

# The Development and Searching the Efficiency of DVD Instruction Media for Fluently Reading with the Concept of Ehri's 4 Stage

Catthaleeya Rerkpichai<sup>1</sup>,

Paitoon Pimdee<sup>2</sup>,

and Thanin Ratana O-larn<sup>3</sup>

Department of Industrial Education, Faculty of Industrial Education,  
King Mongkut's Institute of Technology Ladkrabang, Thailand

<sup>1</sup>catthaleeyar@siamtechno.ac.th

<sup>2</sup>kppaitoo@kmitl.ac.th

<sup>3</sup>krthanin@kmitl.ac.th

**Abstract** - The purpose of this research is to develop and improve the efficiency of the DVD instruction media for the efficiency of DVD instruction media for fluently reading with the concept of Ehri's 4 Stage and compare learning achievement before and after study by the media based on the concept of Ehri's 4 Stage. The teaching method was used as a teaching tool in the 4<sup>th</sup> year students in the first semester of academic year 2016. The tools used in this research were: The good teaching of Thai language reading skills. There are tests for reading comprehension before and after class and then the scores were analyzed based on statistics.

The results of the research show that the Thai language reading comprehension curriculum is based on the concept of Ehri's 4 Stage developed by the researcher at 1.20, which is higher than the criteria of the Meguigans. The results of the comparison of the learning achievement of the learners were significantly higher than that of the pre-learners. The conclusion was that the good media can be used in teaching and learning.

**Keywords** - DVD Instruction Media for Fluently Reading Thai Language Skills, Fluently Reading Based on the Concept of the Ehri's 4 Stage

## I. INTRODUCTION

Reading is very important that because reading is an extension of knowledge. Reading fluency is 1 of the 4 factors of language skills that need to be practiced and it can be practiced continuously, the reader must read properly, punctuation should be correct, read quickly and accurately and read the meaning of what is reading, and pick up the good stuff from NICHD (2000) the writing. Elementary education is divided into two levels: Elementary school grade 1-3, student must be able to read, Elementary school grade 4-6. It requires students to be able to read and write. Elementary school year 4-6 students can read fluently. (Office of the Basic Education Commission, 2011-2016).

The study found that solving reading problems in the past has found that many teachers, academic. The researchers have created many innovative teaching materials to enhance the reading skills for students, such as exercises. Additional Training Kit most found in classroom research, teachers found that students can't read books fluently. The researcher further investigated that the creation of innovative teaching media to solve the problem of reading fluently may still have defects in the process of creating. For example, teachers find problems created without knowledge of curriculum development or innovation and to search the Internet, some

untrustworthy sources can't prove how well-formed innovation will impact on reading skills in particular, innovative teaching media. 21<sup>st</sup> century is only a co-coach who offers innovative advice to the teacher. Anyone who is able to use easily does not need to depend on teachers, such as teachers, assistants, etc. to solve the problem of attachment in the person who is the teacher when the teacher retire the child couldn't develop. The Improvement of Reading Skills Theoretical Approach to Reading the Dexterity Ehri (1995), a specialist in the theory of reading comprehension, has the notion that reading fluency Students need to develop the following three skills: 1) Familiarity with the characters, 2) Ability to remember the letters, and 3) Knowledge and understanding of the vocabulary of words, thus, to improve reading skills with the students. The 4 steps must be followed. Start to recognize letters steps to recognize letters well and step to recognize the character of a well-rounded correspondence (Adams, 1990; The Reading Committee, 2000 Snow, et al., 1998). Even don't know the character to begin with, know the letters, and know the letters well. Understand the relationship between the letter and the sound for easy-to-remember words. It is clear that high-level skills are needed in familiarity with the font. Hence, creating an innovation that engages students with visual and audio should be a tabloid media that attracts attention.

From the importance of the problem, researchers are interested in developing and finding the efficiency of DVD instruction media for fluently reading Thai language skills.

## II. RESEARCH OBJECTIVES

1. To develop and improve the efficiency of DVD instruction media for fluently reading Thai language skills with the concept of Ehri's 4 Stage.

2. To compare learning achievement, before and after study with the DVD instruction media for fluently reading Thai language skills with the concept of Ehri's 4

Stage.

## III. HYPOTHESIS OF RESEARCH

1. Efficiency of the efficiency of DVD instruction media for fluently reading Thai language skills with the concept of Ehri's 4 Stage through the higher value than 1.00, according to the standard of Meguigans.

2. Learning Achievement the efficiency of DVD instruction media for fluently reading Thai language skills with the concept of Ehri's 4 Stage higher than before study 0.5 significant.

## IV. RESEARCH METHODOLOGY

The research process is as follows:

1. Study the content of Thai subject in Grade 4, to prepare for use in creating media content. The researcher studied course Syllabus, course Description, course Objectives, other related textbooks included teacher inquiries and expert interviews, understand the content by the researcher, about reading correctly, read the space correctly, fast reading, accurate and reading, comprehends the meaning of what is read. Because it was found these readings are a component of reading comprehension both sides must be trained.

2. Study the 4 steps of Ashri and then sort them by difficulty.

3. Experimental Design, this research is experimental research from the:

Hypothesis1: The efficiency of DVD instruction media for fluently reading Thai language skills with the concept of Ehri's 4 Stage was found to be higher than 1.00 in accordance with the standard of Meguigans.

Hypothesis 2: The learning achievement of the learners with the good news, the instructional supplement, the reading skills. The efficiency of DVD instruction media for fluently reading Thai language skills with the concept of Ehri's 4 Stage is significantly higher than that of the prior study.

#### 4. Specification of population:

- The population used in the study was the elementary school grade 4 student of the schools under the jurisdiction of the Office of the Private Education Commission in district 1, academic year 2016.

- The samples used in the study was the elementary school grade 4 student of the schools under the jurisdiction of the Office of the Private Education Commission in District 1, academic year 2016. They were randomly selected by cluster random sampling one classroom (40 students).

The first 5 experimental groups were examined about the use of supplemental instructional packages, understanding of the language and to try the next step.

The second experiment was conducted in order to find out the efficiency of the lesson developed in accordance with the 75/75 criterion.

#### 5. Creating research tools:

The instrument used in this study was a good video tutorial for the efficiency of DVD instruction media for fluently reading Thai language skills with the concept of Ehri's 4 Stage.

- To study and analyze the details of reading fluency in 4 aspects of the Thai language at the elementary school student. The details of the content determine the behavioral goals to sort before and after.

- Analyze the content that the researcher has analyzed from the core curriculum. Thai elementary school grade 4 students.

- Process analysis based on the concept of Ehri's 4 Stage start from don't know the alphabet and then Start to recognize letters, steps to recognize letters well and step to learn the alphabet.

- Evaluate the content of the content for 4 aspects: correct reading, read the space

correctly, fast at reading, accurate, and reading comprehends the meaning of what is read. The three content experts assessed the importance of the 4-step Ashley concept.

- As a result, experts agree that the content of 4 topics is available.

- Analyze the behavioral objectives and then apply them to the four aspects. Monitor and evaluate then improve as experts assess. The first step is to create a good videocassette based on the importance of the 4-step process is: 1) reading the correct pronunciation, 2) Begin to recognize letters. Is reading the space is correct, 3) Step by step to get to know the characters as well as read quickly, and 4) Learn how to read and understand the meaning of reading.

- Develop a reading comprehension test with content and questionnaire covering the objectives of the 4 objectives. The correct reading is the correct spacing is 1 point, if it's wrong score is 0, Reading fast in time will get 25 points, read the wrong words and read the wrong paragraph will be cut off the score 0.5 points. Reading comprehension of the meaning of what is reading the exam is 4 multiple choice, the only one correct answer 25 items, if the number of items in each objective is not the same. Because of the importance of content is not equal. This makes the difference in the number of exams then there were 70 exams offered by the Thai content experts, grade 4, 3 students. Examine and consider the appropriateness to analyze the test by finding the IOC, the result is that there are 7 non-test items.

- Bring the test to the elementary school 4 grade students of the school under the jurisdiction of the Office of the Private Education Commission in the first semester of the academic year 2016. The 30 students then take the test scores to analyze, the quality of the test is determined by the difficulty analysis of between .20-.80 and the discriminative power of 0.20 and above make the order from high to low, the subjects were ranked high and low by 27%. The first 8 students (Ru) and 8

students (RI) were.

There will be some reading tests to understand the meaning is not within the criteria. The results show that there is a reading test to understand the meaning of the cut, the other 6 remaining 12 items.

- Analyze confidence the reliability of the test using the Kuder Richards KR-20 formula, the reliability of the test, should be greater than 0.6. The results of the analysis of the reliability of the constructed test were 0.85, indicating that the developed reading skill test had the confidence level at the appropriate level. It can be applied to students, then take the test to create a test before and after class. The test passed the qualitative analysis and then made to measure the skills before and after learning on the advice of consultants and experts.

### V. DATA COLLECTION

1. The researcher brings the good news, the teaching, the reading skills, the efficiency of DVD instruction media for the fluently reading Thai language skills with the concept of Ehri's 4 Stage installed in Sumsung-LAB room 30 students of the elementary 4 grade students of the school under the jurisdiction of the Private Education Commission in District 1, academic year 2016.

2. The researcher clarifies the procedures and methods of learning to the students.

3. Time spend on learning by reading, reading and writing skills in the fluently reading Thai language skills with the concept of Ehri's 4 Stage, started experimental on Monday, December 4, on 08.30 to 16.30 am total of 7 hours.

### VI. RESULTS

1. Results of the development of the fluently reading Thai language skills with the concept of Ehri's 4 Stage, correct pronunciation, read the space correctly, fast reading, accurate, and reading comprehends the meaning of what is read. For example, the video will have the

format shown in Fig. 1 and the reading process based on the concept of Ehri's 4 Stage following Fig. 2.



Fig. 1 The Fluently Reading Thai Language Skills with the Concept of Ehri's 4 Stage.

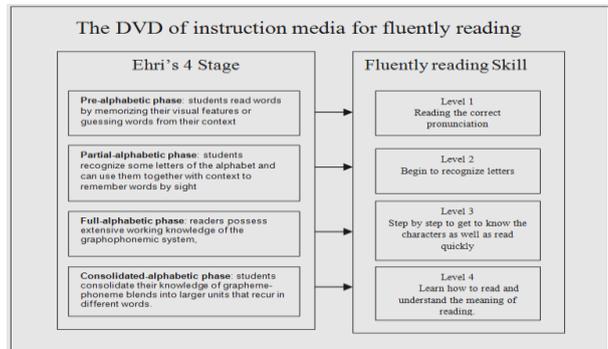


Fig. 2 The Concept of Developing Reading Skills Fluctuates from the Concept of 4-Steps of Ehri's 4 Stage Development Strategies.

The development of 4 Steps of Ehri's 4 Stage.



Fig. 3 Ehri's 4 Stage Reading Process by Media



**Fig. 4** The Test Process after with the Concept of Ehri's 4 Stage Reading Practice.

2. The Development of the VDD Media for Teaching Thai Language Skills Based on the Ehri's 4 Stage Concept of the elementary school 4 grade students apply the results of the experiment to the efficiency. The score obtained for the performance of the media using the Meguigans, the results was the mean of the pre-test scores of 35.57. The average score after the test was 70.05. Meguigans Ratio =  $(70.05-35.57/80-35.57) + (70.05-35.57/80)$  Meguigans Ratio = 1.20.

The result is 1.20. The calculated value is greater than 1, concluding that the training media is more effective than the Meguigans.

3. Results of Development of the fluently reading Thai language skills with the concept of Ehri's 4 Stage of the elementary school 4 grade students. The results showed that the pre-test scores were 35.57 and the mean scores after learning were 70.05 out of 80. The t-test was 16.10. The value of t (t) is 2.0452. The learning achievement of the students was significantly higher than that of the pre-class .05. It was concluded that the good media produced was effective and could be used in the management of teaching and learning.

## **VII. DISCUSS THE RESULTS OF THE RESEARCH**

The results of the research on the development of the fluently reading Thai language skills with the concept of Ehri's 4 Stage could be discussed as follows.

1. The effectiveness of the VDD media in Thai language teaching is based on the concept of Ehri's 4 Stage, using the posttest test of the sample. The result is that the posttest scores are higher than the pretest score. The value of 1.11 is higher than the criterion 1, which is in line with the assumption that the developed media has a higher efficiency, these criteria of Meguigans in the course of teaching by using the media to use Tablet. It encourages learners to be more interested and interested in learning. The media focus on the content, animation, the colors and sounds that are clearly heard are characters, how to read them. This will help to improve reading skills and improve understanding of what is read.

2. Achievement when testing the hypothesis of student achievement, it was found that the learning achievement of the learners was significantly higher than that of the pre-learners .05, which was in line with the assumption that the researcher developed the media. The students read more fluently, as seen by the achievement.

This research is consistent with the development of reading skills. Will need time and repeatedly, Read the prototype will develop the maneuverability. The teacher must read aloud to the children (Dowhower, 1987; Hoffman, 1989; smith, 1979), repeated reading with familiar words. Reading again or reading aloud may be the most frequently used method to improve fluency (National Reading Panel, 2000; Rashotte and Torgesen, 1985), and the use of fluent reading theory is encouraged by practice familiar texts (Carver and Hoffman, 1981). Ehri (1995) suggests that reading fluency Students need to develop the following three skills: 1) Familiarity with the characters, 2) Ability to remember the letters, and 3) Knowledge and understanding of the vocabulary of words, thus, to improve reading skills with the students. The 4 steps must be followed from don't know the alphabet then start to recognize letters Steps to recognize letters well and step. Recognize the character of a well-rounded correspondence (Adams, 1990; Committee on Reading, 2000. Snow, et al.,1998).

## VIII. SUGGESTIONS

### A. Suggestion from the Research

- Learning should be separate group by Native, moderate and beginner. The students with low reading ability in Thai will not follow the moderate group and native group. The students are shy and discouraged.

- The content that follows Ashry's procedure will take some time to practice. So spend time. Days make students fatigue. The new timings may be adjusted to suit the age of the fourth grade students.

- Some tablet machines are sometimes unstable. Audio and video are not supported, rendering the display problematic during the experiment.

### B. Suggestions for Further Study

- The Thai language media should be provided with a good knowledge of Ehri's 4 Stage to apply or integrate with other course content to gain more skills and understanding in other subjects.

- It should be repeated more than once, pretest-posttest each developmental rate should be studied at least 4 times and then measured after the trial.

readers". *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 14(2), pp. 135-163.

[4] Hudson, R., Lane, H., and Pullen, P. (2005). "Reading fluency assessment and instruction: What, why, and how?". *The Reading Teacher*, Vol. 58, No. 8, pp. 702-714. <[http://www.fcrr.org/publications/publicationspdffiles/hudson\\_lane\\_pullen\\_readingfluency\\_2005.pdf](http://www.fcrr.org/publications/publicationspdffiles/hudson_lane_pullen_readingfluency_2005.pdf)>.

[5] Raykov, T. (2012). "Scale Construction and Development Using Structural Equation". *Handbook of Structural Equation Modeling*, New York: The Guilford Press, pp. 472-492.

[6] Adams, M.J. (1990). "Beginning to read: Thinking and learning about print". Cambridge, MA: MIT Press, pp. 170-172.

[7] Snow, C.E., Burns, M.S., and Griffin, P. (1998). "Preventing reading difficulties in young children". Washington, DC: National Academy Press, pp. 277-279.

## REFERENCES

(Arranged in the order of citation in the same fashion as the case of Footnotes.)

- [1] National Institute of Child Health and Human Development (NICHD). (2000). "Report of the National Reading Panel". Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.
- [2] Ehri, L.C. (1995). "Stages of development in learning to read words by sight". *Journal of Research in Reading*, 18, pp. 116-125.
- [3] Ehri, L.C. and McCormick, S. (1998). "Phases of word learning: Implications for instruction with delayed and disabled