

The Effect Of Using Inference On Student's Reading Comprehension Skill

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ABSTRACT

The purpose of this experimental research was to find out the effetcs of using inference strategy on student's reading comprehension skills. One participant was taught how to use think aloud and inference strategy while she was reading a text. Then, she was interviwed on her understanding of the text after using the inference strategy. The result showed that her test score before and after treatment was not signifikanly change. However, from the interview, the participant admitted that the strategy was very helpful in understanding a text in many different ways.

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Introduction

Reading comprehension is still the main focus of learning English in Indonesia where English is not the first language. Students are required to be able to read many English textbooks in a particular area (Sugirin, 1999). Teaching English as a Second Language (TESL) also emphasize reading skill as it is stated in the national curriculum (Diknas, 2004).

Therefore, reading skill becomes very important to students. However, many students still have serious problems in understanding an English reading text. Most of them are categorized as poor readers because they are not able to use good strategies, which can be used by good or expert readers (Sugirin, 1999). The main problems in reading comprehension for many students are lack of vocabulary and background knowledge (Oster, 2001). Research by Sawir (2005) has revealed that most international

students found difficulties in understanding reading because of a lack of vocabulary and also because the topics in the text are new for them.

The Cognitive Process of Reading Comprehension

Celce-Murcia & Olshtain (2000) state that to understand a reading text, a reader must perform several simultaneous tasks: decode the message by recognizing the words, interpret the message by assigning the words meaning and understand the writer's intention. Therefore, there are at least three elements involved: the writer, the text, and the reader. Many theories of the cognitive process of reading comprehension mention schema activation as a central part of reader-text interaction.

The recent approaches to reading are a combination of bottom-up approaches and top-down approaches (Celce-Murcia & Olshtain, 2000). The bottom-up approaches see reading as a series of stages that proceed in a fixed order from sensory input to comprehension. On the other hand, the top-down approaches see reading as the interpretation process as a continuum of changing hypotheses about the incoming information.

One of the strategies expert readers use in understanding a reading text is the inference strategy. The inference is defined as the ability to activate the information, which is not directly stated in a reading text (Matlin, 2005). This strategy can increase students' reading comprehension skills (Bruning et al, 1999). Anderson (1995) suggests that inference can improve memory for textual material.

This research examined if there was a measurable improvement of using inference strategy on student's reading comprehension skills. It also examined the participant's perspective on the effect of using inference on reading comprehension skills. The result of this study provided information about the use of an inference strategy in helping a student comprehend English text especially for students from the non-English speaking background.

Literature Review

The main focus of teaching English in Indonesia is reading skills (Sawir, 1999). This is because students are prepared to understand a large number of reading texts when they enter university. This makes reading skills become the main priority in teaching

English as a second language. Many types of tests, such as national final examination or entrance test to state university use reading tests as the single test of English skill ability.

Some studies have shown the effectiveness of the inferences strategy in understanding a reading text. Research by Sugirin (1999) has shown that the inference strategy helps students from non-English speaking backgrounds understand an English reading text. Another research by Pearson (1993) also suggests that drawing inference is very important in the reading comprehension process. He states that inference is the center of the comprehension process in reading. In drawing an inference, readers build explanations actively. They make connections between the current information and all the relevant information from the previous parts of the text. They also use their prior knowledge (O'Brien & Myers cited in Matlin, 2005).

Pearson (1993) in his research adds that expert readers use inference in a reading process to get a comprehensive understanding of what they read. He also explains the process of inference in the reading process. Readers often ask the authors and themselves about the text they read. Inference shows the awareness of the readers that they have to find the links between two seemingly unrelated sentences in a reading text (Ehrlich cited in Matlin, 2005).

Another research by Laing and Kamhi (2002) has examined inference during reading. The research shows that there is a significant result of using inference during reading on the students' comprehension performance. Some research also shows that inference strategy is an important factor, which influences comprehension in reading a text (Reed, 2004).

Inference helps readers actively construct explanations as they integrate the current information from the prior parts of the passage and their background knowledge (O'Brien & Myers cited in Matlin, 2005). Inference also increases reading comprehension skills (Bruning et al, 1999) and helps readers comprehend a passage (Weaver, 1980).

Inference strategy in reading comprehension

The inference strategy plays an important role in understanding reading comprehension text. This strategy involves some main skills in reading comprehension such as self-questioning, self-explanation, and making connections (Burke, 2000). The inference is also very important in integrating information found in the text (Butcher,

2006). In other words, the inference can help readers activate their prior knowledge and make links to other information.

Another important aspect of inference is that this strategy is required in understanding the implied meaning of a text. Some writers do not say exactly what they mean in their writing (Butcher, 2006). In this case, the readers need to read between the lines.

Research Rationale and Objectives

This research was expected to promote the use of an inference strategy in understanding reading comprehension.

Research Question

Is there any significant effect of using inference strategy on student's reading comprehension skills?

Methods

Participant Details

A voluntary international student from Indonesia participated in this research. She was studying education at Flinders University. She found difficulties in understanding the materials of English reading texts. When entering Flinders University, her lowest score in IELTS (International English Language Testing System) was a reading test.

In Indonesia, English is one of the main subjects in the national curriculum. English is taught from Junior High School for three years. After that, it was taught again in Senior High School for the same period. Up to 2004, the only official test form of English in all levels of education in Indonesia was reading comprehension grammar. There were no tests on writing, listening, and speaking. That is why the main focus of teaching English is on reading comprehension. However, according to the Department of Education of Indonesia, the average scores of English are the second-lowest scores after mathematics nationally (Diknas, 2004).

Instrumentation

The instrumentation used in this research was standard reading comprehension tests from the Department of National Education of Indonesia. Each reading test consists

of two reading passages followed by 10 questions, which asked understanding in reading comprehension. None of the passages asked for vocabulary or grammar knowledge.

Procedures

The participant was tested to answer the questions from an English reading text as a pre-test. After the test, the participant was interviewed about how she went about understanding the reading text. On the next day, the participant was given a learning intervention that was training about inference. In the training, I taught the participant how to use inference in understanding an English reading text. The training was held for 60 minutes each day for two days. The training included some practices. Then, in the post-test, the participant was asked to answer the questions from another English reading text, which had the same level as the previous test. The participant was asked to use the think-aloud method and inference in understanding the text. Finally, the participant was interviewed about how she did the reading text different from the pre-test.

Teaching inference as an instructional intervention design

In teaching inference, I used the think-aloud method. This method is very helpful for identifying types of inference during reading comprehension (Laing & Kamhi, 2002).

To model the think-aloud strategy, I started by telling the participant that a good reader should think while reading a text. I wrote on a piece of paper some of the things that a reader might consider:

- What she notices—information she may think important
- Facts and possible facts about characters or the story—thing she is figuring out
- Predictions—what might happen next
- Questions she has—about words or phrases
- Personal reactions—how she feels about what is in the text
- Making connections
- Monitoring and correcting
- Clarifying
- Applying previous or new knowledge

- Identifying what's important

(Adapted from Leslie Oster, 2001 and Jim Burke, 2000)

Next, I demonstrated the use of the think-aloud strategy using an English reading text. I also provided another example of using a think-aloud strategy by playing a cassette recorder of my previous research.

After the demonstration, we discussed the comments that I made in my thinking aloud strategy. The next day, I repeated this procedure until the participant understands how to use a think-aloud strategy. Then, I asked the participant to do a think-aloud strategy by herself.

Data Analysis Techniques

The score of pre-test and post-test was compared to find out if there was a significant change between the two tests.

Results

Pre-test and post-test

The participant did not do the pre-test well. The result was not very satisfied according to the national standard test. She got 50 % while the national standard for a good result is 70 %. Her score in the post-test was 60 %, which cannot be claimed as a good result. However, the test score is not the only tool in measuring the improvement of the participant in understanding English reading texts. Another measurement is the interviews.

Interviews

The main aim of the interviews was to find out the participant's perspective about her efforts in doing the test. I asked the participant what her main problems in understanding the text and how she coped with the problems. In the first interview after the pre-test, the participant said that her main problem with the text in the pre-test and the texts she used to read was a lack of vocabulary and background knowledge. She stated:

"Bacaannya lumayan susah mungkin karena topiknya nggak begitu menarik buat Saya. Saya kan dari jurusan sosial sementara topiknya mengenai bahan bakar. Sebagian kosa katanya juga agak agak sulit."

("The text was a little bit difficult, maybe because the topic was not very familiar to me. I am from social science while the text was about fuel. Some words were very difficult too")

As predicted before the participant found difficulties in dealing with some unfamiliar words. She gave up on this problem because she had no idea about solving it.

"Kalau Saya menemukan kata-kata sulit dalam sebuah kalimat atau bacaan berbahasa Inggris, Saya biasanya meninggalkan kalimat itu lalu pindah ke kalimat berikutnya. Supaya nggak makan waktu. Dan kalau ada pertanyaan mengenai kalimat yang Saya tinggalkan tadi, Saya tebak aja jawabannya. Saya tahu ini masalah besar Saya dalam memahami bacaan berbahasa Inggris tapi gimana lagi. Bingung sih!"

("When I found one or two difficult words in a sentence, I usually skip that sentence and move to the next sentence. And if I found the questions related to that sentence, I just guessed the answer. I know this is my big problem in understanding English reading texts but I just don't know what to do")

In the second interview after the post-test, the participant was asked the same questions about how she went with the text. She said she had the same problems as the previous test. However, she used a different approach when she found difficult words. She tried making connections between sentences and guessed the meaning of the words based on the context in the sentences.

"Saya menebak arti dari beberapa kata-kata sulit. Saya nggak begitu yakin tebakan Saya itu benar tapi Saya pikir cukup membantu dalam memahami teks."

("I guessed the meaning of some difficult words. I was not sure if my guessing was right but it helped me a lot in understanding the text")

Comments about using inference and think-aloud during the reading process

When the participant was asked about using think-aloud and inference, she said:

"Ini metode baru yang belum pernah Saya gunakan sebelumnya. Saya pikir cukup membantu dalam beberapa hal. Saya lebih kritis dalam membaca. Saya dipaksa untuk menghubungkan satu kalimat dengan kalimat yang lain. Biasanya kita kan cuma mengartikan kalimat per kalimat tanpa merangkai hubungan antar kalimat. Manfaat lain buat saya adalah saya jadi terbiasa mempertanyakan maksud sebuah kalimat dan memperjelasnya dengan asumsi saya sendiri."

Cuma masalahnya metode ini makan waktu. Kalau dalam tes sebenarnya, Saya nggak mungkin memakai metode ini. Misalnya waktu tes Ebtanas dulu, waktunya 90

menit sedangkan soalnya cuma 60. Dan ada sekitar empat bacaan. Tapi untuk studi Saya mungkin cukup membantu"

("This is a new method that I have never used before. To some extent, I think it's very helpful. It helped me a lot. Became more critical in reading. I was pushed to make connections one sentence into another. Usually, I just translate the sentences without making any connections. Another advantage for me is that I get used to asking myself a question about the meaning of a sentence and then make an assumption of my own. But the problem was it took a lot of time. I think I cannot use this method in reading tests. In reading tests like national final examinations, the time was only 90 minutes with 60 questions. And there were four reading passages. Maybe I can use it in understanding my materials in my study.")

Discussion

The interviews revealed more information than the tests. The participant realized that inference helped her in overcoming some of her main problems in understanding English reading texts. For example, when she found a difficult word in a text, she guessed by making connections between the previous sentence and the next sentence. She also often activated her schemata during the reading process by making connections between the sentences. By using an inference strategy she could read between the lines. However, she needs some more practice to make the strategy familiar to her.

It doesn't mean inference strategy is the best solution for any problems in understanding English reading texts. Guessing or making connections cannot always solve a problem such as a lack of vocabulary. Reading various types of text will help readers cope with this problem (Burke, 2000).

Another important point is that think-aloud is only a method in measuring inference strategy in reading. This method will lead the readers to use inference in reading comprehension. Readers do not need to use this method in reading every text. This method cannot be used if readers follow a particular test in reading comprehension as mentioned by the participant in the second interview. It will disturb other participants. Besides, the think-aloud method takes more time than silent reading.

Conclusion

Many researchers have examined the use of inference in understanding reading comprehension texts. The results have shown that the inference strategy has an important

role in helping readers comprehend texts. This study also found some advantages that the participant gets in using inference during the reading process. The participant states that this strategy is very helpful for her to understand the English reading text.

However, as the participant stated in the interview, she was never taught this strategy before. The inference strategy is new for her. Teachers should promote the use of an inference strategy in understanding an English reading text for students from a non-English background. The inference will help students in dealing with many problems in understanding English reading texts.

References

- Anderson, J.R. (1995). *Cognitive psychology and implications (4th ed)*. NY: W.H. Freeman and Company.
- Butcher, K.R. (2006). Learning from text with diagrams: Promoting mental model development and inference generation. *Journal of Educational Psychology*, 98(1), 182-197.
- Burke, J. (2000). *Reading reminders: Tools, tips, and techniques*. Portsmouth, NH, USA: Heinemann.
- Bruning, R.H., Schraw, G.J. & Ronning, R.R. (1999). *Cognitive psychology and instruction (3rd ed.)*. Upper Saddle River, NJ: Merrill Prentice hall.
- Celce-Murcia, M. & Olshtain, E. (2000). *Discourse and context in language teaching: A guide for language teachers*. Cambridge: Cambridge University Press.
- Departemen Pendidikan Nasional. Retrieved 29 May, 2006, from <http://www.diknas.org>.
- Laing, S.P. & Kamhi, A.G. (2002). The use of think-aloud protocols to compare inferencing abilities in average and below-average readers. *Journal of Learning Disabilities*, 35(5), 436.
- Matlin, M. W. (2005). *Cognition (6th ed.)*. Hoboken, NJ: John Wiley & Sons, Inc. Oster, L. (2001). Using think-aloud for reading instruction. *The Reading Teacher*, 55(1), 64.
- Pearson, P.D., Roehler, L.R., Dole, J.A., & Duffy, G.G. (1993). Developing expertise in reading comprehension. In Samuels, S.J. & Farstrup, A.E. (Eds.). *What research has to say about reading instruction (2nd ed.)* (pp.145-199). Newark, Delaware, USA: International Reading Association.
- Reed, S.K. (2004). *Cognition: Theory and applications*. Belmont, USA: Wadsworth.

- Sawir, E. (2005). Language difficulties of international students in Australia: The effects of prior learning experience. *International Educational Journal*, 6(5), 567-580.
- Sugirin (1999). Studying the academic reading comprehension process: Responding to methodological concerns. Paper presented to HERDSA Annual International Conference. Melbourne, 12-15 July.
- Weaver, C. (1980). *Psycholinguistics and readings: From process to practice*. Toronto: Little, Brown and Company.