



## **The Development of Reading Literacy Using Metacognitive Reading Strategies with Analysing Text Structure**

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The objectives of this research were to 1) develop reading literacy using metacognitive reading strategies with analysing text structure, 2) develop metacognitive reading behaviours using metacognitive reading strategies with analysing text structure, and 3) study the relation of reading literacy and metacognitive reading behaviours of Mathayomsuksa 1 students after learning by using metacognitive reading strategies with analysing text structure. The samples were 30 of Mathayomsuksa 1/1 students who enrolled Thai language subject in semester 1, academic year 2023 at Kham Kaen Nakhon School, The Secondary Educational Service Area Office KhonKaen. Research instruments were six lesson plans using Metacognitive Reading Strategies with Analysing Text, post-lesson report, teaching behaviours of teachers and learning of students report, metacognitive reading strategies with analysing text checklist, reading literacy framework process checklist and reading literacy assessment. The instruments used to evaluate the research were reading literacy test and reading behaviours questionnaire. Statistics used for data analysis were mean, standard deviation, percentage, Pearson correlation coefficient and content analysis. The findings indicated that 1) the percentage of the students' reading literacy scores were 83.07 and 80 percentages of the students met the criteria which was at a higher level, 2) the student's metacognitive reading behaviours were at a high level and 80 percentages of the students met the criteria at a higher level and 3) metacognitive reading behaviours and reading literacy were related after using metacognitive reading strategies with analysing text structure.

**Keywords:** reading literacy, metacognitive reading strategies, reading strategies, analysing text structure, action research

### **INTRODUCTION**

The government policies state that developing reading literacy is important for dealing with changes of the world. Learning standards and indicators for Thai language according to The Basic Education Core Curriculum B.E. 2551 prescribe that reading is

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one of the five strands since reading is an essential tool for communication, knowledge building, thoughts and self-development. (Office of the Basic Education Commission, 2008) Moreover, learners' quality according to The Basic Education Core Curriculum B.E. 2551 also indicates that linguistic competence especially reading help learners communicate more effectively.

Reading literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Reading literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society. (OECD, 2019; NAEP, 2019; PIRLS, 2021) Furthermore, the important factor indicating that one has mastered reading literacy is the ability to critically evaluate media, not only written text but also any other types of medias such as internet and social media. (Santiwat Chandai & Nattapong Noosawat, 2018)

According to researcher's observation, it indicated that learners' reading literacy was not satisfying especially article reading and typical story reading. The problem teachers face is that expository text reading tends to be more difficult for students than typical story reading. Several characteristics of expository text may contribute to this difficulty are technical vocabulary, high density of fact, unfamiliar content and cognitively demanding concepts. (Roehling et al., 2017) Moreover, this could be noticed through exercise checking, testing and learners' answering questions habits which implied that what learners lack was reading literacy. Another problem was the shortage of instructional media, technology, innovation and strategies which did not contribute to the development of reading literacy.

Furthermore, the result of the Ordinary National Educational Test (O-NET) in Thai language of Mathayomsuksa 3 students, Kham Kaen Nakohn School during academic year 2017 to 2021 was decreased. Furthermore, the overall scores of the test in the past three years was decreased to -6.31 which was lower than the average score of the country. For this reason, the National Institute of Educational Testing Service suggested that learning standards needed to be improved was Standard TH1.1 in academic year 2018 and 2019. (The National Institute of Educational Testing Service, 2017-2021) Apart from the O-NET test, 79 of Mathayomsuksa 1 students resulted in reading and writing test especially reading ability was moderate at 28.42 percentages. 29 students were at poor level at 10.43 percentages.

According to Programme for International Student Assessment (PISA) in 2018, it showed that Thailand reading literacy score was 393 which was 16 points decreased compared to 2015. This result was 94 points lower than the standard score which was 487. Considering the tendency of Thailand's PISA score from 2000 to 2018, it indicated that the score was reduced significantly. (Nanthawan Somsook & Suchada patthamawiphat, 2022; Hattakarn et al., 2022) PISA had suggested that Thai schools need to improve reading skills and encourage students to read outside of the classroom. (The Institute for the Promotion of Teaching Science and Technology, 2021)

Vazquez-Lopez & Huerta-Manzanilla (2021) state that it is necessary to create strategies to improve the reading competence of adolescents. The basis for developing

these strategies is knowing the factors that influence the development of reading skills. One of the most important factors is metacognition strategies consisting of three minor factors which are understanding and remembering, summarizing and assessing credibility.

According to the metacognition strategies, understanding and remembering including summarizing are useful tools to improve reading skills effectively. Researcher needs to implement new techniques and strategies to solve the problems. Therefore, it is advisable to invent new strategies to improve reading literacy efficiently. (The Institute for the Promotion of Teaching Science and Technology, 2021)

Having done literary review and research study involving reading literacy development, the researcher decided to choose suitable learning activities and innovation which could be used to improve learners' reading literacy. That is learning management using Metacognitive Reading Strategies with Analysing Text Structure. Provided that learners were able to apply systematic strategies, it would be convenient for them to interpret, understand, evaluate and reflect what they have read effectively.

A reading comprehension strategy is a plan or technique used by students to get information they need from the text or a systematic sequence of steps for understanding text. Moreover, the strategies emphasize conscious plans under the control of the reader. (Dymock & Nichoson, 2010) The theory of metacognition is an awareness and understanding of one's own thought processes by carefully planning, regulating, controlling, managing, checking and evaluating. (Pasana Chularut, 2020) Using metacognition in reading processes can be performed as followed. Marshall, K. J., & Herrmann, B. A. (1990) First, teachers need to understand the basic function of reading. Second, provide learning processes that allow learners to use strategies on a pre, while and post-reading stage. On a pre-reading stage, teachers can ask some questions to recall prior knowledge, present vocabulary or grammar and predict the text by providing a story in a chronological order. On a while-reading stage, students need to practice reading strategies to regulate themselves and control their reading processes by providing them different types of written texts. Moreover, students need to have the ability to identify main idea and supporting details. Apart from that, readers rely on metacognitive reading strategies to manage their thoughts during reading processes. Some of these metacognitive strategies which are helpful for learners include note taking, summarizing, underlying, matching, using mind map, organizing, identifying important details and checking understanding. Besides, The Metacognition for teaching analytical reading, it helps the learner to solve the problem about the reading and also improves student's reading ability due to the learner's self-awareness, planning before reading, choosing an appropriate strategy, monitoring their understanding of reading and evaluating about the result of reading by themselves. (Savitri Chitbanchong, 2021) "Another interesting finding of current research is that metacognitive strategies had impact on student' reading comprehension achievement. It promoted student's reading performance as well as their ability to maximize their reading effectively. (Muhid, A., Amalia, E. R., Hilaliyah, H., Budiana, N., & Wajdi, M. B. N., 2020)"

Analyzing Informational Text Structure is an analytical reading process that readers use to examine the text; that is readers observe specific details in the text. Moreover, readers or learners can analyze text structures by using a mind map to interpret the information written in the text. Using analyzing informational text structure, it acts as a useful tool to assist learners to identify the main idea, supporting details and key information that authors want to convey. Thus, developing learners' reading literacy using analyzing informational text structure will help learners understand authors' purposes and organize the information presented in the text. (Goldman & Rakestraw, 2000) Moreover, the more clearly an author organizes an informational text, the easier it is for a reader to recognize the text structure. Well-structured text improves students' abilities to construct accurate meaning, acquire new content knowledge, ask relevant questions, predict forthcoming information, summarize the text, and monitor comprehension. Well-structured text also helps students to more easily and accurately differentiate the important main ideas from the sub-ordinate details; with less well-structured text, students tend to recall more peripheral details and fewer main ideas. Readers who are aware of the text's structure organize the information presented in the text as they read, chunking the information into thought units that are more readily stored and later recalled. (Jones et al., 2016)

Learning by using metacognitive reading strategies with analysing text structure is the learning process which is influenced by cognitive psychology in order to develop reading literacy. In each learning process, metacognitive reading strategies were the main method supported by analysing text structure. The learning processes consisted of four stages. First, pre-reading stage; it allowed learners to prepare, plan and use reading strategies to organize the information. Second, while-reading stage; this stage allowed learners to start reading and analyzing the text structures. This stage presented five informational text structures for learners to read which included description, compare-contrast, sequence, cause-effect and problem-solution. The while-reading stages could be classified as three minor stages; recalling prior knowledge, identifying and diagnosing, and selecting and managing which could be performed by using questions, checking overall components, formulating concepts and examining. Third, post-reading stage; this stage allowed learners to summarize main idea, concepts, and ideas of the text in order to creatively apply them in their daily life. To summarize the text, it would be practical if learners used their own words from their understanding. This can be done by allowing learners to summarize main idea by themselves, exchanging information with their classmates, and revising their final thoughts. In the last stage which was reading evaluation, learners had to evaluate themselves in order to reflect their mistakes, and problems and solutions. Learners were required to evaluate the results of their reading and how effective their reading processes were from the pre, while and post reading stages. The last evaluation was for metacognitive reading processes in order to figure out what strategies learners implemented.

As mentioned earlier, learning by using metacognitive reading strategies with analysing text structure was considered important and suitable for the development of reading literacy. This strategic reading performed as a useful tool to help learners read better. Furthermore, the reading processes were obvious which allowed learners to regulate, plan, examine and evaluate their reading processes themselves.

It allowed learners to develop understanding through inquiring authors' thoughts and realize text structures which contained authors' purposes and contents. This learning processes developed learners' reading literacy effectively; that was learners were able to access and recall, understand, interpret, apply, evaluate, reflect, and criticize the information efficiently.

## **METHOD**

### **Research Design**

This research implemented Kemmis's classroom action research: CAR (Kemmis, 1998) to analyze the data. The triangulation technique was applied in this research which consisted of four stages in each cycle; plan, act, observe and reflect.

### **Participants**

The sample was 30 members of Mathayomsuksa 1/1 students studying Thai language 1, code TH21101 in the first semester, academic year 2023, Kham Kaen Nakhon School, The Secondary Educational Service Area Office KhonKaen.

### **Instrumentation**

The instruments used in this research were classified as three types; 1) the instruments used for action research, 2) the instruments used for reflecting research results and 3) the instruments used for research evaluation.

The instruments used for action research

The instruments used for action research consisted of six lesson plans in Thai language using metacognitive reading strategies with analysing text structure for Mathayomsuksa 1 students. The subject code was TH21101, semester 1, academic year 2023. The topic was Receptive Skills: Reading. Each lesson plan lasted for three hours, therefore the total amount was 18 hours in this three spiral action research. "The text structure of each lesson plan consists of: Illustrations Example Text Structure (IETS), Definition and Classification Text Structure (DCTS), Comparison-Contrast Text Structure (CCTS), Cause-Effect Text Structure (CETS), Chronological order-Process Text Structure (CPTS) and Problem-Solution Text Structure (PSTS)

The instruments used for reflecting research results

The instruments used for reflecting research results after the end of each learning plan consisted of 1) post-lesson report, 2) teaching behaviours of teachers and learning of students report, 3) metacognitive reading strategies with analysing text checklist, 4) reading literacy framework process checklist and 5) reading literacy assessment with content based on the text structure in each plan

The instruments used for research evaluation

Two types of instruments were used for research evaluation. The first instrument was reading literacy test which included 35 items of subjective test with four to five multiple choices and five objective tests according to the evaluation framework synthesized by the researcher. (OECD, 2018; NAEP, 2019; PIRLS, 2021) It included three aspects; 1)

access and retrieve, 2) integrate and interpret, and 3) reflect and evaluate. The last instrument used for research evaluation was a 5-point Likert scale reading behaviors questionnaire for Mathayomsuksa 1 students which included 30 items of questions.

It was a self-assessment questionnaire applying from The Metacognitive Awareness of Reading Strategies Inventory: MARS (Kouider Mokhtari and Carta Reichard, 2002). Learners had to scale themselves according to their use of metacognitive reading strategies by following these criteria. One point was for learners who never use them. Two points were for learners who occasionally use them. Three points were for learners who sometimes use them. Four points were for learners who often use them. Five points were for learners who always use the strategies.

### **Procedure**

The research procedures were as follow.

#### *1. Planning*

Survey and analyze learners' problems using observation, interview and reading literacy test reports analyzation. Study students' learning evidence and assignments in order to address problems or factors affecting reading literacy. After that, identify the main cause of the problems and implement learning innovation acquired from literature review.

Study, analyze and synthesize the curriculum, indicators, learning strands and school curriculum in order to set the scope of the research.

Study, analyze and synthesize concepts, theories and review the literature which involved metacognitive reading strategies, analysing text structure, reading literacy and metacognitive reading behaviors.

Design, create, examine and develop the research instruments to make it effective and qualified. The research instruments included 1) the instruments used for action research, 2) the instruments used for reflecting research results, and 3) the instruments used for research evaluation.

#### *2. Action*

Implement the developed lesson plans using metacognitive reading strategies with analysing text structure. Six lesson plans, three hours each, were used in all three spirals of this action research process, thus 18 hours were the total amount of the time spent.

#### *3. Observation*

Collect quantitative and qualitative data using research instruments and methods developed in the first, second and third spiral.

#### *4. Reflection*

Summarize, analyze and discuss the research results acquired by collecting quantitative and qualitative data in each spiral leading to the revision for the next spiral.

## FINDINGS

### Reading Literacy

The results of learning management acquired in three spirals of action research process using research instruments which were six lesson plans, 18 hours in total, and reading literacy test to evaluate the development of reading literacy using metacognitive reading strategies with analysing text structure are displayed in table 1. The percentage of the average scores of the sample were expected to be more than 75 so as the number of the students who met the criteria.

Table 1  
Reading literacy

Number of the students (Person)	Total score	Mean	S.D.	Percentage	Number of students meeting the criteria			
					Met		Not met	
					Number	Percentage	Number	Percentage
30	30	24.92	1.80	83.07	25	80.00	5	10.00

Table 1. The results of students' reading literacy test indicating that the average score was 25.37 (83.07 %) and the number of students who met the criteria was 25 (80 %) which is at a high level.

When considering reading literacy aspects, (OECD, 2018; NAEP, 2019; PIRLS, 2021) the results are displayed in table 2.

Table 2  
The results of reading literacy aspects evaluation

Reading literacy aspects	The number of students	Score		S.D.	Average score percentage	The number of students meeting the criteria	
		Total	Average			Number (Person)	Percentage
1. Access and retrieve	30	10	9.11	0.55	91.07	30	100.00
2. Integrate and interpret	30	10	8.27	0.72	82.65	26	86.67
3. Reflect and evaluate	30	10	7.55	0.79	75.50	23	76.67

Table 2 displays the test results of reading literacy aspects (OECD, 2019; NAEP, 2019; PIRLS, 2021) which consist of three aspects including 1) access and retrieve, 2) integrate and interpret, and 3) reflect and evaluate. The percentage of the average score of the first aspect is considered the highest at 91.07. The percentage of the second aspect's average score is 82.65. The last aspect's average score is at the lowest level at 75.50 percentages. All 30 students meet the first aspect criteria which is 75 percentages, thus the percentage is 100. 26 of the students meet the second aspect criteria, therefore the percentage is 86.67. 23 students meet the last aspect criteria, so the percentage is 76.67 which is considered the lowest.

### The results of metacognitive reading behaviors development

The researcher uses 5-point Likert scale reading behaviors questionnaire of Mathayomsuksa 1 students to collect the results of metacognitive reading behaviors development acquired from learning management using six lesson plans in three spirals of action research process. Learners had to scale themselves according to their use of metacognitive reading strategies by following these criteria. One point was for learners who never use them. Two points were for learners who occasionally use them. Three points were for learners who sometimes use them. Four points were for learners who often use them. Five points were for learners who always use the strategies. The questionnaire is used to evaluate the research results using metacognitive reading strategies with analysing text structure of Mathayomsuksa 1 students. 75 percentages of the students are required to meet the criteria of metacognitive reading behaviors test. The results are displayed in Table 3.

Table 3  
The results of metacognitive reading behaviors test

Number of the students (Person)	Number of students resulted in metacognitive reading behaviours test						Number of the students meeting the criteria			
	Low Level		Medium Level		High Level		Met		Not met	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
30	-	-	5	16.67	25	83.33	25	83.33	5	16.67

Table 3 displays the results of metacognitive reading behaviours test. The results indicate that none of the students is at the low level, thus the percentage is 0.00. Five of the students are at the medium level, thus the percentage is 16.67. 25 of the students are at the high level which causes the percentage to reach 83.33. Numbers of the students meeting the criteria are 25, therefore the percentage is 83.33 which is higher than the criteria.

The results of metacognitive reading behaviors according to Mokhtari and Reichard (2022) are displayed in Table 4.



Table 4

The average score of metacognitive reading behaviors according to Mokhtari and Reichard' reading strategies (2022)

Reading Strategies	Pre		Result	Post		t	p	
	M	S.D.		M	S.D.			
Global reading Strategies	3.21	1.03	Medium	3.85	0.82	High	-7.252	.001**
Problem solving Strategies	3.44	1.04	Medium	4.02	0.78	High	-6.636	.001**
Support Strategies	3.42	0.64	Medium	4.24	0.60	High	-7.306	.001**
MRASI Overall	3.22	0.29	Medium	3.87	0.17	High	-7.513	.001**

\*\* The statistic significance is at 0.01.

From Table 4, the result of Problem-solving Strategies before using metacognitive reading strategies with analysing text structure is the highest in overall transcription ( $\bar{x} = 3.44$ ). The next one is Support Strategies which is also at a high level. ( $\bar{x} = 3.42$ ). Lastly, the result of Global reading Strategies is also displayed in a high level. ( $\bar{x} = 3.21$ ). Focusing on the overall aspects, the result of metacognitive reading behaviours is shown in a medium level ( $\bar{x} = 3.22$ ).

After using metacognitive reading strategies with analysing text structure, the result of Support Strategies is at the highest level ( $\bar{x} = 4.24$ ). The next one is Problem solving Strategies which is also at a high level ( $\bar{x} = 4.02$ ). Lastly, the result of Global reading Strategies is also displayed in a high level ( $\bar{x} = 3.85$ ). Focusing on the overall aspects, the result of metacognitive reading behaviours is shown in a high level ( $\bar{x} = 3.87$ ). This indicates that using metacognitive reading strategies with analysing text structure develop learners' reading literacy.

#### **The relation between reading literacy and metacognitive reading strategies after using metacognitive reading strategies with analysing text structure**

After learning management is finished, reading literacy and metacognitive reading behaviors of the sample students are evaluated by the researcher. Then, study the relation between reading literacy and metacognitive reading strategies after using metacognitive reading strategies with analysing text structure by implementing Pearson correlation coefficient. The results are displayed in Table 5.

Table 5

The relation between reading literacy and metacognitive reading strategies after using metacognitive reading strategies with analysing text structure

		META	RE.LI
META	Pearson Correlation	1	.765**
	Sig. (2-tailed)		<.001
	N	30	30
RE.LI	Pearson Correlation	.765**	1
	Sig. (2-tailed)	<.001	
	N	30	30

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From Table 5, the results indicate that after using metacognitive reading strategies with analysing text structure, students' metacognitive reading behaviours and reading literacy are related. The statistic significance is at 0.01 and Pearson correlation coefficient is at 0.71.

## DISCUSSION

Learning by using metacognitive reading strategies with analysing text structure help readers read strategically; that is it allows readers to assess their preparation, set purposes and factors leading to the success of reading. Moreover, readers are able to use different methods to interpret what they read meaningfully by applying relevant prior knowledge and experiences, thus it makes reading much more easier to understand. Apart from that, it allows readers to question the text, access and retrieve useful information, observe the structure and elements of the text which helps them read more effectively. Readers are able to organize their thoughts using appropriate types of infographics and recall those indefinite information in long-term memory when needed. Besides, it helps readers in considering the overall aspects of the reading text, identifying key words, inquiring, and summarizing the main idea of the text systematically using different strategies. As a result, readers can evaluate their reading processes in order to develop their reading literacy.

Focusing on each aspect, the result indicates that the highest average score is for the first aspect, access and retrieve because it is considered the primary reading which requires simple reading processes. Learners are able to read closely and retrieve information more easily, thus mastering access and retrieve aspect is by far the easiest and fastest.

The next aspect that are approachable for readers is the aspect of integrate and interpret. This aspect requires readers to analyse purposes, set goals and identify authors' intention, classify facts and opinions, summarize main idea and supporting details, sort out priority, explain causes and effects, find out problem and solution, compare the differences and interpret the text. Therefore, the aspect of integrate and interpret is considered more complicated; however, with the use of analysing text structure, it helps readers accomplish this aspect successfully. Readers are able to classify facts and opinions as well as summarize the text. Lastly, the aspect with lowest average score is the aspect of reflect and evaluate. According to classroom observation, learning

activities and assignments, they indicate that learners' attitude towards reflection and evaluation is unsatisfying. Learners are not enthusiastic in the process of reflection and evaluation since doing so requires higher order thinking. Moreover, learners are not confident to take risk in answering questions, thus the result of this aspect is the lowest among all.

Learning by using metacognitive reading strategies with analysing text structure not only helps students develop their reading literacy, but it also improve their communication skills, both sending and receiving. Besides, it promotes cooperative skills and teamwork which allow learners to interact with each other and the teacher. Learners are able to work cooperatively to think, read, compose, plan, act and reflect.

This research results were supported by the research conducted by Shemshadsara et al. (2019) which was Raising text structure awareness: A strategy of improving EFL undergraduate students' reading comprehension ability. The results of the inferential statistics revealed a significant mean difference between the reading comprehension of the experimental and control groups after the treatment. It was found that raising the students' awareness of text structure by adopting different expository texts resulted in the improvement of students' reading comprehension ability in the experimental group. Findings can contribute to the practical application of raising the students' textual awareness as an effective strategy in assisting them to get mastery over reading comprehension skill. Moreover, it was supported by the research studied by Visutsri Chanprasert (2019) which was Metacognitive Reading Strategies to Improve Reading Comprehension and Performance. Research findings could be concluded that 1) the students' post-experiment metacognitive reading awareness was significantly higher than their pre-experiment counterpart at the .01 level; and 2) metacognitive reading strategies enabled the students to better understand the reading text, as measured by their post-reading notes, and they also enabled students to improve their reading performance.

Learning by using metacognitive reading strategies with analysing text structure helped improve students' metacognitive reading behaviours, both overall and individual aspect. Metacognitive reading strategies with analysing text structure also promoted students' reading strategically; that was it allowed readers to clarify their reading processes, thus they were able to read more efficiently. Moreover, learning by using metacognitive reading strategies with analysing text structure helped learners plan their reading and check themselves in order to figure out what techniques, skills or competencies they needed so that they would be able to accomplish their reading. Consequently, the tendency of metacognitive reading behaviours is considered high.

This was supported by the research conducted by Palacheewa & Chunlasewok (2015) which was Enhance Metacognitive Skills Using Reflective Thinking Technique by Social Network for Tertiary Students in Educational Innovation and Information Technology Course. The samples were 131 tertiary students in Educational Innovation and Information Technology Course. The research findings were: tertiary students in educational innovation and information technology course study through reflective thinking technique by social network had pre-test metacognitive skills scores average of

61.93 and the standard deviation level of 8.79. Tertiary students in educational innovation and information technology course study through reflective thinking technique by social network had post-test metacognitive skills scores average of 68.71 and the standard deviation level of 9.98. Tertiary students in educational innovation and information technology course study through reflective thinking technique by social network had post-test metacognitive skills scores higher than pre-test metacognitive skills scores at the .05 level of significance. Correspondingly, it was supported by the research studied by Rassamee Ratanapracha & Wisa Chattiwat (2020) which was The Development of Reading Instructional Model Using Metacognitive Reading Strategies, Explicit Instruction and Think-aloud Approach to Enhance Reading Abilities and Self-regulation Abilities of University Students. The research findings revealed that 1) the instructional model called PPME Model consisted of 4 components 1) principles, 2) objectives, 3) learning process and 4) evaluation. The learning process composed of 4 stages: 1) Planning for Learning: P, 2) Presenting and Practicing: P, 3) Monitoring Understanding: M, and 4) Evaluating Reading Task: E. The efficiency of the PPME Model was 80.33/80.67; 2) the students' English reading abilities after using the PPME Model was significantly higher at the .05 level; 3) students' metacognitive strategies use after using the model was higher; 4) students' self-regulation abilities after using the model was higher; 5) the students' opinions towards the PPME Model were positive and 6) the PPME Model was verified at the highest level. Students with metacognitive reading behaviours develop apparent reading processes which normally occurred when students themselves plan and examine during their reading processes. Students were able to reflect their lessons learned, improve their reading processes and make them more effective. Thus, high level of metacognitive reading behaviours resulted in high reading literacy.

Furthermore, it was supported by the research conducted by Bernardo & Mante-Estacio (2023) which was Metacognitive reading strategies and its relationship with Filipino high school students' reading proficiency: insights from the PISA 2018 data. The results indicated variations in the students' awareness of which strategies aided in their reading comprehension and pointed to the need to better understand how effective reading strategy instruction was taught to and was engaged by Filipino students in their reading classes.

## **CONCLUSION**

The research findings were concluded as follow; 1) learning management using metacognitive reading strategies with analysing text structure developed students' reading literacy, 2) learning management using metacognitive reading strategies with analysing text structure improved students' metacognitive reading, and 3) students' metacognitive reading behaviours and reading literacy were related after using the model.

Reading strategically with the use of reading strategies played an important role in developing reading literacy. It was an essential tool for learners to read effectively and receive important information in this digital era with rapid information flow. Readers were able to select necessary information for their study, daily life and work. Apart

from familiar narrative reading, it was inevitable for learners to face with descriptive reading found in textbooks, articles and documentaries. Descriptive reading required learners to identify main concepts that the authors wanted to convey, as well as authors' purposes including description, compare-contrast, sequence, cause-effect and problem-solution. As a result, the ability to analyze text structure would help learners identify main idea, supporting details, words explanation, relevant causes, and arrange the story in a chronological order. These effectively developed reading literacy in three aspects which were access and retrieve, integrate and interpret, and reflect and evaluate.

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