

The Use of Cognitive and Metacognitive Strategies Across Proficiency and Task Complexity

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Abstrak

Siswa-siswa memiliki pendekatan dan strategi yang berbeda-beda dalam menghadapi tugas komprehensi membaca. Penelitian ini menginvestigasi strategi kognitif dan metakognitif yang digunakan siswa dengan tingkat kemampuan berbeda dalam tingkat kompleksitas tugas berbeda pula pada siswa-siswa SMA di Surabaya, Indonesia. *Think-aloud protocol* digunakan dalam mendapatkan data yang direkam, di transkripsi, dan dikode menggunakan kode yang telah ditentukan sebelumnya. Hasilnya menunjukkan bahwa para siswa menggunakan hampir semua strategi kognitif dan metakognitif, kecuali *Comprehension Monitoring*, *Predicting*, *Visualizing*, *Adopting an Alignment*, dan *Analysing the Author's Craft*. bahkan, siswa dengan kemampuan tinggi menggunakan lebih banyak strategi daripada siswa dengan kemampuan rendah, terutama dalam proses *Evaluating* dan *Monitoring*. Selain itu, tingkat kompleksitas tugas mempengaruhi penggunaan strategi pada kedua grup; tugas yang lebih rumit membuat strategi *Monitoring* dan *Evaluating* lebih banyak digunakan.

Kata Kunci: strategi membaca, strategi kognitif, strategi metakognitif, tingkat kompleksitas tugas

Abstract

Students have different approaches and strategies in coping with reading comprehension task. this study investigated the cognitive and metacognitive strategies used by students across proficiency and task complexity of high school students in Surabaya, Indonesia. *Think-aloud protocol* was used in collecting the data, which were recorded, transcribed, and coded using predetermined codes. The results showed that students employed almost all of the cognitive and metacognitive strategies, excluding *Comprehension Monitoring*, *Predicting*, *Visualizing*, *Adopting an Alignment*, and *Analysing the Author's Craft*. Moreover, High proficiency students were found using more strategies than the low proficiency ones, especially in *Evaluating* and *Monitoring* processes. Furthermore, task complexity affects the strategies used by both group; harder task made *Monitoring* and *Evaluating* strategies used more.

Keywords: reading strategy, cognitive strategy, metacognitive strategy, task complexity

INTRODUCTION

Learning reading is one of the most basic things in learning English and in gaining literacy. It plays a great role in gaining new information, especially for academic purposes (Zhang & Seepho, 2013). Moreover, in EFL (English as Foreign Language) country such as Indonesia, china, and other Asian EFL countries requires English to gain developmental and communicative potentials with other countries which can be achieved by reading.

According to Wooley (2011), reading comprehension is the process of making meaning from text. Its goal is to understand what does the text describes instead of merely obtaining meanings of some isolated words or sentences in the text. A common view in reading that it is done from finding the meaning from words, then to clauses and sentences, and forming meaning of the paragraph; or in short "starting at the bottom" until the meaning of the text is understood (Anderson, 1985). However, this common view is not

fully correct. He added that reading also involves selecting and using knowledge in understanding the text.

"Reading is a process in which information from the text and the knowledge possessed by the reader act together to produce meaning" – Anderson, 1985

Students' autonomy in reading also is one of the most frequent problems encountered by EFL learners (Chamot, 2004). In overcoming that problem, most appropriate method that also encourages autonomous reading for students with various proficiency levels is Metacognitive strategy (Zhang & Seepho, 2013). Metacognitive strategy covers phases that have important roles in enhancing student's reading comprehension such as planning, monitoring, and evaluating (Zhang & Seepho, 2013). But this study employs qualitative approach instead of quantitative one which is dominantly used in researching learning methodology.

Since students with different proficiency levels use different strategies which determines their accomplishment in completing the task given (Scarcella

& Oxford, 1992), teachers need to understand how students with high proficiency levels are able to overcome the difficulties of different task in order to be able to know which strategies work the best in achieving reading goals.

This study will try to seek better understanding in students' metacognitive strategy when facing high level reading and to determine the pattern of metacognitive strategy used by high-proficiency students. Therefore, three research questions that were formulated from the gaps in research studies were:

1. What are the cognitive and metacognitive strategies that are used by students with different proficiency levels in reading comprehension?
2. What are the differences in the use of strategy between the high-proficiency and low proficiency high school students in reading comprehension?
3. Does text complexity affect the cognitive and metacognitive strategies used by students across proficiency? What are the differences?

METHOD

Participants

The study was conducted to 6 11th grader of high school in Surabaya Indonesia. Teachers' recommendation followed by C-test was used to classify students into two groups: low proficiency students and high proficiency students. Students that scored more than 90 were classified as high proficiency students, and students that scored below 70 were classified as low proficiency students.

Instruments

There was only one instrument used in this study; think-aloud protocol. It is a protocol in which the participants were asked to speak what they are thinking, as if they are speaking to themselves. Think aloud protocol provides detailed information of task-induced reader behaviours in readers' mind and it enables the effect of affective states on reader-text interaction (Afflerback, 2000). Moreover, since that there are no interval between the processing and reporting, the participant can be involved in the task while reporting what they are thinking, which provides elicits information attended recently by the learners.

Predetermined codes were used in analysing the data collected using think-aloud protocol. The codes are as follows:

Table 1. Metacognitive strategy codes

Metacognitive Processes	Metacognitive Strategies (Codes)	Description of Codes
Planning (Pre-reading)	Advanced Organizer	<ul style="list-style-type: none"> • Determining reading task's nature • Setting reading goal • Planning sub-tasks reading objectives
	Organizational Planning	<ul style="list-style-type: none"> • Planning the content of each tasks, the parts of specific reading tasks • Planning strategies to complete the task • Relating prior knowledge with the reading task
	Selective Attention	<ul style="list-style-type: none"> • Focusing on a particular task • Selecting strategies for the particular task
	Self-Management	<ul style="list-style-type: none"> • Applying strategy(s) to the particular task • Adjusting strategies to achieve goals
Monitoring (While-reading)	Comprehension monitoring	<ul style="list-style-type: none"> • Checking accuracy, understanding, and appropriateness on the reading task and or process • Checking difficulties and abilities in each task
	Production Monitoring	<ul style="list-style-type: none"> • Checking whether the strategies learnt in class is usable for the task • Tracing the strategies and adopt other strategies if the strategy doesn't work
Evaluating (Post-reading)	Self-assessment	<ul style="list-style-type: none"> • Checking whether the goal is met or not
	Self-Evaluation	<ul style="list-style-type: none"> • Evaluating how well one learned to read • Evaluating the strategies used
	Self-Reflection	<ul style="list-style-type: none"> • Reflecting on problems encountered

Table 2. Cognitive strategy codes

Cognitive Strategies	
Strategy	Definition
Rehearsal	Reciting the information that need to be learnt
Elaboration	Summarizing the text in order to integrate between the background knowledge with the new information
Organization	Outlining the information to make connections with prior knowledge
Analyzing	Using previous learners on current situations

Data Collection

The procedure of think-aloud protocol that was used in this research is as follows:

1. The researcher gave general instructions orally to the participants in Bahasa Indonesia as the participants' native language to ensure clarity
2. The participants were administered with the reading section that has been prepared by the researcher
3. They were assigned to a packet of materials which contain a text to read with the questions regarding the text given
4. The participants read the passage and do the task at their own pace, while saying what they were thinking aloud
5. Voice-recording was done from the moment the participants looked at the text sheets until they have done doing the task.

The voice recordings were transcribed and coded using the codes on table 2.1 and table 2.2 above. The coded transcript were analysed by the researcher. Moreover, peer debriefing was done to the coded transcript to make sure that the coding process was done properly, and there were no mistranslation of the participants' statement into codes

RESULTS

The cognitive and metacognitive reading strategies across proficiency

The think-aloud protocol demonstrated that students with different proficiency levels used various kinds of cognitive and metacognitive strategies in facing reading comprehension tasks. The coded transcript shows that both cognitive and metacognitive strategies were employed by the students while doing the task given by the researcher. The researcher breaks down this sub-chapter in two parts; (1) the strategies employed by high-proficiency students and (2) strategies employed by low-proficiency students

Strategies employed by high-proficiency Students

The high proficiency students show high variety of strategies while doing the task. The planning strategy of cognition and metacognition are found in all of the high proficiency students. For cognitive strategies, there is only planning and goal setting in which all the students employed in doing the reading task. Advanced organizer, organizational planning, selective attention, and self-management are also all found in the think-aloud protocol

"aku cuman liat teksnya sekilas terus I immediately know and apa namanya the type of text and then I

just went with the questions" Icha turn 3 – low complexity task

"jadi ini masuk di nomer pertama. Jadi ini saya baca dulu semua teksnya buat tau gimana teksnya"

Rio turn 1 – high complexity task

The quotations above are the examples of advanced organizer, in which students determined the reading task's nature while setting and planning the goals and objectives of the reading task.

As for the cognition, asking questions, predicting, and visualizing cognition were not found at all among the students. They only employed tapping prior knowledge; Directing attention; And making connections.

"ya ini bisa nemu soalnya pake nalar kan, soalnya emang female kangguru punya kantong kan" Rio turn 24 – low complexity task

"kalo pengen join kan biasanya ada kata confirmation, or join, or everything" Icha turn 2 – high complexity

"saya cari tanggalnya sih pasti di bacaan, sama soalnya" Rio turn 3 – low complexity task

"saya mencari disini di announcementnya ini mana yang menjelaskan tentang orang dan kayak 'who can join'" Nadia turn 1 – high complexity task

Strategies employed by low proficiency students

Low-proficiency students also employed both cognition and metacognition while doing the task given by the researcher. The cognition and metacognition were subtle and limited.

The metacognitive strategies that were employed by the low-proficiency students are Organizational planning; Selective attention, in which one of them used when 1st student encountered a task that couldn't be understood by that student; Self-management; Self-assessment; And self-reflection.

"R: "biasanya kalau masih ada sisa waktu di akhir untuk menjawab yang belum terjawab, apa yang dilakukan?"

S: "cari sih jawaban yang cocok. Saya coba pahami teksnya kalau waktunya masih ada. Saya pahami teksnya sampai paham, terus saya artikan, terus saya sambungkan artinya dulu sampai saya paham baru bisa saya jawab" Zahra turn 37 – high complexity task

The metacognitive strategies that were employed by the low-proficiency students are mostly used because either they were not able to grasp the task so they started employing a strategy or because they chose not to do the task since they did not understand the task and the text simultaneously.

As for the cognitive strategy, the low-proficiency students were able to employ some of the cognition that were able to help them achieve the goal of the task, which are answering the questions regarding the texts. All of the low-proficiency students employed directing attention cognition, in which they focus on a specific part of the text to answer the question of the task.

“karena gak tau artinya, saya cari soalnya yang ada di bacaan itu... yang mirip... cuman cari sekilas yang ada dari soalnya, terus diliat dari bacaannya” Rui turn 22 – low complexity task

One of the low complexity students were able to make connections between the current task (the task given by the researcher) and his own experience with different task, which shows that sometimes the low-complexity students able to use what they have learnt previously, or what they have done in the past task to aid them in doing current tasks.

“itu mas... kayak sama kayak bahasa Indonesia... pernah tau...” Risyad turn 30 – low complexity

Interestingly, the cognitive strategies clarifying and revising meaning were employed by the low proficiency students. These strategies were employed when they were not really sure with the answer that they first gave to the researcher. This is mostly because when they first gave their answer, it was formed hastily and with limited strategy or even with no strategy at all. The quotations of clarifying and revising meaning cognitive strategy are as follows:

“ enggak yakin karena enggak tau artinya... (22s pause) eh ini rawapening lake ini bukan village, soalnya ada tulisannya disini” Zahra turn 25– high complexity task

Table 3. Presence of metacognitive strategies

Metacognitive Strategies	Metacognitive Strategies (Codes)	Presence					
		High Proficiency Students			Low Proficiency Students		
		Nad ya	Ri o	Ic ha	Zah ra	R ui	Ris yad
Planning (Pre-reading)	Advanced Organizer	V	V	V	V	V	V
	Organizational Planning	V	V	V	V	V	
	Selective Attention		V	V			
	Self-Management	V	V			V	
Monitoring (While-reading)	Comprehension monitoring	V		V			

reading)	Production Monitoring						
Evaluating (Post-reading)	Self-assessment	V	V	V		V	V
	Self-Evaluation	V	V	V	V	V	V
	Self-Reflection	V		V	V		

Table 4. Presence of cognitive strategies

Metacognitive Strategies	Metacognitive Strategies (Codes)	Presence					
		High Proficiency Students			Low Proficiency Students		
		Nad ya	Ri o	Ic ha	Zah ra	R ui	Ris yad
Planning	Advanced Organizer	V	V	V	V	V	V
	Organizational Planning	V	V	V	V	V	
	Selective Attention		V	V			
	Self-Management	V	V			V	
Monitoring	Comprehension monitoring	V		V			
	Production Monitoring						
Evaluating	Self-assessment	V	V	V		V	V
	Self-Evaluation	V	V	V	V	V	V
	Self-Reflection	V		V	V		

The differences in the strategies used between the high proficiency and low proficiency students in reading comprehension

As expected, based on few researches (Anderson, 2002; Dhieb-Henia, 2003; Eskey, 2005; Zhang & Seepho, 2013), there are quite a few differences in the use of cognitive and metacognitive strategies employed by students with low proficiency and high proficiency. The differences range from the type of the strategies to the goal of the strategies used by the students. Table 4.1 is used to break down those differences.

The most noticeable difference between the use of strategies is the fact that high proficiency students employ more cognition and metacognition at the same time than students with low proficiency. As presented on table 4.1, high proficiency students employ 8 out of 9 metacognitive strategies and 6 out of 10 cognitive strategies; whereas the low proficiency students only employ 5 out of 9 metacognitive strategies and 4 out of 10 cognitive strategies.

Students with high proficiency use metacognition throughout their reading; from pre-reading, while-reading, to post-reading. They started with advanced organizer; they analysed the reading task quick to get a grasp of the nature of the reading task, as 3rd student stated on the low complexity task

“aku cuman liat teksnya sekilas terus I immediately know and apa namanya the type of the text and then I just went with the questions” Icha turn 3 – low complexity task

This strategy was only employed by high proficiency students, whereas the low-proficiency students goes straight to organizational planning by translating the questions and applied the same strategy for almost all of the tasks: finding the questions sentences in the text.

Moreover, the high complexity students used selective attention to manage their reading. after the high complexity students plan their strategies for the task, they tend to choose specific task that enables them to do the reading comprehension easier and more efficient.

“and then number 4 uhh.. ‘what happened to the boy before he was able to pull out a stick?’ uhh... maybe I can skip this because I have to read all of these to find the answer, so ill proceed to number 5” Icha turn 4 – high complexity task

Although one of the low proficiency student employed this strategy while doing the task given by the researcher, the goal and the reason why the said strategy was used were different; the student employed selective attention because the student were unable to do a certain task and decided to move on to another task instead.

“apa yang membuat internet connection lebih cepat... (20s) masih bingung saya loncati dulu ini soalnya” Zahra turn 51 – high complexity task

The first cognitive strategies that shows how high proficiency students are more superior than low priority students, especially in planning and monitoring cognition. High proficiency students were able to employ planning and goal setting, in which they recognize the type of the text in a quick reading and able to make sense of the tasks that followed the text.

“aku cuman liat teksnya sekilas terus I immediately know and apa namanya the type of the text and then I just went with the questions” Icha turn 3 – low complexity task

Another reason why high-proficiency students were able to do better than low-proficiency students is that they were using tapping prior knowledge cognition in aiding them completing the task. It helped them in doing the tasks more efficiently and faster, with less probability of errors. For instance in the quotations below,

“ya ini bisa nemu soalnya pake nalar kan, soalnya emang female kangguru punya kantong kan” Rio turn 24 – low complexity task

“kalo pengen joing biasanya ada kata confirmation, or join, or everything...” Icha turn 2 – high complexity task

As you can see, the 2nd student was able to complete the task right away only using prior knowledge that the student had about kangaroo. As for the 3rd student, the student was able to pinpoint the key information to complete the task by using prior knowledge of common task and text. Although both of them still employed clarifying to make sure that their answers were correct, it made the task way faster than when the low proficiency students did it.

The researcher also found an interesting finding in the cognitive aspects of both high-proficiency and low-proficiency students. Both groups were able to employ some cognitions, sometimes even used the same type of cognition for the same type of text and task, but the way the two groups used it and the goals in using them were totally different.

For instance, in using clarifying cognition, high proficiency students used the strategy to make sure that they left no mistakes in completing the task even though they had the right answer and had found the key information in completing said tasks

hmm... (20s) ah... park the car... eh eh eh sek sek sek... park the car... iya” Rio turn 15 – high complexity task

whereas the low proficiency students were only using the clarifying cognition because they did not meet the goal of the task. Moreover, the low proficiency students did

not use clarifying cognition at all when they found the answer of the questions or when they completed the task given, whether the answer is correct or not. Although high proficiency students used clarifying cognition more often, they did not employ revising meaning cognition more, since most of the metacognitive strategy they had employed had already helped them in answering the questions well

The cognitive and metacognitive strategies that are used by students across proficiency in facing reading comprehension with different task complexity

In this sub chapter, the researcher provides tables to compare the cognitive and metacognitive strategies used by students with different proficiency levels when facing tasks with different task complexities. This table aids the researcher in pinpointing the difference and analysing the codes as well as answering the third research question.

Table 5. The cognitive strategies used in facing different task complexity levels

Students	Cognitive Strategies							
	Rehearsal		Elaboration		Organization		Analyzing	
	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo
1 st	V	V	V		V		V	V
2 nd	V	V	V				V	V
3 rd	V	V	V		V	V	V	V
4 th	V	V	V				V	
5 th	V	V		V			V	
6 th	V	V		V			V	V

(1st: Nadya; 2nd: Rio; 3rd:Icha; 4th:Zahra; 5th:Rui;6th:Risya)

Table 6. The metacognitive strategies used in facing different task complexity levels

Students	Metacognitive strategies								
	Advanced organizer	Organization	Selective Attention	Self-Management	Comprehension Monitoring	Production Monitoring	Self-assessment	Self-Evaluation	Self-Reflection
1 st	V	V	V		V		V	V	V
2 nd	V	V	V				V	V	V
3 rd	V	V	V		V	V	V	V	V
4 th	V	V	V				V		
5 th	V	V		V			V		
6 th	V	V		V			V	V	

		nni																	
		H	L																
		i	o	i	o	i	o	i	o	i	o	i	o	i	o	i	o	i	o
1 st		V		V	V			V		V				V	V	V	V	V	V
2 nd		V		V	V		V	V						V	V	V			
3 rd		V	V	V	V	V		V		V				V	V	V	V	V	V
4 th		V	V	V	V											V		V	
5 th		V		V	V			V						V		V			
6 th				V	V		V							V		V			

(1st: Nadya; 2nd: Rio; 3rd:Icha; 4th:Zahra; 5th:Rui;6th:Risya)

The cognitive and metacognitive strategies employed by high proficiency students in different task complexity

There was no significant difference in the use of metacognitive strategies when high proficiency students face different task with different task complexities. However, we can see on the table that in facing high complexity task, high proficiency students don't employ production monitoring, in which they check whether strategies learnt while studying in the classroom are usable or to adopt other strategies when the current one doesn't work. This may be due to the fact that high proficiency students are more thorough when they are given harder task, in which they already choose strategies that require them to read and analyse harder.

As for the cognitive strategies, there are many differences found. The first one that goes along with the analysis earlier is that high proficiency students use clarifying cognition for high complexity task but not the low one. This shows that high proficiency students tend to be more careful in facing difficult task, which is preceded by using carefully chosen strategies. Moreover, they also employ reflecting and relating only for high complexity tasks, which has the same reason as why they employ clarifying cognition.

The cognitive and metacognitive strategies employed by low proficiency students in different task complexity

As shown in the table 3.3. and 3.4., low proficiency students have more varies reactions towards different complexity task levels. They employ selective attention, in which they choose specific task after unable to complete the current task they are doing. This is also in line with the complexity level, because higher complexity levels mean that the chances of students completing the goals are much less than doing low complexity task

Moreover, they also only employ self-reflection in high complexity tasks. In which they reflect how they are unable to get the answer despite the reading strategies that they use in trying to complete said tasks. However, self-reflection metacognition were only done by one student in the low-proficiency group, which means that this is unlikely to happen.

More differences are found in the cognition aspects of the strategies. The low proficiency students only employ making connection, summarizing, and finding key information cognitions in low complexity tasks. This is caused by the students unable to understand the Bahasa translation of the tasks or the texts, in which they mention a lot in the post-reading cognitions and metacognitions.

“kalau nomor 9 ini kan ditanyakan judul yang cocok, karena saya tidak mengerti sama sekali teksnya ya tidak saya jawab” Zahra turn 33 – high complexity task

“gak bisa mas... saya gak paham sama pertanyaannya” Risyad turn 18 – high complexity task

DISCUSSION

Cognitive and metacognitive strategies used

The metacognition employed by the students were Advanced organizer, Organizational Planning, Selective Attention, Self-Management, Production Monitoring, Self-Assessment, Self-Evaluation, Self-Reflection. As for the cognition, the strategies that they used were Planning and Goal Setting, Tapping Prior Knowledge, Directing Attention, Making Connections, Summarizing, Finding Key Information, Forming Interpretation, Monitoring, Clarifying, Reflecting and Relating, and Evaluating

Based on the data, the students showed cognitive and metacognitive strategy in dealing with the reading comprehension. Scarcella & Oxford (1992) stated that learners have their own techniques and or behaviour in completing language task. Chamot (2004) added that any

actions and thoughts that learners do or have to achieve a reading goal are called reading strategy, this matches the basic finding of this research which is that all subjects use strategies in completing the reading task.

Moreover, this finding supports Brantmeier's (2005) research in which he showed that variety of strategies will be employed by students depends on the tasks' needs or demands. Each of the cognition and metacognition was employed by the students. The explanation for this finding is that students will always use variety of strategies in aiding them to complete certain reading task, no matter how little the frequency of the strategies used are.

Differences in the use of strategies across proficiency

The researcher found many differences in the use of cognition and metacognition between the two proficiency groups. As expected, high proficiency students use more strategies, both cognitive and metacognitive, in doing the reading tasks. This finding is in line with oxford's (2003) claim that strategies and learning styles determine how well learners learn and do tasks. She also added that students' wide variety of strategies and style preferences are required to make learners perform well.

The next finding is that students with low-proficiency level tend to avoid the Advanced Organizer and Organizational planning. They don't determine the nature of the reading task or planning objectives and set the reading goal, which is compatible with Zhang & Seepho's research in 2013. They stated that there are many possibilities of why low proficiency students tend to not use both strategies; which are familiarities, time management, and simply willingness.

Echoed by previous researches, (Anderson, 2002; Dhieb-Henia, 2003; Eskey, 2005; Zhang & Seepho, 2013) monitoring strategies are widely used only among high proficiency students. This shows that the main difference between the two groups are the fact that high proficiency students have better monitoring skills, which is extremely important for getting achievements in reading. Students' good metacognitive awareness in using and employing strategies along with their good linguistic knowledge could be the explanation for this phenomenon.

This goes the same with the cognitive aspects of both groups. Low proficiency students only use Directing Attention, Making Connections, Summarizing, Finding Key Information, Forming Interpretation, Clarifying, and Revising Meaning. Less than half of the cognitive strategies that high proficiency students used. Anderson (1985) has explained that cognitive and language abilities are related. The possible explanation is that because low

proficiency students did not succeeded in their language development of comprehension and word meanings, whereas the high proficiency students did.

Differences in the strategies used when facing different level of complexity

The only difference in the use of metacognitive strategies employed by high proficiency students is the presence of Production Monitoring. Oddly, high proficiency students used Production Monitoring when facing high complexity task instead of the low one. They checked whether strategies that they learnt in the classroom were usable in completing the task. The explanation can be traced to how Indonesian teachers teach their students. The high-proficiency students used Production Monitoring since they had encountered similar reading task with the one that they had in the classroom, which explains why they didn't use it when facing high complexity tasks that aren't usually given in Indonesian classroom.

In cognition, the high proficiency students used Clarifying in the high complexity task but not in facing low complexity task. The possible explanation is because since the task is more complex and harder than the one they usually given in the classroom, they need to confirm and re-check their answer. This didn't happen in the low complexity task mostly because the students could use the strategies learnt in class and already found the key information needed in completing the task.

CONCLUSION & SUGGESTIONS

Students showed variety of strategies in facing reading comprehension task. Both metacognitive and cognitive strategies were employed in achieving the goal of the reading task. The researcher found that students with different proficiency levels employed different kind of strategies in facing the same reading task. Moreover, the two proficiency group used different metacognitive and cognitive strategies when they were faced with different tasks with different complexity levels.

These findings are in line with previous researches (Anderson, 2002; Dhieb-Henia, 2003; Eskey, 2005; Zhang & Seepho, 2013) which shows further that students with different proficiency levels employ different kind of approach in completing reading tasks. The differences found can be a good resource for teachers, students, and future researchers in understanding the strategies that high proficiency and low proficiency students use in reading comprehension task.

Moreover, task complexity plays a big role in the determination of students' strategy. It triggers students in

using different approach in completing the goals. This research has found that high proficiency students employed more evaluating strategies in facing harder level of task complexity, whereas the low proficiency students didn't show any significant difference in the use of strategy; they tended to either avoid the question or employed random guessing.

The researcher hopes that these findings will enlighten both teachers and students in the use of strategies when facing reading comprehension task. In which teachers will be able to understand more how different proficiency level students cope with different reading task, and students will be able to grasp how students with higher proficiency level able to achieve the goals of certain reading tasks.

Teachers may use the information gathered from this research in knowing what strategies that students that are successful in completing reading goals employ, which they can show and demonstrate to their students in the classroom. teachers can equip their students with more tools in their study of English as the foreign language, especially with cognitive and metacognitive strategies.

Students, regardless of their education level, may utilize the strategies that this research has found that were employed by high proficiency students to aid them in their learning. They can try to understand how to cope with different levels of task complexity in order to complete their goal when they are doing reading task in their study.

Lastly, for future researchers, this research gives them opportunities in conducting research regarding the reading strategies across proficiency levels and task complexity. moreover, the possibility of finding more insight in reading strategies will bring good in foreign language education.

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