# Improving The Scientific Research Methodology's Component Parts for Language Teaching

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**Abstract**

The key components of scientific research technique are covered here for language education. Scientific research methodology is a strategy that enables researchers to accomplish their goals rationally and effectively while using the proper resources for each step of the research process. It is underlined how crucial it is to have precise, feasible study goals as well as the amount of work and commitment needed to accomplish them. The significance of the student's work in this process is stressed, and the function of the methodology as a universal or unitary procedure that researchers adhere to is explored. Research is an integral aspect of higher education since without it, earning a degree or an academic degree is all but impossible. To build skills in reality analysis and enhance scientific research, it is advised to support creative, experimental, and exploratory learning. The fundamental components of scientific research technique for language education are comprehensively covered in this abstract. Research paper preparation is like turning a screw; it takes time and is not a simple task. It is important to recognize and accept that research paper preparation causes anxiety because it involves trial and error, attempts and ideas that are later abandoned or replaced by better ones, or by others that were once thought to be better, and returning to previously abandoned ideas. A documentary study was conducted, the documentary analysis method was applied, and the tool used was the bibliographic record, which allowed registering, ordering, and summarizing the information from sources closest to the subject, evidencing through the methodology of scientific research for lang. On the basis of a bibliographic search, the goal is to specifically examine the state of the art in various areas of scientific research methods.

**Keywords:** important aspects, research techniques, language teaching, scientific research, research writing

## 1. Introduction

Science-based research methods in language teaching are useful across disciplines, from the hard sciences to the humanities. It's a method for accomplishing research goals systematically and efficiently, with the help of the right resources at the right times. From developing research questions and hypotheses to collecting and analyzing data and generating findings and suggestions, the methodology encompasses the researcher's whole process. This report seeks to assess current trends in the application of scientific research methods to the field of language education. We'll talk about how to set research goals that are reasonable and doable, as well as the time and energy you'll need to put in to reach them. We'll also talk about how important it is for students to understand the technique as a whole, and how it fits into the

research process as a whole. We will also discuss how encouraging creative, experimental, and exploratory learning may help students improve their reality-checking skills and push scientific inquiry forward.

This paper is structured as follows: first, we will provide a brief overview of the importance of scientific research methodology. Then, we will discuss the key aspects of scientific research methodology, including formulating research questions and hypotheses, selecting appropriate research methods, data collection and analysis, and drawing conclusions and making recommendations. Finally, we will conclude by summarizing the main findings and discussing their implications for future research. By analyzing the state of the art on aspects of scientific research methodology, this paper aims to contribute to a better understanding of the key elements that contribute to successful research outcomes.

When reviewing the existing literature, aspects of the methodology of scientific research are considered important, because it allows to meet the planned objectives, in a rational and efficient way, applying methodological tools appropriate to the research object at each stage of the research process. (Mitchell et al., 2021; Irwan et al., 2022) for research objectives must be clear, realistic and achievable.

It requires stopping the ball and thinking, synchronizing a large set of diverse elements, learning things that were ignored; Making mistakes, correcting oneself, getting excited and disappointed, believing that you already have the whole idea and it turns out that you don't, looking for ideas or waiting for them to arise, etc., thinking about the subject as if warming up your engines in advance and doing readings when you have to focus fully, should be the usual, avoid getting too anxious. Seek help in books and guides on how to elaborate research papers, consequently the methodology according to (Tracy, 2019; Sri Wilda Albeta et al., 2022) is a global or unitary process that one follows when doing something, that is, it is a series of steps or stages that a Researcher takes to develop his research work.

In fact, the student's effort is valued, it implies an intellectual work of great dedication and high capacity for abstraction and analysis. Without research work it is practically impossible to obtain a degree or an academic degree to which we aspire since we began our higher studies. "Making a thesis means learning to put order in one's own idea and to order the data". It is an opportunity to carry out one of the most important intellectual exercises that exists to publish, if it complies of course, with a true scientific rigor that the institution demands. Curiosity and self-confidence help, but fear, stress and low motivation hinders intellectual work, unconstructive situations. Promoting creative, experimental, exploratory learning would lead to the development of reality analysis capacities, the development of scientific research walks on that horizon.

In this sense, the problem starts from the research question: What is the state of the art of the aspects of the methodology of scientific research? The collection of information will enable other researchers to understand bibliographic sources and to continue the work done to determine the relevance of aspects of scientific research methodology, from a structured and professional perspective, to the point of view of a Bibliographic search. On the basis of the problem, the research consistent with the main objective is described to analyze the state of the art on aspects of the methodology of scientific research.

## 2. Literature Review

Scientific research methodology plays a crucial role in ensuring the success of studies in language education. This literature review aims to explore the essential components of scientific research technique, providing valuable insights and guidance for researchers. By examining relevant literature, this review emphasizes the significance of utilizing appropriate instruments and procedures to achieve study goals in a reasoned and effective manner. The focus areas include the development of research objectives, formulation of research questions and hypotheses, selection of research methods, data collection and analysis, and the formulation of conclusions and recommendations. The use of proper instruments and procedures is necessary to guarantee that the goals of the study are achieved in a reasoned and effective way. Scientific research methodology for language education is a complicated process that encompasses many phases. We'll look at the literature on essential elements of scientific research technique in this literature review, including developing research questions and hypotheses, choosing the best research methods, gathering and analyzing data, and coming to findings and making suggestions.

According to (Mitchell et al., 2021), having clear, realistic, and achievable research objectives is essential for successful research outcomes. Researchers need to think deeply and synchronously about their research questions, learning from mistakes and seeking help from books and guides. (Tracy, 2019; Atef Abdallah Bahrawi, 2022) describe the methodology as a global or unitary process that researchers follow to develop their research work, involving a series of steps or stages that need to be completed. It emphasizes the value of research work as an opportunity to order one's own ideas and data. The effort and dedication required to conduct research cannot be understated, and it is an essential part of obtaining a degree or academic degree. Additionally, promoting creative, experimental, and exploratory learning can help develop reality analysis capacities and advance scientific research. In terms of formulating research questions and hypotheses, (Fraenkel and Wallen, 2019) suggest that researchers need to identify their research topic and purpose, review existing literature, and develop a research question or hypothesis that is clear, focused, and researchable. For selecting appropriate research methods, (Dannels, 2018) emphasize the importance of understanding the research design and selecting methods that align with the research question and the nature of the data being collected.

In terms of data collection and analysis, (Kılıçoglu, 2018) suggest that researchers need to collect data that is rich and relevant to the research question and use appropriate techniques to analyze and interpret the data. Finally, drawing conclusions and making recommendations involves synthesizing the findings, interpreting their significance, and making recommendations for future research or practice (Fraenkel and Wallen, 2019). Overall, this literature review highlights the importance of various aspects of scientific research methodology, including formulating research questions and hypotheses, selecting appropriate research methods, data collection and

analysis, and drawing conclusions and making recommendations. By considering these aspects, researchers can ensure that their research is conducted in a rigorous and systematic manner, contributing to the advancement of knowledge in their field.

## 3. Method and Materials

*Scientific Research Methodology*

It is a science that provides the researcher with a set of concepts, principles and laws for the research process effectively and at certain stages of a project or thesis report that seeks excellence, starting from a theoretical position and leads a selection of specific techniques, related to research (Atmowardoyo, 2018). Aspects such as methodology, research methodology, methods, research method, scientific method, research, scientific research, science and scientific writing, are directly associated with the breakdown of scientific research methodology.


Figure 1. Aspects of scientific research methodology

*Note.* Breakdown of scientific research methodology.

## 4. Methodology

The methodology plays an organizing role, it is based on techniques as steps on the way to the idea of reality. It also covers type, approach, design, research method, also categorization and / or operationalization, in addition to population and sample, techniques and instruments of data collection, procedure developed for the collection of the information, data analysis processing and ethical considerations. As (May et al., 2022) points out "the methodological framework is the detailed illustration of the strategy used to address the specificity of the object of study". In the same sense, (Mukherjee, 2019) state "that both qualitative and quantitative research have their methodological specificity, as well as epistemological, but do not participate in a space in conflict or express a contradiction". The methodology is the set of strategies in scientific or humanistic research, a scientific and philosophical discipline that studies the methods, their effectiveness and the processes that are formed or modified in the way that science develops, to achieve the objectives set. "The methodology exercises the role of ordering, it relies on the methods, as its paths and these in the techniques as the steps to travel along those paths from thought to reality and vice versa" (Snyder, 2019; Faisal Rawhi Ishaq et al., 2022). Etymologically methodology is made up of three words: meta, which means "beyond", odός, which means "path" and, finally, logos, which translates as "study". It means the study of the way to go further.

(Dion et al., 2018) "Research in sciences, technologies and humanities strictly adheres to one methodology, and this is nothing but the normative extension of the epistemology, which, in turn, has a necessary realistic and systemic ontological basis". Therefore, the methodology is a mechanism to maintain our level of subjectivity, since objectivity is based on making the effort to see reality whether we like it or not, the surprise of relating to the world in a rigorous and ethical way, implies a responsibility to describe and analyze the root of the problem. Its importance lies in the elements of each method related to its origin, foundation, ethics, rationality, its explanatory power, its usefulness in the use and control in the procedures used (Halperin & Heath, 2020).

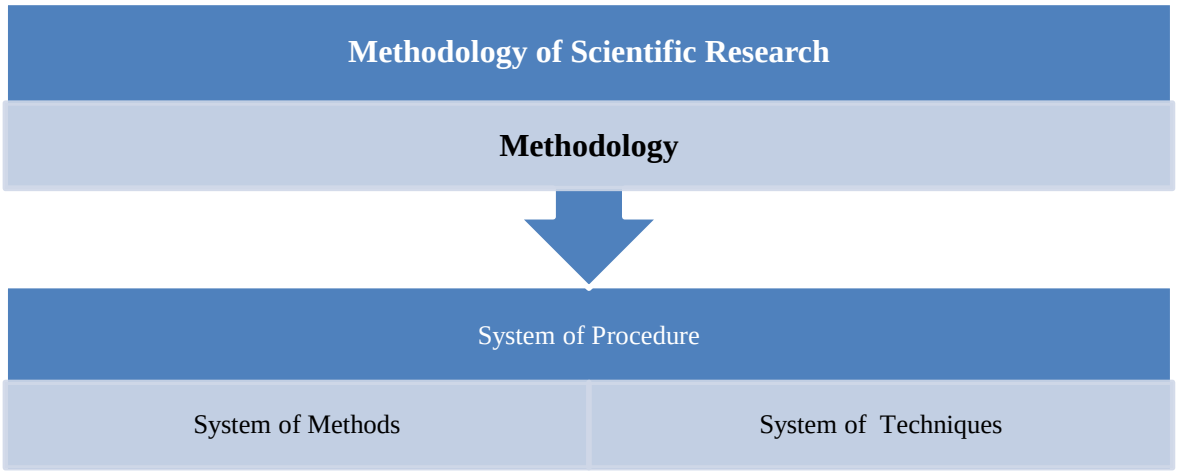


Figure 2. Methodology systems

*Note:* The methodology plays an organizing role, it is based on techniques as steps on the way to the idea of reality.

*Research methodology*

Set of procedures that are applied with the aim of solving a scientific dilemma, a technical problem or generating knowledge about a specific phenomenon. "Set of assumptions underlying the explanations and interpretations of research methods".

The research methodology is divided into three main approaches: (a) quantitative approach; It relies on logic and deductive reasoning, to generate hypotheses that will then be subjected to verification, its objective of study belong to the visible and measurable reality, its main objective is the identification of universal laws and causals, in the collection of data standardized procedures are used and approved by the Scientific community, follows the trajectory from the general to the particular, the analysis of the collected data is carried out by statistical methods to check the hypotheses and previous studies such as theory. (b) qualitative approach; It is based on inductive reasoning, goes from the particular to the general, the qualitative researcher starts interpreting the facts, the collection of data not necessarily It is carried out with standardized methods and tested by the scientific community, qualitative research uses the techniques of interview, focus group, observation, documentary analysis, through the instruments the researcher can know points of view, emotions or experiences of the participants on the phenomenon investigated. "The qualitative approach is characterized by having basically the following characteristics: It is descriptive, inductive, phenomenological, holistic, systematic and flexible design. It highlights the analysis and subjective value of a particular situation". Qualitative research is not developed to test or reject hypotheses but, on the contrary, to determine the key actions that will explain the phenomenon studied. (c) Mixed approach; The mixed study is presented as a Recent approach that mixes qualitative routes with quantitative ones or vice versa and can also keep both at the same level. For example: on the scene of a crime; For the qualitative approach, techniques such as interviews (witnesses) are used. Document review (photographs, audio recordings, physical samples). Observation (videos) and for the quantitative approach, techniques such as the survey on (possible instruments used at the time of the crime), documentary analysis (fingerprints or traces of their footprints, hair, fibers of their clothing, blood or semen that they left, the marks of the tools used, scratches on the paint, chemical properties of the material tests, among others).

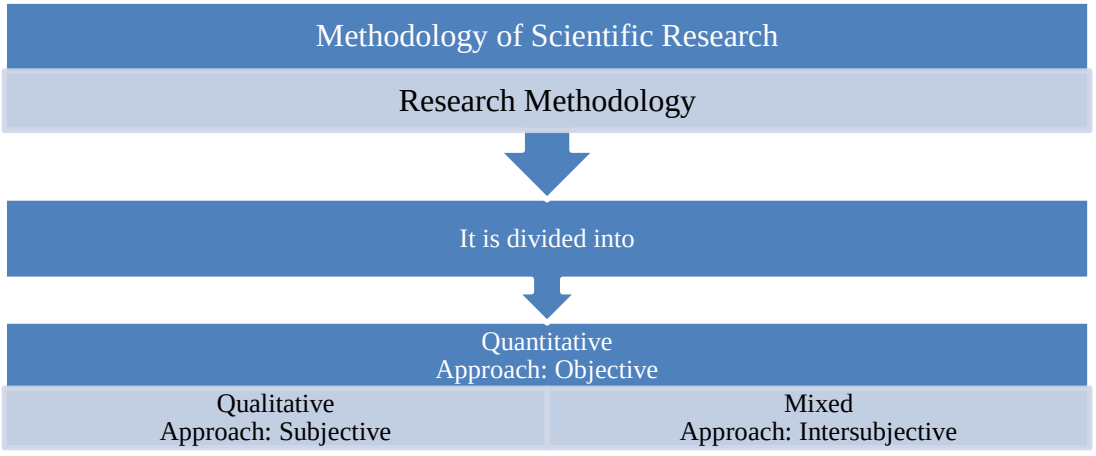


Figure 3. Division of the Methodology of the research

*Note:* It is divided into approaches: (a) quantitative approach; (b) qualitative approach; (c) Mixed approach.

*Method*

The method is like a toolbox in which you take what is needed for the appropriate, adequate and effective execution in each case linked to the investigation. It is important to understand the importance of the method in scientific research, as a main ingredient in the preparation of the scientific task. The expression method comes from the Greek meta "towards", and hodós, "way" It means, path that is built to reach an end, in the same way it is the way or the way, to go far, that is to say that it is a procedure that is chosen for a predisposed end. "Social research has as its main objective theoretically assimilate their object of study and transform it ideologically into images and concepts" (Kılıçoglu, 2018; So Hee Yoon, 2022). The method is the way things are done, it involves using various instruments, tools and techniques, it also implies the experience known in science as empirical knowledge.

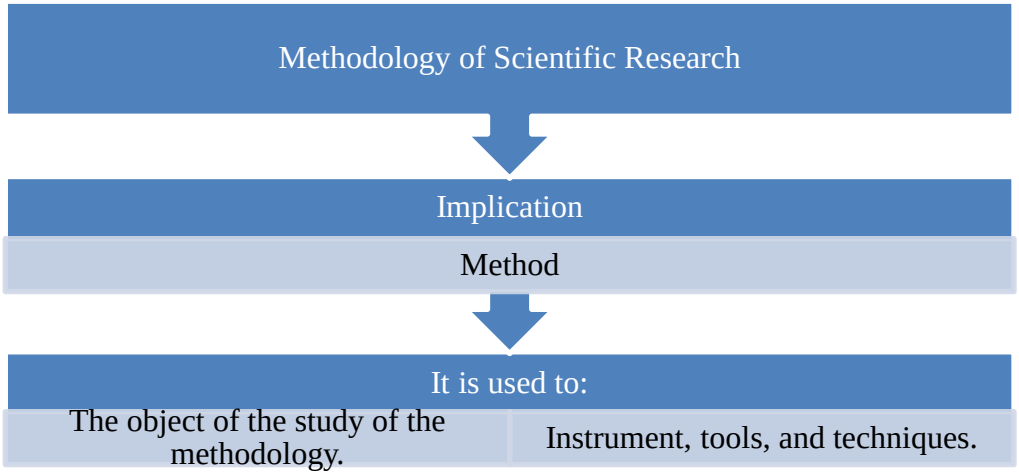


Figure 4. Usefulness of the method

*Note:* Use various instruments, tools, techniques, and experience (empirical knowledge).

*Method of research*

It is a set of techniques, according to the direction of research and the use of certain tools to obtain a specific product or result. They must be used in a coordinated manner to adequately develop the various stages of the research process (Montoya et al., 2020). Likewise, "research methods can be valued as a set of ordered procedures that allow orienting the acuity of the mind to discover and explain a truth" (Halperin & Heath, 2020). It signifies a way of speaking or doing something carefully; for the case at hand, it is a path that leads to a certain result in scientific activity (Mahuika & Mahuika, 2020). The processes that lead to social knowledge are built within two broad cognitive frameworks of the logic of scientific research: (a) Inductive method; it goes from the particular to the general, it consists of observing, comparing necessary data that help justify the ideas and (b) Deductive method; It goes from the general to the particular, quantifying or measuring social phenomena using statistical techniques.

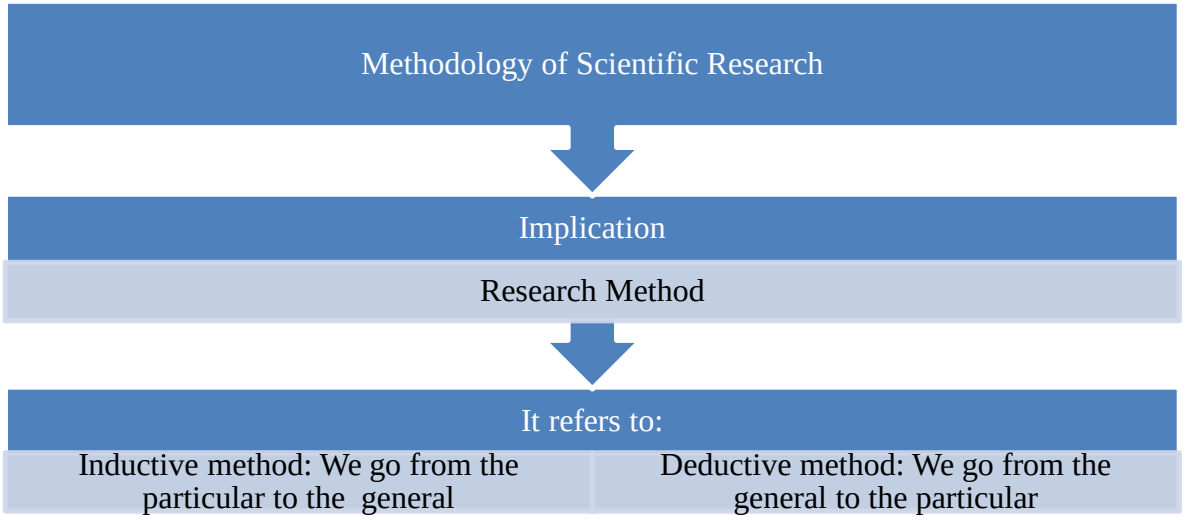


Figure 5. Logic of the research method

Note: They are constructed within two broad cognitive frameworks of scientific research logic, inductive method and deductive method.

*Scientific Method*

The scientific method starts from questioning the established knowledge and answering the questioned that increases the ground from which it was started and new doubts may arise. It is also a systematic process by which scientific knowledge is characterized, reflected and obtained, through observation and experimentation "Where there is no scientific method there is no science". It is a series of thematic steps that allow us to carry out scientific knowledge. The scientific method allows to generate valid and useful knowledge for man, to establish concrete facts that explain the physical phenomena of the world, fundamentally in the study and the available evidence, with rigor and scientific validity.

Its original meaning points the way to a relative truth. "Etymologically means way of saying or doing a thing with order; for the case at hand, the path to follow to obtain knowledge; it is the path that is traced to reach a certain result in scientific activity" (Mahuika & Mahuika, 2020). The scientific method does not generate absolute truths, they are very humble but very sure truths.

They tell us that the scientific method "rejects or eliminates any procedure that seeks to manipulate reality in a capricious way, trying to impose prejudices, beliefs or desires. that do not conform to an adequate control of reality and the problems that are investigated". The task of the researcher is to know the truth of the facts, he uses the scientific method in a reasonable way in order to give results to the problems that arise.

The scientific method is a process that is used every day, for example when turning the key of the contact plate of a vehicle, you do not hear anything. Here the problem is usually a bug that we can fix ourselves, following the following steps: (a) Observation; It checks the fuses with the naked eye, and the connection of the cable to the battery available, (b) Question; Doubts and possible assumptions of the problem arise after checking the fuses and the connection of the cable to the battery, (c) Analysis; First test, clean and adjust the battery terminals. Again, the key of the contact plate of the vehicle is turned, this time the starter motor works and the start of the same occurs, (d) Conclusion; It was found that the problem was in the connection of the CABLE to the battery, which was not properly adjusted and therefore did not make contact.

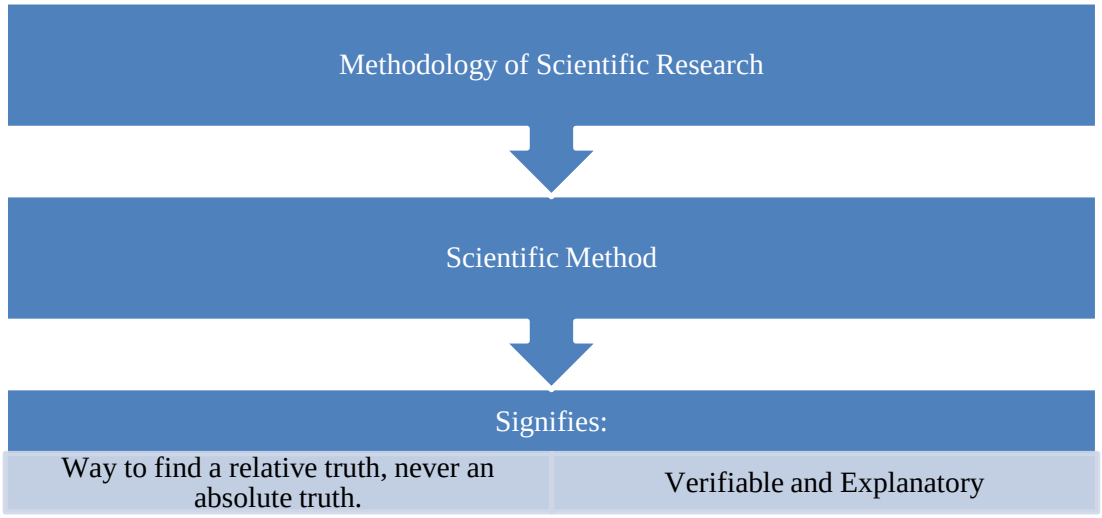


Figure 6. Process of the scientific method

*Note:* The scientific method gives results to the problems that arise.

*Research*

It is a methodical, rigorous and systematic procedure aimed at solving problems by generating new knowledge that produces results to those problems (Hamilton & Finley, 2019). "They are also structured by the countless influences, both external and internal, of a given society, including the internal struggles of social class, race and ethnicity, which make up in their entirety the field of struggle we call culture" (Mohajan, 2020).

Research is an essential task for the human being, an accumulation of knowledge of researcher's generation after generation, can arise from collective, individual, professional and institutional interests to respond to the economic, political, cultural and social problem of communities. It should emerge as a starter according to the following principles. (a) Integrity, (b) Contextualization and (c) Plurality. For (Busetto et al., 2020) it is a "planned, systematic and methodical process that seeks to know the objective reality in a field of knowledge. It has descriptive, explanatory and comprehensive interpretative levels".

Research questions as well as objectives can be modified in the course of the research or even new ones added to cover the various aspects of the research problem. (Busetto et al., 2020; Yanyun Huang & Suyansah Bin Swanto, 2022). We investigate the truth, but not our claim, but reality as it is.

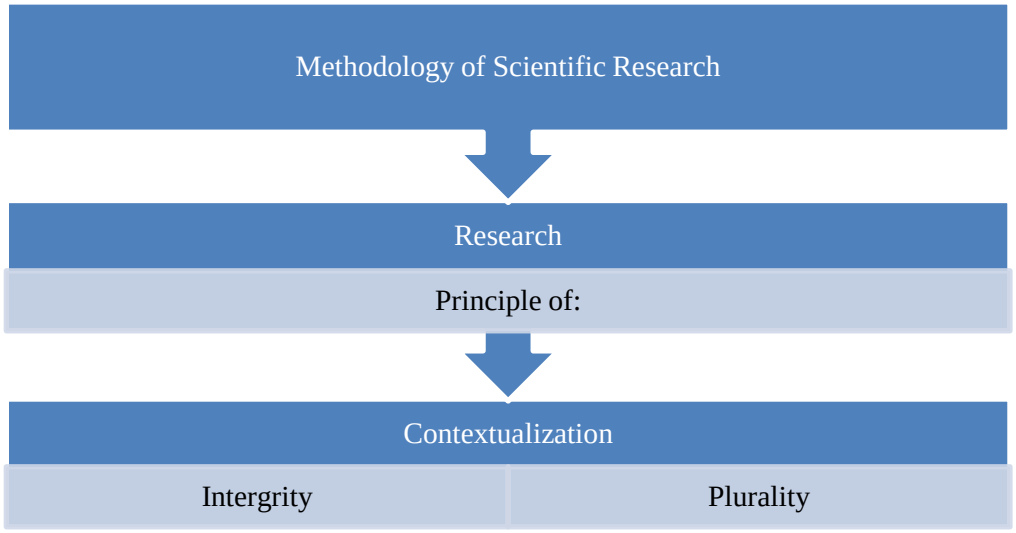


Figure 7. Principle of research

*Note:* Seeks to know objective reality in a field of knowledge.

*Scientific Research*

(Collins & Stockton, 2018) define research as an intransitive verb to carry out intellectual and experimental activities of a systematic nature in order to expand the knowledge about a certain subject. For his part, (Hamilton et al., 2021) mentions that "the approach of the large number of positions in research makes the students of professional master's degrees generally confused rather than clarified". In the field of science, to use the term research means to discover, describe, explain, or interpret facts, phenomena, processes, relationships, and generalizations as they appear in the context of reality (Sovacool et al., 2018). There are two types of research according to their purpose: (a) basic research; It seeks to understand the basic principles of the reality of the world in which we live, its objective is research conducted by the curiosity or interest of the researcher in a scientific question. According to (McNabb, 2020) basic research, also known as pure research, deals with the objects of research without taking into account the immediate application, but taking into account in. It has the possibility of new results, discoveries, products and scientific advances. (b) applied research; It seeks to solve practical problems; its objective is to find knowledge that can be applied to find solutions to problems. According to (McNabb, 2020) applied research is characterized by the way in which social realities are analyzed and its results are used to improve strategies and concrete actions, in addition to improving creativity in an innovative way.

According to (Busetto et al., 2020) the research must be justified, stating the reasons, it means why the research. (convenience), what is the significance for society? (Social relevance), Will it help solve any practical problems? (Practical implication), What will be the use of research solution? (utility). Scientific research is basically the same What any guy of research only What more Rigorous Organized by Thorough (Hernandez-Sampieri, y Mendoza 2018).

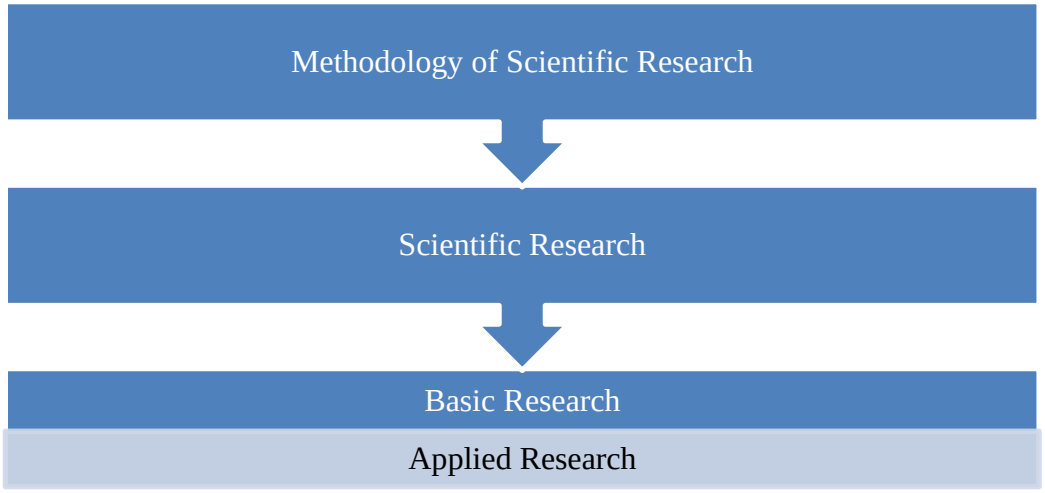


Figure 7. Types of Scientific Research

*Note:* Research according to its purpose: (a) basic research and (b) applied research.

*Scientific Research*

Scientific research is a human activity aimed at finding answers and solving problems in our environment, based on the observation, investigation and analysis of various natural phenomena using a logical and systematic procedure designed to determine the truth about a subject in particular (Collins & Stockton, 2018).

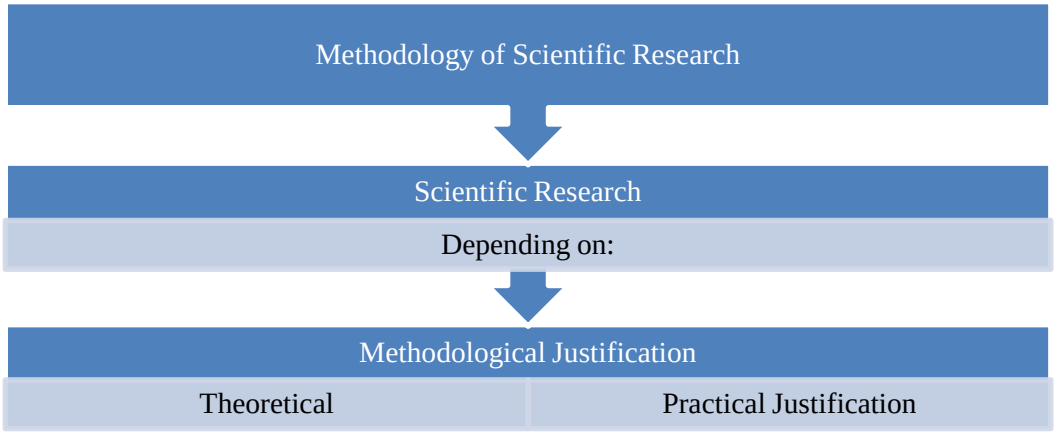


Figure 8. Justification for scientific research

*Note:* Justification in scientific research for the validity of a study.

*Science*

Science is the result of our historical development, that is, it is a product of humanity and reflects the total accumulation of experiences throughout our history and our knowledge (Mahuika & Mahuika, 2020). In the same way, science throughout history has made it possible to clarify and understand the world through verifiable methods.

Due to its didactic character according to (Obaid & Mohammad, 2022) we have two classes: (a) formal science; Suitable for ideal or formal entities such as numbers and other symbols. This is the case of logic and mathematics, its method of investigation is the deductive method and its standard of truth is demonstrative, (b) Factual science; It is empirical science or science appropriate to real facts, phenomena or natural events, it is classified into natural sciences and cultural sciences. "Science is a systematic set of knowledge about observable reality, based on empirical references, obtained through the scientific method, about the phenomena and processes that occur in nature, society and thought" (Snyder, 2019).

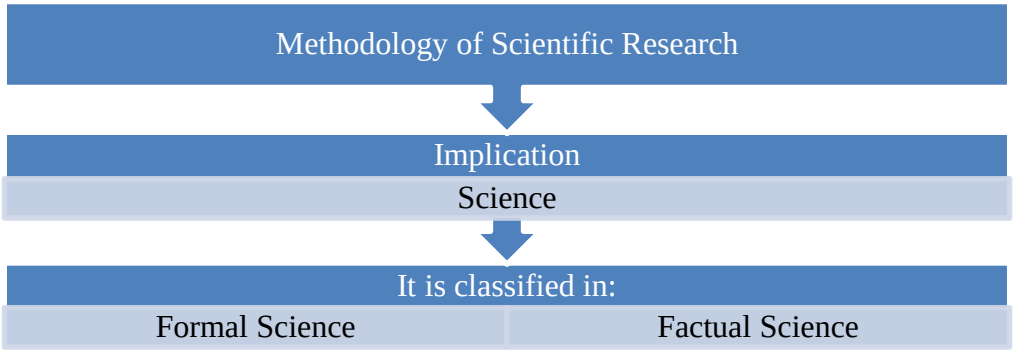


Figure 9. Classification of science

***Note:*** We have two classes: (a) formal science and (b) factual science.

*Scientific writing*

(Dion et al., 2018) to write a research paper you have to think, and there is no other way to think about science than to read texts that stimulate scientific thinking. "Every report must be written using prose according to the nature of the subject matter, presenting the material in an organic and intelligent way" (Sovacool et al., 2018).

The researcher must be a zealous guardian of respect for intellectual property, and put into practice the ways to avoid falling into this scourge. It is necessary to promote a culture of anti-plagiarism or originality, for this there are practices considered good ones, such as: Apply APA (American Psychological Association) style, ISO (International Organization for Standardization), style VANCOUVER and others, which regulate the way of giving credit to the authorship of knowledge by regulating the way of quoting, referencing, presenting tables and figures, etc. Use programs to detect similarities, such as 'Turnitin', 'Urkun', which allow you to identify in a writing similar text

in other sources. This identification serves to correct those irregular situations to say the least (Ishtiaq, 2019).

The author's goal is to apply the four principles of academic writing with precision, clarity, brevity, and formality (Gaste & Day, 2022; Amiruddin Siahaan et al., 2022). You will also effectively communicate the results through a narrative supported by citations and study samples.

Scientific writing has some characteristics: (a) objectivity; uses the grammatical third person, about a reality without subjectivism in an impartial way, (b) Solidity; supported by knowledge that is verifiable, reliable and must clearly bequeath to the reader and (c) correctness of style; corresponds to its orthographic, morphological and syntactic aspects (Ishtiaq, 2019).

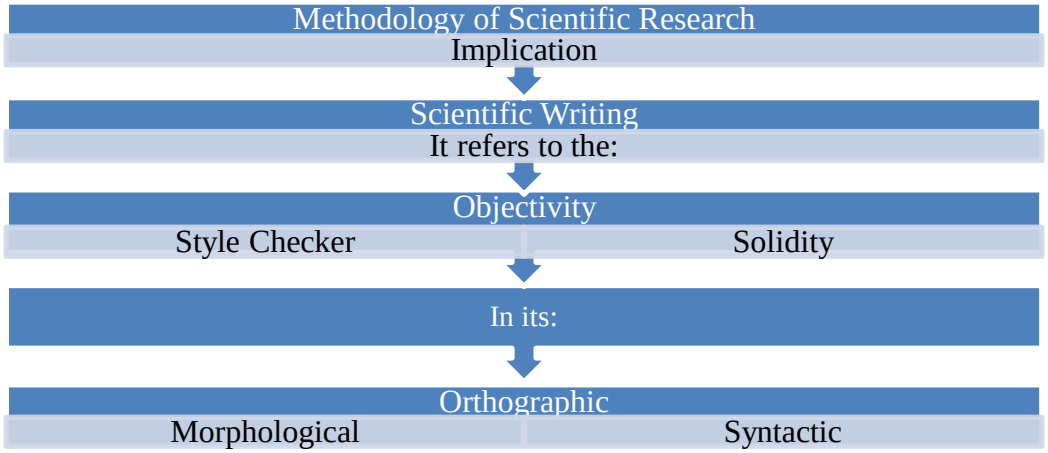


Figure 10. Appearance of Scientific writing

***Note:*** Characteristics: (a) objectivity; (b) Soundness; endorsement and (c) style correction.

**5. Discussion**

The documentary analysis approach was the methodology, a set of tactics, utilized, and the tool was the bibliographic record in language instruction. (Dannels, 2018) claims that this method makes it possible to gather data on a documentary basis, making it easier to collect, organize, and summarize data from the sources that are most relevant to the topic. The drafting went through three phases: (a) appreciating the document; (b) decide on the date and (c) proceed with the recording of the information. According to (Snyder, 2019) knowledge is "a human ability through which a subject that knows and an object to know are related". In this type of study, logic and common sense are widely used to achieve a description with the greatest possible objectivity. For (Tracy, 2019) research works must undoubtedly have a logical structure.

It is necessary to emphasize that the usual methodology of the investigation of the state of the art focuses on the three phases; the first being to appreciate one or several pages of the archive, a preview of a physical or virtual document where each page begins and ends. The second phase of deciding on the document is focused on the capacity for action and decision in order to catalyze information regarding the methodology of scientific research. The third phase, proceed with the registration of the information, refers to the content of all those citations and bibliographic references that support the research is mentioned: author, year, title and place. The files that deal with the topic, implicit or explicit, are recorded, the quality of the data is the responsibility of the researcher. "The revision must be well organized so that in this way its general scope is well defined and its integral parts fit correctly following a logical order".

**6. Conclusion**

In conclusion, the recording, arranging, and summarizing of information from the most relevant sources may be made easier for language education by using the documentary analysis approach and bibliographic record as a tool. For a well-organized and logically structured literature review, the three steps of this methodology—appreciation of the document, selecting the document, and moving forward with information registration—are crucial. The methodology of scientific research is a discipline that teaches us to efficiently handle certain processes to produce outcomes and rationally address human issues. It is advised that you think of this technique as a system made up of several components, including methodology, research methodology, methods, research method, scientific method, research, scientific research, science, and scientific writing. Also, it is crucial to engage in a state-of-the-art assessment and broaden the search parameters from the viewpoint of other connected fields. The contributions of the bibliographic review have an impact on how scientific research for language education is conducted, thus it is crucial to look into many facets of this approach to understand how research projects grow. The literature review is, in general, a crucial part of any research effort or thesis report that aspires to greatness.

**7. Limitation**

To overcome these limitations, it is crucial to complement the documentary analysis approach with other research methods that involve human interaction, such as interviews, surveys, or observations. Combining qualitative and quantitative data collection methods can

provide a more comprehensive and holistic understanding of language education research. Furthermore, researchers should be aware of their own biases and actively seek diverse perspectives and contradictory evidence to ensure a balanced and comprehensive literature review. Engaging with scholars and experts from various fields can also contribute to a broader understanding and incorporation of interdisciplinary approaches. In summary, while the documentary analysis approach and bibliographic record offer valuable tools for organizing information in language education research, researchers should be mindful of the limitations associated with the lack of human interaction and subjectivity. Supplementing the methodology with other research methods and actively addressing biases can enhance the quality and depth of the literature review.

**References**

A. S. Kazi, Z. Usman, F. Parwez, S. Taj, & Hassan, A. (2023). The Effect of an Augmented Reality App on a Learner's Desire to Use Electronic Resources During the COVID-19 Epidemic. *Information Sciences Letters, 12*(6), 2441-2450. https://doi.org/10.18576/isl/120620

Amiruddin, S., Candra, W., Rusydi, A., Fatkhur, R., & Ojak, M. (2022). Islamic Education Management: A Study of Multicultural Paradigm. *Educational Administration: Theory and Practice 2023, 29*(1), 12-28.

Atef Abdallah, B. (2022). The Efficacy of a Training Program Based on Executive Function Skills in Developing Language Competence of Students with ASD. *Educational Administration: Theory and Practice 2023, 29*(1), 76-90.

Atmowardoyo, H. (2018). Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, *9*(1), 197-204. https://doi.org/10.17507/jltr.0901.25

Bhatti, A., Pathan, H., Tabieh, A., & Hassan, A., (2020). Impact of Learner-learner Rapport on L2 Learning: A Study of Public Sector Universities in Sindh, Pakistan. *The Asian EFL Journal, 27*(4.6), 204-226. https://doi.org/10.5296/elr.v6i1.16627

Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and practice*, *2*, 1-10. https://doi.org/10.1186/s42466-020-00059-z

Collins, C. S., & Stockton, C. M. (2018). The central role of theory in qualitative research. *International journal of qualitative methods*, *17*(1), 1609406918797475. https://doi.org/10.1177/1609406918797475

Dannels, S. A. (2018). Research design. In *The reviewer's guide to quantitative methods in the social sciences* (pp. 402-416). Routledge. https://doi.org/10.4324/9781315755649

Derlina, A., Bukit, N., Sahyar., & Hassan, A., (2020). *Blended Learning in English and English-Medium Physics Classes Using Augmented Reality, Edmodo, and Tinkercad Media. TESOL International Journal*, *15*(3), 111-136.

Dion, M. L., Sumner, J. L., & Mitchell, S. M. (2018). Gendered citation patterns across political science and social science methodology fields. *Political analysis*, *26*(3), 312-327. https://doi.org/10.1017/pan.2018.12

Faisal, R. I., Mohammad, H., Ahmad, A. S. T. (2022). The Degree of Charismatic Leadership Practice among School Principals from Teachers Perspective. *Educational Administration: Theory and Practice2023, 29*(1), 58-75.

Gastel, B., & Day, R. A. (2022). *How to write and publish a scientific paper*. ABC-CLIO.

Halperin, S., & Heath, O. (2020). *Political research: methods and practical skills*. Oxford University Press, USA. https://doi.org/10.1093/hepl/9780198820628.001.0001

Hamilton, A. B., & Finley, E. P. (2019). Qualitative methods in implementation research: An introduction. *Psychiatry research*, *280*, 112516. https://doi.org/10.1016/j.psychres.2019.112516

Hamilton, D., McKechnie, J., Edgerton, E., & Wilson, C. (2021). Immersive virtual reality as a pedagogical tool in education: a systematic literature review of quantitative learning outcomes and experimental design. *Journal of Computers in Education*, *8*(1), 1-32. https://doi.org/10.1007/s40692-020-00169-2

Hassan, A., Alawawda, M., Alzahrani, F & Naz, N. (2023). Developing an ESP-Based Language Learning Environment to Help Students Improve Critical Thinking Skills in Written Output. Information Sciences Letters, 12 (4), 1131-1140. doi:10.18576/isl/120431

Hassan, A., Alhalangy, G, I, A., & Alzahrani, F. (2023). Fake Accounts Identification in Mobile Communication Networks Based on Machine Learning. *International Journal of Interactive Mobile Technologies, 17*(4), 64-74. https://doi.org/10.3991/ijim.v17i04.37645

Hassan, A., Kazi, A. S., & Asmara Shafqat, Z. A. (2020). The Impact of Process Writing on the Language and Attitude of Pakistani English Learners. *Asian EFL Journal, 27*(4.3), 260-277.

Hassan, A., Mitchell, R., & Buriro, H. A. (2020). Changes in uses of salutations in British English. *International research journal of management, IT and social sciences*, *7*(1), 197-204. https://doi.org/10.21744/irjmis.v7n1.840

Irwan, Y. D., Wilda, S. W., Fahmi, R. G., & Aulia, R. R. (2022). The Implementation of Collaborative Project Based Learning Model with Inquiry Process using E-Learning in Higher Education. *Educational Administration: Theory and Practice 2023, 29*(1), 1-11.

Ishtiaq, M. (2019). Book Review Creswell, JW (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches .

Thousand Oaks, CA: Sage. *English Language Teaching*, *12*(5), 40. https://doi.org/10.5539/elt.v12n5p40

Kılıçoglu, A. (2018). Qualitative research for educational science researchers: A review of an introduction to qualitative research. *Qualitative Research*, *4*, 20-2018. https://doi.org/10.46743/2160-3715/2018.3352

Kumar T, Nukapangu V, Hassan A, (2021). Effectiveness of Code-Switching in Language Classroom in India at Primary Level: A Case of L2 Teachers' Perspectives. *Pegem Journal of Education and Instruction, 11*(4), 379-385. https://doi.org/10.47750/pegegog.11.04.37

Mahuika, N., & Mahuika, R. (2020). Wānanga as a research methodology. *ALTERNATIVE: An international journal of indigenous peoples*, *16*(4), 369-377. https://doi.org/10.1177/1177180120968580

Manel, M., Hassan, A., & Buriro, H. A. (2019). Learners' Attitudes towards Teachers' switching to the mother tongue (The Case of Secondary school learners in Algeria). *Indonesian TESOL Journal*, *1*(1), 9-26. https://doi.org/10.24256/itj.v1i1.550

May, C. R., Albers, B., Bracher, M., Finch, T. L., Gilbert, A., Girling, M., ... Rapley, T. (2022). Translational framework for implementation evaluation and research: a normalisation process theory coding manual for qualitative research and instrument development. *Implementation Science*, *17*(1), 1-15. https://doi.org/10.1186/s13012-022-01191-x

McNabb, D. E. (2020). *Research methods for political science: quantitative, qualitative and mixed method approaches*. Routledge. https://doi.org/10.4324/9781003103141

Mirza, Q., Pathan, H., Khatoon, S., & Hassan, A., (2021). Digital Age and Reading habits: Empirical Evidence from Pakistani Engineering University. *TESOL International Journal*, *16*(1), 210-136.

Mitchell, K. M., McMillan, D. E., Lobchuk, M. M., Nickel, N. C., Rabbani, R., & Li, J. (2021). Development and validation of the situated academic writing self-efficacy scale (SAWSES). *Assessing Writing*, *48*, 100524. https://doi.org/10.1016/j.asw.2021.100524

Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of Economic Development, Environment and People*, *9*(4), 50-79. https://doi.org/10.26458/jedep.v9i4.679

Montoya, J., Brandl, R., Vishwanath, K., Johnson, J., Darbali-Zamora, R., Summers, A., ... Brundlinger, R. (2020). Advanced laboratory testing methods using real-time simulation and hardware-in-the-loop techniques: A survey of smart grid international research facility network activities. *Energies*, *13*(12), 3267. https://doi.org/10.3390/en13123267

Mukherjee, S. P. (2019). *A guide to research methodology: An overview of research problems, tasks and methods.* https://doi.org/10.1201/9780429289095

Obaid, A. S., & Mohammad, A. S. (2022). Effective Teaching Strategies for Students with Learning Disabilities in Inclusive Classroom: A Comparative Study. *Educational Administration: Theory and Practice 2023, 29*(1), 209-220.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of business research*, *104*, 333-339. https://doi.org/10.1016/j.jbusres.2019.07.039

So Hee, Y. (2022). Educational Outcomes of After- School Programs in Korea: A Meta-Analysis. *Educational Administration: TheoryandPractice2023, 29*(1), 29-42.

Sovacool, B. K., Axsen, J., & Sorrell, S. (2018). Promoting novelty, rigor, and style in energy social science: Towards codes of practice for appropriate methods and research design. *Energy Research & Social Science*, *45*, 12-42. https://doi.org/10.1016/j.erss.2018.07.007

Sri Wilda, A., Suarman, N., & JimmiCopriady, M. A. (2022). Blended Learning: Learning Outcomes, Class Dynamics, and Perceptions of Students and Teachers-A Systematic Literature Review. *Educational Administration: Theory and Practice 2023, 29*(1), 43-57.

Supriyatno, T., Susilawati, S., Hassan, A., (2020). E-learning development in improving students' critical thinking ability. *Cypriot Journal of Educational Sciences*, *15*(5), 1099-1106. https://doi.org/10.18844/cjes.v15i5.5154

Tracy, S. J. (2019). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons.

Us Saqlain, N., Shafqat, A., & Hassan, A. (2020). Perception Analysis of English Language Teachers about Use of Contextualized Text for Teaching ESP. *The Asian ESP Journal*, *16*(5.1), 275-299.

Yanyun, H., & Suyansah, B. S. (2022). Research on College Students' Classroom Learning Based on Informatization to Promote English Education System in China. *Educational Administration: Theory and Practice 2023, 29*(1), 91-106.