

The Perceptions of Year Six Pupils on the Usage of Numb-Met Toward Enhancing ESL Comprehension Skill

Siti Nurhazwani Binti Kamin, Dr. Maslawati Mohamad

Abstract— Reading for comprehension is not a simple phenomenon, but a very complex process. Hence, the suitability of methods and strategies in teaching reading comprehension should fit into students' needs. This study attempted to explore the usage of NUMB-MET amongst Year 6 pupils in answering reading comprehension questions as well as to investigate to what extent does NUMB-MET facilitate Year 6 pupils in enhancing their reading comprehension skills. Eight year six pupils one primary school in Bintulu, Sarawak were involved in this case study and the data were collected using document analysis, focus group interviews and field notes. The findings revealed that all the participants perceived that NUMB-MET as engaging, effective, served as language support in constructing sentences in English reading comprehension. The findings of this study are hoped to provide insights to the educators on teaching students reading comprehension strategies which could help the students especially primary pupils in answering questions with lesser or minimal help from the teachers.

Index Terms— Reading comprehension, enhancing, NUMB-MET.

I. INTRODUCTION

Highlight Comprehension skill is one of the main skills which is needed to be acquired by primary school students. In the primary school, most Year 4 to 6 students are expected to achieve the necessary level of reading fluency based on the prescribed syllabus (Yahya Che Lah & Nor Hashimah Hashim 2014). It has been one of criteria to identify the level of proficiency of the students. Thus, the comprehension skill is one of ways to develop students' critical and analytical thinking which included in Malaysian Education Act 1966 regardless on English language considered as second language in all Malaysia schools. Consequently, it becomes crucial in the Malaysian education system in achieving national and international goals (Segawa, 2007). Hence, the Ministry of Education encourages the concerned stakeholders especially teachers to enhance students' English language skills particularly reading comprehension (Musa, 2003). In Malaysian context, English Year 6 Syllabus comprises of various types reading skills which is reading comprehension becomes a major portion that aided the students in developing and enhancing their reading comprehension skills (Nunan,

2003). Weeden et al. (2002) mentioned that teachers could plan and teach their lesson based on the information they obtained from assessment results. There is numerous of initiatives had been made to develop ESL students' reading comprehension skill. However, the students still need to be more skillful in answering reading comprehension questions (Afflerbach et al.2008). In order to enhance the students' performance in reading comprehension skill, it will be beneficial for ESL teachers to enhance their abilities in answering reading comprehension questions (Paulston & Bruder, 1976). In addition, the comprehension questions should also be developed in line with reading skill categories which will suit the level of the pupils (Nuttall, 2005). Hence, as agreed by Masters (2014) teachers should identify and monitor students' reading ability in order for them to develop or modified their teaching in order to meet the needs of their students as well as providing them relevant stretch goals in learning reading comprehension skills.

The purpose of the research is to explore the effectiveness of NUMB-MET in enhancing the performance of Year 6 pupils' reading comprehension. Data were gathered qualitatively to answer the following research question

- What are the Year 6 pupils' perception toward the usage of NUMB-MET in answering comprehension questions?
- To what extent does NUMB-MET facilitate Year 6 pupils in enhancing the reading comprehension skills?

NUMB-MET

In this context of study, NUMB-MET is a set of formula to facilitate Year 6 primary pupils in answering comprehension questions. This method is adapted from the extension of the model of question-answering proposed by Clark and Clark (9). It can be applied to the answering of WH-interrogative questions when the information needed to retrieve the answer is stored in long term memory. There are differences between the search of long term of answers, text or passage. The direct access to the answer is assumed whereas the search of a text or passage where the subject must look through the passage for the appropriate answer. It also adapted from the functional literacy question-answering model by Fisher (10). The model consists of series of eleven discrete steps or stages. However, individuals vary considerably in their control over the corrective steps needed to repair comprehension when it goes awry, and many readers need instruction to learn to use strategies effectively (11).

Siti Nurhazwani Binti Kamin, Faculty of Education National University of Malaysia (UKM) 43600, Bangi, Selangor, Malaysia.

Assoc. Dr. Maslawati Mohamad, Lecturer at Faculty of Education National University of Malaysia (UKM) 43600, Bangi, Selangor, Malaysia.

Table 1 NUMB-MET method

WH-Questions	NUMB-MET
What ___?	3+ 2 + x
When ___?	3 + 2 + at + x
Who ___?	3 +2 +x / 3+2+x+5/x+2+3
Where ___?	3+2+4+ at / to + x (place)
Why ___?	3 + 4 + because + x (to express reason)
Which ___?	4+3+ x+ 5 (making choices)
How ___?	5+4 + x +3. (quantity)

From the table each word represents one number except the last phrases. To give clear picture of the method below shows some examples of answering simple wh-questions using NUMB-MET. From the examples, it shows that the pattern of answering is fixed where the words represent 3 and 2 will come first followed by the answers. For each answer, Number 2 represents verbs. However, the answering pattern change slightly for questions ‘which’ and ‘how’. In conclusion, there is not much difference in answering the pattern as long the students know the rule of answering the questions.

II. LITERATURE REVIEW

Reading and Reading Comprehension

Reading is defined as a complex cognitive process in which a reader decodes the symbols or printed messages into sounds (12). Whilst, reading comprehension is classified as a vigorous process of constructing meaning from a piece of text and understanding it effusively and comprehensively (13). Additionally, Day and Park’s (14) taxonomy of reading comprehension, and Bloom’s taxonomy of educational objectives revised by Anderson et al. (15) presented almost the similar skill categories. According to the taxonomies, literal comprehension refers to the information explicitly stated in the text, whereas reorganisation comprehension needs an ability to synthesise, analyse, and integrate the information plainly stated in the text. In view of the above discussion, the three skills stated in the afore-mentioned taxonomies were taken into consideration in developing the NUMB-MET to enhance ESL year 6 pupils’ answering comprehension questions abilities among them. Furthermore, these three skills are appropriate to teach language skills whereas the rest of the skills are helpful for teaching the English language (7)

Reading Comprehension Questions

As justified by Richard et al. (16), using comprehension questions in teaching of foreign language reading have attempted to reflect the development of the students through interactive exercises and tasks. In this context of study, it becomes one of integral aspect of such activities in enhancing the students’ reading comprehension skill in order to the help students interact with the text to create or construct meaning. Richard et. al (16) also believed that well-developed comprehension questions help students begin to think critically and intelligently.

In this context of study, reading comprehension is referring as text or passage in which it required Year 6 students to answer wh-questions correctly based on the reading texts provided. The result development of numerous reading comprehension measures including recall and recognition tasks, comprehension questions, and on-line procedures, such as lexical decision tasks, eye-tracking tasks and think aloud protocols (17).

Consequently, the link between the symbol and the embodied experiences is more tenuous in the case of reading. For students who fail to make the link between the written word and the embodied experience, reading becomes a boring exercise in word-calling that rarely results in meaning.

School Based Assessment

In order to produce students who can compete at international level, Malaysian education system has come up against a transformation of education in curriculum as well as in assessment. Standard Curriculum for Primary School (KSSR), a new curriculum for primary school, was launched in year 2011 and at the same time, *Lembaga Peperiksaan Malaysia* (LPM) established a new format of assessment which was School-Based Assessment (SBA) or *Pentaksiran Berasaskan Sekolah* (PBS) (18).

SBA is considered as a new innovation conducted in Malaysian education system which derived by Ministry of Education (19). According to Malaysia Education Blueprint 2013-2025, in 2016, students’ UPSR results will be derived from both national examination and SBA. It is a transformation in the education system as it scales down the emphasis on examination orientated teaching and learning (20).

This new assessment test students based on their memory skills in examinations in different kinds of skills. These questions will be set based on four higher levels in Bloom Taxonomy which are applying, analyzing, evaluating and creating. According to Malaysia Education Blueprint 2013-2025, 80% of questions in UPSR tested on higher order thinking skills. This transformation of assessment system is to stress on the application of knowledge as well as to develop students’ critical and creative thinking skills. With this new format of assessment, more information about students’ performance or development on a broader range will be gathered continuously and over a period of time (18). Through school-based assessment, students can be assessed based on their skills, abilities, talents, potentials in both curricular activities and co-curricular activities without comparing to others (21).

Strategies in Enhancing Comprehension Ability

There are several past studies on strategies in enhancing the primary students’ ability in answering comprehension questions. One of the studies is conducted by Yahya et al. (1) involving Standard 4 students from a government primary school in Muara Brunei District. The respondents were divided into two groups, namely the experimental group and the control group. Each group involved 30 average-ranking students. Based on the t-test analysis, there was a significant difference of reading comprehension performance between

the score of experimental group and control group. The metacognitive strategy used by the students in this study has proven to enhance students' understanding on the texts that they have read.

While, Muhammad Javed, Lin Siew Eng, Abdul Rashid Muhamed (22) in their research aims to develop a set of 6 Reading Comprehension Modules (RCMs) for Malaysian ESL teachers to facilitate different reading abilities of ESL students effectively. The study involved 5 experienced content/language experts validated the RCMs while 80 ESL students selected through purposive sampling from a secondary school from Penang, Malaysia participated in the pilot study for determining the reliability of the RCMs. The results of the pilot study revealed that the participants improved their scores gradually. Kuder and Richardson Formula 20 (KR-20) was employed to determine the internal consistency of the RCMs. The calculated values of RCMs ranged between 0.804 and 0.923 that indicate high reliability. The researchers suggested that the standardised RCMs would act as indicators for the ESL teachers to enhance ESL students' performance in reading comprehension.

In addition, Yahya and Nor Hashimah (1) also suggested a few ways to improve students' reading comprehension in their study. There were 4101 students involved in a comprehension test which consist of 50 multiple choice questions. These items were categorized into three main comprehension categories, namely literal, inferential and critical-creative. The findings of this study show that there is consistency in the acquisition of comprehension skills of low and high achievers in both literal and critical-creative categories. However, there is inconsistency in the acquisition of comprehension skills of low and high achievers in inferential category. Researcher suggested that strategies to foster comprehension skill should be developed to assist and improve students' acquisition of comprehension especially in inferential category.

In summary, from all the recent studies that have been discussed show that the acquisition of comprehension skill is very crucial for students in learning English. It is inter-related with the component of main skill that is reading, writing, speaking and grammar. As in Malaysia, little research have been carried out on how to help the primary pupils who learning English to answer reading comprehension questions in complete and accurate manner. As agreed by Muhammed Javed, Eng and Abdul Rashid Mohamed (22) that here is little work done regarding developing modules for ESL teachers to teach reading comprehension at school level in Malaysia. The problem of students not being able to comprehend what is being read and the fact that there is no specific approach which stresses the acquisition of comprehension skill ought to be given serious attention (Yahya Che Lah & Nor Hasimah Hashim 2014). Hence, there is a need of a study to identify the effectiveness of NUMB-MET in aiding primary students to improve their ability in answering comprehension questions.

III. METHODOLOGY

A. Setting and Participants

This study was conducted in one of the daily primary schools in the state of Sarawak. The school is located in the suburban area of Bintulu district. The class chosen for this research is Year six primary pupils. Their performance in English Comprehension was low. Based on the analysis from the UPSR Trial 2, the students were having similar problems in comprehension section which caused them to obtain low marks in English Comprehension paper. The researcher had to choose this class because it fulfilled the criteria set for this investigation which was the students' English proficiency level (low level).

B. Data Collection Tools

The study phase was conducted for 12 weeks with approximately 12 hours of total engagement in using NUMB-MET in reading comprehension lessons. Three data collection tools were used; reading comprehension test (RCT), focus group interviews (FGI), classroom observation (CO) and field notes (FN). The data collected were then transcribed and analyzed.

IV. RESULT AND DISCUSSION

What are the Year 6 pupils' perception toward the usage of NUMB-MET in answering comprehension questions?

In order to answer RQ1, data from the focus group interview (FGI), and classroom observations (CO) were analyzed. The observations were carried out for six times during the lessons. Seven pupils were interviewed and observed. The learner participants were labeled as S1-S7. Only one teacher was interviewed individually. She was labeled as T1. The answers are divided into 3 parts; (a) Enable learners to learn new knowledge (b) Language support, (3) Develop learners' motivation
Enable learners to Learn a New Knowledge

Most of the participants were showing pleasure or contentment with the use of NUMB-MET in their reading comprehension lessons. This statement is derived from the teacher's interview responses, focus group interview responses and classroom observations. Both parties, students and teacher confessed that they like using NUMB-MET, it is beneficial as it has made language learning especially in the teaching and learning of reading comprehension, enabling them to gain new knowledge on how to answer reading comprehension question in correct manner. They added that the NUMB-MET was new to them as they were never exposed on how to answer reading comprehension question correctly.

"At first it's hard. Now, it's easy." (Q1, FGI)

"I never know how to write my answers in complete sentences. Now I know." (Q2, FGI)

"It's interesting and easy." (Q11, FGI)

The teacher also brought up during the interview session that teaching reading comprehension using NUMB-MET could be useful and she also claimed that students were able to answer the reading comprehension correctly.

("Errmm...They can see clearly how the answers being

constructed by using the NUMB-BET as they were able to organize their sentences and ideas based on comprehension questions. It works on them. Now I know how to explain clearly by using NUMB-MET.”(T1)

Classroom observation (CO) is used to triangulate the data for this section. Participant applied the NUMB-MET formula when they were answering the comprehension questions based on the texts given. They numbered the words in the questions and answered them based on the formula taught to them.

Language Support

The participants found that the NUMB-MET was helpful for reading comprehension enhancement as they were able to learn how to answer the reading comprehension questions correctly. The pupils also responded that through NUMB-MET they were able to write their answers in complete sentences in correct sequence and orders. Most of the participants agreed that this NUMB-MET can aid them in answering the reading comprehension questions correctly. In comparison to before they joined this study, they commented that they did not know how to answer the reading comprehension in complete sentences and correct manners. Fortunately, being able to utilize NUMB-MET, they felt that they were much clearer on how the ideas and sentences structures that should be organize based on the NUMB-MET.

“I feel happy... because I can learn new technique on how to answer questions in complete sentences.” (Q3, S2)

“I can answer the questions faster..I’m not confuse anymore.” (Q3, S3)

“(Before this) I don’t know how to answer the questions. Now I know. I like it. (Q2,S4)

“NUMB-MET help me. I can write my answers correctly.”(Q4,S7)

(c) Develop Pupils’ Motivation

Based on the interview session, most of the participants agreed that the NUMB- MET had develop their motivation as they were able to answer the reading comprehension correctly without confusion on how to answer them correctly and prevented them to produce errors which resulting in losing their marks. They also felt confident when they answering the reading comprehension. Hence, this proved that the pupils motivation in learning English through NUMB-MET had develop.

“I enjoy using the NUMB-MET.” (Q6,S2)

“I’m happy. It is easy.” (Q3, S5)

“ I can learn how to write answers correctly.”(Q11, S7)

“Yes, it help me. I like it.” (Q8, S6)

“ It’s interesting and easy.” (Q4, S1)

To what extent the numb-met enhance the year 6 pupils’ reading comprehension skills?

This section provides the researcher’s findings using the data collected using focus group interviews (FGI) with the learners, researcher’s observation notes (CO), and teacher’s interview responses (TI) and document analysis of learners’ compositions. This section is further subcategorised under two categories, namely (4) Develop understanding, (5) Improvement in reading comprehension skills

a) Develop Pupils’ Understanding

The pupils commented that that they had clear pictures or ideas on how to answer the reading comprehension questions in organize way. They were able to identify and use suitable formula for different types of comprehension questions. As they were asked to memorize the formula, they were able to organize their reading comprehension answer in correct sequence and order although their answers were wrong. Throughout the process, they answered the reading comprehension questions without referring to the NUMB-MET formula given by the teacher

“ Yes. It does.” (Q4, S1)

“ Yes, it helps me in writing the answer in correct order.” (Q9, S3)

“ I learn how to write answers in full sentences.” (Q11, S4)

b) Improvement in Reading Comprehension Skill

Most of the pupils could see the changes in their answering reading comprehension skills. Participants claimed that the use of NUMB-MET help to improve their reading comprehension as well their wring skill. Since participants got exposed to the skills during NUMB-MET reading comprehension lessons, they became more aware of the language structure as they were more aware of the errors they made and organize the answers in more comprehensible manners.

“My answering technique is improve.” (Q11, S1)

“I can write the answers in full sentences.” (Q4, S3)

*“The change that I can see in my reading comprehension is the **improvement in writing answers in correctly.**” (Q5, FGI)*

*“It has **improved my answering skill in reading comprehension.**” (Q8, FGI)*

The data above is also supported by the teacher’s interview responses, the teacher claimed that students had improved in their answering reading comprehension skill.

*(“Emm..what I like the most is that the pupils **improved in terms answering reading comprehension because they were able to know how organize their answers based on the reading text.**)*

The impact that the participants reflected on their answers show that they were more organize in answering the reading comprehension. The NUMB-MET provided them with a clear idea or picture on how the ideas or sentence structures were constructed based on the reading comprehension texts.

“Yes. It does.” (Q4, FGI)

“Yes, my marks increase.” (Q8, FGI)

“Yes, Now I know how to write the answers in complete

sentences. Ermm. I'm not confuse anymore." (Q11, FGI)

The data from the teacher interview responses confirms that the participants had made an improvement in their reading comprehension skills. The teacher was comparing the students' comprehension performance before and after using the NUMB-MET

"Yes, it does. Err, I can see that **the students can write their answers in complete sentences and organize.**(TI)

The pre-test and the post-test of the reading comprehension test show that there is an increase in the score of each of the participants of the study (See Figure 1). All the participants showed an improvement in their reading comprehension test.

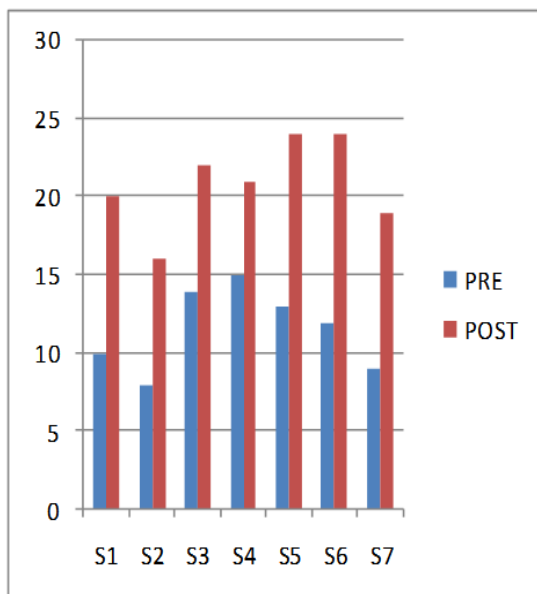


Figure 1 Pre-Post Reading Comprehension Test

Most of the participants gave a positive remark on how the NUMB-MET enhanced their skill in answering reading comprehension questions. This statement is derived from the FGI, teacher interview (TI) response, and also their reading comprehension scores.

Yes, NUMB-MET help me in my comprehension. I can learn how to write the answers correctly. (Q11, FGI)

"Yes, It does. I like it." (Q10 FGI)

Yes, NUMB-MET really help me in answering the questions. (Q10. FGI)

Yes, I can organize my sentences.(Q11, FGI)

From the response of the teacher individual interview, she could see that the participants have made an improvement in reading comprehension. ("Yes, of course it helps. My pupils were able to answer the questions in complete sentences though some of their answers were wrong. The good about it is **I can see their answering skills for reading comprehension getting improved.**")

V. CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

The purpose of this study was to investigate Year 6 pupils' perceptions toward the usage of the NUMB-MET in enhancing their ability in answering comprehension questions.

Learners had positive perceptions towards the usage of

NUMB-MET in helping them in answering the reading comprehension questions. It has enabled them to learn new knowledge in a more interesting manner and ways. In addition, as this NUMB-MET is something fresh to them, they find it interesting and useful to them. Hence, the NUMB-MET can aided the pupils in answering reading comprehension questions correctly and organize manners. reading comprehension questions.

In terms of motivation, learners felt that they were having a sense of purpose, thus becoming more engaged in the reading comprehension lesson. Finally, the participants' improvement in writing could be seen after four week lessons. The learners could see that their language and writing skills had improved significantly.

Learners' experience toward the usage of NUMB-MET had aided them to develop their skills, and thus help to improve their learning. Hence, NUMB-MET did assist learners who are facing the similar problem in answering reading comprehension questions. As a result, it will vary the learning strategies of the learners in helping them to learn the language and enhancing their reading comprehension skills. Furthermore, it helps to assist the ESL teachers in Malaysia on how to teach reading comprehension at primary level. It is significant since a little research has been done before on enhancing the primary pupils on how to answer literal, reorganisation, and inferential comprehension questions according to the students' reading abilities. The numb-met will help the ESL teachers to transfer their knowledge to the students effectively. The NUMB-MET will also help the ESL teachers to enrich their pedagogical skills, teaching approaches, and professional development.

Hence, It is also expected that the administrators will benefit the NUMB-MET since the researchers, after analysing various aspects, made tireless and strenuous efforts for designing and developing the NUMB-MET through a systematic and coherent process in order to enhance ESL pupils' ability in answering comprehension questions as well as academic achievement in reading comprehension.

VI. RECOMMENDATIONS FOR FUTURE RESEARCH

The following are some suggestions that researchers might want to consider for future research. First, this study can be further explored by using NUMB-MET in writing lesson in order to explore how it is effective in aiding the pupils to organize their sentences. Second, a multiple case study can be carried out to compare the outcomes of the findings. Third, this study can be further explored by expanding the number of respondents. Finally, this study could also be expanded on areas of other language skills. For example, using NUMB-MET to teach writing.

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Siti Nurhazwani Binti Kamin

Currently works as a teacher in one of the primary school in Malaysia. She also currently studies at Faculty of Education National University of Malaysia (UKM) 43600, Bangi, Selangor, Malaysia.



Dr. Maslawati Mohamad

She is a lecturer at Faculty of Education National University of Malaysia (UKM) 43600, Bangi, Selangor, Malaysia. A few of her publication.

Recent research output:

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