Development of an Integrated English Reading Teaching Model Focusing on the ASEAN Community Contents to Enhance Reading Comprehension and Critical Reading Skills of Mattayomsuksa 6 Students

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Abstract
The purposes of this research are: 1) to study problems and needs in developing the Integrated English Reading Teaching Model, 2) to develop an Integrated English Reading Teaching Model with efficiency at 75/75, and 3) to evaluate the use of the Integrated English Reading Teaching Model consisting of 3.1) to compare reading comprehension skills and critical reading skills before and after study via this model, 3.2) to compare reading comprehension skills before and after study via this model, 3.3) to compare critical reading skills before and after study via this model, and 3.4) to measure students’ satisfaction level towards this model. The subjects, 36 students from a school in Lopburi province were randomly sampled from a classroom of Matthayomsuksa 6 students. The subjects were taught by the researcher. Learning achievements before and after study via the model were compared under dependent t-test statistic method. The students’ opinions were measured by the values of percentage, mean, and standard deviation. The results were evident as follows: 1) The average scores of the students for reading comprehension skills were at the moderate level and the average scores of students for critical reading skills were at the highest level. 2) The models showed the efficiency at 86.25/82.33 that was aligned with the established requirement at 75/75. 3) Model Evaluation: 3.1) Students’ reading comprehension and critical reading skills after learning were significantly higher than before learning at the 0.5 level of statistical significance with the large effect size; 3.2) Students’ reading comprehension skills after learning were significantly higher than before learning at the 0.5 level of statistical significance with the large effect size. 3.3) Students’ critical reading skills after learning were significantly higher than before learning at the 0.5 level of statistical significance with the large effect size. 3.4) The subjects’ overall opinion towards the models was at the high level.

Keywords: Reading Comprehension Skills / Critical Reading Skills / Integrated English Reading Teaching Model / ASEAN Contents

1. Introduction
Thai teachers who teach English as a foreign language are facing several problems. According to the language learning achievement assessment of English by the National Institute of Educational Testing from the Ministry of Education, the results of statistical scoring analysis system from National Basic Educational Testing System (O-NET) of the Academic year in 2009, the students who took the test had very low academic scores. The level of the English language indicates poor learning abilities of students across the country. Teaching English is not as effective as it should be. Students
also have problems in reading and thinking as well as understanding vocabulary and comprehending texts (Chaowang, 2008), in line with Angwattanakul (1996) and Naijarun (2008: 5). There is a problem with students’ reading ability because they do not like to read or even study. After reading texts, they are unable to interpret or comprehend the provided texts. Another problem is that students have a lack of interest in learning to read. There is no motivation in developing reading skills which should continuously be improved noted by Komonsay (1994), Surakay (2001), Chanwichit (2004), Jantakhru (2005), Thonganantiwong (2005), Phodhi (2006), Thienthanna (2006). The Murdoch Integrated Approach (MIA) was introduced by George S. Murdoch. It is a teaching method that focuses on learners’ involvements in the learning process by using their thinking and solving problems skills. The learning activities, prepared by teachers, are done by the students using learning materials and activities. The students will do the best in learning activities by themselves or in groups under the teacher’s support as a facilitator. It is concluded that students who have been taught under Murdoch’s Integrated Approach will show an increase in students’ academic achievement both in reading comprehension and critical reading at the .01 level of statistical significance.

Reading is one of the crucial skills in teaching English as a foreign language. Reading skills are the skills that should be encouraged because it is the most persuasive skill for learners. The learners have an opportunity to use it even after graduation because this skill can allow them to acquire more knowledge in their own time, both in education and work, as well as to improve their reading ability. Furthermore, it is important to develop reading competence, so students will be able to select, scrutinize, and receive information appropriately through means of instructional activities in order to be consistent of a particular purpose. As a result, students can solve problems by themselves, which helps them to discover their own personal methods. The solution is based on experience and basic knowledge that is equally vital for teachers as well as students. The activity, which corresponds to Nakornthap, is optional (2010). How successful is integrated instruction? There are various factors but the key is process design of teaching.

The researcher studied the CEFR as guidelines for curriculum development. Course orientation measurement of language teaching as a tool for communication covering language and culture skills for effective communication is often problematic in linguistic communication. Synthesizing and summarizing topics for further lessons based on the information above are needed.

The researcher, thus, intends to study the development of an integrated English reading teaching model focusing on ASEAN community contents to enhance reading comprehension and critical reading skills of Mattayomsuksa 6 students.

2. Objectives

This research is aimed:

1) To study problems and needs in developing an integrated English reading teaching model
2) To develop an integrated English reading teaching model with efficiency at 75/75.
3) To evaluate the use of an integrated English reading teaching model to enhance reading comprehension and critical reading skills in ASEAN community contents of Mattayomsuksa 6 students covering

3.1) To compare English reading abilities of reading comprehension skills and critical reading skills before and after teaching and study the effect size
3.2) To compare English reading abilities for reading comprehension skills before and after teaching and study the effect size

3.3) To compare English reading abilities for critical reading skills before and after teaching and study the effect size

3.4) To measure students' satisfaction of the Integrated English Reading Teaching Model

3. Research Questions

This study was designed to test the following questions:

1) Does the effectiveness of an integrated English reading teaching developed align with the criteria set at 75/75?
2) Is the ability of the experimental group students in reading comprehension and critical reading skills after studying the Integrated English Reading Teaching Model significantly higher than before studying English reading comprehension and critical reading skills?
3) Is the ability of the experimental group in reading comprehension skills after studying the Integrated English Reading Teaching Model significantly higher than before studying and what is the effect size?
4) Is the ability of the experimental group in critical reading skills after studying the Integrated English Reading Teaching Model higher than before studying and what is the effect size?
5) What is the students' satisfaction towards using the Integrated English Reading Teaching Model?

4. Research Hypotheses

This study is designed to test the following hypotheses:

1) The effectiveness of the Integrated English Reading Teaching Model to enhance reading comprehension and critical reading skills in ASEAN community contents of Mattayomsuksa 6 students developed by the researcher shows a high performance based on 75/75 criteria.
2) The ability in reading comprehension and critical reading skills after studying the Integrated English Reading Teaching Model of students in the experimental group is significantly higher than that of other groups, before studying English reading comprehension and critical reading skills, at the 0.5 level of statistical significance and the effect size is very large.
3) The ability in reading comprehension skills after studying the Integrated English Reading Teaching Model of students in the experimental group is significantly higher than another group, before studying, at the 0.5 level of statistical significance and the effect size is large.
4) The ability in critical reading skills after studying the Integrated English Reading Teaching Model of students in the experimental group is higher than another
5) Students' satisfaction of the Integrated English Reading Teaching Model is high.

5. Research Plan

This research is based on an ‘Experimental Design’ in One-group Pre-test and Post-test Design as follows:

<table>
<thead>
<tr>
<th>Pre-test</th>
<th>Experiment</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1</td>
<td>x</td>
<td>O2</td>
</tr>
</tbody>
</table>

The symbols used in this experimental design can be defined as follows:

- O1 means the analysis of examination before study.
- X means the effectiveness of each independent variable in the examination.
- O2 means the post-analysis of the examination after study.

The experimental design for this research is to compare students’ reading comprehension and critical reading skill of the experimental group before and after study in the class.

6. Participants or the Target Group

1. Population and sample

The population in this study is Mattayomsuksa 6 students studying basic English program (33102) in the second semester of 2015 Academic year at a school in Banmi District, Lopburi province.

The study samples were from three classes with a total number of 94 students.

Thirty-six students (a class) of a school in Mattayomsuksa 6 who were studying in the second semester of 2015 academic year are the sampling group of this study.

2. Variables

2.1 Independent variable:

2.1.1 Integrated English reading instruction format

2.2 Dependent variables:

2.2.1 Reading comprehension abilities
2.2.2 Critical reading abilities

2.2.3 Students' satisfaction of the Integrated English Reading Teaching Model

7. Research Instruments

The instruments in this research were as follows:

1. A survey questionnaire about the problems and needs of reading understanding and critical reading as well as learning needs in the ASEAN community of both students and teachers who were in the section of foreign language learning (English language) and the section of social sciences, religion and culture.

2. Reading Comprehension and Critical Reading Tests
   A test for measuring the efficiency of the integrated reading lessons by which students were evaluated in class through both a reading comprehension test (15 questions) and a critical reading test (10 questions) for each lesson.

3. Tests for measuring abilities of reading comprehension and critical reading skills (before and after)

4. Students’ questionnaires to measure the satisfaction level of the Integrated English Reading Teaching Model

8. How the Study Was Conducted

The research methodology has three major steps as follows:

Step 1: The researcher analyzed information on the problems and their sub-skill needs, reading comprehension and their sub-skills, reading as well as the analysis and learning needs in the ASEAN community both for students and teachers. The purpose of this stage was to determine basic information for developing the Integrated Reading Teaching Model to enhance reading comprehension and critical reading skills in ASEAN community contents for both the students and the teachers’ groups in the section of foreign language learning (English language) and the section of social sciences, religion and culture. This step resulted in the lesson topics at 10 chapters: 1) General information about ASEAN 2) A life profile of important persons 3) Environment News 4) ASEAN folktales 5) Poem of ASEAN 6) Economic news in ASEAN 7) Festival in ASEAN 8) Educational news in ASEAN 9) ASEAN news feature 10) ASEAN political news.

Step 2: The researcher developed an integrated English reading teaching model focusing on the ASEAN community contents to enhance reading comprehension and critical reading of Mattayomsuksa 6 students. The researcher created unit specifications for each chapter that consisted of: 1. Unit / Theme /Title 2. Text type and resource 3. Reading skill focus 4. Process of learning 5. Evaluation. Then, the researcher submitted them to consultants for to have them checked for accuracy and verified by experts. After that, the researcher created the teaching instructional materials based on the comments by
native speaker advisors and professors who teach the English language. Then, IOC
calculation was conducted in order to confirm the contents, reliability as well as
objectives. Next, the researcher corrected and modified the lesson materials as
recommended. Then, the modified materials for Chapters 1, 3, and 5 were taught to three
students and other ten students for Chapter 2, Chapter 4 and Chapter 6. After teaching to
these two student groups, the researcher gathered feedback from them and received
positive results that the lessons were suitable to teach in class. Therefore, the researcher
examined such lesson materials to design the Test Specifications as well as in class-unit
tests which contained 25 questions for each unit. IOC was conducted for the in class-unit
tests that showed the conformity of the content reliability as well as lesson objectives.
Pre- and Post-tests at 50 questions also reflected the positive IOC values. All of the
questions were verified and checked by the experts for peculiarities (p), the discriminative
power (r), and there liability of pre-test and post-tests. Moreover, native speaker teachers
had reviews and made corrections grammatical errors. The experts confirmed that the
IOC was consistent with learning objectives in the test of specifications. Thus, the
researcher conducted a pilot study with 36 non-experimental students and evaluated
students’ satisfaction towards the Integrated English Reading Teaching Model, Then, they
were submitted for advisors’ and experts’ approval. Teaching a group of experimental
students in accordance with the learning process in the third step of research process was
proceeded accordingly.

Step 3: Identifying each lesson unit for the Integrated English Reading Teaching
Model was conducted as below.

Pre-test: students needed to sit for a pre-test in order to measure the abilities of
reading comprehension and critical reading skills. The paper contained 50 reading
questions.

Warm up: students were asked questions about the ASEAN community contents
in order to check for their background understanding towards the community.

Vocabulary Study: students were asked about vocabulary knowledge and the
teacher rechecked their understanding through vocabulary exercises as quizzes in class.

Pre-Reading: students read questions as guiding questions about the text for better
understanding of the text content.

While-Reading: students read the text and the teacher acted as a facilitator to
explain some misunderstood issues to students. This would assist them to answer guiding
questions and do exercises for each lesson at the end of the class.

Critical Reading: students read critical reading text for each assigned lesson and
the teacher acted as a facilitator to explain some misunderstood issues to students. This
would assist them in doing exercises for each lesson at the end of the class.

Extended Activity: students enabled to search for broadening their knowledge via
the Internet and write a report for class presentation.

Wrap Up: after completing each lesson, students reviewed their knowledge and
gave a report under the “K W L” format. “K” is defined as What you already know about
the subject?, “W” is defined as What you want to know about the subject?, and “L” is defined as What you have learnt about the subject?

**Evaluation:** students were evaluated not only by in class-evaluation but also by after class-evaluation through a test of reading comprehension (15 questions) and critical reading (10 questions) skills. This was to gather scores to evaluate effectiveness of each lesson regarding the Integrated English Reading Teaching Model.

**Final Assessment:** after students were taught all the 10 chapters, they were assessed by a test of reading comprehension and critical reading skills (50 questions), which was the same paper as done earlier in order to make further research analysis.

**Evaluation for student’s opinion:** students' questionnaires were distributed to collect the students’ level of satisfaction towards the Integrated English Reading Teaching Model.

### 9. Data analysis

Data analysis of this study was as follows:

1) The researcher analyzed a survey of problems and needs of reading understanding and critical reading as well as learning needs in ASEAN community of both students’ and teachers’ groups who were in the section of foreign language learning (the English language) and the section of social sciences, religion and culture by using the values of mean (\( \bar{x} \)) and standard deviation (SD.).

2) The researcher analyzed the tests to find out the efficiency of the Integrated English Reading Teaching Model developed in accordance with the 75/75 criteria.

3) The researcher analyzed tests of abilities to identify the level of understanding of reading skills and critical reading skills by using the values of mean (\( \bar{x} \)), standard deviation (SD.), and t-test independent for the same group as well as the effect size.

4) The researcher analyzed students' questionnaire on the satisfaction of the students with the Integrated English Reading Teaching Model by using the values of mean (\( \bar{x} \)) and standard deviation (SD.).

### 10. Research Results

The research results are as follows:

1) Results of the problems and needs of reading understanding and critical reading as well as learning needs in ASEAN community of both students’ and teachers’ groups who are in the section of foreign language learning (English language) and the section of social sciences, religion and culture are at the average demand in the highest level. Students understand the text main idea correctly (\( \bar{x} = 4.60, \text{ S.D.} = 0.85 \)). They can find details from the texts (\( \bar{x} = 4.60, \text{ SD} = 0.85 \)). Students are able to read for sequences to link events (\( \bar{x} = 4.60, \text{ SD} = 0.85 \)).

2) Comparisons of similarities and differences in the texts are understood (\( \bar{x} = 4.60, \text{ SD} = 0.85 \)). Result analysis for the efficiency of the Integrated English Reading
Teaching, developed in accordance with the 75/75 criteria, shows that the efficiency of the Integrated English Reading Teaching Model is 86.25/82.33, which is 75/75 (Promvong, 1995). The following table shows result analysis for the effectiveness of the lessons with the Integrated English Reading Teaching Model.

<table>
<thead>
<tr>
<th>Details</th>
<th>Full Score</th>
<th>( \bar{x} )</th>
<th>S.D.</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding the effectiveness of the lessons with the Integrated English Reading Teaching Model Test Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score tests while students studied in classroom from lesson 1-10 (E1)</td>
<td>250</td>
<td>215.63</td>
<td>15.135</td>
<td>86.25</td>
</tr>
<tr>
<td>Post-test score (E2)</td>
<td>50</td>
<td>41.16</td>
<td>2.53</td>
<td>82.33</td>
</tr>
</tbody>
</table>

3) Evaluation of the Integrated English Reading Teaching Model for reading comprehension and critical reading in ASEAN community contents of Mathayomsuksa 6 students:

3.1 Results of reading comprehension and critical reading before and after using the Integrated English Reading Teaching Model show that students have statistically significant increase at the 0.5 level. After considering the post-test scores, the average post-test score was 41.16, higher than pre-test scores at the average score of 24.38. The effect size was at 3.37 that indicated the size from the pre- and post-tests was large.

Result analysis for reading comprehension and critical reading skill before and after using the Integrated English Reading Teaching Model.

<table>
<thead>
<tr>
<th>Sampling</th>
<th>N</th>
<th>Full Score</th>
<th>( \bar{x} )</th>
<th>S.D.</th>
<th>( \bar{D} )</th>
<th>S.D. (D)</th>
<th>( t )</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test score</td>
<td>36</td>
<td>50</td>
<td>24.38</td>
<td>7.76</td>
<td>15.49</td>
<td>4.87</td>
<td>19.61*</td>
<td>3.37</td>
</tr>
<tr>
<td>Post-test score</td>
<td>36</td>
<td>50</td>
<td>41.16</td>
<td>2.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistical significance at the .05 level

3.2 Results of reading comprehension for before and after using the Integrated English Reading Teaching Model show that student achievement is significantly higher at the 0.5 level. When the post-test score was obtained, the average post-test score was at 25.81, which was higher than the average of the test before studying at 15.97. The result of the study shows that the result is at 3.81. The effect size is large.
Result analysis for reading comprehension skill

<table>
<thead>
<tr>
<th>Sampling</th>
<th>N</th>
<th>Full Score</th>
<th>(\bar{x})</th>
<th>S.D.</th>
<th>(\bar{D})</th>
<th>S.D. (D)</th>
<th>(t)</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test score</td>
<td>36</td>
<td>30</td>
<td>15.97</td>
<td>2.82</td>
<td>9.87</td>
<td>2.59</td>
<td>42.65*</td>
<td>3.81</td>
</tr>
<tr>
<td>Post-test score</td>
<td>36</td>
<td>30</td>
<td>25.81</td>
<td>1.41</td>
<td>3.33</td>
<td>0.71</td>
<td>9.87</td>
<td>3.81</td>
</tr>
</tbody>
</table>

* Statistical significance at the .05 level

3.3. The results of critical study on pre- and post-critical reading skills show the student's academic performance is significantly higher at the 0.5 level and the post-test score is at 15.26, which is higher than the average score obtained from the previous test at 8.95. The result on the size shows that the result is at 4.13, which indicates the effect size is large.

Result analysis for critical reading skill

<table>
<thead>
<tr>
<th>Sampling</th>
<th>N</th>
<th>Full Score</th>
<th>(\bar{x})</th>
<th>S.D.</th>
<th>(\bar{D})</th>
<th>S.D. (D)</th>
<th>(t)</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test score</td>
<td>36</td>
<td>20</td>
<td>8.95</td>
<td>1.87</td>
<td>6.44</td>
<td>1.56</td>
<td>24.84*</td>
<td>4.13</td>
</tr>
<tr>
<td>Post-test score</td>
<td>36</td>
<td>20</td>
<td>15.26</td>
<td>1.41</td>
<td>3.33</td>
<td>0.71</td>
<td>9.87</td>
<td>3.81</td>
</tr>
</tbody>
</table>

* Statistical significance at the .05 level

4) Result analysis of students' satisfaction level towards the Integrated English Reading Teaching Model is: The items with the highest level of feedback covering the contents (\(\bar{x} = 4.80, \text{SD} = 0.41\)), the satisfaction of the order of presentation (\(\bar{x} = 4.71, \text{SD} = 0.46\)), and the overall learning activity (\(\bar{x} = 4.60, \text{SD} = 0.50\)).

11. Discussion of the Results

Based on the results of this study, the development of an integrated English reading teaching model focusing on ASEAN community contents to enhance reading comprehension and critical reading skills of Mattayomsuksa 6 students, there are, at least, three major points as follows:

1. The Integrated English Reading Teaching Model scored higher than the criteria set. That may derive from the teaching method which has been developed from theoretical research concepts from several researchers. Durr (1997) studied and found that the integrated English reading teaching model was an effective tool and could enhance learner's needs systematically. This also aligns with Williams (1963) and Miller and Willa (1972) as they stated that critical reading before thinking can help students evaluate
the truth as well as accuracy on what is read. The reader can then assess the reading text by using their reading experience as a comparison criterion. Furthermore, the integrated English reading teaching model is a recognized innovated tool in class. The after class-evaluation can be conducted for each lesson unit by a test in order to measure the students’ reading abilities on reading comprehension as well as critical reading. Twenty-five tasks for each lesson were provided with collecting scores collected under the purpose of developing student’s knowledge via the Integrated English Reading Teaching Model and learning media. Chaowakiratipong (2002) mentioned that clear objectives need to be identified. Supporting activities for learners would be offered in accordance to capabilities and aptitude of individual persons. Evaluation both before and after class would be essentially conducted as a quiz for each lesson unit. Study will focus on the learner as a center for teaching process, rather than the teacher. Students can be a self-learner based on personal capacity, and aware of their abilities including progress in every single lesson unit. The study process needs to have exact learning plans, but provides a wide range of learning methods.

2. The result of students’ reading comprehension and critical reading was very high after using the Integrated English Reading Teaching Model based on the following reasons. First, students primarily studied contents of the books as a key for reading comprehension and critical reading skills. Secondly, students were engaged in small group activities by using integrated learning techniques. Thirdly, students practiced by individually doing exercises and reviewing lessons learnt to broaden their understanding.

3. Students agreed that the Integrated English Reading Teaching Model was rated as appropriate at higher level. As a result, students can apply reading comprehension and critical reading skills to work in groups with more confidence. This is in line with Vygotsky (1962: 86-87) stating that learning and doing activities in groups encourage students for active study. Adult learners have high experiences with self-directing abilities; therefore, teachers should have more interaction with them more than just normal teaching. They said that the integrated English reading teaching model was effective, fun and interesting. They also enjoyed reading English materials and could improve their reading comprehension as well as critical reading including grammar. This finding was corresponded with Willis (2000:72) in that students should have freedom when focusing on language accuracy. However, teachers should provide feedbacks on the contents after finishing their practices.

12. Recommendations

From the study results, the researcher would like to suggest an integrated English reading teaching model to be executed by teachers. They can implement it as a tool for analyzing and planning their learning management in order to cultivate students for intelligent attitude. For students, they can apply an integrated English reading teaching model as a ground for basic analysis prior to actual practical action. The analysis of components for both reading comprehension and critical reading skills can support analytical thinking skills, and develop ability to apply for their future learning as well as daily life.

13. Suggestions for Future Research

Suggestions for further research are as follows:

1) Other learning activities can be introduced in teaching practices through integrated teaching techniques with other methods.
2) Multimedia can be integrated with the content of lessons.
3) Developing lesson plans on Internet channel should be considered.
4) This model with larger student groups can be tried out in other schools.
5) Future studies may consider constructing new models on other skills such as writing, listening, and speaking.

14. Acknowledgements

The researcher would like to express his gratitude to all specialists for validating the study instruments as well as all students who participated in this study. My heartfelt gratitude is especially for Asst. Prof. Dr. Bamrung Torut from the Faculty of Education in Curriculum and Instruction, Silpakorn University, for his valuable comments, encouragement as well as substantial supports.

15. The Author

The researcher, Mr. Mongkol Barlee, presently is a Doctor of Philosophy candidate in Curriculum and Instruction at the Faculty of Education, Silpakorn University.

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