EFFECTS OF SIX THINKING HATS AND CONTEXT CLUE STRATEGIES ON ANALYTICAL READING PRACTICES.

Tasanee Satthapong^{*}, **Sirion Jullasap^{**} & Sujintorn Sumransirikul^{***}** ^{*,**,***}*Faculty of Education, Suan Sunandha Rajabhat University, Thailand. Email:* <u>*Tasanee.sa@ssru.ac.th*</u>

ABSTRACT

This research aims (1) to study the problem and the causes of students (2) to study the effectiveness of the learning method by using six thinking hats with context clue strategies (3) to study the development of analytical reading ability of students. The target group of the research were 6 secondary students of Demonstration School of Suan Sunandha Rajabhat University, which investigates the problem condition while practicing the teacher profession. The research methodology was divided into 3 phases; Phase 1 analyze problems in the classroom, Phase 2 develops innovation, and Phase 3 implementation. The tools used in the research were 1) lesson plans based on six thinking hats with context clue strategies with skill training and 2) analytical reading tests.

The research findings were as follows:

1) The most problematic condition of the study was the identification of the importance and detail of supporting information from the reading of 12.2%.

2) The innovation used in problem solving is the learning management using the six thinking hats with prediction strategies. The results of the consistency check of the innovation by the experts found that the innovation is suitable 1.00 for use in solving the problem of analytical reading ability.

3) The average score of analytical reading ability highter than before. The results showed that the number of students passing the criterion was 66.66%. The percentage was 70, 66.67, 76.67, 73.34, 80 and 80 respectively.

Keywords--Analytical reading, Six thinking hats, Context clue strategies

INTRODUCTION

The reading was also an important in society development. It is a component of educational quality measurement that was the potential indicator for economic development. Reading is a complex behavior and an impressive achievement, as demonstrated by a century of research.

In year 2015, Thailand was evaluated the analytical reading of Thai students at lower score than the international average 49 (O-NET, 2015: 15) meant the students were basic level of analytical reading proficiency that could read and describe content when they were obviously direct meaning and citing summation or contrast or linkage to the low of existing knowledge. They were evaluated and analyzed as basic level. The comparison between year 2013 and 2014 were emphasized to analytical reading. Its competency was inclining down and 43 percentages of students were below basic of analytical reading. Seeing regional scores were found that the students in Central, Lower Northeastern, Southern and Lower Northern were average of analytical reading at low level (O-NET, 2015: 61). The Conclusion of knowledge and reading skill of students changed the direction to be unsatisfactory, because the total of low reading students were marginal increased.

[©]ICBTS Copyright by Author(s) | The 2019 International Academic Multidisciplines Research Conference in Brussels 127

Therefore, the Department of Thai language would encourage secondary students to have analytical reading. According to it was a knowledge and understanding skills then using in daily life, reflecting and giving the suggestion in contents with engagement in its for targets approach of each people. To develop knowledge and self-competency and social contribution (OECD, 2013; 61; OECD, 2010: 37), the learners of University used reading to learn in their objectives with complex stories and specific interesting stories to encourage literacy in own academic contents (Lee and Spratley, 2010; Mahimuang, 2017).

The result of study from concepts, theories, principles of literature reviews and researches related to analytical reading enhancement showed that the theories might be able to utilize in fundamental schooling development so as to encourage analytical reading for the learners in school based on the six thinking hats with prediction strategies.

Therefore, the aim of this study is formulated as follows:

The purposes of this study were to, (1) to study the problem and the causes of students (2) to study the effectiveness of the learning method by using six thinking hats with prediction strategies (3) to study the development of analytical reading ability of students.

LITERATURE

1.Analytical reading

The Basic Education Core Curriculum B.E. 2551 has specified the indicators of reading, analytical thinking and writing for students as follows: (1) Selective reading of the desired media for finding the purpose of data. Understanding and adapting well from what has been read (2) Identify the essentials and support or argue topics (3) Analyze, criticize, reason, reliability, sequencing and probability from the reading(4) summarize knowledge and gain insights from what has been read and (5) Summarize, debate, explain, express opinions, argue, support, persuade by writing in various kinds such as mapping ideas.

Educators (OECD, 2010: 37; 2012: 61) definition of analytical reading, each part of the definition is explained further:

1. Understanding refers to the ability to gain meaning from what is read. This can include the meaning of words or it can be more complex in identifying the underlying theme of a narrative.

2. Using relates to the notions of application and function (i.e. applying what has been read to an immediate task or goal, or using what is read to reinforce or change beliefs).

3. Reflecting on emphasises the notion that reading is interactive, where readers make connections with their own thoughts and experiences when engaging with a text.

In order to achieve one's goals, to develop one's knowledge and potential, and to participate in society – this statement is intended to capture the full scope of situations in which analytical reading plays a role. To achieve one's goals and to develop one's knowledge and potential refers to the idea that analytical reading enables the fulfilment of individual aspirations. The word participate is used because it implies that analytical reading allows people to contribute to society as well as to meet their own needs. (OECD, 2010: 37; 2012: 61)

Therefore analytical reading development for the learners, teachers needed to focus on the development of the learners in reading skill for understanding and reflecting resulted to the objective of learners and good reader (Loera, 2006 cited in Satthapong, 2018)

2.Six Thinking Hats

Six Thinking Hats is a technique by which one can structure "Decision Making" / "Thinking Process" be it in group or at an Individual level decision making. Sheth (2012) and

Tatiana (2015) et al. "Six Thinking Hats" method, transactional analysis and a reflective practice.

Lystopad (2017) et al. "Six Thinking Hats" technique by Edward de Bono. His great contribution is that he has created exercised for the development of creative thinking, which help to create atmosphere of joy, trust, mutual respect and understanding at classes. The "Six Thinking Hats" technique is a system de-scribing the tool for team discussion and individual thinking using six colored hats. The main approaches to its organization are the use of different mental processes (analysis, synthesis, comparison, generalization, classification, etc.), sense creativity, freedom of choice, self-realization, self-actualization, reflection.

Six Thinking Hats is a technique by which one can structure "Decision Making" / "Thinking Process" be it in group or at an Individual level decision making. Sheth (2012) and Tatiana (2015) et al. "Six Thinking Hats" method, transactional analysis and a reflective practice.

Lystopad (2017) et al. "Six Thinking Hats" technique by Edward de Bono. His great contribution is that he has created exercised for the development of creative thinking, which help to create atmosphere of joy, trust, mutual respect and understanding at classes. The "Six Thinking Hats" technique is a system de-scribing the tool for team discussion and individual thinking using six colored hats. The main approaches to its organization are the use of different mental processes (analysis, synthesis, comparison, generalization, classification, etc.), sense-creativity, freedom of choice, self-realization, self-actualization, reflection.

Each style of thinking is symbolized by a color and we have to imagine that we are wearing a hat of that color and then start thinking in that direction only. Each that symbolizes something unique and that is how it has derived its color. No deviations are allowed and in case someone deviates, the meeting conductor who is wearing an imaginary blue hat has to control all the participants and make them think in one direction only. The hats are only imaginary hats and we just have to imagine that we are wearing a hat and changing from one color hat to another. There is no physical hat that we need to wear or change from time to time to change our style of thinking. Changing of our hat from one style to another. The transition in our style of thinking from one direction to another automatically happens smoothly (Sheth, 2012).

There are 6 hats, different in colours, in the structure of the method: red, white, yellow, black, green and blue.

The white hat is impartial and objective, directs one's attention to information, dry facts and figures.

The black hat is pessimistic and requires indication of disadvantages, critical assessments, challenging of the words and figures, and search for potential risks.

The yellow hat is optimistic, opposite of the black one, aimed at seeing potential benefits (of very different nature, not only the material well-being) and advantages, requires search for positive aspects of the analyzed phenomenon.

The green hat thinks out new ideas, investigates opportunities, searches for alternatives, and modifies the existing ones.

The red hat allows to state intuitive guesses and feelings on the matter, not explanations.

The blue hat operates the working process, kicks into gear at the initial stage of discussion to determine the forthcoming tasks, and finally to summarize the achieved, if necessary, and designate prospects. Thanks to the blue hat all actions of the participants pursue a common goal. A leader or head of a conference wears the blue hat all the time. One would obviously think that transition from one mode of thinking to another is going to be a painful process.

Teaching according to de Bono's method can be performed effectively not only in the individual group but in the small one (preferably 6 people), as well as in the group exceeding the small one in the number of students in 3–4 times (up to 30 people). In the first case the students carry out the analysis of a problem on each aspect themselves, in the second case the analysis can be carried out in two ways: either each student is given one aspect for the analysis, or each of the participants analyzes the whole problem aspect by aspect, and then the collective discussion and systematization of the results take place. In the latter case the students are divided into several groups of 3–5 people, and each group (as well as in the first case) analyzes one of the aspects of the problem situation.



Picture 1 Six Thinking Hats main characteristic is interaction in small group.

The Six Thinking Hats main characteristic is interaction of all educational process participants aimed at efficient creative activities. The technique contributes to the formation of non-standard decision making skills, helps to analyze and assess one's own acts and level of competence. (Lystopad, 2017)

Teachers had to try six hats on (white, black, blue, yellow, red, and green), every of which reflected the type of attitude to-wards life. If a student put on a white hat (independently constructed in advance), his/her attitude to the issue had to be neutral, he/she had to rely on analytical thinking only, avoid emotions, and use only verified data. The red hat was a symbol of subjectivity and emotional thinking. A student wearing it had to express his/her thoughts manifesting various feelings and emotions. This person acted as a critic, searching for only negative aspects of the situation, accusing other participants of falseness. A student wearing a yellow hat should think positively, search for positive sides of the problematic situation, help the game participants with positive discussion of their ideas. The green hat is a symbol of associative, creative thinking. A student with it on his/her head had to avoid trivial ideas, his/her goal was to generate creative ways out of a crisis situation and collect all alternative and even fantastic decisions. The blue hat on one's head expresses order and structure. The main goal of the participant with it on his/her head is to consider and structure all the suggested ideas.

The premise of this technique is that the human brain is designed to think in 6 different manners when it comes across a decision making process. These six different patterns in which a human brain "thinks" can be deliberately sensitized and humans can be made to think in a particular direction. In each of these states the brain will identify and bring into conscious thought certain aspects of issues being considered.

The "Six Thinking Hats" method (De Bono, 1991 cited on Lystopad, 2017 et al.) has long been successfully applied in various business trainings in order to find a non-trivial solution in the fastest way. Some evidence of its efficacy has been presented by the western higher school (Note 1), but little attention is unfairly paid to it at the Russian universities. In search for rational organizing ways of communication in the cross-cultural environment, which is represented by our groups of foreign students, we found it interesting to use the "Six Thinking Hats" method, as it offers the students to discuss unclear questions, relying on the parallel thinking different from the traditional one in that, firstly, it is based on the collision of opinions and, secondly, it leads to the fact that the participants of communication learn gradually to hear another person's point of view, to accept it as having the right to exist.

3. Context clues

Context clues are clues that the author gives intentionally or incidentally in the text to help the learners understand a difficult or an unfamiliar word. The determine or clarify the meaning of unknown and multiple meaning words and phrases, analyzing meaningful word. And using the words around it is using contextual clues. Even if you can't figure out the exact definition, phrases and words should be able to help you make a guess about the word's meaning. (Innaci and Sam, 2017; Zorfass and Gray, 2014).

How to use context clues, teacher must be very explicit in his/her description and modeling the application of this as a strategy while reading texts. The teacher needs to guide and encourage students as they try to use the strategy, slowly increasing the complexity of the text (Zorfass and Gray, 2014).

Before Reading

1. Review the skill: context clues.

2. Explain the purpose of the lesson.

3. Building on past lessons using context clues. Model how to find context clues.

During Reading

1. Display a short passage about da Vinci on the interactive whiteboard.

2. Have students read the passage in pairs.

3. Invite students to come up to the whiteboard and highlight unfamiliar words and surrounding context clues.

4. Have students share their thinking and discuss.

5. To confirm their thinking, have students search for words in dictionaries and other resources.

6. Repeat the process for one or two more words.

7. Have students use context clues to understand new vocabulary and track these words on the class wiki.

After Reading

1. Have students share their answers and prompt them to explain their process.

2. In pairs, have students discuss at least two ways to figure out the meaning of a new word.

3. Create a reference list of strategies.

Baily (2017) said context clues to help students learn to use contextual clues to learn new vocabulary words, teach them specific strategies. The following exercise can help:

1. Using a textbook or printed worksheet, write down several new vocabulary words on the board. If using a textbook, write down the page and paragraph where the word is.

2. Have students divide a paper into three columns.

3. In the first column, the students should write the new vocabulary word.

4. In the second column, the student should write down any clues in the text that help them guess the meaning of the word. Clues can be found immediately before or after the word, in the sentence before or after or even in the paragraphs around the word.

5. The third column should contain the student's guess as to what the word means.

Context clues has benefic helps learners to understand and effectively use the target language. Many shades of meaning of words used in a particular context can better be mastered if context clue is provided for weak reading skills when comprehending reading passages. Students could learn the art of understanding the meaning of a word or phrase without being dependent on any external source of information such as a dictionary. This helps the learners to minimize the time they spend on understanding the content. Also, learners learn of skill of identifying the contextual meaning of a word based on the usage.

METHODOLOGY

This study was a action research. The purposes of this study were to, (1) to study the problem and the causes of students (2) to study the effectiveness of the learning method by using six thinking hats with prediction strategies (3) to study the development of analytical reading ability of students. The selected participant of 1^{st} semester 2018 was 6 students in Demonstration School of Suan Sunandha Rajabhat University.

The research procedure was divided into phases; 1) survey the problem and the causes of students on analytical reading; and 2) effectiveness evaluation of an instructional model through implementation with the subjects who were 6 students in Demonstration School. They learn Reading subject.

The information of research was reading content in the category of Thai curriculum for students that was concerned with non-fiction, fiction. Their reading contents were from interesting and requirement of the learners contained in the Thai language Program. The duration of experiment was one semester 8 weeks in 2018. The research instrument were analytical reading test apply from Satthaphong (2018). Analytical reading test data provided information on a number of factors measuring various elements of the educational context influencing reading achievement. These constructs refer to characteristics of schools, teachers, and students.

The data were analyzed by using average score and descriptive statistic: Frequency, Percentage, Mean, Maximum value and judged value of mean were examined to describe students' analytical reading ability.

RESULTS AND DISCUSSION

Part 1: the problem and the causes of students on analytical reading

The results of the problem and the causes of students on analytical reading total 130 students, they were as similar as the sample group in first semester year 2018 as following; The most problematic condition of the study was the identification of the importance and detail of supporting information from the reading of 12.2%.

Part 2:

The innovation used in problem solving is the learning management using the six thinking hats with prediction strategies. The results of the consistency check of the innovation by the experts found that the innovation is suitable 1.00 for use in solving the problem of analytical reading ability.

Part 3: The effectiveness of the instructional model based on six thinking hats with Context clue strategies

Types of reading	Analytical reading	
	score	Percentage
1. short story 1 (30)	15	50
2. short story2 (30)	16	53.34
3. News 1 (30)	14	46.67
4. News 2 (30)	15	50
5. fiction 1 (30)	19	63.34
5. fiction 2 (30)	18	60
7. Poem 1 (30)	15	50
S. Poem 2 (30)	16	53.34
Analytical reading	test 16	53.34
30)		

Table 1 The comparison result of score and Percentage in analytical reading against the sample week 1-8 experiment (N = 6)

As table 1 found that Week 1-8 experiment samples had average score 16 percentage 53.34. Week 5-6 they read fiction and had high scores 19,18 percentage 63.34, 60

ison result of average score in analytical reading the experiment (score = 30)			
Number of students	Analytical reading		
	score	percentage	
Students 1	21	70	
Students 2	20	66.67	
Students 3	23	76.67	
Students 4	22	73.34	
Students 5	24	80	
Students 6	24	80	

Table 2 The c after

As table 2 found that after the experiment to the sample group had overall analytical reading the average score of analytical reading ability showed that the number of students passing the criterion was 66.66%. The percentage was 70, 66.67, 76.67, 73.34, 80 and 80 respectively.

CONCLUSIONS AND FUTURE WORK

The population of this study was 6 students from Demonstration School of Suan Sunandha Rajabhat University. Findings were average score of analytical reading ability showed that the number of students passing the criterion was 66.66%. The percentage was 70, 66.67, 76.67, 73.34, 80 and 80 respectively. Students who were participant, provided activities and enjoyable learning. Students had reading skills performed best on the analytical

reading test. The "Six Thinking Hats" method (De Bono, 1991 cited on Lystopad, 2017 et al.) has long been successfully applied in various business trainings in order to find solution in the fastest way which is represented by our groups of students, the result found the students interesting to use the "Six Thinking Hats" method and discuss unclear questions. The reading type fiction was high scores because the context clues has benefic helps learners to understand and provided for weak reading skills when comprehending reading passages.

ACKNOWLEDGMENTS

The financial support was provided by the Suan Sunandha Rajabhat University for academic. Thanks secondary students and Faculty of Education.

REFERENCES

- [1] Baily, E. (2017). Using Context Clues to Improve Reading Comprehension. Available from: (https://www.thoughtco.com/context-clues-improve-reading-comprehension-3111170)
- [2] Innaci, D.L. and Sam, D.P. (2017). Using context clues as a vocabulary learning strategy: an experimental study. Available from: <u>https://www.researchgate.net/</u> publication/19741383_.
- [3] Lee, C.D. and Spratley, A. (2010). Reading in the disciplines: the challenges of adorlessen literacy. Available from: https:// vpn.chula.ac.th/+CSCO+ch7567
 67633A2F2F7376797266 2E726576702E72712E746269++/fulltext/ED535297.pdf. [accessed February 24, 2014]
- [4] Loera, G. (2006). Latino Parental Aspirations And Literacy Practices Related To Children's Reading Engagement. [Online]. Available from: http://www.drgustavoloera.com /research-publications/[accessed December 10, 2013]
- [5] Lystopad, O., Mardarova, I. and Kuk, T. (2017). *Forming students' motivation for creativity by means of edward de bono's "six thinking hats" technique*. Available from: http://scienceandeducation.pdpu.

edu.ua/en/articles/2017-8-doc/2017-8-st14-en

- [6] Mahimuang, S. (2017). Development of Reflective Thinking Factors for Student Teachers in Suan Sunandha Rajabhat University. *Social Sciences Research and Academic Journal*. 12(35). Pp.17-32.
- [7] OECD. (2013). PISA 2012 Results in Focus What 15-year-olds know and what they can do with what they know. Available from: onlinehttp://www. Childcare Canada .org/documents/ research-policy-practice/13/12/pisa-2012-what-15-year-olds-know-and-what-they-can-do-what-[accessed December 3, 2013]
- [8] OECD. (2012). PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy. Available from: http://dx.doi.org/10.1787/9789264190511-en[accessed December 10, 2013]
- [9] OECD. (2010). PISA 2009 Results: What Students Know and Can Do Student Performance in Reading, Mathematics and Science. Available from: http://dx.doi.org/10.1787/978 9264091450-en [accessed December 12,2013]
- [10] Satthaphong, T. (2018). *Development of analytical reading based on the transactional strategies instruction*. Proceedings of ICBTS. Austria.
- [11] Sheth, M. (2012). The amazing concept of six thinking hats. International journal of management research and review. Volume 2 (3) pp.449-452.

[©]ICBTS Copyright by Author(s) | The 2019 International Academic Multidisciplines Research Conference in Brussels 134

- [12] Stanislavovna, T. & Leopoldovna, K.O. (2015). Adaptation of Foreign Students to the Foreign Culture Learning Environment Using the Six Thinking Hats Method. Available from:https://files.eric.ed.gov/fulltext/EJ1067794.pdf
- [13]Zorfass, J. and Gray, T. (2014). Using Context Clues to Understand Word Meanings. Available from: http://www.ldonline.org/article/61511/