

The Implementation of Chinese Nursery Rhymes to Improve Mandarin Pronunciation among Primary Students at a School in Pathum Thani Province

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Abstract

This paper reports the significance of bilingual education for Thai Primary students in learning Chinese nursery rhymes to enhance their Mandarin pronunciation at the beginning level through accumulation of a series of musical rhyming words in activities. This paper aims to prove whether Chinese nursery rhymes could motivate Thai Primary students in their Mandarin pronunciation. The subjects were 37 Primary One students in two classes. The qualitative and quantitative research instruments included Chinese nursery rhyme training, pre-interviews, post-interviews, and observation notes. The motivational standard levels are divided by 5 levels according to their levels of performance in the classroom. The results of the study revealed that Chinese nursery rhymes can be a useful teaching tool that helps students memorize and master Mandarin pronunciation.

***Keywords:** Mandarin pronunciation, Chinese nursery rhymes, Motivation, Primary students.*

1. Introduction

Mandarin is pervasive and prevalent as the official language of the People's Republic of China. Most significantly, it has been among the United Nations' (UN) 6 official languages (United Nations Security Council, 1974). Moreover, Mandarin is in fact related to numerous aspects of development. In the aspects of trade, it has accelerating economic development and strengthening cooperation between India and China in "new economic trade" projects (Moore, 2012). In the aspect of second language acquisition, over 18% of American students have taken up Mandarin as their foreign language since 2006 (Furman, Goldberg & Lusin, 2010). In the aspect of education, Mandarin becomes a major foreign language in the ranking of world languages. As a result, it is currently more important than German and French (Grenfell & Harris, 2015).

1.1 Rationale

In retrospect of Mandarin education development history of the Kingdom of Thailand, Mandarin has been taught in Thai schools since last century. At present, according to Wu, Murra and Wang (2014), a large number of Thai students are engaged in Mandarin pronunciation learning. Liu and other researchers (2017) points out that most Thai bilingual schools focus on developing and improving Mandarin teaching. Ronnaphol (Chinese Studies Center, Institute of Asian Studies, Chulalongkorn University) explains that China Hanban Institution has made huge contributions to provide many Chinese native teachers to Thai primary schools, to strengthen the development of Mandarin education. Meanwhile, many Thai primary schools have offered compulsory Mandarin courses to enhance Mandarin basic education (Zhang & Ma, 2015).

Mandarin-Thai Bilingual Education Benefits

Following the progress of current society, bilingual education has been a key factor to communicate and to strengthen the economic development for Thailand. Manfred (2016) points out the “Bilingual” refers to “the people who know two languages or the people who can speak more than one dialect.” It means bilinguals have excellent executive functions and positive cognitions in most areas (Bialystok, Craik & Luk, 2012). In other words, in linguistic aspects, bilingual learning benefits wording and memory as well as enhance attention (Bialystok & Martin, 2004). Moreover, the spoken language of learners can be produced well with spontaneous opportunities in bilingual experience (Costa & Sebastian, 2014). Simultaneously, good pronunciation follows as a result (Burgaleta, Sanjuan, Ventura-Canpos & Sebastian-Galles, 2016). Sam and Claire (2017) found young bilinguals were good at discovering and classifying similar phonemes in two languages, which can help and predict their spoken language in the future. On the other hand, these totally different phonemes could be conquered efficiently (Maureen & Laurice, 2016). Furthermore, psychologists point out that young bilingual students easily move attention from the negative to positive attitude. (Kovacs & Mehler, 2009).

The Cultural Advantages of Chinese Nursery Rhymes

Chinese nursery rhyme is one form of the literature, a part of the Chinese culture (Radka, & Jana, 2015). It enlightens young students’ understandings about life and society. It leads young students to think, to image and to explore. Chinese nursery rhymes are more easily known by shorten content, which attracts young students by vivid stories (Jeffery, 2017). These colorful characters and imaginary dreams in nursery rhymes (In Appendix B: Chinese Nursery Rhymes 1) are to improve young students’ recognition ability (Hatice, 2013). Nowadays, media as a teaching tool in the classroom gives pleasant atmosphere with numerous short cartoons of nursery rhymes (In Appendix B: Chinese Nursery Rhyme 3) (Anisha & Nachiketa, 2015), which enrich Primary students’ learning experiences and strengthen scientific concepts (Albert, 2013). It often reveals a wide background, in enthusiastic and educational ways like counting (In Appendix B: Chinese Nursery Rhyme 2) (Laurie, 2011). These are appropriately used to encourage young students playing with peers and to immerse themselves in learning, especially rhyming words in nursery rhymes. Young students can learn by sounds easily; it could enhance their speech and pronunciation proficiency. (Anisha & Nachiketa, 2015)

The Musical Training Merits for Thai Primary Students

Marzieh & Masoud (2011) point out that Chinese nursery rhymes are often presented by songs. These musical training is an effective learning method in second language acquisition (Natsuki, Elizabeth, Goldenberg & Sandhofer, 2015) because young students prefer more to share knowledge with friends than adults enjoyably (Selma & Nazli, 2014). At the same time, music background could awake their inner resonance and emotions, and built their self-confidence, as well as self-expression (Albert, 2013). Primary students are young. Their physical organ has potential to absorb tremendous knowledge than adults with growing neuron branches (Lisa, Eina, Anjal & Jeffrey, 2016)

1.2 Significance of the Problem

- 1) Thai primary school face a shortage of Chinese native teachers (Liu, 2017).
- 2) The existing of improper Mandarin curricula in primary schools need to be mentioned (Piyoanuntapong, 2013).
- 3) Mandarin teaching method (imitation learning by repetition reading) could not motivate primary students sufficiently (Johon & Johnson, 1985).

1.3 Significance of the Study

Mandarin teachers, schools and the Ministry of Education can apply this study to find ways to improve their Mandarin pronunciation teaching.

2. Research Objective

To motivate primary student Mandarin pronunciation through Chinese nursery rhymes

3. Literature Review

This literature review is divided into four parts. The first part introduces a series of definitions of terms related to Mandarin phonemes. The second part discusses Chinese nursery rhymes to demonstrate the significance of Mandarin rhyming words, and its musical cultural background to Thai primary students learning, as well as to prove connectivity between Mandarin phonemes and Mandarin rhyming words in Chinese nursery rhymes. The third part is language acquisition theories, which totally include the Play Theory and the Motivation Theory. And this review focuses on applying the Motivation Theory to Chinese nursery rhymes activities. The final part is Chinese vocabulary acquisition.

3.1 Phonological Awareness

Phonemes play an important role in speaking and listening to the word level. Levey & Polirstok (2011, p.302) thought it is the smallest unit that can be pronounced without meanings, it can be created to a new word according to the phonological principle. A series of definitions of terms related to phonemes is shown below:

Table 1: Definitions of Various Terms Related to Phonology

Terms	Definitions	Origins
Pronunciation	A sound of word; phonology rhyme or stress; intonation.	Ur (2009, p.47)
Phonology	It is a basic rule or voice system to apply in a syllable to a word.	Levey & Polirstok (2011, p.37)
Phonemes Awareness	It means understanding a spoken word in a way of awareness of the individual phonemic differences.	Levey & Polirstok (2011, p.302)

Phonological Awareness (1)	It is a subconscious focus on the sound of a word, apart from its meaning. It is the ability to manipulate, count, or identify linguistic units at the phoneme, word, or syllable level by a period of training.	Levey & Polirstok (2011, p.302)
Phonological Awareness (2)	Phonological awareness can be taught, in both before and during reading instruction.	Yaemsaard & Soonchornmanee (2005, p.90)
Phonological Awareness (3)	It is a process containing phonological information by spoken and written language. This cognitive process means understanding construction, storage knowledge, and linguistic output.	Kuo, Uchiosi, Kim & Yang (2016)

How to Practice Mandarin Phonemes

According to recent studies (Ma, Perrier & Dang, 2015), phonological practice should focus on syllables, especially for Thai students, because the Thai language is the tonal (5 tones) language and its intonation patterns are slightly different from those of Mandarin (Carl, Diana & Deborah, 2015). The details of Mandarin practices related to Mandarin phonemes in classroom can be demonstrated as below: 1). Onset: Find out the same or different sounds in words. (Ma & Perrier & Dang, 2015). An example is “Which pinyin is not the same as others in Chinese pronunciation below: duo, dou, jun? The answer is “jun”. 2). Phoneme Cloze: Find out the correspondence voice when listening to Mandarin pronunciation, and choose the right pinyin (Levey & Polirstok, 2011). An example of this is Choose the right vowel to complete this pinyin: ji+ ____ “A: /ang/, B: /eng/, C: /en/” The right answer is A. (ji + ang = jiang)

3.2 Chinese Nursery Rhymes

Nursery rhymes can be found in different countries. The 17-18th century period was the most popular time for nursery rhymes in England (Wikipade, 2017). In German nursery rhymes, Riabov and Kobenko (2015) point out that a linguistic and cultural study indicated that nursery rhymes have tremendous sound-imitation words (Onomatopoeia). In Thai nursery rhymes, Ramnath (2009, p. 44) mentioned that poetry plays a vital role in teaching. It is used as a resource for language learning and creative writing. These poetries are explored forms, focusing on the sounds, rhythms, simple words and structures. It has proved to have musical value and meanings of words are useful to enhance pronunciation. However, Chinese poetry has had a long history to develop. In 1949, it was regarded as a new form of Chinese. In the meantime, Chinese nursery rhymes are always influenced by the Chinese poetry, and originated from it (Martin & Robert, 2001, p.159). Therefore, it is easy to find Chinese nursery rhymes that convey fruitful culture and colorful expressions. As mentioned above, Chinese nursery rhymes are often used to support classroom teaching (Ramnath, 2009). The reasons do not only train students in producing consonants in different backgrounds and cultures, explaining views, expressing sensations, as to immerse themselves in positive atmosphere of classroom, but also cultivate Mandarin pronunciation awareness of primary students

during experiences of Chinese nursery rhymes gradually (Katz, Jones, Shah, Buschkuehl & Jaeggi, 2016).

Thus, it is regarded the Chinese nursery rhyme features as an essential part of Chinese nursery rhymes. They are: 1) Sound Repetition: repetition in words and in lines. 2) Structural Pattern: each sentence has equivalent word numbers, in order to achieve the same structure (Ramnath, 2009, p40-49). Furthermore, the nursery rhymes as poems or songs are always created and provided for children around the world (Harper, 2011, p.66). Nursery rhymes are spread and translated into many languages easily, which facilitate teaching children acquiring second language anywhere (Brno, 2009, p.68). Therefore, the value of Chinese nursery rhymes in this study can be designed for practices, which obviously connect Mandarin phonemes and the useful features of Chinese nursery rhymes (Carl, Diana & Deborah, 2015). The examples as below: 1) fill the missing Mandarin phonemes in words of Chinese nursery rhymes to improve primary students' understanding of Mandarin phonological pronunciation system (Terry, 2010; Townsend & Konold, 2010). 2) Let parents playing with primary students in Chinese nursery rhyme songs and games, to monitor and assess Primary students' Mandarin pronunciation ability (Peeters, Verhoeven, Moor, Balko & Leeuwe, 2009).

3.3 Language Acquisition Theory

The Play theory

Play is very important for young students. In learning Chinese processing, they need tremendous opportunities to accumulate Mandarin vocabularies and train in their Mandarin pronunciation. For example, if primary students want to express their views in Mandarin, they have to use their working memory to organize their concepts (Irina. & Auline & Pauline, 2003). Play is regarded as a valuable learning process by educators. It means learning desire/ (motivation) and interest. Meanwhile, play also means cultivating self-regulation and self-initiation ability (Akinjogbin & Kayode, 2011). Moreover, it contributes to developing group cooperation inspiration, as well as making sure of their roles in peers' relationship (Irina, Auline & Pauline, 2003).

Motivation Theory: Self-determination Theory

Motivation is not only related to student behavior and achievements, it also influenced teaching ways (Georgeta, Nicolet & Ion-ovidiu, 2015). Maya, Kimberly and Kristie's study (2014) indicate that the self-determination of young students is an advantage for growth and discovery. because self-determination is originated from intrinsic motivation arising from learning desire and needs. According to Oga-Baldwin, Yoshiyuki, Philip and Richard (2017), Self-determination comes from allowing young students to find their own interests and cultivating self-responsibility and self-management at an early age. In another aspect, the teacher support and encouragement in the classroom are very important. Moreover, Georgta, Nicoleta and Ion-ovidiu (2015) have explained when young students apply self-determination in motivation; they can develop their positive interests, and participate in enjoyable activities. In a sense, the self-determination means communication, cooperation, engagement, and achieve high-

scores (Maya & Kimberly & Kristie, 2014). The standards and categories of student motivational engagement is shown in the following table:

Table 2: The Standards and Categories of Student Motivational Engagement

Categories	Standards
The Positive Motivation of Students (Ur, 2015, p275)	<ol style="list-style-type: none"> 1. Engage in an activity positively. 2. Accomplish assignments well 3. Have a strong self-determination and diligence 4. Have a good perception and can cooperate with others
The Negative Motivation of Students (Anita, 2001)	<ol style="list-style-type: none"> 1. Perform badly in an activity 2. Can't complete assignments 3. Be satisfied with low scores 4. Have low efficacy 5. Have big worries

3.4 Chinese Vocabulary Acquisition

Suk, Grace and Kim ever pointed (2017) vocabulary is a basic factor in the second language acquisition. Vocabulary learning is related to the speech-based plan, and it is a process to establish second language phonology. They suggested the rehearsal strategies (employing a list of vocabularies to deep and broaden young student's accumulation) for teaching foreign language. Mitsuko (2017) thought language acquisition strategy is employing vocabulary tests to enhance students' working memory. Yuka (2014) thought, for second language acquisition, the most important is perceiving differences and similarities of properties in vocabulary. Moreover, Suk, Grace and Kim (2017) pointed out that the environment has large extent influences on second language students because students can be motivated by positive atmosphere in the classroom.

4. Research Methodology

4.1 Subjects

The interviewed participants were four randomly selected students in two classes of Primary One, and 37 students in Primary One at a school in Pathum Thani Province were under observation. They had already learned Mandarin pronunciation for at least one year. All of them were Thai students.

4.2 Research Instruments

Table 3: Research Type and Instruments

Research Type	Research Instruments
<ul style="list-style-type: none"> • The qualitative research study adopted from Chrisensen, 	<ul style="list-style-type: none"> • Interviews • Observation Notes

Johnson & Turner (2015, p.237) and Ryan (2017)	• Chinese Nursery Rhymes Training
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5. Data Collection

5.1 The Time of Data Collection

October 2015 was the beginning of this study. Data collection was completed in February of 2016.

5.2 Designs and Procedures of Data Collection

Interview (pre-interview & post-interview) Design

In the process of interviews, the researcher spent 30 minutes making a conversation with each interviewee. The Pre-interview and the Post-interview each had four questions. And the answers include the precise numbers and words. The evaluation scale have 5 levels, these are “not difficult”, “not very difficult”, “difficult”, “very difficult” and “can’t understand”.

Observation Notes Design

The observation notes include the Normal Mandarin Class Notes and the Chinese Nursery Rhyme Class Notes. The details of notes are shown below.

Table 4: Observation Schedule during November 2015: (Each Week/ One Hour)

The Normal Mandarin Class Notes		The Chinese Nursery Rhyme Class Notes	
The First Week	The Third Week	The Second Week	The Forth Week

Chinese Nursery Rhyme Training Procedures

The Chinese nursery rhyme training materials were two Chinese nursery rhymes. These were “Two Tigers”, “Twinkle Stars”. The procedures of training were: 1) Students watched and listened to Chinese nursery rhymes. 2) Students sang Chinese nursery rhymes. 3) The Thai teacher explained Chinese nursery rhymes to class. 4) Students pronounced Chinese nursery rhymes following the teacher. 5) Students listened and sang alone.

6. Data Analysis

The qualitative research data analysis was used to deal with the content of observation notes, pre-interviews, and post- interviews.

7. Results

The four primary students' responses were interpreted as the results of interviews (Pre-interview & Post-interview) following each question.

Pre-Interviews

Question 1: How many Chinese nursery rhymes you have learned at pre-school?

Table 5: The Qualitative Data: Pre-interview (Answer 1)

Student	Students Responses / Results
A	I have learned the Chinese nursery rhymes at kindergarten. However, I just remember some words or phrases.
B	I have also learned Chinese nursery rhymes before, I just remember the melody of music and forget the names of the nursery rhymes.
C	I have learned Chinese nursery rhymes, but I can't remember anything.
D	That's a funny activity, but I have forgotten all Chinese nursery rhymes I have learned.

In summary, 1) The four students all had the experience of learning the Chinese nursery rhymes in kindergarten. 2). All of them have forgotten the details of nursery rhymes. It means they almost do not remember Mandarin vocabulary. 3). Only one student enjoyed reciting the rhymes. 4). Another one said he liked the activity, because it is funny.

Question 2: How many Mandarin consonant phonemes, vowel phonemes, and intonations you have learned before training?

Table 6: The Qualitative Data: Pre-interview (Answer 2)

Mandarin Textbook of Primary One (Numbers)	Student A	Student B	Student C	Student D
Consonants (24)	24	23	23	22
Vowels (23)	23	23	23	23
Intonations (4)	4	4	4	4

In summary, the interviewees have good basic knowledge of Mandarin phonemes, but they cannot pronounce Mandarin words.

Question 3: What did the teacher do to improve your Mandarin pronunciation in the classroom?

Table 7: The Qualitative Data: Pre-interview (Answer 3)

Student	Results	Techniques
A	Generally, the teacher reviewed the previous lessons, and then taught us a new lesson.	<ul style="list-style-type: none"> Review previous lessons
B	The teacher reviewed the lessons before starting a new lesson. If we have some questions, we can ask the teacher, but we like to keep silent in the classroom.	<ul style="list-style-type: none"> Review previous lessons Students can ask questions
D	Teacher led us to read the textbook several times, and then, did exercises of the main textbook. In the class time that is left, the teacher may ask some questions, or let us review lessons quietly and individually.	<ul style="list-style-type: none"> Review previous lessons Work quietly The lesson shape: <ol style="list-style-type: none"> Read repetition Do exercises Questions from the teacher
C	We read books and do exercises regularly.	<ul style="list-style-type: none"> Read Do exercises

In summary, the results are 1). The activities that the Thai native Mandarin teacher preferred to use were reviewing the previous lesson, then teaching the new lesson, and instructing the students to do exercises. 2). Most of the time, students did the exercises by themselves while keeping the quiet.

Question 4: Is it difficult for you to pronounce Pinyin that you have never learned?

Table 8: The Qualitative Data: Pre-interview (Answer 4)

	Student A	Student B	Student C	Student D
Results	Very Difficult	Not Difficult	Very Difficult	Difficult
The Details of the Results	Difficult Phonemes: “u”, “ui”, “uan”, “yuan”, “yun”			

In summary, three Primary One students agreed that unfamiliar words are hard for them; however, one was confident with the Mandarin pronunciation

7.1 Post-Interviews

Question 1: Do you feel it is hard to pronounce pin-yin accurately, apart from those in Chinese nursery rhymes training?

Table 9: The Qualitative Data: Post-interview (Answer 1)

Student	Results	The Details of Results.
A	Difficult	It's hard to remember and apply.
B	Very Difficult	The student failed to face new Pinyin.
C	Difficult	It's hard to remember and apply.
D	Difficult	It's hard to remember and apply.

In summary, the four interviewees lost courage to face the challenges of Mandarin pronunciation, when the class was taught in the traditional approach.

Question 2: Do you feel it is hard to pronounce Mandarin words in Chinese nursery rhymes?

Table 10: The Qualitative Data: Post-interview (Answer 2)

Student	Results	The Details of Results	Percentage
			100%
A, B, C	Difficult	Vocabulary content in nursery rhymes are difficult to pronounce without the melody	60%
D	Very Difficult	Vocabulary content in nursery rhymes are difficult to pronounce without the melody and rhyming words.	80%

In summary, 1). the four Primary One interviewees still feel it is hard to pronounce words in the Chinese nursery rhymes during the training as well. 2). It also reflects that students' Mandarin pronunciation is easily influenced by music of the Chinese nursery rhymes activity.

Question 3: How much is Mandarin pronunciation do you know more than before?

Table 11: The Qualitative Data: Post-interview (Answer 3)

Students	Results	The Details of Results	
A	Not Very Difficult	<ul style="list-style-type: none"> • Achieve a lot from training. • Be aware of rhyming words 	<ul style="list-style-type: none"> • All of four students has short-term memory of vocabularies • Has group cooperation
B	Difficult	<ul style="list-style-type: none"> • Achieve a little from training. • Be aware of rhyming words 	
C	Can't Understand	<ul style="list-style-type: none"> • Not aware of rhyming words 	
D	Not Very Difficult	<ul style="list-style-type: none"> • Achieve a little from training. • Be aware of rhyming words 	

In summary, 1). The interviewees had progressed after the Chinese Nursery Rhyme training. Some progressed more than others, 2). The process also presented they were engaged in the activity at varying degrees.

Question 4: Which vocabularies can you master better than before thorough training?

Table 12: The Qualitative Data: Post-interview (Answer 4: Reason)

	Results	Reasons
Student A Student D	Xingxing	This Mandarin vocabulary is similar to Thai vocabulary pronunciation.
Student B Student C	Qiguai	This Mandarin vocabulary is different from Thai vocabulary pronunciation, especially the phoneme “u”. The student knew this before training.

In summary, every interviewee had mastered new words, because they can classify and distinguish the Thai-Mandarin phonological system to some extent.

8.3 Observation Notes: Normal Mandarins Class and Chinese Nursery Rhymes Training

Table 13: The Observation Notes during November 2015

	Description of the Observation	Topics of Student
The First Week	I saw the <i>students were bored</i> with Mandarin phonemes and vocabularies in the textbook, because they did not aware of Mandarin phonology. <i>Being very young</i> , they could not understand Thai systematically. In the classroom young Primary one student just <i>repeat Mandarin pronunciation</i> following the Thai teacher <i>without vivid activities by media</i> . Primary one students can be organized by groups with instruction of the teacher.	<ul style="list-style-type: none"> • Mandarin vowels, consonants and Pinyin without its meanings • Discussion how to write down Mandarin phonemes in the Thai language.
The Third Week	I saw they have been taught by <i>short stories</i> for learning new vocabularies. They are demanded by the Thai teacher <i>to paint Mandarin vocabularies</i> instead of Mandarin pronunciation.	
The Second Week	I saw they <i>were curious about</i> the Chinese nursery rhyme training. They were <i>engaged in training</i> , and <i>worked in groups to share information</i> with one another. They can <i>understand the Mandarin instructions</i> in the steps. They can <i>speak following the musical melody</i>	<ul style="list-style-type: none"> • The Character of the tiger • Some Mandarin vocabularies
The Fourth Week	I saw they <i>already know</i> the steps of training and <i>have done the process automatically</i> , could <i>remember the previous Chinese nursery rhyme melody and rhyming words</i> . They <i>sing the Chinese nursery rhymes along</i> instead of keeping <i>silent</i> .	

In summary, through the Chinese nursery rhymes training, young primary students can keep long attention than normal mandarin word teaching repeatedly. Because motivation of young students is easily stimulated by musical rhyming, classroom activities, and colorful pictures in video or in papers. These funny factors interest them, let them attempt to try their best to conquer the different and difficult Mandarin pronunciation in classroom practices.

8. Discussions of the Results

The following tables are made of discussions from the results of Pre-Interviews, Post-Interviews and Observation notes during November 2015. They are shown as below:

Table 14: The Discussion on Normal Mandarin Class and Chinese Nursery Rhyme Training

	Normal Mandarin Class	Chinese Nursery Rhyme Training Class
Students Behaviors in the Classroom	<ul style="list-style-type: none"> • Lose attentions in Mandarin phonemes. • Not aware of the Mandarin phonology system. 	<ul style="list-style-type: none"> • Keep long attention in the characters of cartoons of Chinese nursery rhymes • Motivated by musical melody easily • Engage in the training • Do not keep silent any more. • Sing the songs • Pronounce some rhyming words
	<ul style="list-style-type: none"> • Interested in listening stories in Thai. • Have fun in drawing Mandarin vocabulary • Do not know the details of different phonemes in Thai and Mandarin. 	<ul style="list-style-type: none"> • Be familiar with the process of Chinese nursery rhymes training. • Could discuss Chinese nursery rhyming words • Remembered the melody of Chinese nursery rhymes. • Dare to pronounce Mandarin phonemes any more.

In summary, through the Chinese nursery rhymes training, young primary students can keep longer attention than going through normal mandarin words teaching repeatedly because the motivation of young students are easily stimulated by musical rhyming, classroom activities, and colorful pictures in videos or in papers. They show greater interest when they are physically involved.

Table 15: The Discussion between Pre-interviews and Post-interviews

Findings	Pre-interviews	Post-interviews
Chinese Nursery Rhyme Experiences	<ul style="list-style-type: none"> • Have experiences at kindergarten only. 	<ul style="list-style-type: none"> • Enjoy Chinese nursery rhyme training,
New Mandarin Vocabulary	<ul style="list-style-type: none"> • Scared to face them • Not easy to remember them 	<ul style="list-style-type: none"> • Master more words from the training • Learn quickly than interpretation words
Mandarin Phonemes	<ul style="list-style-type: none"> • Find Mandarin phonemes: “u”, 	<ul style="list-style-type: none"> • Remember new words of “Xinxin” • Discover and master new words of

	“uan”, “ui”, “yuan”, “yue” are difficult to pronounce.	“Qiguai” that are different from Thai pronunciation.
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In summary, through the Chinese nursery rhymes training, young primary students are aware of the Mandarin-Thai language phonemes in some new words, while they begin to classify and distinguish different phonemes to enlarge their Mandarin vocabulary volume.

In contrast to the previous studies from the aspects of phonological awareness and students’ motivation, 1). Yaemsaard & Soonchornmanee (2005) implied that students can improve their reading ability when they apply phonological awareness in reading. From the aspect of nursery rhymes and students’ motivation: 2). Ur (2015) suggested that nursery rhymes as learning material can motivate young students in learning a second language. 3). Katz, Jones, Shah, Buschkuehl and Jaeggi (2016) viewed the nursery rhymes are fun for young students. From the aspect of music and students’ motivation: 4). Akinjogbin and Kayode (2011), Radka and Jana (2014) thought students can be attracted to the music of the rhymes. 5). Johnmarshall (2012) found musical melody may influence young students’ engagements and attitudes. From the aspect of teaching techniques and students’ motivation: 6). Caciuc (2015) viewed that the techniques of class teaching should be changed from teacher-centered to student-centered. 7). Bulter (2015) implied that teacher should organize more funny games or activities to stimulate student learning. 8). Hatice (2013) found the activity can develop positive behaviors and intrinsic motivation of students.

In this study, the researcher has found a new claim, that is, teaching Thai Primary student Mandarin phonological awareness through Chinese nursery rhymes training can help Thai students be aware of different phonemes between Mandarin and the Thai language. Therefore, every participant achieves high-motivation in pronouncing Mandarin vocabularies efficiently, not only enhance their learning attention, but also facilitate their accumulation of Mandarin vocabularies gradually and naturally. Moreover, this study can prove that the underlying motivation of student are always stimulated by some high-frequently multimedia activities.

9. Conclusion

Therefore, this research seems to support the research question, that is, teaching Chinese nursery rhymes can motivate Thai primary student Mandarin pronunciation.

Limitations of this study can be concluded with the following: 1). Research methodology is only qualitative. 2) The study time was just two months and the training materials were two Chinese nursery rhymes. 3.) The participants totaled 37 primary students, so they could not represent all Thai primary students 4). The result of research has one possibility, that is, Thai Primary One students are motivated by the playing process and enjoyable atmosphere in the classroom, not the Chinese nursery rhymes only. Recommendations of this research are 1). Chinese nursery rhyme training is a funny language learning experience and can be found in many channels such as media, books,

or conversations. 2). Chinese nursery rhymes can create many topics and many kinds of activities. 3). Chinese nursery rhyme training is a teaching model to enhance young student short-term memory in any second language acquisition. 4). Mandarin phonological awareness is not a feature to be learned by just Primary One students, but all primary level students should be helped to build a systematically linguistic knowledge at the beginning level.

Moreover, through this study, the researcher would like to pose a future outlook in developing bilingual education industry. That is the second language acquisition of teaching and learning is closely related to a basis of student-centered psychological motivation and a series of activities arising from creation of the teaching models in the classroom, it can be applied in any foreign language acquisition.

10. Acknowledgement

I would like to express my sincerest thanks to Assistant Professor Dr. Anchalee Chayanuvat, Dean of the Faculty of Education, and Dr. Ubon Sanpatchayapong, my thesis advisor and Dr. Pannarat Wansavatkul, my journal editor. Thanks to my parents and friends who are encouraging me in the process of writing this journal article, as well as the school (whose name I prefer not to disclose due to the required ethical considerations), which provided the opportunity to me to complete my data collection, with the help of a Thai teacher who taught Mandarin pronunciation in that school.

11. References

Akinjogbin, S. A., & Kayode, O.O. (2011). The play theory: a critique from the communitarian context. *Communication and Culture. International Perspective*, 2 (3), 111-119. <https://www.icidr.org> .

Albert, C. (2013). Rhythmicity in infants' experiences and their development. *Physiology- Pairs*, 107 (2013), 286-290. (Online). <http://www.elsevier.com/locate>

Anisha, S., & Nachiketa, R b. (2015). Auditory perception of non-sense and familiar Bengali rhyming words in children with and without SLD. *Pediatric Otorhinolaryngology*, 79 (2015), 2300-2307. (Online). <http://www.elsevier.com/locate/>

Bialystok, E., Craik, I., & Luk. (2012). Bilingualism: consequences for mind and brain. *Trends in Cognitive Sciences*, 16 (4), 240-250, <http://www.sciencedirect.com/science/article/>

Bialystok. E., & Martin, M.M. (2004). Attention and inhibition in bilingual children: Attention and inhibition in bilingual children. *Dev. Sci.* 325-339. (Online). <https://www.ncbi.nlm.nih.gov/>

Brno. (2007). *A Compassion of Czech and English Nursery Rhymes*. Masaryk University Press. (Online). <https://www.google.hr/search>.

Burgaleta, M., Sanjuán, A. N. N., Ventura-Campos, N., & Sebastian-Galles, A. C. (2016) Bilingualism at the core of the brain, Structural between bilinguals and monolinguals revealed by subcortical shape analysis. *Neuroimag*, 125 (2016), 437-445. (Online). <http://www.sciencedirect.com/science/article/>

Caitlin, C., Farrell, A., Julie, A., & Marsh, (2016). Contributing Conditions: A qualitative comparative analysis of teachers' instructional responses to data. *Teaching and Teacher Education*, 60 (2016), 398 – 412. <http://www.sciencedirect.com/science/article>

Carl, J. D., Diana, M., & Deborah, W. H. (2015). Relationship between Young Children's Nursery Rhyme Experiences and Knowledge and Phonological and Print-Related Abilities. *Procedia - Social and Behavioral Sciences*, 191 (2), 1947-1951 <http://www.sciencedirect.com/science/article/>

Chrisensen, B. L., Johnson, R. B., & Turner. L.A. (2015). *Research Methods, Design, and Analysis*. R. R. Donnelley & Sons Company Press.

Costa, A., & Sebastián, G. N. (2014). *How dose bilingual experiences sculpt the brain* Pompeu Fabra University Press. <https://repositori.upf.edu/bitstream>

Deng, L., & Dang, J. (2007). *Advance in Chinese Spoken Language Processing. Speech analysis: The Production-Perceptive*. New Jersey: World Scientific.

Furman, N., Goldberg, D., & Lusin, N. (2010). *Enrollments in languages other than English in United States institutions of higher education*, New York, NY: Modern Language Association. <http://www.mla.org>

Georgeta, P., Nicolet, D., & Ion-Ovidiu, P. (2015). The influence of reasons approving on students motivation for learning. *Sciences. Procedia - Social and Behavioral Sciences*, 197 (2015), 1215-1222. <http://ac.els-cdn.com>

Grenfell, M., & Harris, V. (2015). Memorisation strategies and the adolescent learner of Mandarin Chinese as a foreign language. *Linguistics and Education*, 31 (2015), 1-13. (Online). <http://www.sciencedirect.com/science/article>

Harper, L. J. (2011). Nursery rhyme knowledge and phonological awareness in preschool children. *Language and Literacy Education*, 7 (1), 65-78

Hatice, K. (2013). Elements of science in Cypriot folk stories. *Procedia –Sical and Behavioral Sciences*, 106 (2013), 1050-1053. (Online). <http://ac.els-cdn.com>

Huitt, W. (2000). *The information processing approach*. Valdost State University Press. (Online). <http://chiron.valdosta.edu> June12, 2012,

Irina V., Auline H., &Pauline L. (2003). Young Children and Learning Technologies. July 2003. (Online). <http://crpit.com/>

Jeffery, S. M. (2017). Three questions for better academic storytelling. *Business Horizons*, 60 (2017), 3-5. (Online). <http://www.Elsevier.com/locate>

Johnson, D. W., & Johnson, R. (1985) Cooperative learning and teaching citizenship in democracies. *Educational Research*, 76 (2016), 162-177. (Online). <http://www.sciencedirect.com>

Katz, B., Jones. M.R., Shah, P., Buschkuehl, M., & Jaeggi, S. M. (2016). *Individual Differences and Motivational Effects*. <https://link.springer.com/chapter>.

Kovacs. A., & Mehler. J. (2009). Cognitive gains in 7-month-old bilingual infants. *PANS*. 106 (2009), 6556-6560 (Online). <http://www.pnas.org/content/>

Kuo,L.J., Uchikoshi, Y., Kim, T.J., & Yang, X.Y. (2016). Bilingualism and phonological awareness: Re-examining theories of cross-language transfer and structural sensitivity. *Contemporary Educational Psychology*, 46 (2016), 1-9. (Online). <http://www.sciencedirect.com>

Laurie, J. H. (2011). Nursery Rhyme Knowledge and Phonological Awareness in Preschool Children. *Language and Literacy Education*, 7 (1), 65-78. (Online). <http://jolle.coe.uga.edu>.

Levey, S., & Polirstok, S. (2011). *Language Development: Understanding Language Diversity in the Classroom*. (Online). <http://www.sagepub.com/levey>.

Lisa L. C., Einat L., Anjali D., Jeffrey, R. B. (2016). The relationship between maternal education and the neural substrates of phoneme perception in children: Interactions between socioeconomic status and proficiency level. *Brain & Language*, 171 (2017), 14-22. (Online). <http://www.sciencedirect.com/search>.

Liu X., et al. (2017). Onset age of L2 acquisition influences network in early and late Cantonese-Mandarin Bilinguals. *Brain & Language*, 174 (2017), 16-28. (Online). <http://www.Elsevier.com>

Ma, L., Perrier, P., & Dang, J. (2015). Strength of syllabic influence on articulation in Mandarin Chinese and French: Insights from a motor control approach. *Phonetica*, 53 (2015), 101-124. (Online). <http://www.Elsevier.Com/locate/phonetics>.

Manfred, S. (2016). Bilingual benefits in education and health. *Trends in Neuroscience and Education*, 5 (2016), 67-76. (Online). <http://www.elsevier.com>

Martin, Kern. & Robert, E. H. (2001). *A History of Chinese Literature*. Edited by Victor H. Mair. New York: Columbia University Press.

Marzieh, M., & Masoud H. B. (2011). The Impacts of Music on Language Learners' Performance. *Porcedia – Social and Behavioral Sciences*, 30 (2011), 2186-2190. (Online). <http://www.sciencedirect.com>.

Maureen, S., & Laurice, T. (2016). Assessing successive bilinguals in two languages: A longitudinal look at English-speaking children in France. *Communication Disorders*, 64 (2016), 45-61. (Online). <http://www.sciencedirect.com>.

Maya, S.M., Kimberly, A.N., Kristie, D., & Saumure. (2014). Students' self-determined and integrative orientations and teachers' motivational support in a Japanese as a foreign language context. *System*, 45 (2014), 1-15. (Online). <http://www.sciencedirect.com>.

Mila, V., Camilla, H., Foyn, R. A., & Nilsen, H. Sigmundsson. (2014). Link between phonological memory, first language competence and second language competence in 10-year-old children. *Learning and Individual Differences*, 35 (2014), 87-95. (Online). <http://www.Elsevier.Com/locate/>

Mitsuko, T. (2017). Examining EFL vocabulary learning motivation in a demotivating learning environment. *System*, 65 (2017), 130-138. (Online). [http:// www. Elsevier. Com/locate/](http://www.Elsevier.Com/locate/)

Moore, A. (2012). *Theories Teaching and Learning: pedagogy, curriculum and culture*. Page 1-3, London: Routledge Press. (Online). <https://www.google.co.th/search>

Natsuki, A., Elizabeth, R., Goldenberg, C. M., & Sandhofer. (2016). Children’s use of linguistic information when learning in a bilingual contest. *Experimental Child Psychology*. 144 (2016), 199-208. (Online). [http:// www. Elsevier.com /locate](http://www.Elsevier.com/locate)

Oga-Baldwi W. L. Q. et al. (2017). Motivation young language learners: A longitudinal model of self-determination motivation in elementary school foreign language classes. *Contemporary Educational Psychology*, 49 (2017), 140-150. (Online). [http://www. Elsevier.com](http://www.Elsevier.com)

Pattapong K., & Chinuornno, A. (2005). A study of fifth grade students’ motivation toward Task-based English-speaking instruction. *International Language*, 1 (2005), 72-83. (Online). [http://www. elsevier.com](http://www.elsevier.com)

Peeters M. L., Verhoeven L., Moor D. J, Balkom, V. H., & Leeuwe, V. J. (2009). *Home literacy predictors of early reading development in children with cerebral palsy*. The Netherlands: Radboud University Nijmegen Press. (Online). <https://www.ncbi.nlm.nih.gov>.

Pinyoanuntapong, S. (2013). The Development of Thai Early Childhood Education Curriculum to Promote Desirable Characteristics of Preschool Children. *Procedia- Social and Behavioral Sciences*, 88 (2013), 321-327. (Online). [http://www. elsevier.com](http://www.elsevier.com)

Radka, W., & Jana, K. (2015). Early Childhood Pre-Reading Literacy Development. *Procedia –Social and Behavioral Sciences*, 101 (2015), 878-883. (Online). [http:// www. elsevier.com](http://www.elsevier.com).

Ramnath, R. (2009). Creative writing: Exploring the Underexplored. *Asian Journal of literature, culture and society*. 03, No. 01/02. Assumption University Press.

- Riabov E.A., & Kobenko Y. B. (2015). Onomatopoeia in the English and German Nursery Rhymes. *Procedia-Social and Behavioral Sciences*, 206 (2015), 123-126. (Online). [http://www. Elsevier.com](http://www.Elsevier.com)
- Sam, K., & Claire, N. (2017). An acoustic-articulatory study of bilingual vowel production: Advances tongue root vowels in Twi and tense/lax vowels in Ghanaian English. *Phonetics*. 62 (2017), 65-8. (Online). [http://www. Elsevier.com](http://www.Elsevier.com)
- Selma, G & Nazli, D. (2014). A Study Aiming to Develop Listening Skills of Elementary Second Grade Students. *Porcedia – Social and Behavioral Science*. 191 (2015), 103-109. (Online). [http:// www. sciencedirect.com](http://www.sciencedirect.com).
- Suk, Y., Grace & Kim. (2017). Multicomponent view of vocabulary acquisition: An investigation with primary grade children. *Experimental Child Psychology*. 162 (2017), 120- 133. (Online). [http://www. sciencedirect.com](http://www.sciencedirect.com).
- Terry, N. P. (2010). Examining relationships among dialect variation and emergent literacy skills. *Communication Disorders Quarterly*. Doi:10.1177//1525740110368846.
- Townsend, M., & Konold, T.R. (2010). Measuring early literacy skills: A latent variable investigation of the Phonological Awareness Literacy Screening for Pre-school. *Psycho-educational Assessment*. 28 (2010), 115-128.
- United Nations Security Council. (1974). *United Nations' Official Language Rank*. Retrieved 15 January (Online). <https://www.google.co.th>
- Ur, P. (2009). *A Course in Language Teaching: Practice and theory*. United Kingdom: University Press. (Online). <http://www.cambridge.org>
- Wikipedia. (2017). *Nursery Rhyme: the early nursery rhyme in the world*. (Online). [https://en. Org/wiki.com](https://en.Org/wiki.com)
- Wu, X., Murray, J. M., & Wang, Yue. (2014). Tone assimilation by Mandarin and Thai listeners with and without L2 experiment. *Phonetics*.46 (2014), 86-100. University Press. (Online). [http:// www. sciencedirect.com](http://www.sciencedirect.com)
- Yuka, Y. (2014). Multidimensional vocabulary acquisition through deliberate vocabulary list learning. *System*. 42 (2014), 232-243. (Online). [http://www. sciencedirect.com](http://www.sciencedirect.com)

Yaemsaard & Soonchornmanee. (2005). Role of phonological awareness of English reading in Thai Context. *Wording papers in English as an International language*. 1 (2005), 84-91.

Zhang, C., & Ma, H. (2015). A Survey of Chinese Teaching in Thailand Thonburi's Primary Schools. (Online). <http://caod.oriprobe.com/journals>

Appendix A: Mandarin Phonemes

Compared with Table 2.3: The Mandarin consonants (Initials) are: /b/, /p/, /m/, /f/, /d/, /t/, /n/, /l/, /g/, /k/, /h/, /j/, /q/, /x/, /z/, /c/, /s/, /r/, /zh/, /ch/, /sh/, /y/, /w/. The Mandarin vowels are: /a/, /o/, /e/, /i/, /u/, /Ü/, /ai/, /ei/, /ui/, /ao/, /ou/, /iu/, /ie/, /ue/, /er/, /an/, /en/, /in/, /un/, /Ün/, /ang/, /eng/, /ing/, /ong/. The whole Integration tion pronunciation sounds are: /zi/, /ci/, /si/, /zhi/, /chi/, /shi/, /ri/, /yi/, /wu/, /yu/, /yin/, /ying/, /yun/, /ye/, /yue/, /yuan/.

Appendix B: Nursery Rhymes Materials

Chinese Nursery Rhyme 1 <Find a Friend>

Find, find, find a friend, I found a good friend.

Give a salute, shake my hand. You are my good friend, Goodbye

Chinese Nursery Rhyme 2 <One Toad, One Mouth>

One toad, one mouth. Two eyes, four legs, Splash, splash, they jump into the water!

Two toads, two mouths, four eyes, eight legs, Splash, splash, they jump into the water!

Chinese Nursery Rhymes 3 <Two Tigers>

Two little tigers, two little tigers (They) run very fast, (They) run very fast.

One has no eyes. One has no tail. Very strange! Very strange!

Pinyin; Liǎng zhī lǎo hǔ, Liǎng zhī lǎo hǔ, Pǎo de kuài, Pǎo de kuài. Yī zhī méi yǒu yǎnjīng,

Yī zhī méi yǒu wěibā. Zhēn qí guài, Zhēn qí guài.

Chinese Nursery Rhymes 4 <Twinkle Star>

Pinyin: Yi shan yi shan liang jing jing, man tian dou shi xiao xing xing, guai zai tian kong
fang guang ming, hao xiang xu duo xiao yan jing