Bilingual Music Use for Learning Moken and English Languages for Children and Youth of a Sea Gypsy Ethnic Group

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Abstract

This research is the action research was executed utilizing the PAOR process, ethnic music data, a genre-based approach, and Carl Orff's pedagogical framework for music education. The objectives are: 1) to create bilingual songs that align with Moken music culture and lifestyle; and 2) to find guidelines for using bilingual music to facilitate the learning of the Moken and English languages for children and youth of the Chao Lay ethnic group.

The findings indicated that the development of bilingual music for the acquisition of Moken and English can be accomplished in three primary stages: 1) Preparation involves selecting and cultivating Moken music, choosing appropriate words and meanings for songs, and crafting bilingual lyrics for children; 2) Composition entails the creation of bilingual music and songs utilizing distinctive melodies from Moken songs; and 3) Creation focuses on formulating guidelines for employing bilingual music in the instruction of Moken and English.

Keywords: Bilingual Music, Learning Moken and English Languages, Children and Youth of a Sea Gypsy Ethnic Group.

The Sea Gypsy ethnic group, or "Chao Lay" for short, has unique cultural characteristics such as language, music, and a lifestyle closely linked with the sea. Traditionally, the Chao Lay lived a nomadic life at sea, their homes being small boats called "Kabang Boats". They traveled and stopped at various islands according to the wind, waves, and abundant resources. Nowadays, the Chao Lay have settled in permanent locations. They are divided into three subgroups, each with different languages: the Urak Lawoi, the Moklen, and the Moken. Each group resides in areas around the Andaman Sea as follows:

1. The Urak Lawoi: Located in Satun, Krabi, and Phuket provinces.

- 2. The Moklen: Mainly residing in Phuket and Phang Nga provinces.
- 3. The Moken: Found in Phang Nga, Ranong, and some parts of Phuket provinces.

Because the regions where the Sea Gypsy ethnic groups currently reside are major tourist areas of Thailand, there is a high chance of them being assimilated into urban society. This has impacted the lifestyle and culture of the Sea Gypsies, as they frequently interact with both local and international visitors. Working with urban populations has forced the Sea Gypsies to adapt to urban ways. Culturally, this may lead to some degree of cultural assimilation. In some places, Sea Gypsy music and performances have

become local cultural representatives that attract tourist interest.

However, the group of Sea Gypsies who live in more remote areas remain tourist targets. This group is the Moken, who have distinctive language, cultures, beliefs, music, and songs, which are significant aspects that give them a valuable identity and can be promoted as their unique cultural identity. Despite this, their current lifestyle changes are causing some cultural elements, particularly in music and songs that affect their language and performances, to fade away.

Language development is crucial for both personal and regional development. Besides being a communication tool, language fosters understanding that leads to community and societal development, enhancing knowledge and comprehension. Local languages are vital for local understanding, while English, as a global language, is essential for wider communication. It serves as a lingua franca for intercultural communication, significantly benefiting cultural, economic, and tourism-related understanding.

Given the abovementioned reasons, developing both the Moken and English languages and promoting Moken music culture can be implemented through bilingual songs (Moken and English). This integrates musical and linguistic knowledge, instilling knowledge in individuals and creating cultural identity value from visual memories for the tourism industry. It enhances the language skills of youth in both local and global languages.

Therefore, the researcher is interested in creating guidelines for using bilingual music for learning Moken and English for children and youth of the Sea Gypsy ethnic group through action research. This involves designing music suitable for children's learning and developing local and English language skills through Sea Gypsy culture. Simultaneously, it fosters ethnic awareness among the Chao Lay to preserve their culture, promoting self-value creation by the Chao Lay themselves, leading to greater self-

reliance, and pride, and reducing social disparities in the long term.

Research Objectives

- 1. To create bilingual songs that align with Moken music culture and lifestyle.
- 2. To find guidelines for using bilingual music to facilitate the learning of the Moken and English languages for children and youth of the Chao Lay ethnic group.

Methodological Framework

This research is based on the principles of music used to develop potential, employing musical principles to enhance language skills for children and youth. The theories applied are related to indigenous music, language, and music teaching activities, using musical principles relevant to the ethnic group, genre-based language teaching approaches, and Carl Orff's music teaching methodology. The research follows the action research cycle of Kemmis and McTaggart (1988), comprising the PAOR process (Plan, Action, Observation, Reflection). Data collection involved reviewing existing documents on Moken music and language in Moken songs, as well as field data collection. The study areas were the Moken villages in Mu Ko Surin National Park, Phang Nga Province; Thai Mai Village, Rawai Subdistrict; and Thai Mai Village, Baan Laem Tookkae, Ratsada Subdistrict, Mueang Phuket District, Phuket Province.

The population for this research consisted of individuals who had reached legal adulthood and could provide information about Moken music in the area or were related to the Moken Sea Gypsy ethnic group in the southern part. The sample included children, youth, and those interested in learning bilingual songs residing in areas with the Moken ethnic group or having associations with the Chao Lay group, totaling 20 people.

This analysis employed descriptive and interpretative methods. Data gathered during activities and their outcomes were analyzed step-by-step using content analysis and linked to

relevant theories and concepts that align with the research objectives. The analyzed data was then compiled into descriptive text to develop credible guidelines for using bilingual music to facilitate the learning of Moken and English languages for children and youth of the Chao Lay ethnic group.

Research Results

The research findings showed that the Moken ethnic group resided in two major areas: the Surin Islands in Phang Nga Province and Lao Island in Ranong Province. In both locations, the Moken continued to use their native language in daily life. However, only a few individuals, mostly adults, and artists, could sing traditional Moken songs. Most of these artists lived in the Surin Islands, Phang Nga Province. For this study, data on the Moken language were collected through songs. The researcher mainly gathered data from Moken artists living in the Surin Islands and conducted other steps in Phuket, where various other Chao Lay Sea Gypsy ethnic groups coexisted. The detailed process was as follows:

1. Preparation and Selection of Data

For this study, the initial data needed and analyzed was Moken music. The researcher explored document data and audio recordings. It was found that audio recordings or documents returned to the community by researchers had been destroyed in a fire at the Moken village at Ao Bon Yai, South Surin Island, Koh Phra Thong Subdistrict, Khuraburi District, Phang Nga Province in early February 2019. As a result, the existing audio evidence was limited.

However, the researcher recorded songs sung by two surviving artists: Mr. Jipen Klatalay, 64 years old, and Mr. Tad Klatalay, 71 years old (as of 2024). The songs they sang were based on their memories and their skill in improvising new songs during performance (live improvisation), without any written records.

1.1 Moken Song Data

The song data came from research by Ungpho.R and Chandransu.N (2019), who

conducted a study on "Moken and the Revival: Music Education for Sustainable Community Cultural He

ritage Preservation." At that time of recording, there were still female singers who could sing women's songs. The songs considered in the research included "Jijumpu Tiak," "Duyung," "Ai Boom Ai Bab," "Suni" (primarily sung by women), and "Kordo." However, when this research was conducted, no female singers in the Moken villages could sing the complete versions of these songs. Therefore, new recordings were performed solely by male singers. Some songs were not recorded because the male singers could not sing them. The new recordings (2024) include "Jijumpu Tiak," "Duyung," "Ai Boom Ai Bab," "Kuhululu," "Pavov." "Mannok." and "Babu." demonstrate the characteristics of Moken melodies, the researcher compared them approximately as shown in Table 1.

From the data in Table 1, it is evident that the presentation of songs sung by the Moken group varies by context. The notes for this recording were taken based on what was heard. Even though the songs are the same, the details of the melodies and lyrics differ. The melodies might be similar in some parts, but musicians find ways to play them differently each time. For this reason, the researcher transcribed the notes to learn the melodies and forwarded the lyrics for translation and further analysis of their content and meaning.

1.2 Moken Language in Songs

The Moken songs revealed that the singers were quite elderly and were beginning to experience health issues. This affected the clarity and continuity of the lyrics, although they still managed to improvise melodies to entertain listeners. The extraction of lyrics focused only on parts that could be interpreted, and the researcher compiled the following:





Figure 2: Recording Process for Data Analysis

The following table presents Thai and English translations of lyrics from three selected songs: "Jijumpu Tiak," "Duyung," "Suni," and "Ai Boom Ai Bab." The example of the data preparation for the song "Duyung" is presented in the table below.

Table 1: Moken song lyrics with Thai transliteration, English phonetic transcription, and Thai-English translation

Lyrics*	Moken-Thai	Thai	English
ยาดีแปนาจิจุมปูเตี๊ยก Yā dī pæ nā ci cum pū teī́ yk	จีจุม – นก ปูเตี๊ยก – สีขาว	พอเห็นนกสีขาว	-Bird -White -Seagull
ยาดีแปนา ดีลาโรง ดีปุเตียก Yā dī pæ nā dī lā ngong dī pū teī yk	ลาโงง – นกกระยาง ดีปูเตียก - จิจุมปูเตียก	มีนกกระยาง นกนางนวล (นกสีขาว)	-egret -Seagull
ໂຄແນານ ດີແນໂຄ Xonæ bāb dīnæ xo	โอแน – (เป็นค°าสร้อย) บาบ – ตา∕ลุง/ปู่ (ไม่ใช่วัยรุ่น)	โอ้ดุงเอ๋ย	-Uncle -Grandfather -Grandpa
ดาดีลาโอบีอาย Dā dī lā xobī xāy	บีอาย – พี่เขย	โอ้พี่เอ๋ย	-Brother -Brother-in-law
ดีแรมบุม ดีลาเกาตะเอางานัง Dī ngæm būm dī lā keāa xeāngān bạng	บุม – ยาย/ป้า/ช่า (ไม่ใช่วัยรุ่น) ดีลาเกา – เราไป ตะเอา - ข้างนอก งานัง – ปะการัง	บุมเอ๋ย เราไปที่นอกแนวแนวปะการังนั้น	-Aunt -Grandmother -Grand mom -We go -Outside - along - the coral reef
ดีแหมุม ดีลาเกาตะเอาปุตุ Dī ngæm būm dī lā keā ta xeā pū tū	ดีลาเกา – เราไป ตะเอา - ข้างนอก ปูตู – หัวแหลม	ไปที่หัวแหลม	-Go to that cape

Note: * The Moken people do not have a written language, then researchers used the Thai transliteration and English phonetic transcription to conduct this research.

The translations of lyrics in Table 1 were done by local individuals from the Moken village

in the Surin Islands, Phang Nga Province, who were literate. Since the Moken language did not

yet have a clear dictionary and no scholars could truly verify the translations, the researcher used a triangulation method for validation. After translating, the researcher double-checked and confirmed the accuracy with the Moken villagers through reading and mutual understanding to ensure that the translations conveyed the correct meaning.

2. Development of Bilingual Songs for Children

2.1 Song Selection

From the gathered data, the researcher selected credible information that could be distinguished for analysis. The important data consisted of songs with clear lyrics that could be interpreted or translated. Since the Moken songs primarily vocal with rhythm accompaniment and lacked instrumental melodies, song selection required listening to the vocal melodies. The researcher collected and considered criteria for selecting songs to develop children's songs as follows:

- 1) Songs with lyrics that can be interpreted. Based on this criterion, the songs with translatable lyrics included: "Jijumpu Tiak," "Ai Boom Ai Bab," "Suni," and "Duyung."
- 2) Rhythmic Enjoyment: Almost every Moken song has an enjoyable rhythm that can be adapted to create fun, lively music. While the initial parts of a song might be slow, the subsequent sections can incorporate lively rhythms because Moken drum rhythms are fast and lively, adding excitement to the songs.
- 3) Concise Melodies: Considering the songs used in Moken events, they tend to be long, as singers can keep singing by improvising lyrics. The melodies are repetitive, so the researcher analyzed and selected distinctive melodies. Each song has unique melodic features, although some songs may share similarities in certain parts. Thus, the researcher needed to focus on using melodic sections for analysis and use the outstanding melody of each song for consideration as each song has a prominent melody that identifies that melody.

- 4) The melody should use notes that are not overly disjointed. This is determined by examining the melodic patterns or progressions where the notes follow a sequence of full tones or can be adapted to closely resemble the use of pentatonic scales or five-note scales. However, melodies that include half-tones or intervals that leap too far apart were avoided.
- 5) The pitch of the songs should not be too high or too low. Children's songs should have a mid-range pitch. Songs that have notes exceeding an octave range are not suitable for children. From the analyzed songs, none of the Moken songs feature melodies with a range exceeding an octave. Thus, all these songs can be adapted for children.

Based on the selection criteria, it was found that the main factors were the "understanding of the meaning" of the words used for communication and the "melody" suitable for children. The songs chosen by the researcher for further development were "Jijumpu Tiak," "Ai Boom Ai Bab," and "Duyung."

2.2 Language Selection

The researcher selected language based on the genre-based approach, using the following criteria:

- Language and Meaning: The researcher chose words that reflect the Moken way of life and are appropriate for children, avoiding ethically sensitive content. The selected words include:
- 1.1 Topics related to fish, turtles, and birds/white birds: The songs are about various fish, dugongs, turtles, and birds such as seagulls and egrets. (The researcher asked about and found that this particular bird was not found in the area but the Moken knows this kind of bird probably from sailing by the mainland and has learned about how they fly and catch fish).
- 1.2 Natural areas of the Moken: Naturally, the Moken live on boats, sailing through various islands. The land areas on these islands are called "cape" or "headland," and "bay."

- 1.3 Everyday Items: This includes tools for fishing and eating utensils, such as cups, bowls, and shell openers.
- 1.4 Relatives terms used to refer to family members within the group, such as brother, uncle, aunt, paternal grandfather, paternal grandmother, maternal grandfather, maternal grandmother, younger sibling, and brother-in-law.
- 1.5 Time Terms for times of the day, like evening, night, tomorrow, and tonight.
- 2) Language and Context: Language selection was based on situations aligned with culture, lifestyle, and environment to ensure understanding of words in each sentence according to the children's or youth's way of life. This prevents any feelings of disconnection. Thus, most terms are connected to their meanings and understanding of their usage in the sentences, as shown in Table 2.

Table 2: Examples of words and their meanings related to the Moken lifestyle

Moken-Thai	Moken lyrics with Thai transliteration, English phonetic transcription	English
Cī cum – นก	ยาดีแปนาจิจุมปุเตี๊ยก Yā dī pæ nā ci cum pū teī́ yk	-Bird -White -Seagull
Pū teí yk – สีขาว	ยาดีแปนา ดีลาโม ดีปุตียก Yā dī pæ nā dī lā ngong dī pū teī yk	-egret -Seagull
Lā ngong – นกกระยาง	ดีแหมุม ดีลาเกาตะเอางานัง Dī ngæm būm dī lā keāa xeāngān bạng	-Aunt -Grandmother -Grand mom -We go -Outside - along - the coral reef
Dī lā keā – เราไป Ta xeā – ข้างนอก Pūtū – หัวแหลม	ดีแหมุม ดีจากาตะเอาปุตุ Dī ngæm būm dī lā keā ta xeā pū tū	-Go to that cape

3) Language and Register: This involves selecting and compiling words suitable for children (derived and expanded from the songs).

These words are appropriate for children's learning and understanding of the lifestyle and culture of the ethnic group.

Table 3: Table comparing Moken, Thai, and English Languages used in Moken Lifestyles

Category	Moken	Thai	English
Aquatic animals	Kān	ปลา	Fish
	Nād xæ kān	ลูกปลา	Fingerling
	Dū yūng	ปลาพะยูน	Dugong
	Xeī yk cī cum	หอยเจาะ	Shipworms
	Xeī yk talxng	หอยนางรม	Oyster
	Kāla	เต่า	Turtle
	Kā rạng/ngā nạng	ปะการัง	Coral
Poultry	Cī cum	นก	Bird
	Cī cum cā mạng	นกนางนวล	Seagull
	Lā ngong	นกกระยาง	Bittern
	Mā ńxk	ไก่	Chicken

Category	Moken	Thai	English
	Xādā	เป็ด	Duck
Tools/ equipment	Kā bāng	เรือ	Boat
	Sūm	ฉมวก	Harpoon
	Bā yān	แห	Fishnet
	Chx lxy	เอ็นตกปลา	Fishing line
	Ka wį̇́	เชือก	Rope
Relative	Xā ka kā nạy	พี่ชาย	Brother
	Lū xuy kā nạy	น้องชาย	Brother
	Nạy xã kabī nạy	พี่สาว	Sister
	Lū xuy bī nạy	น้องสาว	Sister
	Bāb	ลุง/ตา/ปู่	Uncle, Grandfather, Grandfather
	Būm	ป้า/ยาย/ย่า	Aunt, Grandmother, Grandmother
Other	Ken	ทะเล	Sea
	Lā ngxy kæn	ว่ายน้ ำ	Swim
	Ϋ́ā	กิน	Eat
	Ka lxn	หิว	Hungry
	Mæ xạy	เหนื่อย	Tired
	Lā keā	เดิน	Walk
	Ka red	หลับ	Sleep

4) Language Learning in Context: This process is designed by the researcher to connect with other processes, enabling participants to practice and learn language in the sentences in various situations presented in the songs. They are about simple cultural everyday situations that are easy to understand, such as seeing a bird fly, a fish swim, or a boat float.

2.3 Song Creation

This bilingual song creation aims to align with the musical culture and traditional lifestyle of the Chao Lay Sea Gypsy ethnic group, primarily focusing on the Moken lifestyle on Surin Island, as it remains closely connected to nature and less urbanized compared to other Sea Gypsy groups.

The initial step in creating these songs involved analyzing traditional Moken melodies to identify distinctive features that should represent the ethnic group. Newly arranged melodies needed to be simple in both sound and rhythm to facilitate teaching others and using musical notation systems. The notation was

made in both Thai and Western systems as follows.

The melody of "Duyung" features numerous half-tones. Using half-tones in children's songs could pose difficulties for young singers, so the adapted melody focuses on smooth note transitions instead.



Figure 4: Half-notes in the melody of "Duyung"

From the above melody, the notes used are in the "Fa," "Sol," and "La" range. To adapt these notes for children's songs, the melody can follow the original notes' sequence. It can be adjusted to the "Do" note group and represented in the Thai alphabet notation system or the Numeral notation system to make learning easier, as illustrated in Example Notes 1 and 2 below.

Note 1: Melody using "Fa," "Sol," and "La" notes.

6	- 6 5 4	6	- 6 5 4		- 4 - 4	- 4- 5	- 6
- 4 - 5	- 4 - 5	- 4 - 4	- 4 - 4	- 4 - 5	- 6 - 5	- 4 - 4	- 4 - 4
Note 2: Melody using "Do," "Re," and "Mi" notes.							
3	- 3 2 1	3	- 3 2 1		- 1 - 1	- 1- 2	- 3
1 2	2 2	1 1	1 1	1 2	2 2	1 1	1 1

These notes can be represented in the Western musical notation system as follows.

After analyzing and selecting Moken musical melodies for bilingual songs, the next step was choosing words suitable for children, reflecting the culture and lifestyle of the Chao Lay ethnic group in the Moken songs for consideration in using in the bilingual lyrics.

Table 4: Thai-English lyrics with the same meaning in the song "Duyung."

meaning in the song Duyung,			
Thai lyrics	ปอยดูยูง ติงดูยูง		
	ดูยูงคือพะยูน		
	พะยูนตัวน้อยว่ายน้ำไปมา		
	พะยูนตัวใหญ่ว่ายน้°าตามไป		
English lyrics	Oh Dugong, Oh Dugong,		
	Dugong is Pa-Yun (พะยุน).		
	Small dugongs swim around. Bigger dugongs swim behind.		
	Digger dagongs swim cemma		

2.4 Preparation and Development of Tools After selecting words, melodies, and lyrics for the bilingual songs, the process involved

creating new songs based on the translations, lifestyle, and culture of the Moken group. Preparations to develop guidelines for using bilingual music to teach Moken and English to children and youth of the Sea Gypsy ethnic group were carried out through focus group meetings. These meetings gathered insights from music experts and those connected with the Moken ethnic group, such as Moken musicians, Moken school teachers, and public health nurses in Moken villages, to finalize the guidelines for bilingual music. The following preparations and guidelines were established:

- 1) Data Preparation: This involved selecting words, melodies, and songs as previously presented.
- 2) Document Preparation: Transforming the songs written in Western musical notation into an easier-to-read format. The notation used was an 8-cell grid, using Thai alphabet or numerals to write the notes, along with the lyrics in the grid as follows.

Table 5: Example notation grid used for training (song "Duyung")

							0 /	
Notation	3	- 3 2 1	3	- 3 2 1		- 1 - 1	- 1-2	- 3
Thai lyrics	ปอย	ดู ยูง	ติง	ดู ยูง		ดู ยุง	คือ พะ	ยูน
English lyrics	Oh	Dugong	Oh	Dugong		Dugong	is We	ยูน
Notation	- 1 - 2	- 3 - 2	- 1 - 1	- 1 - 1	- 1 - 2	- 3 - 2	- 1 - 1	- 1 - 1
Thai lyrics	พะ ยูน	ตัวน้อย	ว่าย น้ ำ	ไป มา	พะ ยูน	ตัว ใหญ่	ว่าย น้ ำ	ตาม ไป
English lyrics	Small	dugongs	swim	around.	Bigger	dugongs	swim	behind.

3) Media Creation: Developing materials to facilitate language learning for children and youth of the Sea Gypsy ethnic group. The conclusion was to produce video and audio media with melodies created by the team, used for bilingual song practice. This media creation began with making videos with animations that

match the songs and then converting these into audio formats for groups without video playback equipment.

4) Field Selection for Song Trials: Conducted twice; first with Sea Gypsy children and youth, and second with educational personnel. Since the song trials were during the monsoon season on

the Andaman Sea, accessing remote island areas was not possible. Thus, the research team chose Thai Mai Village, Rawai Subdistrict, Mueang Phuket District, Phuket Province, for the bilingual song implementation. Thai Mai Village houses all three Sea Gypsy groups (Moken, Moklen, and Urak Lawoi), making travel convenient for the research team, educational personnel, and participating children and youth. These area remains accessible during the monsoon without the need for boats.

- 3. Activities for Using Bilingual Songs
 The activities for using bilingual songs to
 find guidelines for developing Moken and
 English language skills among Sea Gypsy
 children and youth.
- 3.1 Finding guidelines for using bilingual songs with music experts:

The approach for teaching music involved applying Carl Orff's music teaching principles to adapt the activities for the language development of children and youth. Orff's method emphasizes communication (communicative performance) through happy active learning and promoting engagement in speaking, singing, moving, and using simple instruments. In this case, small, lightweight xylophones with a full 7-note range, known as "glockenspiels" (as illustrated) were used as the main learning tools. Children can learn musical sounds and play them following Orff's principles.



Figure 6: Small, lightweight xylophones, known as "glockenspiels" used in the activities

Xylophones were used in activities aimed at helping children learn and absorb the languages of the ethnic group and learn age-appropriate English. These instruments engaged children and facilitated learning about music and melodies while they learned the language embedded in the songs.

3.2 Using bilingual songs with youth

This step involved actual implementation based on the prepared guidelines. The researcher recruited Sea Gypsy children and youth from Thai Mai Village, Rawai Subdistrict, Mueang Phuket District, Phuket Province, to participate in the bilingual music project aimed at language learning. The group consisted of 20 participants (Aged 10-13 years):

- 12 boys
- 8 girls

The training included pre-tests and post-tests to measure progress. The tests were designed as matching exercises between English vocabulary and pictures, selecting keywords that matched the learning objectives and appeared in the songs, such as dugong, boat, seagull, swim, sea, uncle, and fish.

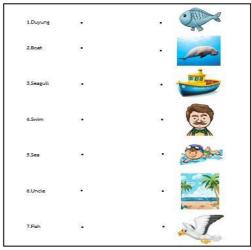


Figure 7: The pictures and words selected for the tests

The activities were conducted according to the planned sequence with the following results:

- 1) The entire activity took 2 hours, including introductions, getting to know the musical instruments, playing music, and knowing songs.
- 2) The venue for the activities was Rawai Palm Beach Resort, Rawai Subdistrict, Mueang District, Phuket Province.
- 3) The pre-test for matching English vocabulary with pictures showed that the

participating children scored an average of 10% and had no prior knowledge of playing musical instruments.

4) The songs used for the children were "Duyung," "Jijumpu Tiak," and "Ai Boom Ai Bab."

These three songs contained the following words the children were required to learn.

Table 13: Examples of selected vocabulary for learning

Song	Moken	Thai	English
Duyung	Cī cum	พะยุน	Dugong
	Næa	เล็ก	Small
	Da	ใหญ่	Big
	Da to xa bi	ใหญ่กว่า	Bigger
	lā ngxy kæn	ว่ายน้ำ	Swim
Jijumpu Tiak	ci cum pū teī́ yk	นกสีขาว	The white bird
	cī cum cā mạng	นกนางนวล	Seagull
	Kān	ปลา	Fish
	Ken	ทะเล	Sea
Ai Boom Ai Bab	bāb	คุณลุง	Uncle
	būm	คุณป้า	Aunt
	Kā bāng	เรือ	Boat

- 5) Words that children answered correctly included sea = พะเล, uncle = คุณลุง, boat = เรือ, and swim = ว่ายนั้า. The words the research team hoped the learners would learn the most were: dugong = พะยุน and seagull = นกนางนาล. None of the children answered these words correctly, indicating a need for the researcher to improve the activities.
- 6) After conducting the activities for 2 hours, it was found that the learners' average scores increased from 10% (pre-test) to 25% (post-test).
- 7) Post-activity evaluations conducted through interviews revealed that participants were satisfied with the activities and wanted to participate in the next session. They also requested a summary of the words for better understanding.

3.3 Training Teachers (Educational Personnel)

After developing music and melodies, and creating bilingual lyrics suitable for the community context and the youth's age, the guidelines were shared with educational personnel for consideration. This was done through a project on using ethnic music and bilingual songs for language learning among children and youth.

4. Improvement of Bilingual Music Guidelines for Learning Moken and English

The implementation of the designed guidelines revealed some incomplete processes, resulting in outcomes not aligning with the set objectives. Improvements were made using the feedback from the bilingual music training with children and educational personnel. The research team analyzed and enhanced various aspects, leading to better pre-test and post-test scores in

English vocabulary and pictures. The second training showed an increase in the average pretest score from 26.98% to a post-test score of 55.56%, with vocabulary improvement aligning with the objectives.

- 1) Clarity in bilingual songs: The bilingual songs should have clear content in both languages, avoiding alternation between languages without explaining the meaning of each. For example, the song "Duyung" contains the Moken word "Duyung" in the Thai version but not in the English version, which can be confusing.
- 2) Emphasis on target words: During activities, the focus was on singing and playing instruments, which might have diverted children's attention from learning the words. The approach should include summarizing words or teaching words through music. This can involve associating target words with pictures and their meanings, along with rhythms or music, selected from songs and vocabulary tables related to the ethnic group's lifestyle and appropriate for children and youth.
- 3) Short and simple melodies: Use short, simple melodies and adjust lyrics to match the target vocabulary consistently.
- 4) Using bilingual music when equipment such as musical instruments, projectors, etc. is not available and what to do:
- Musical instruments: Musical instruments enhance the activity by allowing participants to experiment and create music, enriching their learning experience. However, if instruments are not available, activities can still proceed using pre-recorded audio files provided by the research team, combined with body movements and rhythm clapping to engage learners.
- Projector/TV: If a projector or TV is not available for displaying visuals, audio files can be used for the activity, and printed handouts can be provided to the learners.
- 5) Time allocation: According to principles of early childhood education, children aged 9-12 typically maintain focus for about 30-45 minutes (National Institute for Child and Family

Development, 2024). Engaging in activities or games that children enjoy can extend this focus. Therefore, activities should be limited to no more than 45 minutes, including introductions and preparation time, which should not exceed 60 minutes.

Conclusion

In finding guidelines for using bilingual music consistent with Moken musical culture and lifestyle for Learning Moken and English Languages for Sea Gypsy children and youth, an analysis of various original versions of Moken music and songs was performed, and unique melodies were found. Some parts of the songs from "Ai Boom Ai Bab," "Duyung," and "Jijumpu Tiak" were selected and the music was presented in two audio file formats: 1) A format using natural sounding instruments, with flutes as the main instrument and synthetic rhythms as accompaniment. And 2) A format using small xylophones (Glockenspiels), which teachers can use in classrooms, combined with Ramana drums played by the ethnic group to retain the Sea Gypsy essence. These audio files are paired with animations, and presented in two formats:

1) Animated videos (VDO-File) matching the songs, melodies, and karaoke-style lyrics without vocal accompaniment to encourage singing along. These can be used in both languages. 2) Audio files with illustrations. These two formats can be chosen to suit different contexts and user convenience. The bilingual song lyrics are presented in three formats: Songs with both languages in the same song (Moken-Thai/Moken-English); Songs with translated lyrics between the two languages; and bilingual songs with two sets of lyrics, sharing the same storyline but potentially differing in detailed content. From the evaluation of learners using the bilingual music approach for learning the Moken language and English, it was found that the learners were able to score an average of 26.98 percent on the pre-test, the average score on the post-test increased to 55.56 percent, with

vocabulary improvement aligning with the teacher's objectives.

Discussion

This research is based on the fundamental idea that the processes of language and music learning in humans follow the same natural order. This makes it possible for language and music learning to occur simultaneously or complement each other. In this study, language learning for children is designed through songs with tones or language features familiar to their daily lives, emphasizing listening and singing to facilitate the learning of words and meanings in the songs.

The research found that using language in the creation of bilingual songs should align with the original meaning of the Moken songs before being adapted. Language use should consider the cultural context and situations related to the Moken lifestyle and Sea Gypsy ethnic groups. This aligns with the Genre-Based Approach (Saowaluk Rattanavich, 1993), which includes:

1) Language and meaning, 2) Language and context, 3) Language and register, and 4) Language learning in context.

In the creative process, original songs were analyzed in terms of melody and lyrics before selection to develop bilingual songs suitable for children. The guidelines for using bilingual music for learning included 1) Using music as a medium for language learning; 2) Developing music to incorporate Moken cultural features, embedding language, and music culture in bilingual songs; 3) Utilizing developed music to enhance language skills for ethnic children and youth; 4) Emphasizing the use of small xylophones, focusing on singing and practical activities; and 5) Training the teachers in using bilingual music for child development, aligning with Carl Orff's concepts. The creation of bilingual music for learning Moken and English was carried out systematically, aligning with music and language teaching guidelines. Special attention was given to ensuring the music was consistent with the lifestyle and culture of the Sea Gypsy ethnic group, specifically focusing on the Moken group, due to their minimal impact from urban influences. The process of analyzing and creating bilingual music for specific groups, such as ethnic groups, should involve particular considerations and steps. These methods can be adapted for teaching or learning languages with other specific groups.

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