Student Survey Results

In order to collect information on student perception regarding teaching practices, classroom climate, and leadership opportunities, a structured survey-type instrument was applied to technical high school students. The instrument allowed us to identify the frequency with which active pedagogical strategies, collaborative work, socio-emotional development, student participation, teacher accompaniment, and formative feedback are implemented, fundamental aspects to understand how it is configured in the educational context. The most relevant results are presented below.

Table 1
Results of the survey applied to students in the third year of technical baccalaureate

Item	Frequent Choice	Percentage
Use of practical and dynamic activities in class	Students perceive that these activities are applied occasionally	42.3%(<i>Sometimes</i>)
Teamwork in academic activities	Collaborative work is done with moderate frequency	46.2%(<i>Sometimes</i>)
Emotional self-regulation in the face of academic difficulties	Students show an adequate ability to control their emotions	34.6% (<i>Sometimes</i>)
Respect and listening in the classroom	Respect and listening are present, although not constantly	34.6% (<i>Always</i>)
Opportunities to lead group work	Leadership opportunities present themselves intermittently	42.3% (<i>Sometimes</i>)
Ability to make decisions in a group	Group decision-making is perceived as moderate	30.8% (<i>Sometimes</i>)
Promoting leadership by teachers	Teachers promote leadership in a partial way	34.6% (<i>Almost always</i>)
Respectful and collaborative classroom environment	The classroom environment is mostly favorable	34.6% (<i>Sometimes</i>)
Teacher support for learning difficulties	Teacher support is constant and positive	38.6% (<i>Sometimes</i>)
Feedback to improve and participate	Feedback contributes to learning, but needs to be strengthened	46.2% (<i>Sometimes</i>)

Note: Relevant results of the survey of technical high school students

In general, the results show that active pedagogical strategies, teamwork, and opportunities occur intermittently, with perceptions that indicate an occasional application of these practices predominating. The behavior suggests that, although there are attempts to incorporate participatory methodologies in the classroom, they are not yet consolidated as systematic and sustained practices, a situation that limits their impact on student education. The absence of continuity in the use of active methodologies reduces the chances for students to assume leading roles and develop competencies such as autonomy and shared decision-making (Cabana et al., 2022). In this same sense, the moderate levels identified in group decision-making and in the promotion of leadership by teachers reflect that it is not yet fully configured as a transversal competence integrated into the training process (Sánchez et al., 2025).

On the other hand, students perceive the classroom climate relatively favorably, characterized by mostly respectful and collaborative relationships, as well as teacher accompaniment in the face of learning difficulties, which evidences the presence of pedagogical mediation processes. The literature highlights that a positive classroom climate is a necessary condition for student leadership to emerge progressively and consciously (Weinstein & Muñoz, 2018). However, emotional self-regulation and formative feedback are at medium levels, which indicates the need to strengthen these components to promote more active and reflective student participation. Previous research warns that the absence of systematic feedback and strategies aimed at socio-emotional development limits the consolidation of ethics and responsibility in educational contexts (Espinoza &

Gallegos, 2020). Overall, the findings describe a scenario with incipient but favorable pedagogical conditions, which needs to be enhanced through planned and sustained teaching strategies.

Observation sheet

The following is the observation sheet applied through non-participant observation during the development of regular classes in the technical baccalaureate. The purpose of the instrument was to identify the real presence of teaching pedagogical strategies, the mediating role of the teacher, the classroom climate and the opportunities for student participation, allowing to contrast the information declared in the surveys with the pedagogical practice observed in the natural context of teaching and learning. The measurement of the file was through dimensions, with indicators that established a scale from 1 to 4, with 1 being not observed, 2 being observed occasionally, 3 being observed frequently and 4 being observed constantly.

Table 2

Observation cards

Observed dimension	Indicator	Predominant result
Active pedagogical strategies	Use of practical and participatory activities	2 (Occasional)
	Contextualized problem solving	1 (Not observed)
Collaborative work	Organization of team activities	2 (Occasional)
	Assigning roles within the group	1 (Not observed)
Social-Emotional Skills	Promotion of respect and active listening	2 (Occasional)
Teacher mediation	Teacher acts as a facilitator of learning	2 (Occasional)
Classroom climate	Respectful and collaborative environment	3 (Frequent)
Student autonomy	Participation in decision-making	1 (Not observed)
Student initiative	Evidence of protagonist participation	1 (Not observed)

Note: Most relevant results of the observation sheet applied in class

The general analysis of the results obtained from the surveys and the observation sheet shows a significant gap between the theoretical knowledge of teachers and its practical application in the classroom. It can be said that teachers have a basic knowledge of contemporary pedagogical approaches, active methodologies and principles associated with educational leadership, direct observation reveals that these strategies are implemented occasionally or in some cases are not evident in daily pedagogical practice. Therefore, this situation confirms that knowledge alone does not guarantee the transformation of classroom dynamics or the generation of systematic spaces for participation, autonomy and decision-making by students. According to Cabana et al., (2022) who point out that the absence of a sustained application of active methodologies limits their formative impact even when teachers have an adequate theoretical basis. Likewise, Weinstein and Muños (2018) who argue that the consolidation of transformative educational practices requires coherence between pedagogical discourse and continuous teaching action. In this sense, the results obtained reinforce the need for a training proposal aimed at strengthening the practical dimension of the teaching task, allowing conceptual knowledge to be translated into systematic and contextualized pedagogical strategies.

Proposal

Next, this proposal is proposed as a training guide aimed at teachers, aimed at strengthening their pedagogical practices and promoting leadership development in technical high school students.

Guide for Teacher Planning Aimed at Strengthening Student Leadership

1. Active pedagogical strategies

Pedagogical action: Implement methodologies focused on student participation

To apply active pedagogical strategies, the teacher must develop the following actions in the classroom:

Design projects linked to the technical environment

- Identify a real situation related to the technical specialty.
- Formulate a central theme or challenge that connects the curricular content with this situation.
- Form balanced working groups.
- Assign each group a specific subtopic or problem to be solved.

Pose open problems for analysis and decision-making

- Presenting cases or scenarios without a single correct answer.
- Encourage students to analyze information, compare alternatives, and argue their decisions.
- Guide the process through guiding questions, without imposing solutions.

Organize planning, implementation and evaluation activities

- Ask students to plan the project activities (objectives, roles, times).
- Accompany the execution of the work without replacing the autonomy of the group.
- To provide spaces for evaluation and reflection on the results obtained.

Prioritize project-based learning and problem-solving

- Integrate these methodologies systematically into planning.
- Avoid their isolated or sporadic use, ensuring continuity in the training process.

2. Collaborative work and distributed leadership

Pedagogical action: Promoting shared leadership within groups

To strengthen collaborative work, the teacher must:

Build teams with rotating roles

- Assign specific functions such as coordinator, spokesperson, technical manager and evaluator.
- Rotate roles in each activity so that all students take responsibility.

Promote student-built work agreements

- Facilitate the development of group norms and commitments.
- Establish clear criteria of responsibility and mutual respect.

Facilitate spaces for deliberation and consensus

- Encourage moments of discussion before making decisions.
- Value the arguments and opinions of all the members of the group.

Strengthening leadership as a service to the group

- Recognize attitudes of cooperation and support.
- Avoid authoritarian practices and promote co-responsibility.

3. Development of socio-emotional skills

Pedagogical action: Strengthening emotional self-regulation and empathy

To promote social-emotional development, the teacher must:

Incorporate brief emotional reflection activities

- Starting or closing the class with questions about how students are feeling.
- Relate emotions to the learning process.

Model assertive communication and active listening

- Use respectful and clear language.
- Actively listen to student interventions.

Accompanying frustration management

- Normalize error as part of learning.
- To guide the student when facing academic difficulties.

Promote respect for the emotions and opinions of the group

- Encourage empathy and positive coexistence.
- Prevent attitudes of mockery or devaluation.

4. Pedagogical Teacher Mediation

Pedagogical action: Accompany the process without substituting the student's autonomy

The teacher must exercise intentional pedagogical mediation through:

Assume a role as a facilitator of learning

- Guiding the process without controlling every action.
- Trust in the student's ability to learn autonomously.

Ask guiding questions

- Stimulate reflection and critical thinking.
- Avoid direct answers that limit reasoning.

Allow experimentation and error

- Provide a safe environment to test ideas.
- Encourage reflection after the error.

Adjust the intervention according to the group

- Attend to the diversity of learning rhythms and styles.
- Intervene only when necessary.

5. Formative feedback

Pedagogical action: Using feedback as a training tool

To apply effective feedback, the teacher must:

Provide clear and timely feedback

- Explain what was done well and what can be improved.
- Use constructive language.

Recognize progress in participation and accountability

- Value initiative and commitment.
- Positively reinforce the observed behaviors.

Focus feedback on the process

- Analyze how the activity was developed.
- Don't just focus on the bottom line.

Promote self-evaluation and co-evaluation

- Invite students to reflect on their performance.
- Encourage peer evaluation.

6. Favorable classroom climate

Pedagogical action: Creating a safe, respectful and participatory environment

The teacher must:

Establish consensual rules of coexistence

- Build agreements together with students.
- Promote mutual respect.

Ensuring equitable participation

- Give everyone the opportunity to speak.
- Avoid exclusion or favoritism.

Validate the group's ideas

- Recognize individual contributions.
- Build confidence to express yourself.

Creating an environment of trust

- Facilitate the taking of responsibilities.
- Promote emotional safety in the classroom.

7. Decision-making and autonomy

Pedagogical action: Promoting responsibility and autonomous management

To strengthen autonomy, the teacher must:

Delegate real decisions to students

- Allow them to organize activities, roles and times.
- Accompany without impose.

Propose choice scenarios

- Propose alternatives to solve situations.
- Analyze the possible consequences.

Accompanying the decision-making process

- Provide guidance through questions.
- Respect the decisions of the group.

Reflect on the decisions made

- Analyze results and learning.
- Strengthen individual and collective responsibility.

Criteria and Indicators for Assessing Student Leadership

To ensure that the proposal has a formative and assessable nature, it is necessary to incorporate clear criteria for student observation, the indicators allow the teacher to identify real progress in the development of the topic, beyond academic performance. Therefore, it is recommended to consider the following indicators

- Actively participates in group activities and projects.
- Assumes responsibilities within the work team.
- Make informed and consensual decisions.
- Communicates ideas clearly, respectfully, and assertively.
- Manage their emotions in the face of academic difficulties.
- Collaborates and motivates their colleagues to achieve common goals.

In this way, the indicators can be used as a guide for observation, student self-evaluation or peer co-evaluation, favoring reflection and continuous improvement. Once validation by expert judgment was applied, the results

were systematized through the analysis of frequencies and averages, using a five-level Likert-type weighting scale, where 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree and 5 = Strongly agree. The results showed a favorable overall assessment of the training proposal, which supports its relevance and applicability in the context of the technical baccalaureate. The experts issued observations aimed at strengthening the proposal, including the improvement of the wording of the objectives, the incorporation of inclusive strategies to address the diversity of the classroom and the emphasis on contextualized active methodologies. These suggestions were integrated into the final version of the proposal, increasing its pedagogical coherence, conceptual clarity and feasibility for its implementation in real educational scenarios.

Conclusions

The review of the scientific literature allowed us to conclude that the formation of student leadership in the technical baccalaureate is based on the intentional implementation of active pedagogical strategies, collaborative work, the development of socio-emotional skills, pedagogical teacher mediation, formative feedback and the construction of a favorable classroom climate. The results analyzed agree that these strategies must be systematically integrated into the teaching and learning process since leadership is progressively developed through participatory and contextualized educational experiences and not as an isolated theoretical content.

The diagnosis applied to the teachers evidenced a solid conceptual mastery of the principles of educational leadership, active methodologies and contemporary pedagogical approaches associated with their training. However, when contrasting these results with student perception and direct observation in the classroom, a significant gap was identified between the theoretical knowledge of the teaching staff and its practical application. Leadership-oriented strategies are implemented occasionally or unsystematically, which limits their formative impact and the consolidation of leadership as a transversal competence in the technical baccalaureate.

Based on the findings obtained, it is necessary to design a training proposal aimed at teachers, aimed at strengthening the practical dimension of the pedagogical task. The proposal proposed responds to the needs identified in the diagnosis, articulating pedagogical strategies, intentional teacher mediation, socio-emotional accompaniment and clear criteria for evaluating student leadership. Its contextualized and operational nature allows for the transformation of conceptual knowledge into sustained pedagogical practices, favoring the development of autonomy, participation, decision-making and collaborative work in technical high school students.

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