A REVIEW OF SCHEMA THEORY IN STUDENTS' READING COMPREHENSION

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Abstrak: Penelitian ini mengkaji penerapan Teori Skema dalam meningkatkan pemahaman membaca siswa. Teori Skema menyoroti peran pengetahuan sebelumnya formal, konten, dan skema linguistic dalam memahami teks. Ini menekankan proses kognitif di mana pembaca menghubungkan informasi baru dengan struktur mental yang sudah ada sebelumnya, sehingga meningkatkan pemahaman dan keterlibatan. Terlepas dari potensinya, tantangan seperti ketidakakraban siswa dengan struktur teks, kesenjangan budaya, dan kosakata yang terbatas tetap ada. Studi ini mengeksplorasi strategi instruksional, termasuk aktivitas pra-membaca (misalnya, curah pendapat), teknik membaca sambil (misalnya, membaca terpandu), dan tugas pasca-membaca (misalnya, meringkas), untuk mengaktifkan dan memanfaatkan skema secara efektif. Temuan dari berbagai penelitian menggarisbawahi pentingnya pendekatan yang disesuaikan untuk aktivasi skema, seperti mengintegrasikan konteks budaya, memprediksi konten, dan menyempurnakan skema yang ada. Makalah ini berpendapat bahwa memanfaatkan Teori Skema dapat menginformasikan instruksi membaca yang lebih holistik dan efektif, memenuhi kebutuhan peserta didik yang beragam dan meningkatkan hasil literasi.

Kata kunci: Membaca, Skema Teori

Abstract: *This research examines the application of Schema Theory in enhancing students' reading comprehension. Schema Theory highlights the role of prior knowledge—formal, content, and linguistic schemata—in understanding texts. It emphasizes the cognitive processes through which readers connect new information with pre-existing mental structures, improving comprehension and engagement. Despite its potential, challenges such as unfamiliarity with text structures, cultural gaps, and limited vocabulary persist. The study explores instructional strategies to activate and utilize schemata effectively, including pre-reading activities (e.g., brainstorming), while-reading techniques (e.g., guided reading), and post-reading tasks (e.g., summarizing). Findings from various studies highlight the importance of tailored approaches to schema activation, such as integrating cultural context, predicting content, and refining existing schemata. This paper argues that applying Schema Theory can enhance reading instruction, address diverse learners' needs, and improve literacy outcomes.*

Keywords: *Reading, Schema Theory*

INTRODUCTION

Schema theory is an explanation of how readers use prior knowledge to comprehend and learn from text (An, 2013). The term "schema" was first used in psychology by Barlett as "an active organization of past reactions or experiences" (1932), later schema was introduced in reading by Rumelhalt (1980), Carrell (1981) and Hudson (1982) cited in Huyen (2023) when discussing the important role of background knowledge in reading comprehension.

Reading is an important skill that must be mastered by students in order to understand the text and be able to follow the lesson well. Yet, in reality, reading skills are

skills that are difficult for students to master because of the lack of student interest. Lack of mastery of reading methods is one of the obstacles that makes students are only able to read with one reading style for all varieties discourse, then it takes a series of efforts to overcome this, one effort that can be done is to introduce various strategies or methods of learning to read that are capable shape reading behavior as well as being able to develop abilities reading comprehension of students

Reading is also an individual process to derive meaning from print. Everything that is obtained through reading will make a person's insight wider, sharpen his views, and be able to heighten his thinking power. When reading a text, a person use his brain to think and reason. In addition, Reading skill is the ability of each individual to process how to read properly and correctly in order to understand the contents of the reading text. In the process of reading, the reader uses skills, including physical and mental skills. When the student reading, the students must have a good concentration and ability of the text, so that the students will be easier to get information and can understand the text (Kasim, 2020).

Reading is the process of understanding the content of the text by looking at the written text aloud or silently. By reading someone will gain new knowledge, information, and experiences that have never been known before (Kasim, 2020). Reading is also an individual process to derive meaning from print. Everything that is obtained through reading will make a person's insight wider, sharpen his views, and be able to heighten his thinking power. When reading a text, a person use his brain to think and reason. In addition, Reading skill is the ability of each individual to process how to read properly and correctly in order to understand the contents of the reading text. In the process of reading, the reader uses skills, including physical and mental skills. When the student reading, the students must have a good concentration and ability of the text, so that the students will be easier to get information and can understand the text (Huyen, 2023)

The time constrains and topic diversities have been the causes of low achievement in the reading module. Many of the reading passages deal with unfamiliar topics to readers. In other words, there is no connection between new information with the existing information. We experience the world through reading and listening. All these experiences are then stored in the schemas. According to McGee and Richgels, a schema is a "mental structure in which we store all the information we know about people, places, objects, or activities" (1996). If we have no schema for a particular topic, we begin that encounter with an immediate loss of comprehension. Schemata can be loosely defined as patterns which represent the way experience and knowledge are organized in the mind.

This Article aims at investigating the importance of the roles of schemata in reading comprehension can inform reading instruction. By gaining insights into how schemata affect comprehension, educators can develop more effective strategies to scaffold and support readers, especially struggling or diverse learners.

METHOD

Library research is a systematic process used to gather information for academic or professional purposes, leveraging specialized resources found in research libraries. These libraries house extensive collections, including scholarly articles, primary sources, and

digital formats. The research process involves developing a topic, gathering and evaluating sources, organizing information, and writing up findings. Research librarians play a crucial role by curating collections, guiding users in navigating databases, and conducting their own research. Ultimately, library research emphasizes critical thinking and the synthesis of knowledge to contribute to scholarly discourse (Nursapia, 2020).

FINDING AND DISCUSSION

From some previous research, here are some series in the application of schema theory. A study from Wenying (2022) states that the following are steps in the application of schema theory, namely by getting used to analyzing themes using relevant vocabulary, vocabulary, and student understanding. For example, when a teacher wants to talk about an article about sports, then the teacher can present a picture of a basketball activity or a famous basketball player, then ask students to guess what the meaning behind the picture is. Furthermore, you can relate what is being discussed to the related article. For example, when there is a theme of an "independence event", the teacher can ask the students about what things are in it. So in the minds of students will be able to stop several things such as ceremonies, competitions, or commemorations of Independence Day. Some of the ways above can activate students' reading comprehension, because there will be a scheme that connects with student learning that allows students to repeat their memories or imagine about their previous knowledge. It has also been proven that students' learning background can affect their understanding in reading activities.

Another study that also explains some of the steps of applying schema theory, From Zhao and Zhu (2012) states that the application of schema theory is as follows First, Linguistic schema refers to language knowledge essential for understanding texts, including vocabulary and grammar. College English learners often struggle with vocabulary due to inefficient memorization methods. Teachers can link new words to familiar ones and emphasize context to activate students' linguistic schema. Grammar, another key element, should be explained during teaching to reinforce understanding. Second, Content schema involves background knowledge needed to comprehend texts. Even with strong linguistic skills, readers may struggle without cultural context. Teachers can encourage students to explore books and journals on English-speaking cultures and promote broad reading to enrich content schema and general knowledge. Third, Third, building formal schema relies on teachers' guidance. During reading instruction, teachers can use various text types as examples to familiarize students with different genres and structures. This approach helps students effectively develop their formal schema. Schema activation involves pre-reading, while-reading, and post-reading activities to enhance students' comprehension. Pre-reading activities, such as questioning, brainstorming, and pre-testing, help activate prior knowledge and create interest. While-reading activities, like guided reading, discussions, and predictions, encourage students to build on existing schema and infer missing details. Post-reading activities, including outlining, summarizing, and analyzing text structure, solidify understanding and expand schema. These strategies collectively improve students' reading skills and foster deeper engagement with texts.

In the Ding and Zhu (2019) research, it is stated that the following methods are used in the stages of applying the theory scheme as follows, The pre-reading stage is ideal for activating students' background knowledge and schema through predictive activities. These methods help students recall relevant information and prepare their minds to integrate new knowledge effectively. During reading, teachers can guide students to use their existing schema by focusing on key words and concepts to deepen understanding. Post-reading activities, such as writing abstracts, rewriting texts, and engaging in discussions, help consolidate and reconstruct knowledge. These activities enhance language, content, and rhetorical schema, promoting better retention and internalization of the material.

Ren (2023) research states that some strategies in the application of schema theory in reading comprehension are as follows, The first is Motivating existing schemata to predict the content Before reading, teachers can activate students' schemata by using pictures and discussions to predict text content. For example, showing Thanksgiving images and asking questions helps students recall prior knowledge, engage with the topic, and better understand the theme, leading to smoother reading. Second, Constructing new schema to analyze the text. During reading, teachers guide students to build schemata through skimming, scanning, and intensive reading. Skimming aids text structure analysis, scanning deepens comprehension, and intensive reading enriches language skills, enhancing overall reading and writing abilities. Third, Updating and optimizing existing schemata. To maximize schema theory in reading, teachers help students refine and update their schemata. By guiding students through activities like describing vacations and providing feedback, teachers ensure more effective and accurate application of schemata in future learning. The last is, encouraging students to apply schemata independently. In English teaching, it's crucial for students to use schema independently for reading, not just as decoration. Teachers should guide students to apply schema effectively, considering their learning styles, and provide personalized feedback to improve reading efficiency and create a better learning environment.

These findings illustrate the significant influence of schema theory on education, particularly in enhancing reading comprehension and overall academic achievement. A key implication of this theory is the activation of prior knowledge. This process involves employing pre-reading strategies such as brainstorming, questioning, or presenting visual aids to assist students in recalling their existing knowledge about a subject. By facilitating this connection, students can relate new information to their prior understanding, thereby improving their ability to comprehend and retain the material. For instance, before engaging with a text about the solar system, a teacher might encourage students to discuss their knowledge of planets, stars, and space. This approach not only prepares students for the new content but also increases their enthusiasm for learning.

Furthermore, schema theory underscores the importance of developing vocabulary and linguistic schemas. Many students struggle with reading due to insufficient vocabulary or grammatical understanding necessary for interpreting texts. Educators can address this issue by introducing new vocabulary within context, clarifying unfamiliar words using familiar terms, and revisiting grammar concepts during lessons.

For example, when teaching a text that features complex sentence structures, teachers can deconstruct the sentences and elucidate the grammar, thereby making the material more comprehensible for students.

Another crucial implication is the implementation of guided reading and scaffolding techniques. Through guided reading, educators can ask questions, offer hints, and foster discussions that enable students to link new information with their existing knowledge. For instance, while exploring a history text, a teacher might prompt students to predict future events based on their understanding of historical occurrences. This strategy not only maintains student engagement but also encourages critical thinking and a deeper comprehension of the material. In summary, schema theory serves as a robust framework for enhancing reading comprehension and catering to the varied needs of learners.

CONCLUSION

Schema theory provides a powerful framework for enhancing reading comprehension by leveraging students' prior knowledge and organizing it into formal, content, and linguistic schemata. The findings suggest that activating, constructing, and optimizing schemata through targeted instructional strategies can significantly improve students' engagement and understanding of texts. Pre-reading activities like brainstorming, while-reading strategies such as guided discussions, and post-reading tasks like summarizing are effective in bridging gaps in background knowledge and reinforcing comprehension. The practical application of schema theory highlights the importance of culturally relevant content, contextual vocabulary teaching, and exposure to diverse text structures. Teachers play a crucial role in guiding students to connect new information with existing knowledge, thereby fostering active and independent learning. By incorporating schema theory into reading instruction, educators can better address the challenges of diverse learners and contribute to improved literacy outcomes.

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