

EDITORIAL

We are happy to present the 38th issue of our journal *Sophia*. The title that summarizes the diversity of approaches and perspectives is “The inductive method in the humanities and in pedagogy”, a collection that invites to reflect on the transformative force of an essential methodological approach in the construction of knowledge.

With the contributions gathered in this volume, it is proposed to investigate the different ways in which the inductive method, from the observation and analysis of reality, establishes connections between facts and theories, in an adaptive and committed way with the context to promote educational practice. This issue aims to provide a space for understanding the different ways in which the humanities and pedagogy integrate inductive reasoning and open new opportunities for reflection, action, and learning.

The inductive method contributes to discovering patterns and to the construction of meanings that go from the concrete to the general. It presents as a powerful tool to rethink teaching and research in various fields of knowledge. In a global context in which educational and cultural processes must adapt to changing realities, and in which the ability to generate knowledge from experience becomes fundamental. This volume intends to provide a comprehensive theoretical vision, motivate readers to apply these methodologies in their daily practice and provide a series of categories, principles, guidelines and ideas for implementation and improvement in the academic field, as well as in the communities in which they operate.

The 38th edition of our journal explores the impact and possibilities of the inductive method in the humanities and in pedagogy, analyzing its foundations and practical applications in educational and scientific contexts.

From an experiential and reflective approach, the inductive method in the humanities and in pedagogy is pivotal since it responds to the need to demonstrate the complexity of human and social phenomena; it offers a methodological and didactic framework enriched with the implementation of observation, experience, and reflection; it favors the improvement of various research and teaching-learning processes. Its versatility and ability to adapt to contemporary demands make it a neces-

sary resource to foster a more critical, inclusive, and oriented education towards social change and transformation.

This method fosters active and contextualized learning, essential qualities in a world where knowledge and education face global challenges such as disinformation, cultural diversity, and digital transformation. It promotes a situated education, focused on the understanding and articulation of theoretical-practical knowledge.

As it is generally known, the inductive method has contributed significantly to traditional scientific activity and offers interesting approaches to understanding the different phenomena of the human and social sciences. Likewise, its emphasis on experience as the primary source of knowledge resonates with contemporary needs for action-oriented, critical, and thoughtful education.

Historically, "the human being from its origins began to question himself and everything that happened around him, began to reflect and seek explanations about the causes and principles of everything" (Aguilar Gordón, 2015, p. 14), tried to find explanations from myth, legend, rite and gradually began to seek solutions from reason, experience, science, etc. To the extent that it establishes relationships between different phenomena, it implements a variety of research methods, discovers techniques and procedures ordered, systematic and coordinated that shape science from at least three perspectives, in which the following criteria predominate:

- Assessment of human reason mediated by the mathematical-deductive method.
- Assessment of experience and observation of concrete facts mediated by the inductive method initiated by Francis Bacon in the science of Modernity.
- Evaluation of experience and reason thanks to the use of the resolute-compositional method known as hypothetical-deductive (inductivist-deductivist) initiated by Galileo.

Undoubtedly, the inductive method is essential to address current educational challenges where learning requires the inescapable balance between theory and objective-sensory praxis typical of the concrete reality in which the subject interacts. In the humanities, the method allows the interpretation of cultural, historical, and social phenomena with a contextualized and plural approach. In pedagogy, it translates into teaching strategies that prioritize the experience and participation of students, encouraging the construction of meaningful learning and the development of critical competences.

In addition, it is necessary to consider that the inductive method responds to a growing need to link knowledge with reality, promoting educational solutions that integrate reflection, creativity, and action.

Digital transformation, interdisciplinarity and cultural diversity as features of the social dynamics of the current context, require the presence of the inductive method in education. Thus, in educational practice, the use of methodologies such as service-learning, the discovery approach, problem-based learning, among others, is justified. All of them inspired by the principles of induction enrich the educational processes and contribute to the formation of critical, analytical, committed, and proactive citizens.

In education, the use of an inductivist methodology “enables horizontal relations between the professor and the student” (Aguilar Gordón, 2019, p. 94). Likewise, in the research process, both are seen as “active agents for constructing knowledge, and thus achieve a greater dynamization of the teaching-learning process” (p. 95). This type of methodology is used to evaluate the learning potential as a product of interaction with the context in which experience, observation, and participation play an important role. The inductive method in pedagogical practice encourages the dialog of knowledge and promotes the development of skills to learn to know”, “learn to do”, “learn to be and “learn to live with others”, in the style of the four pillars of education, suggested in the report *Education contains a treasure*, presented to UNESCO by Jacques Delors (1996).

In pedagogy, the inductive method translates into a key tool to promote active, meaningful and observation- and experience-based learning; it promotes guided discovery, problem solving and timely decision-making. This method reinforces the need for an education that integrates experience, action, and critical thinking, and motivates the creation of a scenario in which students are active participants in the construction of knowledge. In addition, its integration with constructivist principles and participatory approaches makes it an educational resource that responds to contemporary demands for innovation and personalization of learning.

In the humanities, induction allows a methodological approach that combines analytical rigor with interpretative sensitivity, favoring an integral understanding of social and cultural phenomena. The inductive method is indispensable for interpreting sociocultural contexts and establishing connections between specific phenomena and broader theories; it becomes one of the best tools to build theories from observation and experience, interpreting human phenomena from a situated and empirical perspective.



Structure of Sophia 38

The 10 articles of this volume are distributed between the main theme of the call and the variety of topics related to it. All the articles demonstrate the versatility and effectiveness of the inductive method in various educational fields, from ethical training to science teaching, promoting a more reflective, dynamic, and integrated education with emerging technologies.

On the central theme

The intellectual journey begins, the article "The Role of the Inductive Method as a Link Between Educational Theories and Classroom Practices" by Luis Rodolfo López Morocho (Belgium) and Christian Paul Jaramillo Baquerizo (Ecuador), explains the role of the inductive method in linking educational theories, pedagogical models, educational research and classroom practice. It highlights the relevance of the inductive method in the improvement of teaching-learning processes.

The article "Contributions of the Inductive Method to the Teaching of Military Ethics" by Andrés Eduardo Fernández Osorio (Colombia), Marina Miron (United Kingdom) and David Whetham (United Kingdom), guides respect for human rights, the observance of the laws of war and the protection of institutional legitimacy. In this sense, military ethics presents as a fundamental tool to guide the behavior of the military in complex environments to ensure responsible decision-making and direct the attitudes and behavior of military personnel through the application of innovative methods such as the inductive method.

For its part, the manuscript "Inductive Methodologies in Education, Supported by the Integration of Technology" presented by Mexicans Magda Collazo Fuentes, María Guadalupe Veytia Bucheli and Francisco Javier Rivera Alejo, analyzes the translation and validation of the instrument developed to apply the inductive method with the SAMR model, in Spanish-speaking educational contexts to facilitate its use in teaching-learning with technology. The paper explains that inductive methodology is complemented by educational technologies to promote more interactive and evidence-based teaching. Through the application of the SAMR model it is shown that the integration of technologies facilitates the application of inductive methodologies in the classroom.

Likewise, "Induction and Analogy in Applied Ethics in Socio-Educational Projects" by the Mexicans María Teresa Yurén Camarena, Elena Guadalupe Rodríguez Roa and Miriam de la Cruz Reyes, explains the ad-

vantages of articulating induction and analogy with the applied ethics in socio-educational projects. In this sense, the authors examine theoretical positions on the status of applied ethics, confirming that induction and analogy are present. In addition, they consider that these methodologies contribute to the improvement of learning and establish contextualized moral behavior patterns.

Finally, the article "Conceptual construction in physics through inductive teaching methods" by Julio Cuevas Romo (Mexico), discusses the application of inductive strategies for the teaching of scientific concepts of physics. The author considers that the use of didactic strategies with inductive characteristics contributes to the improvement of conceptual understanding in students of exact sciences.

About the open section (miscellaneous)

The five articles included in this section address varied content and topics, but indirectly related to the central theme of the call. Below is a brief presentation of the results.

The text that opens the way for reflection is "The erotetic approach in ecocriticism" by Dancizo Yarness Toro Rivadeneira (Spain). The author analyzes the interrelationship between the conceptual frameworks of ecology and literary critical theory; suggests a common structure based on agendas of problems that enrich scientific practice and teaching; highlights the importance of questions in environmental sciences to redefine new research agendas integrating conceptual frameworks not unified by a central theory; maintains that "ecocriticism is configured as a research program structured erotetically, just like ecology".

The article "Critical Perspective of Educational Innovation from Active Learning Methodologies" by the Spanish Romina Denise Jasso Alfieri, Vicente de Jesús Fernández Mora and Antonio Daniel García Rojas, proposes active methodologies as suitable means to implement educational innovation, which must be focused on a social approach that considers people as the fundamental center of any training process, as creators and as supporters of such innovations. The proposal is supported by fundamental aspects of educational theory, the philosophy of education and the philosophy of educational innovation.

For its part, "Contributions of the Frankfurt School and Edgar Morin to Promote Dialectical and Complex Thinking in Education", by Sheila López Pérez (Spain), outlines an educational proposal "that complexifies the way of thinking of schooled adolescents and their way of co-



existing with uncertainty, becoming and otherness". The author considers that dialectical and complex thinking can and should be articulated to form "citizens capable of taking charge of their democracies" and asserts that it is necessary to "promote an education for complexity, understanding and freedom".

Likewise, the text "Scientific Models as Abstract Epistemic Tools for Learning how to Reason" by Juan Bautista Bengoetxea Cousillas (Spain), establishes that the philosophy of science and education have critically valued the virtues of various scientific methods, especially inductive and deductive ones. Additionally, he argues that empirical evidence-based modeling is a practice of high interest in linguistics, and he compares two philosophical approaches to scientific modeling: representational and pragmatic.

This journey of approaches and perspectives concludes with the article "Academic Challenge using Writing Virtual Tools", by Verónica Patricia Simbaña Gallardo, Lilian Mercedes Jaramillo Naranjo and Santiago Fernando Vinueza (Ecuador). Here the authors show the contribution of Scrivener and Evernote as valuable digital tools for academic writing, since they "allow to insert written notes, voice notes, abstracts, documents, images, quotes from authors, audios, links...", making this practice more efficient and systematized.

In this issue 38 of *Sophia*, dedicated to the "Inductive Method in the Humanities and in Pedagogy", we celebrate the richness and depth of a methodological approach that continues to transform the way we understand and practice teaching, research and learning. Through the contributions of outstanding authors, it has been explored how induction, based on the observation and interpretation of specific phenomena, allows to build theories and models that not only enrich the academic field, but also have a direct impact on the training of students and professionals committed to a more reflective and critical education but also makes an invitation to pedagogical practice, showing how the inductive method can promote a more dynamic, inclusive and adapted to the challenges of contemporary society.

We are pleased to know that the inductive method, far from being a research tool, stands as a bridge that connects knowledge with action, theories with classroom realities and reflection with praxis. In a world in constant change, where the ability to appropriate, create and learn new realities is essential, the inductive approach emerges as a source of inspiration and innovation.

We thank all authors for their valuable intellectual contribution; the reviewers of the articles for their contribution in the editorial process;

and our readers for their continued support. We hope that this issue will generate new ideas and dialogs that will further enrich the field of the humanities and pedagogy.

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