

## **A Study of the Comparison of Learning Development in Reading Skills of Students from Grade 2 to 4 of Bilingual Education (Thai - Patani Malay) in the Four Southern Bordered Provinces of Thailand**

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### **Abstract**

The objectives of this research were to study the factors of the learning development in reading skills of Bilingual Education (Thai and Malay dialects) of the students in grade 2 to 4 in the four southern bordered provinces; Pattani, Yala, Narathiwat, and Satun, to compare the reading achievement of the students in grade 2 to 4 in reading skills between the eight experimental and comparison schools, and to demonstrate the learning development of the students in grade 2 to 4 of the experimental schools. The research project was conducted by Yala Rajabhat University in 2013 as the fourth consecutive year research project. In the 4 provinces, 159 respondents who used Malay as their mother tongue completed the tests. The data were analyzed by using software packages. In reading skills, most students of the experimental schools outscored the comparison schools. Their learning achievement of the experimental schools was lower than the past years significantly, but the comparison school students met the cutoff scores more than that of the comparison schools.

**Keywords:** Bilingual education, Reading skills, Learning development, Southern Bordered provinces

### **Introduction**

Social conditions in the four southern bordered provinces differ away from the majority of society in religion, culture, as well as education. The people in these provinces still have limited access to education due to their low socio-economic status and diverse ethnicity (UNESCO, n.d.). An appropriate education to the context of language and culture is in a way to allow the students to improve their learning. However, multilingual education establishes a broad educational access to the peaceful coexistence of people, especially in restoring and empowering to those who have been historically oppressed (Hornberger, 2009). Resource Center for Documentation, Revitalization, and Maintenance of Endangered Languages and Cultures has undertaken the action research on Patani Malay – Thai Bilingual / Multilingual Education in Thailand's Deep South (PM-MLE) (UNESCO, n.d.). The research project has been conducted the Longitudinal study (2011-2016) starting from early childhood to grade 6 (the end of six years of elementary education) in the four southern bordered provinces; Pattani, Yala, Narathiwat and Satun. The project aimed to carry out the full bilingual education focused on the use of 4 skills of listening, speaking, reading and writing in 4 pilot schools in the southern bordered provinces as a prototype for other schools where the students are from ethnic group and their mother tongue are different from the official language by building brain development process, creative thinking and using child's mother tongue as a base of their learning along with the creation of the strong Thai language systemically. This will result in the

development of learning process in all subjects in order to enhance the opportunity to further strengthen their success in education, and use the knowledge to improve the quality of life, to appreciate local culture, to enable them to behave properly in their cultural identity at the local level as well as being Thainess at a national level, and in order to achieve participatory work in solving the problems of education in the four southern provinces between communities, government agencies, and academic organizations.

Previous studies have indicated that the achievement of the students in grade 2 of the experimental schools had a better learning development in almost all subjects except in social studies, and the students in grade 3 had an overall learning development slightly lower. Considering in each every subject, the results showed that their learning development in Thai language and reading skills were constant, but in science and social studies, the learning development was lower than before, and only in Mathematics is better than every year (Sintana et al., 2013).

The bilingual teaching of Patani Malay and Thai as languages of instruction was the innovative approach of the PM-MLE project (UNESCO, n.d.). The findings suggested that this approach could also be useful for bilingual education in the next stages. For bilingual Education Project in 2014, the assessment team had set the examination questions to compare the achievement in 5 subject areas and collecting more qualitative data to obtain a matter of fact to further develop the research in the future.

## Objectives

1. To compare the reading achievement of the students in grade 2 to 4 in reading skills at eight schools between the experimental and comparison schools, and
2. To demonstrate the learning development of the students in grade 2 to 4 of the experimental schools in the four southern bordered provinces of Thailand.

## Materials and Methods

The data were collected using the achievement tests. The tests were constructed in line with the Grade level indicators in Learning Standards and Indicators of the Basic Education Curriculum 2008, Ministry of Education by the primary school teachers from the project sites and examined the contents validity (IOC) by the language experts. The valid generated items of the tests were selected to print and tried them out with 98 students in grade 4 in the comparison schools. The eight elementary schools participating in the present study were located in the southernmost bordered provinces of Thailand; Pattani, Yala, Narathiwat, and Satun. The target population was 159 project students of the first cohort studying in grade 4 in 2013 which were composed of 100% Malay. The tests were calculated the difficulty index ( $p = 0.20 - 0.68$ ), the index of discrimination ( $r = 0.20 - 0.77$ ), the reliability ( $KR20 = 0.73$ ) and the validity ( $IOC = 0.67 - 1.00$ ). The questions in the tests are edited and translated into Malay dialect for collecting the data at the experimental school.

The data were collected from 83 students from the comparison schools and 76 students from the experimental schools. They were analyzed using percentage, mean, standard deviation, a t-test, and an effect size.

## Results

As seen in Table 1, the reading achievement of the students in grade 2 of the experimental schools in the three southern bordered provinces was higher than the comparison schools statistically at a .01 level of significance with a large effect size ( $d = 1.32$ ).

**Table 1** The comparison of the reading achievement of the students in grade 2 between the experimental and comparison schools in the three southern bordered provinces.

Subject	Experimental			Comparison			T	p	d
	N	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.			
<b>Grade 2</b>									
Reading skills	67	73.51	21.03	66	46.14	20.57	7.59	0.00	1.32

As seen in Table 2, the reading achievement of the students in grade 3 of the experimental schools in the three southern bordered provinces was not statistically different with the comparison schools.

**Table 2** The comparison of the reading achievement of the students in grade 3 between the experimental and comparison schools in the three southern bordered provinces.

Subject	Experimental			Comparison			T	p	d
	N	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.			
<b>Grade 3</b>									
Reading skills	62	38.31	17.01	54	36.11	13.06	0.78	0.43	0.14

In addition, the assessment team compared the students in grade 2 and 3 between the experimental and the comparison schools that met the cutoff scores (percent out of 50, mean and median) in reading skills as follows:

As seen in Table 3, the percentage of students in grade 2 and 3 of the experimental schools that met the cutoff scores (percent out of 50, mean and median) in reading skills outnumbered the comparison schools.

**Table 3** The comparison of percentage of the students in grade 2 and 3 between the experimental and comparison schools in the three provinces that met the cutoff scores (percent out of 50, mean, and median)

Subject	Grade 2			Grade 3		
	50% Rate	Mean $\bar{x}$	Median Md	50% Rate	Mean $\bar{x}$	Median Md
Reading skills	<b>50.00</b>	<b>59.92</b>	<b>65.00</b>	<b>50.00</b>	<b>37.28</b>	<b>37.50</b>
Experimental	86.60	80.60	79.10	30.65	50.00	50.00
Comparison	39.40	30.30	27.30	20.37	50.00	50.00

As Seen in Table 4, the reading achievement of the students in grade 4 of the experimental schools in the four southern bordered provinces was not significantly different with the comparison schools.

**Table 4** The comparison of the achievement of the students in grade 4 in reading skills between the experimental and comparison schools that studied in the four southern bordered provinces.

Subject	Experimental			Comparison			T	p	d
	N	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.			
<b>Grade 4</b>									
Reading skills	83	41.93	16.58	76	40.89	17.81	0.38	0.71	0.06

As seen in Table 5, the reading achievement of the students in grade 4 of the experimental schools in the three southern bordered provinces was higher than the comparison schools statistically at a .01 level of significance with an average effect size ( $d = 0.53$ ).

**Table 5** The comparison of the achievement of the students in grade 4 in reading skills between the experimental and comparison schools that studied in the three southern bordered provinces

Subject	Experimental			Comparison			T	p	d
	N	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.			
<b>Grade 4</b>									
Reading skills	55	48.15	15.34	61	39.41	17.62	2.85	0.00	0.53

In addition, the assessment team compared the students in grade 4 between the experimental and the comparison schools that met the cutoff scores (percent out of 50, mean and median) in reading skills as follows:

As seen in Table 6, the percentage of students in grade 4 of the experimental schools that met the cutoff scores (percent out of 50, mean and median) in reading skills outnumbered the comparison schools.

**Table 6** The comparison of percentage of the students in grade 4 between the experimental and comparison schools in the four provinces and in the three provinces (excluded Satun) that met the cutoff scores (percent out of 50, mean and median) in reading skills.

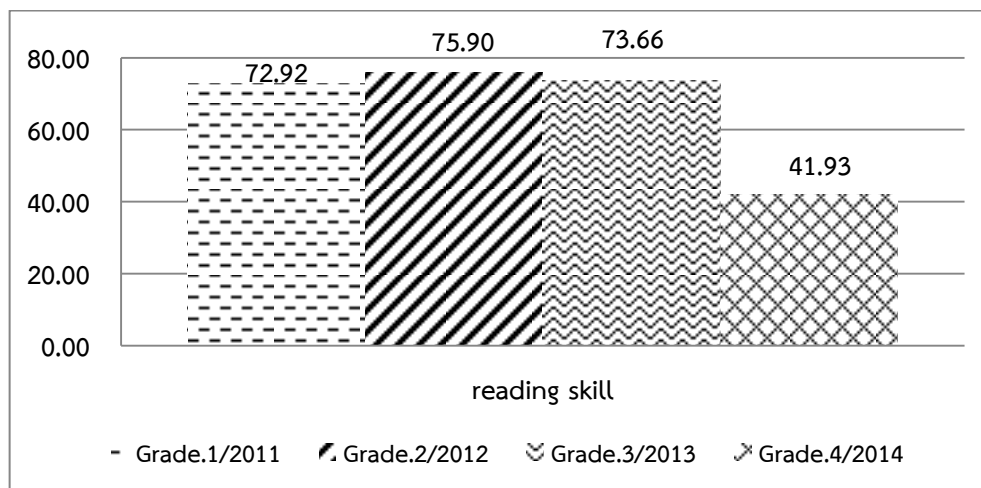
Subject	Grade 4 in 4 Provinces			Grade 4 in 3 Provinces		
	50% Rate	Mean $\bar{x}$	Median Md	50% Rate	Mean $\bar{x}$	Median Md
<b>Reading skills</b>	<b>50.00</b>	<b>=41.43</b>	<b>=40.00</b>	<b>50.00</b>	<b>=41.43</b>	<b>=40.00</b>
Experimental	34.94	50.60	57.83	49.09	69.09	69.09
Comparison	31.58	43.42	51.32	27.86	39.34	39.34

As seen in Table 7, when compared with each pairs of the provinces, the only one province: Pattani that the reading achievement of the students in grade 4 of the comparison school was higher than the experimental school.

**Table 7** The comparison of the reading achievement of the students in grade 4 between experimental and comparison schools by provinces.

Provinces / Subjects	Experimental schools			Comparison schools			T	p	d
	N	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.			
<b>Yala</b>									
Reading skills	14	45.71	14.86	15	38.67	19.81	1.09	0.28	0.40
<b>Narathiwat</b>									
Reading skills	18	43.56	17.02	18	32.22	13.68	2.20	0.03	0.73
<b>Satun</b>									
Reading skills	28	29.71	11.44	15	46.93	17.92	-3.37	0.00	-1.07
<b>Pattani</b>									
Reading skills	23	53.22	13.24	28	44.43	17.53	2.04	0.04	0.57

As seen in Figure 1, the learning development of the students in grade 4 of the experimental schools in the four bordered provinces, who belongs to the first group of MTB-MLE (Malay dialect – Thai) project in the four southern bordered provinces, their learning development in reading skills was lower than in the past years (2011-2013) significantly.



**Figure 1** The comparison of the learning development of the students in grade 4 in reading skills of the experimental schools during the academic year 2011 – 2014. Average scores of 4 experimental schools

### Discussion

As the results of the study, the reading achievement of the students in grade 2 between the experimental and comparison schools in the four southern bordered provinces was found that the achievement of the experimental school was higher than the comparison schools statistically at a .01 level of significance with a large effect size ( $d = 1.53$ ). Based on the interview, every teacher in grade 2 of the experimental schools in the three southern bordered provinces had the opportunity to receive training in bilingual education several times and to participate in the preparation of bilingual lesson plans. They expertized in the management of bilingual teaching at any stage and they also had taught for many years. Those teachers who had a bad attitude towards the bilingual education had a much better attitude. Thus, the reading achievement of the students in the experimental schools was higher than the comparison schools. This result is consistent with the findings of Sintana et al. (2013) on the implementation of Evaluation of Teaching and learning Administration by Using Dialects and Thai as the medium of instruction: A Case Study of Bilingual (Malay Dialect and Thai) Education in the Region Schools of 4 Southern Bordered Provinces. (Continuing Project Year 2 and 3) that the student achievement of the experimental schools was higher than the comparison school, and also the findings of Lemtrakul et al. (2013) on Supporting Multilingual Education for Ethnic Minority in Northern Thailand: An evaluation study that the students in the project developed self-confidence, creativity, imagination, a reading habit, and enjoyed their learning. These impacts affected on the language development (Malay dialect and Thai), the development of cognitive skills and affective skills of the students. Teachers were happy and parents were proud of their children. Community had more confidence in the government schools (Chongsuvivatwong et al., 2010).

The comparison of the reading achievement of the students in grade 3 of the experimental schools in the three southern bordered provinces was not statistically different with the comparison schools. In fact, the achievement of the students of the experimental schools should be higher than the comparison schools. The factor caused a reading achievement lower than the past few years was that the Malay dialect was downgraded. The school only focused on teaching tutorial for NT

(National Test) and aimed to teach Mathematics and Thai according to the emphasis of the Primary Educational Service Area. Thus, it reduced the importance of this subject. School No. 1 moved this subject from morning to evening period. If the teaching could not complete in time, it had to give up. The teacher also understood that the bilingual education can resolve illegibility of the students, and the Islam intensive course was already explained in Malay dialect. In addition, the person who constructed the exam papers of reading had been changed every year. Most students rarely wrote exams. They could read out, but they could not analyze it and understand the meanings. The test was constructed in Thai and then translated into Malay dialect. Therefore, the students may not be familiar with the terminology and substances. As a result, the reading achievement of the students of the experimental schools was lower significantly. The result is consistent with the finding of Paris (2011) that reading skills were not like other skills, such as vocabulary, they needed a brief period of development, duration of learning, and small sets of knowledge to master. Based on the qualitative data, the grade 3 was the end of the first grade level. So, there were many factors that can affect the achievement of students, such as the National Test (NT) examination. Each school focused on tutorial for the students in order to obtain a better score. Teachers gathered quizzes from various sources and asked the students to attempt a quiz. This was a quick step tutorial and had affected their learning gradually. Another factor was that some schools had Islamic intensive course and divided the normal class for eight periods in a week for teaching the course.

Based on the finding that in 2014, the learning development of the students in grade 4 scored the average points in reading skills lower than in 2013 significantly. It was probably due to a factor in the nature of the test and the aim of learning in Reading skill that had changed. The contents of the paper was also increased and a person who responsible in setting the exam questions was changed as well. For the character of the grade 3 test (the end of first grade level) in Reading skills in 2013, there was no much content, less number of words in the reading passages, and no new vocabulary. And the purpose of learning, it covered only the behavioral objectives that students able to sequence an event of simple basic sentences, to name the title of the given picture, and to read fluently out loud. This was different from the character of the test in grade 4 (the beginning of second grade level) that there was more content than the previous level. The length of the reading passages was increased and the new vocabularies were increased as well. The aim of learning was also increased. It covered the behavioral objective that enables the students to understand their reading comprehension from a story or a short passage. In other words, they were able to answer questions from a reading passage, to infer the main idea, to identify the moral of the story, and to distinguish between facts and opinions of the story, etc. If the analysis based on the indicators and the learning objectives, the test of Reading skills in grade 3 in 2013 covered the learning objectives very little. Compared with the test of Reading skills in grade 4 in 2014, there would be a great difference both in terms of content and learning objectives. This difference might be a result of a change in grade level from first grade level to second grade level, and a change of a person who set an exam questions perhaps.

## Conclusion

The author is of the opinion that the learning development in Reading skills may be clearer if those in charge of setting an exam questions to assess the students in Reading skills in 2014 could stable the indicators and the learning objectives as in 2013.

## Suggestions

1. In reading skills, the teaching should focus on reading strategies for comprehension as well as an analysis from the story.
2. The complete bilingual education model conducted in the four southern provinces schools should be publicized to other educational departments in this area to help them with the teaching model to improve teaching Thai to the young children better.

3. The clear purposes of the bilingual education project should be publicized to the third parties because there were still concerns that the project will destroyed the community cultural identity and make their language lost.

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