

## **Exploring the Role of Language in the Construction of Education: A Philosophy of Science Perspective**

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### **Abstract**

The purpose of this study is to explore the role of language in the construction of education from the perspective of the philosophy of science. The main role of language in the educational process is not only as a means of communication but also as a medium for building knowledge, a tool for conveying ideas and forming critical thinking. The method used in this study is library research, which examines literature and theories related to language and education. This study also examines how a language influences the understanding and dissemination of knowledge. The analysis was carried out to see the contribution of language in the formation of curriculum, pedagogy, and interaction between teachers and students. The results of this study indicate that language functions as a means of communication and as an epistemological tool that shapes the reality of education. The philosophy of science provides a critical foundation for understanding the relationship between language, knowledge, and education. After understanding the role of language in the construction of education through the lens of the philosophy of science, the results of this study are expected to provide new insights into the development of more effective educational strategies that focus on the power of language as a medium of instruction.

**Keywords:** Philosophy Of Science, language, education

### **Introduction**

Language is a means of communication between humans as members of a linguistic community. Language includes several grammatical units such as phonology, syntax, and semantics, which are the basic elements of language activity. These grammatical units play an important role in the human thought process and in expressing the results of their thinking in spoken and written language (Mahmudi, 2016).

This also applies to aspects of science, especially philosophy. Thinkers and philosophers always rely on language to convey their ideas and thoughts to others (Rejeki, 2017). Language plays a fundamental role in human life as a means of communication and as a medium for communicating complex thoughts and concepts. In the context of education, language not only functions as a tool for transmitting knowledge, but also as a tool for shaping an individual's mindset, values, and understanding of the world around them. The philosophy of science that examines the foundations of knowledge and truth, how language plays a role in shaping the reality of education, and how social and cultural structures influence the perception of education itself provides an in-depth analytical framework for studying education. According to Suharyadi, education functions as a social instrument that reflects collective values and shows people how to understand the world through their mother tongue (Suharyadi, 2021).

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Language is closely related to the emotions, thoughts, and activities of people as speakers. Language serves as a tool for communicating ideas and expressing oneself in human relationships (Wittgenstein, 1922). Language plays a dual role in the context of education, namely as a medium for delivering content and as a tool for forming cognitive concepts to be conveyed to students. Language is the medium used by educators to convey lesson content. Language allows students to understand what the teacher wants to convey. Students can also overcome difficulties in the learning process through language. The language used by teachers in the classroom is also called teacher language. Teacher language is a variation of language that is commonly used by teachers in the teaching and learning process (Vygotsky, 1986).

In the philosophy of science, educational construction is seen as an attempt to examine the relationship between language and reality, where language is considered as a representation of various abstract concepts implemented in the teaching-learning process (Darmono, 2008). Language becomes an important medium for conveying moral, ethical, and logical values embedded in every educational structure, both formal and informal. This confirms that every educational construction is a linguistic construction that involves the meaning and interpretation of language that continues to develop in its context.

Language used in education also plays a role in the formation of identity and self-development of learners, so that the construction of language-based education cannot be separated from the influence of culture and the social environment in which the language develops (Huda, 2022). Therefore, a study of the role of language in education through the perspective of the philosophy of science can provide insight into how language not only acts as a means of communication but also as the main medium in building and developing holistic and integrative educational concepts.

## **Methods**

The method used in this research is a literature research method. The focus of this research is the role of language in building education through the lens of the philosophy of science. The necessary data is obtained through literature sources or documents. The author collects information and data from various relevant sources, such as books, journals, articles, previous research results, and so on, related to the philosophy of science and language. In this research, the author does not need to go directly to the field or interact with respondents.

## **Result and Discussion**

### ***Language as a Means of Scientific Thinking***

The goal of scientific thinking is to obtain true knowledge. To achieve this goal, humans need means and tools for scientific thinking. Without these scientific thinking tools, scientific activities cannot be optimized. The instruments of scientific thinking are tools or support for scientific steps (methods) to obtain the truth. In other words, the tools of scientific thinking help you conduct scientific research properly, orderly and carefully. There are three tools for scientific thinking: language, math, and statistics. In this study, language allows humans to think and acquire knowledge in an abstract, systematic, organized, and continuous way. Unlike animals, humans can use language to think and talk about things that are not in front of them. The complex world of life is explained simply and easily understood. Language also allows us to convey knowledge to others and express our attitudes and feelings towards others (Mahmudi, 2016).

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Language allows humans to think abstractly, where factual objects are transformed into abstract language symbols. With this transformation, humans can think about a certain object even though the object is factually not in the place where the thinking activity is carried out. Language is a verbal communication tool used in the scientific thinking process. Language becomes a thinking and communication tool to convey thoughts to others, both thoughts based on inductive logic and thoughts based on deductive logic. Therefore, scientific thinking is closely related to language. The language that is characterized by science is called scientific language. Scientific language is reproductive, meaning that if the speaker conveys information, then the listener must receive information that matches what the speaker said. This is intended to avoid misinformation; where information is different, then the thought process will also be different (Hermawan, 1999).

### ***Language as an Epistemological Tool***

In the Big Indonesian Dictionary, terminology defines language as an arbitrary system of sound symbols used by members of a community to cooperate, interact, and identify themselves. Language as a means of communication between community members in the form of sound symbols produced by the human speech apparatus. Language also includes two areas, namely vocal sounds and meaning or meaning.

Language is one of the main tools in the process of epistemology, the study of the origins, methods and limits of knowledge. As a medium of communication and expression, language allows humans to not only convey information but also form, organize and develop knowledge collectively. According to Suwito, language is a crucial tool in the formation of understanding because, through language structures and systems, humans can construct and interpret reality (Suwito, 2018). Language also functions as a cognitive tool that allows humans to organize experiences and develop abstract concepts that underlie scientific knowledge (Wahyudi, 2019).

On the other hand, epistemological studies of language show that language not only acts as a tool to convey ideas but also as a structure that shapes ways of thinking and understanding the world. Purnomo emphasizes that the language structure of a society can influence their way of thinking, thus forming a collective perception of reality (Purnomo, 2020). For example, in the context of education, language can shape the mindset of students through the organization of grammar, terms, and discourse used in the teaching and learning process (Rahmawati, 2021).

As an epistemological tool, language is also a means to test and question the validity of knowledge. With language, one can present arguments, conduct critical analysis, and convey judgment on knowledge claims (Hidayat., 2022). Therefore, the role of language in epistemology is not only as a medium of communication, but also as an instrument to reveal, understand, and criticize knowledge.

### **Language in Character Education**

Chapter II, Article 3, of Law No. 20 of 2003 states that national education functions to develop the ability and shape the character and civilization of a dignified nation to educate the nation's life and aims to develop the potential of students to become human beings who are faithful and devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens. Based on these national functions and goals, it explains that national education is directly related to the formation of the character of students so that they are able to compete, be ethical, moral, intelligent, polite, and interact with society. Therefore, the character education of learners must be taken seriously, and the quality of character education must be prioritized (Kanzunudin, 2012).

Character education in Indonesia has actually been discussed for a long time by Ki Hajar Dewantara. The character education advocated by the Ministry of Education is actually another term for character education, which is another term used by Ki Hajar Dewantara. Education is a cultural process to improve human dignity. Education lasts for life and can be implemented in the family, school, and community. Therefore, education is a shared responsibility between the family, community, and government.

Language plays an important role in the development of human personality. The role of the Indonesian language is to reflect the formation of the nation's character. The correct use of Indonesian needs to be done depending on the context and position. If you use Indonesian properly and correctly, then people around you, including foreigners, will judge you as polite. In addition, by learning the

language properly and correctly, it is expected that people can know what positive and negative characters appear in their lives. It is hoped that if people can distinguish between positive and negative characters, then they will be able to apply these characters in their daily lives.

Language has an important influence on character education. Language is a set of habits. Habits can be said to be customs. Adat is a cultural idea consisting of cultural values, norms, habits, institutions, and customary laws that are commonly practiced in an area. If this custom is not implemented, there will be confusion, which will lead to unwritten sanctions by the local community against perpetrators who are considered deviant. Language teaching is used to increase self-esteem, foster positive thoughts, increase self-understanding, grow familiarity with others, and be able to find strengths and weaknesses. From this statement, the purpose of language teaching is oriented towards acquiring values according to character education, namely, fostering positive thoughts and fostering familiarity with others (Devianty, 2017).

## **Conclusion**

In the philosophy of science, educational construction is seen as an attempt to examine the relationship between language and reality, where language is considered as a representation of various abstract concepts that are implemented in the teaching-learning process. Language becomes an important medium to convey moral, ethical, and logical values embedded in every educational structure, both formal and informal. The role of language in building education through philosophical views, namely. Language as a means of scientific thinking. Language, in this study, allows humans to think abstractly, systematically, regularly, and continuously and master knowledge. Language also enables us to communicate knowledge to others and express our attitudes and feelings to others. Language as an epistemological tool. Language is one of the main tools in the process of epistemology, which is the study of the origins, methods, and limits of knowledge. As a medium of communication and expression, language allows humans to not only convey information but also form, organize, and develop knowledge collectively. Language as a tool for character building (character education). Language has an important role in shaping human character. The role of Indonesians is as a reflection of the nation's character. Indonesian must be used according to its context and position properly and correctly. By using Indonesian properly and correctly, people around us, including foreigners, will judge that the character of Indonesians is polite. In addition, by learning the language properly and correctly, humans are expected to learn about what other positive and negative characters are in their lives. When humans can sort out which characters are positive and negative characters, it is hoped that these characters can be integrated in their daily lives.

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