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THE SCIENCE OF IMPLEMENTATION IN EDUCATION: PROGEP AS A PUBLIC GOVERNANCE METHODOLOGY

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Abstract: This article analyzes PROGEP – Strategic Management Protocol by Problems as a contribution to the science of implementation, taking the planning of the Paraná State Education Plan (PEE/PR) as an empirical reference for the development of the methodology. The reflections presented do not represent the institutional position of the bodies involved, but rather result from a scientific analysis of a methodological nature on planning processes, governance, and institutional mediation in public education policies. The implementation of educational policies is one of the main challenges for improving public education in Brazil, especially in contexts marked by territorial inequalities, structural limitations, and high federal complexity. Recent studies indicate that the effectiveness of these policies depends not only on their technical design but, above all, on factors such as institutional capacity, intergovernmental coordination, and mechanisms for mediation between formulation and practice. In this context, the article aims to present PROGEP as a scientific methodology of public governance focused on institutional articulation between planning and implementation of educational policies. Anchored in the field of implementation science, the study adopts a methodological approach based on the analysis of educational planning instruments and empirical evidence produced within the scope of PEE/PR planning. The results indicate that PROGEP acts in the critical zone between planning and implementation by structuring planning based on real problems, creating a common language between different institutional instances, and strengthening state capacity through methodological instruments, not just human resources. It is concluded that PROGEP offers lessons

that can be transferred to other educational networks and policies, contributing to the strengthening of collaborative governance and the consolidation of implementation science in the Brazilian educational context.

Keywords: PROGEP; public governance; institutional mediation; educational planning; institutional capacity.

INTRODUCTION

The implementation of public education policies has become one of the main challenges for improving public education in Brazil. In contexts characterized by high federal complexity, persistent territorial inequalities, and structural limitations in the state's institutional capacity, there remains a significant gap between policy formulation and implementation in the territories. It is thus evident that the effectiveness of educational policies does not depend exclusively on the quality of their normative or technical design, but also—and decisively—on the institutional conditions that support their implementation.

Recent literature in the field of public policy and implementation science points out that factors such as institutional capacity, intergovernmental coordination, governance arrangements, and mediation mechanisms between different levels of the educational system play a central role in transforming formal guidelines into effective practices. In the Brazilian context, these dimensions are particularly relevant given the country's territorial diversity, the heterogeneity of its education networks, and the multiplicity of actors involved in conducting education policies.

Despite advances in the debate on implementation, there is still a significant

methodological gap in the field of educational planning: the absence of analytical tools capable of systematically articulating policy planning with the concrete conditions of its implementation. In many cases, planning remains disconnected from the institutional, organizational, and territorial challenges that condition policy execution, limiting its effectiveness and sustainability over time.

It is in this context that PROGEP – Protocol for Strategic Management by Problems – was conceived as a scientific methodology for public governance aimed at institutional mediation between the planning and implementation of educational policies. PROGEP structures planning based on the analysis of real problems, their institutional causes, and their interdependencies, creating conditions for strengthening state capacity and coordination between different bodies involved in the decision-making process.

Thus, the objective of this article is to present PROGEP as a contribution to the field of implementation science in education, taking the planning of the Paraná State Education Plan (PEE/PR) as an empirical reference for the development and application of the methodology. The reflections presented stem from a scientific analysis of a methodological nature on planning, governance, and institutional mediation processes in public education policies.

IMPLEMENTATION SCIENCE IN EDUCATION: AN ANALYTICAL APPROACH

Implementation science emerges as an interdisciplinary field dedicated to understanding the factors that influence the transformation of policies, programs, and

guidelines into effective practices. Unlike approaches focused exclusively on the design of public policies, this analytical field emphasizes the nonlinear nature of implementation processes and the centrality of the institutional, organizational, and territorial contexts in which policies are operationalized.

In the field of education, recent studies indicate that the effectiveness of public policies is strongly conditioned by the institutional capacity of the State, understood not only as the availability of human or financial resources, but also as the existence of methodological instruments, organizational routines, coordination mechanisms, and institutional arrangements capable of sustaining public action over time. In this context, the role of intermediary bodies located between the central policy-making bodies and the local implementation contexts stands out. These bodies play a strategic role in mediating between normative guidelines and concrete practices, in articulating different technical areas, and in translating policy objectives into planned and executable actions.

In this sense, implementation science has emphasized the relevance of implementation-oriented planning, understood as planning that incorporates, from its conception, the analysis of concrete public problems, available institutional capacities, and the real conditions for the execution of educational policies. This perspective shifts the focus from normative planning to methodological approaches capable of articulating diagnosis, decision, and action, recognizing the territorial heterogeneity and institutional limits that characterize the Brazilian educational context.

By valuing institutional mediation, coordination between levels, and the construc-

tion of decision support tools, the science of implementation offers relevant analytical contributions for rethinking educational planning in contexts of high federal complexity. It is within this theoretical-analytical framework that the methodological proposal presented in this article is inserted, detailed in the following section.

METHODOLOGICAL APPROACH: PROGEP AS A METHODOLOGICAL ARTIFACT OF PUBLIC GOVERNANCE

This study adopts a scientific-methodological approach, anchored in the field of implementation science, with a focus on the analysis of planning and public governance instruments applied to educational policies. The methodology developed—PROGEP (Protocol for Strategic Management by Problems)—was conceived as a methodological artifact of public governance aimed at institutional mediation between planning and implementation of educational policies, using the planning process of the Paraná State Education Plan (PEE/PR) as an empirical reference.

PROGEP was conceived from a theoretical-practical approach, exploratory-descriptive in nature, oriented toward the collection, analysis, and systematization of data and evidence relevant to educational planning. These elements are materialized, among other instruments, in the PEE/PR Monitoring Matrix, used as a diagnostic and analytical basis for the elaboration of the new State Education Plan (2026–2036). The methodological model is structured in an integrated manner in three interdependent matrices, namely:

- **Monitoring Matrix**, responsible for organizing data and indicators from official sources (PNE, PEE/PR, statistical systems, and institutional hearings), supporting the construction of the diagnosis.
- **Planning Matrix**, which articulates problems, causes, guidelines, and goals, promoting the analytical transition between diagnosis and proposal.
- **Proposal Matrix**, focused on consolidating objectives, goals, and strategies, serving as the basis for structuring the base document of the educational plan.

These matrices unfold into eight interdependent methodological phases, described below:

1. **Survey of Priority Issues:** initial identification of the main educational problems based on official data and indicators (MEC/INEP, IPARDES, SEED/PR), complemented by preliminary analyses and institutional consultations. This phase guides the analytical focus of planning, ensuring that the diagnosis is anchored in concrete evidence, rather than fragmented perceptions.
2. **Systemic Mapping of Causes and Critical Factors:** integrated analysis of the structural causes and constraints associated with the identified problems, considering multiple levels of the educational reality (national, state, and local). This stage articulates statistical, normative, and qualitative data, in line with the methodological guidelines of SASE/MEC, favoring a

systemic reading of the educational scenario.

3. Technical Interpretation of Reality: systematization and convergence of the quantitative and qualitative evidence produced, resulting in a technically grounded critical reading. This phase contributes to evidence-based decisions, reducing analytical biases and strengthening the institutional legitimacy of the diagnosis.

4. Definition of Guiding Guidelines: establishment of strategic guidelines aligned with the National Education Plan (PNE 2024–2034), articulated with the specificities of the state reality. The guidelines form the basis for the formulation of the PEE/PR 2026–2036 goals, ensuring federal coherence and respect for subnational autonomy.

5. Formulation of Strategic Indicators: preliminary organization of monitoring and evaluation indicators, considering national parameters and their suitability to the state context. This stage analyzes feasibility, relevance, and comparability, strengthening the Plan's monitoring and evaluation capacity.

6. Systematization of Knowledge Built: structured record of studies, analyses, and methodological decisions, composing the base document for planning. This is the practical application of Knowledge Management, consolidating institutional memory, decision traceability, and continuity of the educational planning process.

7. Interinstitutional Coordination and Validation: cross-cutting phase of technical and political discussion of proposals with governance and social participation bodies, with a view to legitimization, collaborative agreement, and strengthening public governance as a structuring axis of planning.

8. Dissemination and Continuous Learning: incorporation of theoretical and methodological training practices, circulation of knowledge, and stimulation of institutional innovation. This phase consolidates PROGEP as an organizational learning protocol, promoting collective appropriation and continuous improvement of educational planning.

This concept gives concrete form to the investigative and decision-making process, based on an applied, integrative logic aligned with the references of the MEC/SASE and the Technical Assistance Network. The unique feature of this approach lies in the systematic articulation between diagnosis, decision, and proposal.

The methodological proposal is based on contemporary legal and conceptual frameworks, with emphasis on Bill No. 2,614/2024, which establishes the guidelines for the new National Education Plan (2024–2034). This regulatory framework reinforces the centrality of a systemic view of planning, federal agreement, robust monitoring, evidence-based management, and a commitment to equity and quality in learning.

To respond to the challenges of this agenda, PROGEP is anchored in a conceptual tripod composed of three interdependent axes—Strategic Educational Mana-

gement (GEE), Innovation in Educational Management (IGE), and Applied Knowledge Management (GCA)—articulated by a cross-cutting principle of collaborative governance. This arrangement aims to institutionalize mechanisms for dialogue, validation, and co-responsibility among federal entities, in line with the guidelines of the new PNE, especially with regard to evidence analysis, intergovernmental coordination, and integration between monitoring, evaluation, and strategic planning.

The consolidation of these foundations results in a hybrid methodology, both qualitative and quantitative in nature, operationalized through active listening, document analysis, triangulation of sources, statistical surveys, and the production of summary tables. These procedures are guided by a participatory logic and the valorization of collective knowledge as an input for institutional transformation.

For the treatment of qualitative data, the content analysis technique is adopted, according to Bardin (2006), structured in three stages—pre-analysis, exploration of the material, and interpretation of the results—allowing for the systematic identification of emerging meanings and categories. The articulation between qualified listening and analytical rigor gives methodological robustness to the process, strengthening the formulation of contextualized and sustainable proposals.

The analysis and refinement of data are based on conceptual modeling guided by reference documents, such as state legal frameworks, methodological guidelines from the Ministry of Education/SASE, and educational monitoring results, ensuring regulatory coherence, analytical consistency, and federal alignment.

The methodological architecture of PROGEP articulates three complementary dimensions: (i) a structured flow in phases, ensuring logical continuity in planning; (ii) conceptual integration, which provides the theoretical and methodological foundations; and (iii) analytical instrumentalization, materialized in the matrices that organize data, evidence, and decisions. This articulation highlights the complexity inherent in public education policies and the need for methodologies capable of supporting decision-making processes in institutional contexts of high responsibility and territorial heterogeneity.

SUPPORT INSTRUMENTS

Of particular note is the specific methodological architecture operationalized by PROGEP – Strategic Problem Management Protocol –, which constitutes a methodological innovation in the sciences applied to public educational policies. PROGEP is a public governance tool focused on the strategic planning of public educational policies, structured around three interdependent matrices: Monitoring, Planning, and Proposals.

The logic behind this structure follows the problem-based methodology, inspired by theoretical and methodological references guided by MEC/SASE guidelines and complemented by consolidated approaches, such as the Problem Analysis and Solution Method (MASP) and *Zielorientierte Projektplanung* (ZOPP). This structure is organized into essential phases – data -> problem -> cause -> guideline -> objective -> goal – strengthening the traceability of decisions and ensuring consistency between diagnosis, proposal, and future monitoring.

TECHNIQUES AND METHODOLOGICAL APPROACHES

To ensure analytical rigor, adherence to TR No. 04/2025, and alignment with MEC/SASE guidelines, qualitative and quantitative techniques and approaches are adopted, structured around source triangulation logic, as follows:

- **Active listening with otherness**, carried out through interview documents and forms applied to strategic actors (attached).
- **Exploratory document analysis**, considering reports, legislation, plans, and national and state statistical bases.
- **Triangulation of sources**, cross-referencing quantitative data (IPARDES, MEC/INEP, SEED/PR), qualitative data (interviews/listening), and normative data (PNE and PEE/PR).
- **Content analysis (Bardin, 2006)**, structured into pre-analysis, exploration, and critical interpretation.
- **Production of summary tables and analytical panels** as a way of converting data into strategic planning inputs, i.e., institutionalized knowledge.

In all phases of the process, knowledge management was central to the methodology, articulating a systemic vision, technical rigor, and participatory construction. The logic of qualified listening, interinstitutional collaboration, and continuous dialogue was a structuring element of methodological mediation, favoring the formulation of strategies aligned with the institutional capacities and needs of the state.

This methodological approach contributes to the construction of more robust educational plans, supported by empirical evidence, institutional agreements, and collaborative governance practices. By structuring mediation processes between different decision-making bodies, the method strengthens the legitimacy of educational guidelines and the institutional capacity of the responsible agencies, ensuring that the definition, validation, and prioritization of strategies occur in a shared and implementation-oriented manner.

By adopting PROGEP as a methodological reference for planning the Paraná State Education Plan (PEE/PR 2026–2036), the process analyzed was guided by the perspective of building a state education policy linked to strategies for social development, equity, and inclusion. This methodological choice highlights the concern with structuring educational planning in a systemic, sustainable, and implementation-oriented manner, in line with the contemporary challenges of Brazilian public education.

It is also worth noting that PROGEP is aligned with the guidelines of the Secretariat for Intersectoral Coordination and Education Systems (SASE/MEC) and the Technical Assistance Network, incorporating principles of federal agreement, use of evidence, and interinstitutional coordination. From this perspective, PROGEP is a public governance tool applied to educational planning, while also representing a methodological innovation by integrating implementation science, knowledge management, and institutional mediation.

PROGEP is anchored in the national benchmarks established by MEC/SASE, which guide the development of educational plans based on the identification of

problems and their structural causes. However, when applied as a public governance methodology, it broadens this framework by strengthening diagnostic capacity, clarity in the formulation of guidelines, and the sustainability of interinstitutional decisions in the field of educational planning.

This expansion is particularly evident in the systematic organization of evidence, the analytical translation of complex problems into strategic guidelines aligned with the National Education Plan, and the structuring of institutional agreement mechanisms that favor coordination between technical actors, public managers, and civil society. These elements contribute to the construction of more robust educational policies, oriented towards implementation and sustained by collaborative governance practices.

By presenting PROGEP as a methodological artifact of public governance, the article seeks to contribute to strengthening the debate on the implementation of educational policies in Brazil, highlighting the centrality of intermediate instances, institutional coordination, and the production of learnings that are transferable to different federal contexts and education networks.

The methodology incorporates, in an applied and reflective manner, consolidated references for analysis and planning—such as the logic of situational reading inspired by the SWOT approach, the causal structuring derived from the Problem Tree, the principles of strategic definition associated with the SMART methodology, and qualitative analysis procedures based on Bardin (2006). These references are not used procedurally, but integrated into a methodological architecture oriented toward institutional mediation and evidence-based decision-making.

This integration highlights the learning governance character of PROGEP, in which the technique operates as an instrument of reflection, dialogue, and institutional coordination. From this perspective, the method articulates scientific thinking and administrative practice in a continuous process of organizational learning, in which diagnosis, planning, and monitoring feed back into each other.

As Argyris and Schön (1996) argue, this is a transition from reference theory to theory in use, expressing a cognitive, and institutional maturation of public educational management. PROGEP is thus based on the premise that the effectiveness of educational policies depends less on the isolated existence of individual competencies and more on the state's ability to organize complex problems, articulate evidence, mediate institutional interests, and sustain decisions over time—especially in federal contexts marked by territorial heterogeneity and asymmetries in institutional capacity.

CONCEPTUAL ARCHITECTURE OF PROGEP

The methodological architecture of PROGEP is structured around the integration of a conceptual tripod composed of:

- **Strategic Educational Management (SEM):** the organizing axis of the methodological architecture, Strategic Educational Management is structured as the basis for planning, monitoring, and evaluating public educational policies. Inspired by authors such as Lück (2017), this approach advocates proactive management models based on the use of data and evi-

dence to define priorities, monitor goals, and make strategic decisions. It is directly aligned with the guidelines of Bill No. 2,614/2024, which values systemic planning and federal co-responsibility as the foundations of public educational governance

- **Innovation in Education Management (IGE):** this is the driving principle behind this concept. It is based on the premise that innovation in educational management is not limited to the adoption of technologies, but requires the design of collaborative strategies, participatory practices, and flexible solutions capable of dialoguing with territorial realities and the diversity of networks. As Moreira *et al.* (2024, p. 195) argue, innovation in educational management “requires a holistic approach that also considers [...] changes in organizational culture, leadership development, and the formulation of public policies aligned with demand.” This perspective demands critical reflection on the current organizational structure, with a focus on redesigning decision-making processes, decentralization, intersectoral and inter y coordination, and valuing collective knowledge as a driver of institutional transformation. As Lück (2015) and Alehegn (2020) reinforce, sustainable innovation requires the construction of an inclusive and participatory environment, in which the role of the manager is understood in its multidimensional dimension—strategic, ethical, technical, and relational.

This understanding guides the adoption of qualified listening, thematic workshops, and co-construction practices, strengthening the link between innovation, social participation, and the effectiveness of public education policies among the various agents involved in the educational process. It is, therefore, a new way of conceiving and implementing educational policies, in which qualified social participation and the collaborative action of educational agents constitute central pillars of innovation in education management. Innovation in education management requires, as pillars, qualified social participation and the collaborative action of educational agents.

- **Applied Knowledge Management (GCA):** this axis contributes to transforming data, experiences, and institutional knowledge into organizational intelligence, strengthening SEED/PR’s capacity to plan based on evidence. It is directly aligned with the guidelines of the new National Education Plan (PL No. 2,614/2024), especially with regard to qualified monitoring, the systematization of learning, and the valorization of practices that favor the institutional sustainability of public policies. Based on Nonaka and Takeuchi (1997), this approach understands knowledge as the result of a continuous conversion between tacit and explicit knowledge – especially relevant in the field of education.

tion, where accumulated experience needs to be incorporated into management. The proposal is also anchored in the contributions of Batista (2012), who adapts knowledge management to the public sector, and the *Asian Productivity Organization* (APO, 2020), which recommends methods and tools such as capturing learning and ideas, creating collaborative physical and virtual workspaces, and the use of knowledge systematization bases, among other practices that facilitate the horizontal flow of information between employees, departments, divisions, and units. These references strengthen the construction of a robust technical memory and strategies oriented toward institutional learning.

This tripod organizes educational planning based on a systemic logic, guided by problems, evidence, and institutional agreement, as summarized in Table 1.

The integration of these three axes allows PROGEP to operate as a **collaborative governance system**, as a cross-cutting principle, in which planning, monitoring, and proposal are no longer isolated stages but constitute a continuous cycle of institutional learning.

METHODOLOGICAL INSTRUMENTATION AND OPERATIONAL LOGIC

Based on this conceptual foundation, PROGEP is implemented through three interdependent matrices—Monitoring, Planning, and Proposal—and eight methodological phases, organized to ensure traceability,

analytical consistency, and sustainability of decisions throughout the plan development process (Figure 1).

PROGEP's operational logic is inspired by consolidated problem-solving approaches, such as the Problem Analysis and Solution Method (MASP) and ZOPP (Zielorientierte Projektplanung), articulated with the logic of data → problem → cause → guideline → objective → goal, strengthening the connection between diagnosis and strategic proposal.

These conceptual foundations are operationalized in PROGEP through an integrated set of analytical and methodological tools, selected not as isolated techniques, but as articulated devices for translating complexity into implementation-oriented strategic decisions. The method incorporates classic analytical tools—such as content analysis (Bardin), problem tree, SWOT matrix, and SMART model—not as isolated techniques, but as integrated components of a methodological system oriented toward public governance. Table 2 summarizes the main tools used and their respective analytical functions.

The integration of these instruments reinforces the principles of knowledge management, institutional learning, and innovation in public management, translating analytical complexity into technical and operational clarity.

COLLABORATIVE GOVERNANCE AND INSTITUTIONAL CAPACITY

As a cross-cutting principle, PROGEP adopts the perspective of collaborative governance, in line with contemporary public management benchmarks and national educational planning guidelines. This approach

Pillar	Main contribution	Practical expression in PROGEP
Strategic Educational Management (SEM)	Ensures alignment between policies, goals, and results, underpinning the planning and evaluation process.	Ensures consistency between diagnosis, guidelines, and goals; structures the logic data → problem → cause → guideline → objective → goal.
Applied Knowledge Management (GCA)	Organizes and systematizes data, converting it into accessible, reusable evidence oriented toward decision-making.	Supports the evidence base of the Analytical Panel and Monitoring Matrix; promotes institutional memory.
Innovation in Education Management (IEM)	Introduces methodologies, participatory practices, and collaborative solutions that expand institutional leadership.	This is manifested in active listening, interinstitutional workshops, and federal agreement mechanisms.

Table 1: Conceptual tripod

Tool	Application	Theoretical basis
Content analysis (Bardin)	Systematizes the statements made during interviews and identifies categories of problems and causes (action 3.1); ensures semantic consistency between guidelines and goals (action 3.2).	Based on the three classic stages: pre-analysis, exploration of the material, and interpretation of the results.
Problem/objective tree	Identifies and organizes causes and effects in a chain, transforming them into guidelines and strategic objectives.	Derived from ZOPP and MASP, applied in participatory planning contexts.
SWOT matrix	Analyzes internal and external contexts, synthesizing strengths, weaknesses, opportunities, and threats, supporting strategic prioritization.	Supports dialogue between diagnosis and decision-making, aligning risks and potentialities.
SMART Model	Defines parameters for the measurability, timeliness, and realism of goals.	Ensures objectivity and traceability of results.

Table 2: Integrated management tools

recognizes that the institutional capacity of the State does not lie exclusively in the individual skills of actors, but in the existence of instruments, routines, methodologies, and institutional memory capable of sustaining complex decision-making processes.

In this sense, PROGEP acts as a compensatory device for asymmetries in institutional capacity, reducing dependence on individual expertise and increasing the sustainability of decisions. By organizing problems, evidence, and agreements in a structured manner, the methodology strengthens interinstitutional coordination and qualifies the role of intermediate bodies as mediators between formulation and practice.

The development of PROGEP, anchored in the planning of the PEE/PR, shows that implementation-oriented methodologies are capable of creating more robust institutional conditions for policy execution, especially in contexts of high federal complexity. Thus, more than a set of techniques, PROGEP is an applied epistemology, integrating scientific thinking and administrative practice from the perspective of learning governance, in which planning becomes a continuous process of institutional learning.

ANALYTICAL SYNTHESIS OF THE METHODOLOGICAL ARCHITECTURE OF PROGEP

By articulating conceptual foundations, analytical instruments, and an integrated operational logic, PROGEP consolidates itself as a scientific methodology applied to the science of implementation in education. Its central contribution lies in its ability to organize complexity, mediate institutional interests, and sustain strategic decisions over time, offering a methodolo-

gical response to the historically observed gap between planning and implementation of educational policies in the Brazilian context, marked by high federal complexity and institutional asymmetries.

These principles do not remain in the abstract: they materialize in a methodological architecture composed of interdependent matrices and applicable phases, which ensure analytical coherence, decision traceability, and institutional sustainability in the process of developing and revising educational plans. Thus, PROGEP acts as a structuring device for public governance, strengthening state capacity not through the occasional expansion of resources, but through the institutionalization of routines, instruments, and organizational learning processes.

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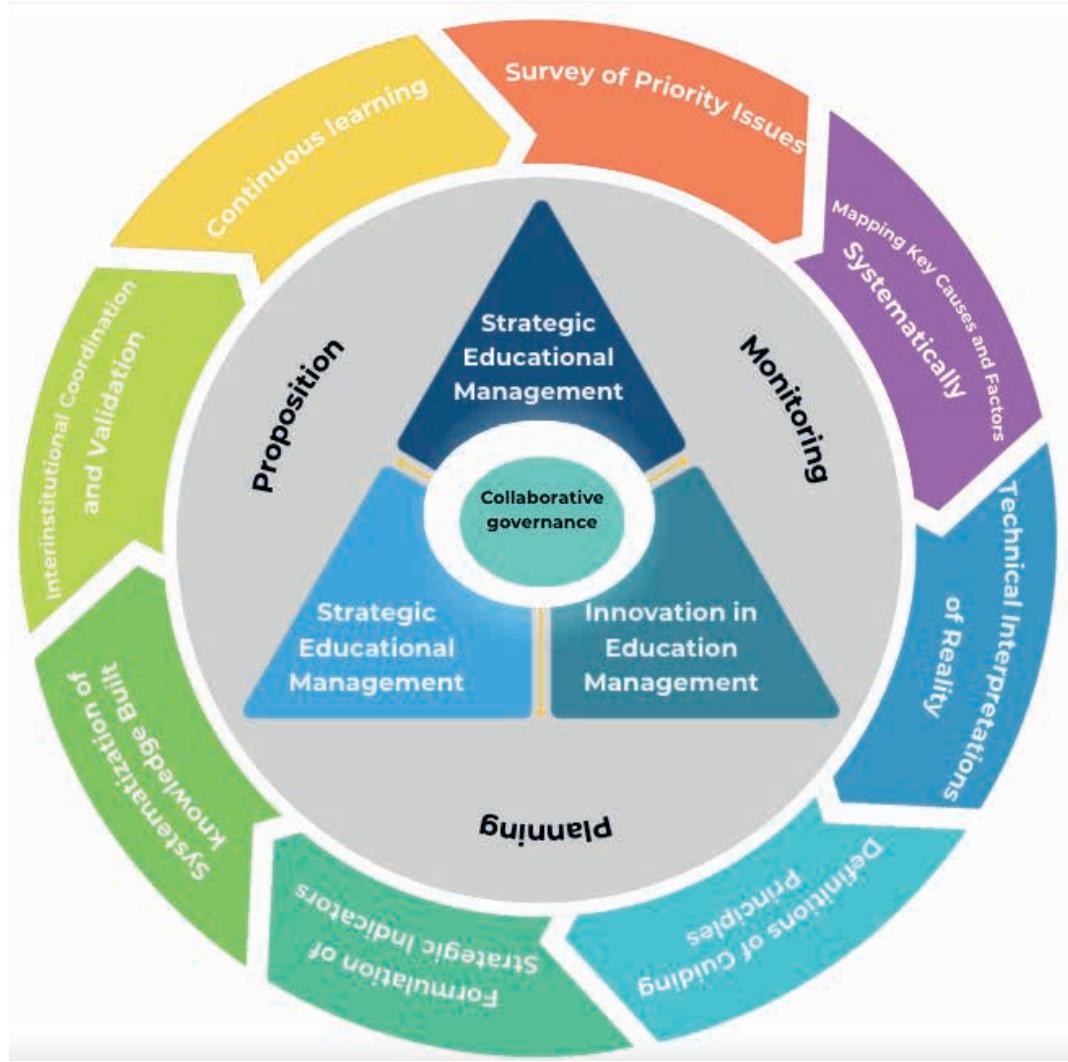
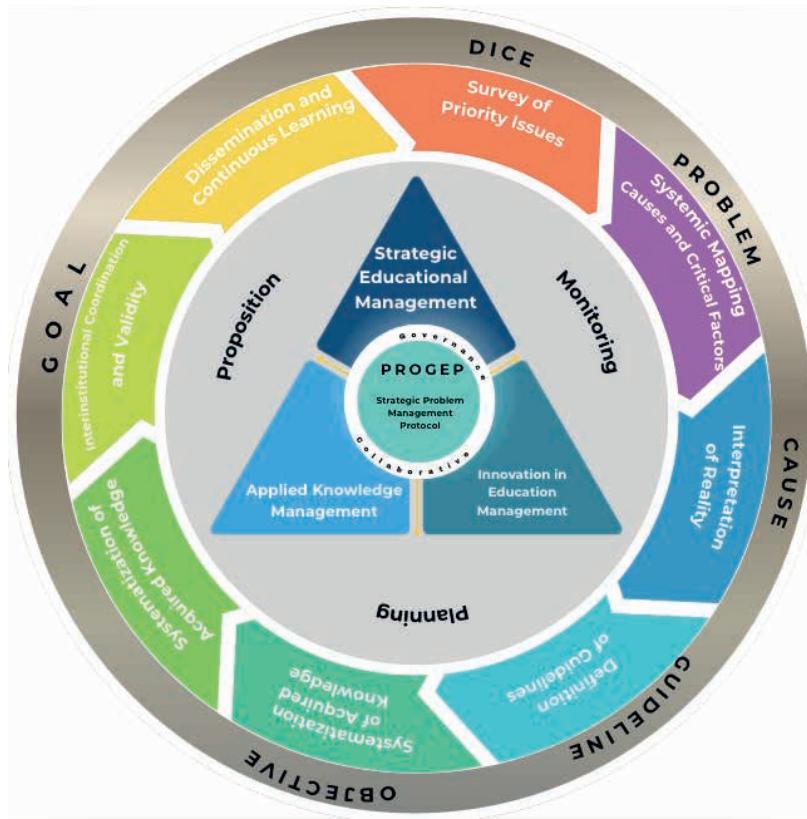
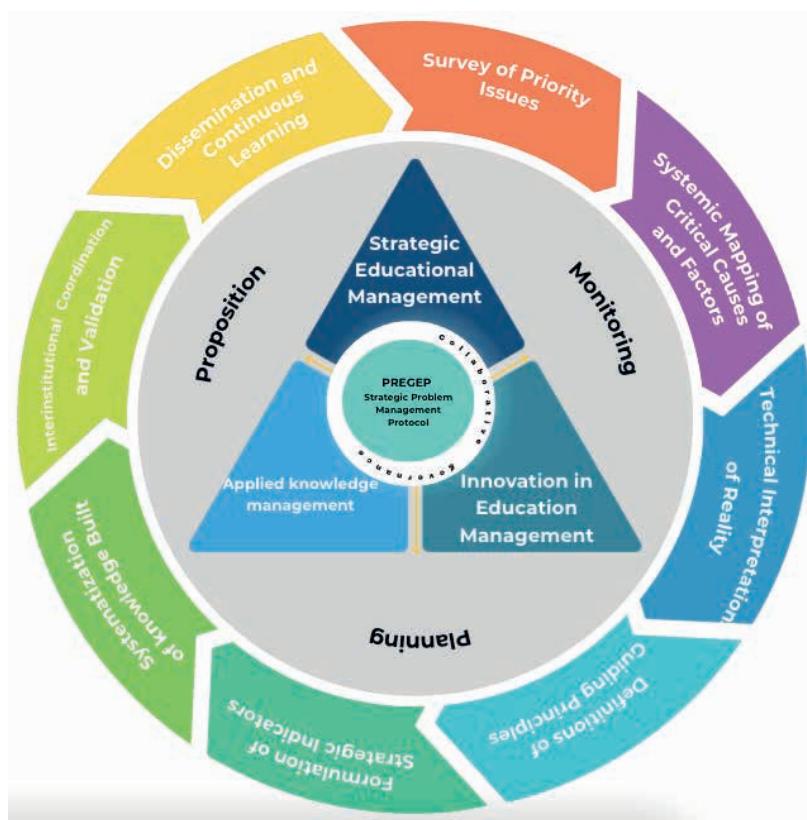


Figure 1: PROGEP – Strategic Problem Management Protocol



DISCUSSION: INSTITUTIONAL MEDIATION AND TRANSFERABLE LEARNINGS

The analysis of PROGEP in light of implementation science highlights the centrality of institutional mediation in the planning and execution of educational policies. By recognizing the existence of multiple instances between central formulation and local practice, the methodology contributes to overcoming the historically observed dichotomy between planning and implementation in Brazilian educational public policies.

The discussion also highlights recurring structural weaknesses in the Brazilian state, especially the absence of consolidated methodologies for implementation-oriented planning and the fragmentation between diagnosis, decision, and action. By occupying this space, PROGEP contributes to strengthening public educational governance by institutionalizing routines, analytical matrices, and organizational learning processes capable of sustaining strategic decisions over time.

Another relevant lesson concerns the role of intermediary bodies in mediating between formulation and practice. PROGEP acts in this space as a methodological translator, organizer of complexity, and articulator between data, evidence, institutional agreement, and strategic planning. This role reinforces the understanding that implementation is not a linear process, but a dynamic phenomenon, conditioned by installed institutional capacity and the quality of intergovernmental coordination mechanisms.

Conceived as an applied scientific methodology, PROGEP has high potential for replicability in different networks and federal contexts, producing transferable lessons in the field of educational public governance. Its contribution lies less in prescribing solutions and more in offering a methodological arrangement capable of structuring decision-making processes, promoting institutional alignment, and sustaining educational policies as state policies.

This perspective legitimizes PROGEP as a model of applied epistemology, in which scientific thinking and administrative practice are articulated in a logic of learning governance. The lessons learned from this approach indicate that the effectiveness of educational policies is strongly associated with the existence of methodological instruments capable of structuring institutional coordination, recognizing territorial variation, and guiding decision-making based on real problems. In this sense, PROGEP contributes to the strengthening of public governance and the production of transferable lessons in the field of educational policies.

FINAL CONSIDERATIONS

The results of the study indicate that the effectiveness of educational planning does not depend exclusively on the existence of normative guidelines or political consensus, but on the concrete institutional capacity of networks and intermediary bodies to translate complex problems into viable strategic decisions. It is observed that, in many contexts, networks do not uniformly have the technical, organizational, and analytical skills necessary to sustain continuous implementation-oriented planning processes. This finding reinforces the need

for methodologies that operate as institutional support mechanisms, capable of compensating for asymmetries in capacity and reducing fragmentation between diagnosis, decision, and action.

In this sense, PROGEP operates in the critical zone between planning and implementation, structuring planning based on real problems, recognizing territorial and institutional heterogeneity, and creating a common language among the different entities involved in the formulation and execution of educational policies. In doing so, the methodology shifts the focus from individual accountability to the construction of collective institutional conditions, strengthening public governance through instruments, routines, and methodological arrangements, and not just by expanding human or regulatory resources.

The findings indicate that the added value of PROGEP manifests itself in four central analytical dimensions: (i) articulation between national alignment and subnational autonomy, by engaging with federal benchmarks without disregarding territorial specificities; (ii) centrality of public governance and institutional agreement, overcoming fragmented management approaches; (iii) evidence-based decisions, integrating official data, technical diagnoses, and qualified listening; and (iv) replicability and methodological sustainability, ensuring institutional memory and continuity of monitoring and planning processes.

As a scientific methodology, PROGEP has the potential to be transferred to other educational networks and public policies, especially in contexts marked by territorial inequalities and structural limitations of state capacity. This characteristic positions it as a relevant contribution to both the academic

field and the practice of public educational management.

It should also be noted that PROGEP is, in itself, a model of applied epistemology, integrating scientific thinking and administrative practice/methodological coordination in intermediate instances as translators of guidelines, organizers of complexity, and mediators between policy and practice from the perspective of learning governance.

As limitations, it should be noted that this article focused on the methodological dimension of implementation-oriented planning, not covering in-depth empirical analyses of the results of implementation or the financing mechanisms of educational policies. These dimensions constitute a relevant agenda for future research, as well as a deeper understanding of the role of intermediary instances in sustaining large-scale change processes.

As a result, we point to the consolidation of PROGEP in expanded formats of scientific and technical dissemination, such as methodological guides, specialized publications, and academic research, contributing to the advancement of implementation science and the improvement of educational planning in Brazil.

Thus, this analysis has shown that the effectiveness of implementation does not depend exclusively on the competencies installed in educational networks. In contexts marked by high federal complexity and territorial asymmetries, the institutional capacity of the State cannot be understood solely as an attribute of local actors, but rather as a result of the existence—or absence—of methodological instruments capable of organizing problems, guiding decisions, and sustaining processes of interinstitutional coordination.

REFERENCES

ALEHEGN, D. **Gestão da mudança e inovação na educação: educação.** Brasília: Edições Nossa Conhecimento, 2020.

APO – ASIAN PRODUCTIVITY ORGANIZATION. **KM tools and techniques: a practical guide for implementing knowledge management in government organizations.** Tokyo: APO, 2020. Disponível em: <https://www.apo-tokyo.org/publications/knowledge-management-tools-and-techniques-manual/>. Acesso em: 15 nov. 2025.

BARDIN, L. **Análise de conteúdo.** Trad. Luís Antero Reto e Augusto Pinheiro. 4 ed. Lisboa: Edições 70, 2006.

BATISTA, F. A. da S. **Modelo de gestão do conhecimento para a administração pública brasileira.** Brasília: Ipea, 2012. Disponível em: <https://repositorio.ipea.gov.br/bitstream/11058/754/1/Modelo%20de%20Gestao%20do%20Conhecimento%20para%20a%20Administracao%20Publica%20Brasileira.%20Livro.pdf>. Acesso em: 30 nov. 2025.

BRASIL. Ministério da Educação. **Documento-Base de Discussão para o Novo Plano Nacional de Educação (PNE 2024–2034).** Brasília: MEC, 2023. Disponível em: <https://www.gov.br/mec/pt-br/assuntos/noticias/mec-disponibiliza-documento-base-para-novo-pne>. Acesso em: 10 nov. 2025.

BRASIL. Ministério da Educação. Secretaria de Articulação com os Sistemas de Ensino (SASE). **Diretrizes metodológicas para apoio à elaboração dos Planos de Educação.** Brasília: MEC/SASE, 2015.

BRASIL. **Projeto de Lei nº 2.614, de 10 de junho de 2024.** Dispõe sobre o novo Plano Nacional de Educação – PNE 2024–2034. Brasília: Ministério da Educação, 2024. Disponível em: <https://www.gov.br/mec/pt-br/assuntos/> noticias/mec-encaminha-projeto-de-lei-do-novo-pne-para-o-congresso. Acesso em: 28 nov. 2025.

CRUZ, R. M. da; FREITAS, L. C. de. **Inovação na Gestão da Educação Pública: fundamentos, práticas e desafios.** Brasília: ENAP, 2020. Disponível em: <http://repositorio.enap.gov.br/handle/1/6079>. Acesso em: 28 nov. 2025.

FAZENDA, I. C. A; TAVARES, D. E.; GODOY, H. P. **Interdisciplinaridade na pesquisa científica.** São Paulo: Papirus, 2015.

KANGERSKI, F. de A. *et al.* **Governança da aprendizagem organizacional e resiliência: uma revisão integrativa da literatura, CONGRESSO INTERNACIONAL DE CONHECIMENTO E INOVAÇÃO (CIKI), 2021.** Disponível em: https://www.researchgate.net/publication/359698758_GOVERNANCA_DA_APRENDIZAGEM_ORGANIZACIONAL_E_RESILIENCIA_UMA_REVISAO_INTEGRATIVA_DA_LITERATURA. Acesso em: 20 out. 2025.

LÜCK, H. **Gestão Educacional: uma questão paradigmática.** 12^a ed. Rio de Janeiro: Vozes, 2015.

MOREIRA, A. dos S. **Innovation in educational management: challenges and opportunities.** Seven Editora, p. 196–206, 2024. Disponível em: <https://sevenpublicacoes.com.br/editora/article/view/5564>. Acesso em: 12 out. 2025.

NONAKA, I.; TAKEUCHI, H. **Criação de conhecimento na empresa: como as empresas japonesas geram a dinâmica da inovação.** Rio de Janeiro: Campos, 1997. PARANÁ.

SEED/PR – Secretaria de Estado da Educação do Paraná. **Anexo I – Plano Estadual de Educação do Paraná 2015–2025.** Curitiba: SEED/PR, 2015.

OSÓRIO, F. S.; LINO, M. C. C.; FREITAS, A. M. Governança pública em três dimensões: conceitual, mensural e democrática. **Organizações & Sociedade**, Salvador, v. 27, p. 370–395, 2020. Disponível em: <https://www.scielo.br/j/osoc/a/HjzrZXnPcTkyY5Q77GssnfH/>. Acesso em: 22 out. 2025.

UNESCO. **Global Education Monitoring Report 2024/25: Ending inequality in education.** Paris: UNESCO, 2024. Disponível em: <https://www.unesco.org/gemreport>. Acesso em: 15 jul. 2025.

UNESCO. Organização das Nações Unidas para a Educação, a Ciência e a Cultura. **Educação 2030: Declaração de Incheon e Marco de Ação para a implementação do Objetivo de Desenvolvimento Sustentável 4.** Paris: UNESCO, 2015. Disponível em: <https://unesdoc.unesco.org/ark:/48223/pf0000245656>. Acesso em: 13 nov. 2025.