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Scientific articles

**Factores determinantes en la consolidación del CA
“Transformación de la práctica profesional pedagógica”**

***Determining factors in the consolidation of the CA
“Transformation of professional pedagogical practice”***

***Fatores determinantes na consolidação da CA
“Transformação da prática pedagógica profissional”***

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Resumen

El objetivo de la investigación consistió en identificar los factores determinantes en la consolidación del Cuerpo Académico “Transformación de la práctica profesional pedagógica” BINEJCB-CA-5 del Benemérito Instituto Normal del Estado “Gral. Juan Crisóstomo Bonilla” de la ciudad de Puebla, México. Se utilizó un enfoque cualitativo con diseño narrativo y alcance exploratorio. El instrumento para la recolección de los datos fue un formulario de *Google Forms* con preguntas abiertas aplicado a cuatro integrantes del Cuerpo Académico, a partir del cual emergieron siete categorías: 1) Dinámicas de colaboración y cultura académica colegiada, 2) Trayectoria académica y formación profesional, 3) Organización y dinámica de trabajo del Cuerpo Académico, 4) Producción académica, 5) Vinculación y redes académicas, 6) Políticas institucionales y apoyo externo, y 7) Factor integrador de consolidación del CA. Los resultados muestran que la consolidación del Cuerpo Académico en estudio se basa en el trabajo colaborativo, el compromiso ético y la cohesión grupal; además, la preparación profesional, destacándose cómo la formación doctoral de los tres integrantes fue determinante en la producción científica. Asimismo, la organización colegiada facilitó el logro de los objetivos, mientras que la colaboración interinstitucional incrementó la calidad y la visibilidad del trabajo. Estos elementos resultaron fundamentales para obtener el reconocimiento como Cuerpo Académico Consolidado por el Programa de Desarrollo Profesional Docente (PRODEP) el 15 de diciembre de 2023.

Palabras clave: Investigación educativa, profesores investigadores, educación superior, estudiantes investigadores, cuerpo académico.

Abstract

The objective of this research was to identify the determining factors in the consolidation of the Academic Group “Transformation of Pedagogical Professional Practice” (BINEJCB-CA-5) at the Benemérito Instituto Normal del Estado “Gral. Juan Crisóstomo Bonilla” in the city of Puebla, Mexico. A qualitative approach with a narrative design and exploratory scope was used. The data collection instrument was a Google Forms questionnaire with open-ended questions administered to four members of the Academic Group. Seven categories emerged from this questionnaire: 1) Collaborative dynamics and collegial academic culture, 2) Academic trajectory and professional training, 3) Organization and work dynamics of the

Academic Group, 4) Academic production, 5) Academic networks and partnerships, 6) Institutional policies and external support, and 7) Integrating factor in the consolidation of the Academic Group. The results show that the consolidation of the Academic Group under study is based on collaborative work, ethical commitment, and group cohesion. Furthermore, professional preparation was key, particularly the doctoral training of the three members, which proved crucial to their scientific output. Likewise, the collegial organization facilitated the achievement of their objectives, while inter-institutional collaboration enhanced the quality and visibility of their work. These elements were fundamental in obtaining recognition as a Consolidated Academic Group by the Teacher Professional Development Program (PRODEP) on December 15, 2023.

Keywords: Educational research, research faculty, higher education, research students, academic group.

Resumo

O objetivo desta pesquisa foi identificar os fatores determinantes na consolidação do Grupo Acadêmico “Transformação da Prática Profissional Pedagógica” (BINEJCB-CA-5) do Benemérito Instituto Normal del Estado “Gral. Juan Crisóstomo Bonilla”, na cidade de Puebla, México. Utilizou-se uma abordagem qualitativa com delineamento narrativo e caráter exploratório. O instrumento de coleta de dados foi um questionário em formato Google Forms com perguntas abertas, aplicado a quatro membros do Grupo Acadêmico. Sete categorias emergiram do questionário: 1) Dinâmicas colaborativas e cultura acadêmica colegiada, 2) Trajetória acadêmica e formação profissional, 3) Organização e dinâmica de trabalho do Grupo Acadêmico, 4) Produção acadêmica, 5) Redes e parcerias acadêmicas, 6) Políticas institucionais e apoio externo e 7) Fator integrador na consolidação do Grupo Acadêmico. Os resultados demonstram que a consolidação do Grupo Acadêmico em estudo se baseia no trabalho colaborativo, no compromisso ético e na coesão grupal. Além disso, a preparação profissional foi fundamental, em particular a formação doutoral dos três membros, que se revelou crucial para a sua produção científica. Da mesma forma, a organização colegiada facilitou a concretização dos seus objetivos, enquanto a colaboração interinstitucional reforçou a qualidade e a visibilidade do seu trabalho. Estes elementos foram essenciais para a obtenção do reconhecimento como Grupo Acadêmico Consolidado pelo

Programa de Desenvolvimento Profissional de Professores (PRODEP) a 15 de dezembro de 2023.

Palavras-chave: Pesquisa educacional, professores pesquisadores, ensino superior, estudantes pesquisadores, corpo acadêmico.

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Introduction

Academic groups (AGs) are groups of full-time professors affiliated with Higher Education Institutions (HEIs) who share Lines of Knowledge Generation and Application (LGACs), as well as common interests in research and academic development. At the same time, their purpose is to strengthen collaborative work, promote scientific production, and foster the consolidation of specialized academic communities within HEIs.

Starting in 1996, the Program for the Improvement of Teaching Staff (PROMEP), now called the Program for the Professional Development of Teachers (PRODEP), issued its first call for proposals to create academic groups at universities. Subsequently, in 2009, this opportunity was extended to teacher training institutions or normal schools; that is, after thirteen years, teacher-researchers at these institutions were able to formally integrate into this academic development and institutional strengthening program.

Since their incorporation into teacher training institutions, the academic bodies of Mexico's normal schools have faced the challenge of operating in institutional environments traditionally oriented toward teaching rather than research. As Rueda (2023) points out, research in normal schools is far from consolidated because it is not a requirement for admission, revealing a structural lag compared to universities. Similarly, Pérez and Aguilar (2021) argue that much of the work of research groups stems from daily teaching activities rather than systematic knowledge generation processes, due to the absence of adequate institutional conditions, such as dedicated research time, job security, and financial incentives. In this sense, the difficulty lies not only in the willingness or training of teacher-researchers but also in the material and regulatory conditions that limit the development of a sustained research culture.

Studies agree that the consolidation of academic bodies in teacher training colleges is a progressive process that depends on organizational, educational, and collaborative strategies. Castro et al. (2019) highlight that collegial planning, clarity in research lines, and

institutional support are key to the evolution and future development of academic bodies. Along the same lines, Pérez Arenas et al. (2020) identify academic bodies as educational spaces that foster knowledge production, although they also reveal tensions associated with workload and institutional demands. Similarly, Siqueiros and Vera (2020) point out that, while academic bodies in teacher training colleges show progress in organization and productivity, challenges persist related to consolidating research and effectively integrating teaching and research.

On the other hand, several studies have documented that the challenges faced by academic bodies in teacher training colleges are also organizational and professional in nature. According to Pérez and Hernández (2020), one of the main obstacles is the difficulty in converting tacit knowledge into explicit knowledge within teams, as well as in establishing inter-institutional collaboration networks. Similarly, González and Ramírez (2022) identify that, while some academic bodies have made visible progress in scientific output, their operation remains partial and dependent on individual leadership rather than on consolidated collegial dynamics.

In sum, collaborative research through academic bodies in teacher training colleges faces a double challenge: a structural one, related to infrastructure and resources; and a professional one, linked to organization, strategic planning, and the consolidation of a genuine research community. Despite this reality, some academic bodies in teacher training colleges have achieved a level of consolidation. Therefore, it is valuable to identify the factors that influenced this distinction through the following research question, objective, and assumptions.

Research question:

- What institutional, organizational, and personal factors influenced the Academic Body 5 of the BINE “Transformation of the professional pedagogical practice” to reach the level of consolidation within the Program for Teacher Professional Development (PRODEP)?

Research objective :

- To analyze the institutional, organizational and personal factors that contributed to the consolidation of Academic Body 5 of the Benemérito Instituto Normal del Estado “Gral. Juan Crisóstomo Bonilla” (BINE), highlighting the strategies, conditions and dynamics of collaboration that favored its academic and professional strengthening.

Research assumptions:

- The consolidation of Academic Body 5 of the BINE was favored by the existence of shared academic leadership and a clear definition of common lines of research among its members ;
- Institutional support mechanisms (allocated time, PRODEP recognition, infrastructure, and management support) played a decisive role in the process of consolidating the academic body.
- Sustained collaboration and joint academic production, expressed in publications, research projects and participation in networks, were determining factors in achieving recognition as a consolidated academic body.

History of Academic Body 5 of the BINE

The history of the Academic Group “Transformation of Pedagogical Professional Practice” at the Benemérito Instituto Normal del Estado “Gral. Juan Crisóstomo Bonilla” dates back to 2012, when its initial members developed a research project during a workshop at the Universidad Iberoamericana Puebla. This project was later presented as completed research at the First International Virtual Congress on Teacher Training in Ibero-America (2013). This experience strengthened the collaborative work that gave rise to the Collegiate Research Group “Educational Innovation,” the direct predecessor of Academic Group 5 “Transformation of Pedagogical Professional Practice.” Among its initial research projects were quantitative and exploratory studies on the training of physical education teachers and their performance in national assessments, as well as the incorporation of socio-formative methodologies applied to postgraduate projects.

In 2016, the group obtained its official registration with the Program for the Professional Development of Teachers (PRODEP) as an Academic Group in Formation, consolidating its General Line of Knowledge Application oriented towards pedagogical professional practice. This achievement represented a key step in strengthening its academic identity and channeling its research efforts. By 2017, the academic group had consolidated into a team with extensive shared experience in the Physical Education Bachelor's Degree program at BINE, comprised of three academics with theoretical and methodological affinities: Norma Nava Ramírez, Mónica Gutiérrez Damián, and Raymundo Murrieta Ortega. This formation allowed for a more solid articulation of their interests and lines of work.

That same year, with the support of Dr. Karla Villaseñor Palma, a research professor at the Benemérita Universidad Autónoma de Puebla (BUAP), CA-5 strengthened its academic outreach, focusing on producing higher-impact publications and expanding its participation in national academic events. These included the National Research Congresses on Teacher Education (CONISEN), Postgraduate Congresses, and meetings of the Mexican Council for Educational Research (COMIE), where both quantitative and qualitative research was promoted on teacher evaluation, effective teaching, and research training.

Between 2017 and 2019, CA-5 significantly increased its academic output through the development of narrative, biographical, and exploratory studies. These investigations addressed relevant topics such as teaching projects, social and gender inequality in educational pathways, pedagogical models for teaching school sports, and the analysis of teacher habitus.

The results of this work were presented at high-level national conferences, allowing the academic staff to consolidate lines of research related to teacher professionalization, educational practices, and educational equity. Their participation in events such as the XIV and XV National Congress of Educational Research of COMIE helped position CA-5 as a leader in the critical analysis of pedagogical practice and teacher training in physical education.

Starting in 2021, the academic body expanded its publishing presence by coordinating books and strengthening collaborations within national academic networks. It published book chapters on teaching competencies, curriculum design using the modular theory of transformation objects, and studies on equity in higher education. In 2022, it shifted its focus to publishing in indexed journals, continuing its research on symbolic interactionism and the analysis of teacher performance evaluation, reinforcing its commitment to educational improvement and the development of relevant knowledge to strengthen professional practices. With these contributions, CA-5 has established itself as a coherent, collaborative research space dedicated to pedagogical transformation through initial and ongoing teacher training.

The following table shows the 14 works produced by the GCI “Educational Innovation” and CA-5 (recognized by PRODEP from 2016 onwards), from 2013 to 2023.

Table 1. CA-5 Publications

No.	Title of the academic production	Authors of the CA-5	Mode	Year
1	Training of physical educators at BINE and its impact on the allocation of teaching positions.	Raymundo Murrieta Ortega and Norma Nava Ramírez.	Presentation. Extended proceedings.	2013
2	Design of socio-formative projects in the master's degree in physical education teaching: an experience at BINE.	Raymundo Murrieta Ortega and Norma Nava Ramírez.	Presentation. Extended proceedings.	2015
3	Evaluation of teaching performance in a postgraduate program in Mexico: students' perceptions.	Norma Nava Ramírez, Raymundo Murrieta Ortega and Mónica Gutiérrez Damián.	Presentation. Extended proceedings.	2016
4	Effective teaching in the normal school and its impact on the design of master's theses.	Raymundo Murrieta Ortega, Norma Nava Ramírez and Mónica Gutiérrez Damián.	Presentation. Extended proceedings.	2017
5	Teaching project: methodological innovation experience to transform teaching practice.	Raymundo Murrieta Ortega and Mónica Gutiérrez Damián .	Presentation. Extended proceedings.	2018
6	Pedagogical model for the comprehensive teaching of school sports through modified games	Raymundo Murrieta Ortega, Norma Nava Ramírez and Mónica Gutiérrez Damián.	Presentation. Extended Memoirs	2019
7	An exploratory approach to teacher evaluation from the habitus of physical education teachers.	Norma Nava Ramírez and Mónica Gutiérrez Damián.	Presentation. Extended proceedings.	2019
8	Social and gender inequality: causes that hindered the professional training of a student living in poverty.	Raymundo Murrieta Ortega, Norma Nava Ramírez and Mónica Gutiérrez Damián.	Presentation. Extended proceedings.	2019
9	Teaching competencies: a means for the transformation of educational practice.	Raymundo Murrieta Ortega, Norma Nava Ramírez and Mónica Gutiérrez Damián.	Book chapter.	2021
10	Design of a master's program using the modular curriculum theory by objects of transformation.	Raymundo Murrieta Ortega, Norma Nava Ramírez and Mónica Gutiérrez Damián.	Presentation. Extended proceedings.	2021
11	Towards a culture of equity in higher education: analysis of an experience .	Raymundo Murrieta Ortega, Norma Nava Ramírez and Mónica Gutiérrez Damián.	Book chapter	2022
12	Physical education teachers and teacher evaluation: construction of meanings through symbolic interactionism.	Norma Nava Ramírez and Raymundo Murrieta Ortega.	Scientific article	2022
13	Analysis of public policies for early childhood education in Mexico.	Raymundo Murrieta Ortega and Mónica Gutiérrez Damián.	Book chapter	2022
14	Between evaluation and the social meanings of physical education teachers: a symbolic experience.	Norma Nava Ramírez, Raymundo Murrieta Ortega and Mónica Gutiérrez Damián.	Scientific article	2023

Source: own design

These results were decisive in obtaining recognition as a Consolidated Academic Body on December 15, 2023, through the Program for the Professional Development of Teachers (PRODEP), being the first AC to obtain this distinction in the state of Puebla.

Theoretical support

This section examines teacher performance evaluation policies in Mexico, with particular emphasis on federal programs such as PRODEP and SNII, which establish criteria and indicators that guide and regulate academic productivity. These programs shape regulatory frameworks that directly influence research, teaching, and management practices, while also defining parameters for recognition and legitimacy within academia.

The analysis is based on the theoretical contributions of Bourdieu (1997) and Foucault (1979), particularly regarding the notions of capital and control, as key categories for understanding the dynamics of power and positioning in academia. It also draws on the contributions of Bozeman and Boardman (2003) to highlight the importance of collaborative work as a strategic factor in strengthening academic productivity, by fostering collaboration, the collective construction of knowledge, and the development of strong academic communities.

Policies for evaluating teacher performance in Mexico

In Mexico, the evaluation of faculty productivity has been shaped by a set of public policies aimed at professionalizing academic staff, strengthening research, and raising the quality of education in higher education institutions. These policies operate through formal recognition and incentive programs, including the Program for Professional Faculty Development (PRODEP) and the National System of Researchers (SNII), among others. Together, they establish a regulatory framework that guides academic practices and defines performance evaluation criteria.

Program for the Professional Development of Teachers (PRODEP)

The Program for the Professional Development of Higher Education Faculty in Mexico has become the main federal mechanism for promoting academic professionalization. One of its principal tasks is the evaluation of the level of consolidation of an academic group, ranging from the basic level "in formation" to the intermediate level "in consolidation" and the high level "consolidated." At the Benemérito Instituto Normal del

Estado "Gral. Juan Crisóstomo Bonilla" in the city of Puebla, Mexico, there are five academic groups recognized by PRODEP (see Table 2): two in formation, three in consolidation, and one consolidated (the subject of this research).

Table 2. Nomenclature, name and status of the Academic Bodies in the BINE

No.	Nomenclature	Name of the academic body	Status
1	BINEJCB-CA-24102	Sustainability and teacher training processes in physical education	In training
2	BINEJCB-CA-2	Teacher training and its impact on education	In consolidation
3	BINEJCB-CA-3	Educational relevance	In consolidation
4	BINEJCB-CA-4	Assessment for educational quality	In consolidation
5	BINEJCB-CA-5	Transformation of professional pedagogical practice	Consolidated

Source: PRODEP

National System of Researchers (SNII)

The National System of Research and Innovation (SNII) is one of the academic evaluation systems with the greatest impact on the career paths of faculty researchers in Mexico. Since its creation in 1984, it has established academic hierarchies based on quantitative and qualitative criteria: scientific publications, impact of research output, thesis supervision, participation in funded projects, and track record in a specific line of research. Membership in the SNII implies national recognition, academic prestige, and a differential financial incentive; therefore, its standards strongly influence the internal policies of higher education institutions (CONAHCYT, 2023). Currently, the BINE has thirteen professors who belong to the SNII, as shown in the following table.

Table 3. BINE teachers belonging to the SNII

No.	Name	Year of entry into the SNII	Period of distinction	Level	PE
1	Guadalupe Badillo Márquez	2019	2023-2026	Level 1	LEP
2	Fernando Flores Vázquez	2022	2026-2030	Level 1	LIE
3	Raymundo Murrieta Ortega	2022	2026-2030	Level 1	LEF
4	Edgar Ulises Osorio Guzmán	2023	2023-2026	Candidate	CENPOS
5	María Elizabeth Luna Solano	2023	2023-2026	Candidate	LIE
6	Alexandra Rossano Ortega	2024	2024-2027	Candidate	LEPE
7	Nancy Silvia Esparragoza Bermejo	2024	2024-2027	Candidate	LEP
8	Raúl Amigón García	2024	2024-2027	Candidate	READ
9	María Anabell Aguilar Zaldívar	2024	2024-2027	Candidate	CENPOS
10	Luis Ricardo Hernández Ramos	2024	2024-2027	Candidate	LIE
11	José Gabriel Marín Zavala	2024	2024-2027	Level 1	READ
12	Francisco Javier Saucedo Jonapá	2025	2026-2029	Candidate	LEF
13	María Patricia Sánchez Bautista	2025	2026-2029	Candidate	LEP

Source: SECIHTI

Results-based management models

On this topic, Didriksson (2008) explains that in Mexico, public policies shifted toward a results-based management model, which transformed academic productivity into a central regulator of academic processes in higher education. From this perspective, academic bodies operate within a system that values quantifiable indicators, such as publications, thesis supervision, participation in networks, funded projects, and membership in the National System of Researchers (SNI) or the Program for the Promotion of Academic Development (PRODEP), among others, as criteria for allocating resources, obtaining institutional recognition, and strengthening their consolidation.

Thus, performance evaluation not only guides individual practices, but also defines the collective dynamics of the academic body, establishes internal hierarchies and sets work routes, while legitimizing the trajectories of its members based on the fulfillment of goals established by national evaluation programs.

In summary, performance evaluation in Mexico has established a regulatory framework that defines what constitutes a “productive” academic career and sets the guidelines that govern the work of faculty and academic groups. These policies directly

influence the dynamics, evolution, and consolidation of academic groups by shaping their goals, strategies, and forms of collegial organization.

Regulation and academic capital (Bourdieu and Foucault)

To analyze the consolidation of an academic body, it is useful to draw on the ideas of Pierre Bourdieu and Michel Foucault, who help explain how the dynamics of power and recognition operate in higher education. Bourdieu (1997) argues that Higher Education Institutions can be understood as fields where actors compete for different types of symbolic resources called capital. In the case of teacher-researchers, this capital includes academic capital: degrees, training, institutional affiliation; scientific capital: publications, participation in academic bodies, membership in the National System of Research Information (SNII), funded projects; and social capital: collaborative networks, links with other groups and researchers.

Therefore, the consolidation of an academic body is the result of the accumulation and combination of these resources by its members. When a research group manages to produce relevant research, publish consistently, supervise theses, participate in networks, and develop projects, its recognition within the institution increases. This allows it to access funding, greater visibility, and a status that validates its quality and academic maturity. In this sense, productivity is not just about fulfilling tasks, but about gaining prestige and strengthening the group's position in the field of research.

For his part, Michel Foucault (1979) provides arguments for understanding how educational policies establish mechanisms of regulation and control over teachers. Programs such as PRODEP, SNII, and performance-based incentives function as devices that "monitor" academic work through very specific indicators (publications, projects, productivity, and student training). These programs generate a culture where teachers feel constantly evaluated and, therefore, organize their work to comply with official criteria.

This process fosters a kind of self-discipline: the professor plans, records, documents, and organizes their output to demonstrate that they are "productive." Consequently, the academic body is also structured according to this logic: tasks are distributed, goals are planned, and decisions are made based on what the programs recognize as valuable.

Taken together, the ideas of Bourdieu and Foucault allow us to understand that the consolidation of an academic body depends both on the capacity of its members to generate and accumulate academic, scientific, and social capital, thereby achieving institutional

recognition, and on the influence of evaluation policies, which guide their work toward meeting indicators and shape their way of acting, producing, and organizing themselves.

From this perspective, the consolidation of the CA is not only a technical or administrative result, but also a social process where prestige, collaboration, regulation, academic discipline and the collective capacity to respond to the demands of the educational system come into play.

Academic productivity and collaborative work

Academic productivity, understood as the ability to generate publications, participate in projects, supervise theses, and strengthen lines of research, is not solely the result of each faculty member's individual effort. Research shows that the best results are achieved through collaborative work, that is, when academics actively work together, share goals, and build a common professional identity.

On this topic, Bozeman and Boardman (2003) point out that the most productive research groups share several distinct characteristics. These include: distributed leadership, where not everything falls on a single person; constant communication, which allows for the coordination of tasks and the resolution of difficulties; clarity in research objectives, to avoid isolated efforts; strategic planning, which guides actions in the medium and long term; and mutual trust, a fundamental element for sustaining collaborative work. When these factors are present, groups achieve greater cohesion, stability, and capacity to respond to the demands of the academic field.

The arguments of Bozeman and Boardman (2003) fully align with the model of academic bodies proposed by PRODEP, recognizing that productivity should not be understood as a sum of individual efforts, but rather as the result of a collective dynamic. An academic body is consolidated when its members work in an articulated manner: they share projects, support each other in the training of students, build a common research agenda, and develop academic products that reflect their level of maturity as a group.

In the case of the research group "Transformation of Pedagogical Professional Practice," consolidation can be interpreted precisely as the effect of having achieved this internal cohesion. From this perspective, productivity is not explained solely by what each member did individually, but by how a group identity, a joint plan, and a shared vision are constructed. The coordination of efforts allowed academic outputs to have a greater impact, strengthened lines of research, and led to institutional recognition as a consolidated academic

body. In this way, academic productivity and collaborative work become two inseparable elements: collaboration sustains academic output, and productivity strengthens the consolidation of the academic body.

Research Methodology

This research was developed under a qualitative approach , which allowed for the understanding of social phenomena from the perspective of the actors involved, considering their meanings, experiences, and particular contexts.

culares (Denzin and Lincoln, 2018). This approach proved relevant to analyze the factors that have influenced the consolidation of the Academic Body “ Transformation of the professional pedagogical practice” , by prioritizing the deep interpretation of the experiences of its members.

The methodological design adopted was narrative , as it sought to recover and analyze participants' accounts of their trajectories, experiences, and organizational and academic processes within the academic community. According to Clandinin and Connelly (2000), narrative research allows us to understand how people construct meaning from their experiences over time, which is fundamental to explaining processes of academic consolidation. Likewise, Bolívar (2012) points out that this design is especially useful in educational studies that analyze formative, professional, and collective processes.

The study had an exploratory scope , as it achieved an initial approach to the phenomenon under study, identifying relevant categories and elements that allowed for an understanding of the determining factors in the consolidation of the CA, without intending to generalize the results (Hernández et al., 2022). This type of scope is appropriate when the object of study has been little researched or requires an initial systematization based on the experience of the actors.

Regarding the data collection technique, a form designed in *Google Forms* was used , consisting of open-ended questions aimed at gathering participants' perceptions, experiences, and reflections. This type of instrument encouraged the free expression of ideas and allowed for the collection of rich and in-depth information (Flick, 2015). To ensure the content validity of the items, an expert review process was conducted, following the methodological approach of Escobar-Pérez and Cuervo-Martínez (2008). Participants also

signed an informed consent form authorizing the use of their information for strictly academic purposes.

The participants in this study were four teacher-researchers affiliated with the Academic Group “Transformation of Pedagogical Professional Practice” (CA-5). Three of them are active members—who also serve as authors of this study—while the fourth participant, although formerly part of the academic group, is no longer affiliated due to changes in their institutional affiliation. In terms of composition, the group consisted of three women and one man; all hold doctoral degrees and have received the Desirable Profile recognition awarded by the Program for Teacher Professional Development (PRODEP). Furthermore, two of the members, one woman and one man, are members of the National System of Researchers (SNII) at Level I. Regarding their professional experience, all have more than twenty-five years of experience in teacher training, demonstrating a solid academic and research track record.

Participants were selected using purposive sampling, taking into account their professional background, level of involvement, and in-depth knowledge of the academic body's dynamics. The inclusion of the authors as participants is explicitly considered part of the methodological design, acknowledging their role as key informants and addressing the potential implications in terms of reflexivity and bias. These characteristics allow for a deeper understanding of the organizational, collaborative, and scientific production processes that have contributed to the consolidation of CA-5.

The information analysis was carried out using content analysis, based on a systematic process of coding and thematic categorization of the discourses. This allowed for the identification of patterns, recurrences, and relevant meanings surrounding the factors that consolidate the academic body (Bardin, 2002). Finally, criteria of qualitative rigor were considered, such as credibility, internal coherence, and transparency in the methodological process, ensuring a clear description of the context, the participants, and the analytical decisions (Lincoln and Guba, 1985).

Results

Analysis of the responses obtained through the open-ended questionnaire administered to four members of CA-5 allowed for the identification of academic, organizational, institutional, and networking factors that were crucial in its consolidation process. The following categories emerged from the content analysis.

1. Dynamics of collaboration and collegial academic culture

The participants agreed that the consolidation of the academic body has been closely linked to the development of collaborative work dynamics based on shared values such as academic commitment, collective responsibility, assertive communication, and mutual respect. These conditions fostered group cohesion, the building of agreements, and the resolution of differences, elements that allowed for coordinated progress toward common academic goals.

In this sense, rather than strictly individual attributes, the testimonies reveal the formation of a collegial academic culture, characterized by cooperation, professional trust, and the recognition of each member's strengths in relation to the group's objectives. These dynamics contributed to consolidating collaborative work practices oriented toward knowledge production and strengthening the academic identity of the faculty.

Participants also highlighted the presence of shared academic leadership models, in which decisions and responsibilities are distributed consensually among members. This type of leadership fostered the development of a strong collective identity and the creation of joint strategies to address the challenges associated with research processes and institutional consolidation.

2. Academic background and professional training

The narratives show that the members' academic background, characterized by doctoral studies, experience in educational research, and continuing education, was fundamental to the consolidation of the research group. Participants indicated that their intellectual maturity and professional preparation enabled them to develop relevant research projects, strengthen academic output, and actively participate in academic networks and events.

Furthermore, disciplinary and methodological training has favored student guidance, thesis direction, and the generation of knowledge with educational impact, fundamental elements in the criteria for consolidating Academic Groups.

3. Organization and work dynamics of the Academic Body

Regarding internal dynamics, members highlighted the importance of a clear organization based on collaborative planning, the definition of lines of knowledge generation and application (LGAC), and the establishment of collaborative agreements. Regular meetings, follow-up on commitments, and the equitable distribution of responsibilities were identified as practices that strengthened the work of the research group. At the same time, consensus-based decision-making and mutual support among members allowed for the continuity of projects and the joint response to academic and administrative challenges.

4. Academic production and collaborative work

The results show that consistent academic output, expressed in scientific articles, book chapters, presentations, and conference participation, was a determining factor in the consolidation of CA-5. Participants indicated that collaborative work allowed them to improve the quality of their academic work and meet the indicators established by PRODEP. Furthermore, it was acknowledged that collaborative academic writing and peer feedback strengthened the group's research skills.

5. Academic Linkages and Networks

Collaboration with other academic bodies, higher education institutions, and national and international research networks was identified as a key element for the growth of the research group. Participants indicated that these alliances represented a significant improvement, enabling inter-institutional projects, academic exchanges, and joint research. Furthermore, participation in academic conferences fostered the exchange of knowledge and strengthened the research group's standing within the educational field.

6. Institutional policies, support from BINE and PRODEP

Regarding institutional policies, participants expressed diverse perceptions. On the one hand, they acknowledged that PRODEP policies guide academic productivity and consolidation processes; however, they also noted the limited existence of specific internal policies within BINE that systematically support the work of Academic Groups. Despite this, institutional support in terms of academic recognition and administrative management was valued as a factor that contributed to the progress of the Academic Groups.

7. Main factor in the consolidation of the CA-5

Overall, the members agree that sustained collaborative work, based on clear agreements, ethical commitment, genuine interest in educational research and a shared vision of transforming pedagogical practice, was the main factor that allowed the consolidation of the academic body.

Results analysis

In summary, to identify the categories and subcategories that emerged from the application of the instrument, the results are presented in the following table.

Table 4. Emerging categories and subcategories on the determining factors in the consolidation of CA-5

Category	Subcategories	Analytical description
Dynamics of collaboration and collegial academic culture	Collaborative work	Willingness to work as a team, co-responsibility and mutual support among the members of the CA.
	Academic commitment	Compliance with agreements, responsibility in tasks and permanence in collective projects.
	Professional values	Empathy, respect, professional ethics and assertive communication as the basis of academic coexistence.
	Shared leadership	Recognition of individual strengths and consensus decision-making.
Academic background and professional training	Doctoral training	Academic level that strengthens research, tutoring, and scientific production.
	Research experience	Previous participation in educational research projects and knowledge generation.
	Ongoing updates	Continuing education in research methodologies and academic writing.
Organization and work dynamics of the CA	Collaborative planning	Joint definition of academic objectives, activities and goals.
	Agreement monitoring	Constant evaluation of progress and compliance with established commitments.
	Distribution of responsibilities	Equitable allocation of tasks according to the skills of the members.
Academic production	Scientific publications	Preparation of articles, book chapters and other academic products.
	Participation in academic events	Presentations at conferences, colloquia and research meetings.
	Collaborative writing	Joint production and feedback among academic peers.
Academic links and networks	Interinstitutional collaboration	Collaboration with other Academic Bodies and higher education institutions.
	Research networks	Participation in national and international networks.

Category	Subcategories	Analytical description
	Collaborative projects	Development of joint research projects and academic stays.
Institutional policies and external support	PRODEP Guidelines	Orientation of academic productivity and consolidation criteria.
	Institutional support from BINE	Academic recognition and administrative facilities.
	Internal regulatory limitations	Absence or weakness of specific institutional policies for CA.
Integrating factor of consolidation	Shared vision	Convergence in objectives, research interests and pedagogical transformation.
	Group cohesion	Permanence, collective identity and sense of belonging to the CA.

Source: own design

The following is an analysis of the results, based on the linking of the categories with the theoretical references of recognized authors in the educational field.

1. Dynamics of collaboration and collegial academic culture

The identified personal characteristics, such as collaborative work, academic commitment, professional values, and shared leadership, align with the arguments of Hargreaves and Fullan (2012), who maintain that professional teaching capital is built upon the interaction of human, social, and decisional capital. Similarly, Wenger (1998) points out that communities of practice are strengthened by a shared identity and relationships based on trust and collaboration. In the context of academic bodies, these qualities foster internal cohesion and the sustainability of collaborative work.

2. Academic background and professional training

Doctoral training, research experience, and ongoing professional development are related to Bourdieu's (2001) argument that academic and scientific capital constitutes a strategic resource for positioning and legitimizing oneself in the field of education. Similarly, De Ibarrola (2012) points out that faculty members' academic trajectories directly influence the quality of their research and their capacity to generate relevant knowledge. In the case of Academic Groups, these trajectories facilitate compliance with the consolidation criteria established by PRODEP.

3. Organization and work dynamics of the Academic Body

Collaborative planning, monitoring of agreements, and the distribution of responsibilities are related to the contributions of Bolívar (2010), who emphasizes that effective collaborative work requires clear organizational structures and shared decision-making processes. Likewise, Santos Guerra (2010) underscores that democratic organization and collective reflection are necessary conditions for institutional learning and continuous improvement in educational contexts.

4. Academic production

Consistent academic production and collaborative writing align with the ideas of Day (2005), who points out that professional development for teachers involves the systematic generation of knowledge and its dissemination within academic communities. Furthermore, Saldaña (2016) emphasizes that scientific production results from collaborative processes of analysis, reflection, and peer validation, which coincides with the dynamics observed in CA-5.

5. Academic Linkages and Networks

Interinstitutional collaboration, participation in research networks, and the development of collaborative projects are related to the approaches of Castells (2006), who argues that academic networks enhance the circulation of knowledge and strengthen innovation. Likewise, Gibbons et al. (1997) posit that knowledge production in contemporary contexts is characterized by its collaborative, interdisciplinary, and socially distributed nature—fundamental elements in the consolidation of academic groups.

6. Institutional policies and external support

The PRODEP policies and institutional support are linked to the analyses of Buendía and García (2014), who point out that public policies on evaluation and academic incentives significantly influence the organization and productivity of teaching staff. Similarly, Didou and Remedi (2008) warn that the absence of clear internal policies can limit the impact of federal programs, even when there are consolidated individual and collective efforts.

7. Integrating factor for the consolidation of the Academic Body

Shared vision and group cohesion as integrating factors are related to Senge's (2006) ideas on learning organizations, in which a common vision and collective learning enable long-term improvement processes. Similarly, Fullan (2016) points out that sustainable educational change is achieved when groups share goals, values, and ethical commitments,

which explains the consolidation of the research group "Transformation of Pedagogical Professional Practice."

Discussion of the results

The results of this research demonstrate that the consolidation of Academic Group 5 at BINE is based, first and foremost, on personal factors such as commitment, collaborative work, assertive communication, and group cohesion. These findings align with studies conducted in Latin American contexts that indicate that collaborative work not only strengthens the professional identity of academics but also fosters the long-term permanence and stability of academic groups (Gómez et al., 2021). In this sense, collective identity is built upon constant interaction and the recognition of shared objectives, which is fundamental for sustaining collaborative research processes.

Furthermore, the academic background and doctoral training of the members emerge as determining factors in the consolidation of the research group, particularly due to their impact on knowledge generation, academic mentoring, and scientific production. Studies conducted in Mexico show that the consolidation of academic groups is closely linked to the research experience and academic maturity of their members, who are able to develop more comprehensive and higher-quality projects when they have solid track records in educational research (Hernández-García et al., 2022). These results reinforce the idea that advanced training not only responds to institutional evaluation criteria but also constitutes academic capital that enhances collective development.

Regarding internal organization, the findings indicate that collaborative planning, adherence to agreements, and the equitable distribution of responsibilities strengthen the functioning of the research group. This result aligns with research conducted at Mexican universities, which has demonstrated that structured collaborative work fosters academic productivity and the achievement of institutional goals, in addition to generating positive effects on the group's management and recognition (López-López et al., 2023). Thus, consolidation depends not only on individual output but also on the collective's capacity to organize itself and sustain collaborative work dynamics.

The consistent academic output and collaborative writing identified in this study are also linked to recent research highlighting that scientific collaboration increases the visibility and impact of academic output in Latin America. Bibliometric analyses show that groups

working in networks and producing collaborative work exhibit higher citation rates and a stronger position within the scientific community (Mendoza & Paravic-Klijn, 2022). This finding reinforces the importance of collaboration as a key element for the consolidation and recognition of academic bodies.

Additionally, interinstitutional collaboration and participation in national and international academic networks are identified as factors that enhance the quality of the research group's work. Studies conducted in Spain show that academic networks foster innovation, knowledge exchange, and the development of joint projects, which strengthens the sustainability of university research groups (Martínez-García and Pérez-Ferra, 2018). In the Ibero-American context, these networks have become established as strategic spaces for the transformation of higher education and the production of relevant knowledge (Moreno-Crespo and Olmos-Gómez, 2024).

From this perspective, the results show that institutional policies and program guidelines such as PRODEP influence the consolidation processes of academic groups, although not uniformly. Previous research indicates that, while academic evaluation policies guide productivity and collaborative work, their impact depends largely on institutional support and the existence of clear internal policies that support the work of academic bodies (Navarro & Ramírez, 2019). In this sense, the findings of this study confirm that the consolidation of academic groups is the result of the interaction between personal, academic, organizational, and contextual factors, rather than the isolated application of public policies.

Taken together, the discussion allows us to affirm that the consolidation of the academic body "Transformation of Pedagogical Professional Practice" is consistent with recent empirical evidence reported in various studies. These findings confirm the relevance of the analytical frameworks used to understand the processes of academic strengthening.

Furthermore, it is identified that successful consolidation processes are based on fundamental factors such as collaborative work, academic trajectory, collegial organization, scientific production, and networking. These elements develop in close relation to institutional policies that, while guiding academic productivity, need to be contextualized and strengthened to respond to the particularities of each educational environment.

Conclusions

Educational research involves methodological, organizational, and professional challenges that intensify when conducted collaboratively. However, the experience of the Consolidated Academic Group “Transformation of Pedagogical Professional Practice” at the Benemérito Instituto Normal del Estado demonstrates that collaborative research is viable and sustainable when based on a shared vision, academic leadership, institutional commitment, and a culture of collegial work oriented toward achieving common goals.

In response to the research question, the results show that the consolidation of CA-5 was the result of the progressive interaction between institutional, organizational, and personal factors. Among the most relevant elements identified were the collegial organization, the academic experience of its members, sustained scientific output, participation in academic networks, and institutional support. These conditions fostered the development of collaborative dynamics that strengthened academic productivity and consolidated a research identity within the institution.

The trajectory of CA-5 over eleven years reflects a process of academic maturation manifested in the transition from initial spaces for knowledge dissemination, such as conferences and colloquia, to higher-impact scientific production, evidenced by publications in indexed journals, book chapters, and the coordination of collective works. This progress not only allowed it to achieve the level of consolidation within the Program for Teacher Professional Development (PRODEP), but also demonstrates the capacity of the Normal Schools to generate relevant and socially pertinent pedagogical knowledge.

From a social perspective, strengthening academic bodies in teacher training institutions has direct implications for improving educational quality by promoting systematic reflection on pedagogical practice and generating situated knowledge that contributes to the transformation of school contexts. In this sense, research conducted in teacher training colleges not only impacts academic output but also the development of critical, reflective teachers committed to addressing the educational challenges in their communities.

From an academic perspective, this experience provides empirical evidence on the organizational, collaborative, and knowledge management processes that foster the consolidation of academic bodies in higher education institutions. It also offers theoretical and practical frameworks for other teacher training colleges and universities seeking to

strengthen their research communities, demonstrating that perseverance, collaborative work, and clarity of purpose are key factors for developing sustained research capabilities.

In sum, the consolidation of CA-5 represents not only a significant institutional and state achievement, but also an academic benchmark for strengthening educational research in teacher training institutions. Its experience confirms that building strong academic communities contributes to the generation of relevant pedagogical knowledge, the strengthening of teacher training, and ultimately, the development of more reflective, inclusive educational systems committed to social transformation.

Future lines of research

Based on the results of this research, new and specific lines of inquiry have been identified that will allow for a deeper understanding of the processes of organization, development, and consolidation of academic bodies in teacher training colleges. These lines of inquiry seek to expand knowledge about the institutional dynamics, academic trajectories, and educational policies that influence the construction of research communities in teacher training institutions.

Research Proposal 1. *Academic Trajectories, Institutional Tensions, and the Resignification of Research in the Consolidation of Academic Groups at Teacher Training Colleges*. The objective of this research is to analyze the institutional and personal trajectories of members of academic groups in formation and in the process of consolidation at teacher training colleges, in order to identify the tensions, obstacles, adaptation strategies, and processes of resignification of research that emerge in the normative, organizational, and cultural contexts specific to these institutions.

From a theoretical standpoint, the study could draw on perspectives from the sociology of education and academia, particularly on contributions regarding academic capital, career paths, and institutional dynamics in knowledge production. It could also incorporate approaches to communities of practice and academic collaboration to understand how collaborative work processes and knowledge generation are configured in specific educational contexts.

Methodologically, a qualitative approach with a narrative design and multiple case studies is proposed, which would allow for the recovery of the experiences and meanings constructed by academics regarding their participation in academic bodies. The research

could be carried out in various teacher training colleges across the country, selected according to their level of research development and their status within academic strengthening programs.

Data collection techniques will include in-depth interviews, academic autobiographical accounts, and documentary analysis of institutional reports, evaluation reports, and academic outputs related to faculty development programs. The data obtained will be studied using thematic and narrative analysis, allowing for the identification of common patterns, institutional tensions, and emerging strategies in the processes of consolidating academic bodies.

This study would contribute to understanding how teacher-researchers construct their academic identity within normal schools and how they redefine educational research as part of their professional practice.

Research Proposal 2. *Institutional Factors, Educational Policies, and Academic Productivity in the Consolidation of Academic Groups in Teacher Training Colleges: A Mixed-Methods Study*. The objective of this research would be to examine the influence of institutional policies, academic strengthening programs, particularly those promoted by the Program for Teacher Professional Development (PRODEP), and organizational conditions on the consolidation processes of Academic Groups in Teacher Training Colleges, considering both the perceptions of academics and indicators of scientific productivity.

From a theoretical perspective, the study could be grounded in the analytical frameworks of public policy in higher education, academic governance, and knowledge management in educational institutions. These approaches would allow for an analysis of how educational policies, academic incentives, and organizational structures influence the development of research capacities within teacher training institutions.

Methodologically, a mixed-methods approach with a sequential explanatory design is proposed. In a first quantitative phase, a structured questionnaire would be applied to members of Academic Groups in formation, consolidation, and consolidation from various Normal Schools in the country, with the purpose of identifying trends, perceptions about institutional support, academic working conditions, and levels of scientific productivity.

In a second qualitative phase, semi-structured interviews would be conducted with key informants, including leaders of Academic Bodies, academic authorities, and research professors, in order to delve deeper into the interpretation of the results obtained in the quantitative phase.

The analysis would integrate descriptive statistics for the interpretation of quantitative data and content analysis for the treatment of qualitative information, allowing a broader and more contextualized understanding of the factors that influence the consolidation processes of academic bodies.

Taken together, these lines of research would allow us to expand our knowledge of the conditions that favor or limit the development of academic communities in Normal Schools, as well as generate useful evidence for the design of institutional policies and strategies to strengthen educational research in teacher training institutions.

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