## Article

# Case Study of Bilingual Program in Junior High School in Southern Taiwan 

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#### Abstract

The national policy for bilingual education was declared in 2017 in Taiwan. Since then, Taiwan has been on the way to becoming a bilingual nation by 2030. Relevant plans, workshops, and immersion teaching activities have been proposed and challenged teachers in Taiwan. Based on such outcomes, we investigate students' attitudes toward bilingual programs and the importance of code-switching and mixing in teaching. The data analysis and findings indicate that 1) students' English proficiency does not affect their attitudes toward the bilingual program, 2) there are no gender differences in the attitudes toward the bilingual program, 3) teachers usually code-switch and mix when asking students questions, explaining the steps and main ideas, and repeating the instructions or descriptions, and 4) the code-switching and mixing are essential when students learn the course content in the bilingual class. According to such findings, teachers can supplement their bilingual teaching. Besides, foreign teachers are considerably helpful in building a proper bilingual learning environment. With them, students participate in language learning more actively. This study result can be a reference for educational administrations for their planning.


Keywords: Bilingual education, Code-switching, Code-mixing, Language immersion

## 1. Introduction

Since the announcement of the Bilingual Nation policy, Taiwan has been on the way to becoming a Bilingual Nation by 2030. Various plans were made, and workshops were held such as Teaching English Through English (TETE) and Implementation Project of Bilingual Instruction in Some Domains of Primary and Junior High School Education. However, all types of immersion teaching activities stemming from the plans have challenged teachers in Taiwan. Contrary to popular belief, bilingual education was not invented in the US in the 1960s. Much earlier, in 1839, Ohio became the first state to implement a bilingual education law, authorizing German-English teaching at parents' request. The Bilingual Education Act of 1968 provided federal funding to promote local school districts to cooperate with native-language instruction. Most states in the US followed the lead of the federal government to enact their bilingual education laws. Bilingual education has been tried for years outside Taiwan and is still yet unknown to most teachers in Taiwan. However, the promotion of immersion classes and bilingual programs is conducted actively in Taiwan as the MOE of Taiwan is keen to involve schools at all stages of bilingual education. If information about the effectiveness of bilingual programs in Taiwan is provided, the importance of applying code-switching and code-mixing in teaching is noticed. Therefore, in this study, the effectiveness is explored through the questionnaires for students and the collection of related data, as it is necessary to uncover the effectiveness of bilingual education and the reaction of the participants considering the teaching experience in English. A questionnaire survey for 187 students was conducted in bilingual classes and teaching was observed. In this study, the following questions are addressed: 1) Does students' English proficiency affect their attitudes toward the bilingual program?, 2) are there gender differences in the attitudes toward the bilingual program?, 3) When does the teacher code switch and code mix in the bilingual class? and 4) how does the frequency of the teacher's code-switching and code-mixing affect students' attitudes toward the bilingual program? The study result provides a reference for teachers to adjust their code-mixing and code-switching and for education administrators to consider how to promote bilingual education.

## 2. Literature Review

The government intends to set the goals of the Bilingual 2030 Policy for the bright future of the youngsters in Taiwan. To provide a better language learning environment, schools at all stages encourage teachers to use English in all subjects. However, compared to Singapore's 57-year implementation of bilingual education, there are only 7 years left before 2030 in Taiwan. Moreover, this policy burdens related authorities, not just education. The government has to rush to implement this policy for implementing
this policy step by step. Teachers need to be willing to face the challenge and learn English to enhance, the English proficiency of teachers and students. To reach the goals of the Bilingual nation policy in Taiwan, it is essential to understand background knowledge including language immersion, code-switching and code-mixing, and bilingual education.

According to the Center for Applied Linguistics (CAL), in 1971, there were three types of immersion programs in the United States. As of 2021, there were more than 1000 language immersion schools in the U.S. (Center for Applied Linguistics, 2011) with an increase in immersion programs. The first French immersion program in Canada started in Quebec in 1965 (Zuidema, 2011) as English-speaking parents wanted to make sure that their children could learn French as well as English because the majority language in Quebec is French. Since then, immersion programs in learning French have become the most common in Canada. After that, language immersion programs have been spread all over the world. The survey by CAL in 2011 showed that Spanish was the most common language in immersion programs in the US because of immigration from Spanish-speaking countries (Center for Applied Linguistics, 2011). Based on Andrade and Ging's (1988) and Hummel's (2013) studies, "students are exposed to a different language and culture in the classroom in foreign language experience or exploratory programs. The goals of the program are to develop careful listening skills, cultural and linguistic awareness, interest in foreign languages for future language study, and basic words and phrases in one or more foreign languages." Students spent a small proportion of class time learning about languages, so it is not the main goal to promote their abilities in the target language. Andrade and Ging (1988) and Hummel (2013) also mentioned that "students focus on listening, reading, writing, and speaking in the target language in the foreign language in elementary school programs." In foreign language experience or exploratory programs, it is the main goal to develop students' proficiency of the target language. However, exposing students to the culture of foreign languages is also essential.

Cummins (2009) proposed that bilingual students receive instructions at L2 in submersion programs. Such programs are often referred to as sink-or-swim programs because they seldom support students' first language. When there are students who can use two or more languages in class, a two-way immersion program, so-called bilingual immersion is possible. Potowski (2007) argued that "the programs in the US promote L1 speakers of a language other than English to maintain that language and to teach English as a second language." Besides, Hummel (2013) also mentioned that these programs make L1 speakers of English immersed in a "foreign language acquisition environment." Cummins (2009) also proposed that bilingual students process at an earlier age in earlyexit programs. In these programs, bilingual children benefit the most from turning into a prevailing classroom as early as possible. Compared with students in early-exit programs, bilingual students in a bilingual program prevail in the classroom at a later age in late-exit programs. In late-exit programs, bilingual students would do better from being supported in both languages. According to Meyerhoff (2019), code-switching is "the alternation between varieties or codes, across sentences or clause boundaries," which means that code-switching is found between sentences or in the sentence. Appel and Muysken (1987) claimed that language change is done at sentence boundaries in inter-sentential code-switching. This is seen most often among fluent bilingual speakers. Waris (2012) argued that code-mixing occurs when a speaker is unable to remember a term but can recall it in a different language. It has a strong connection with code-switching. Speakers use two languages at the same time and switch between them in a single utterance. Code-mixing takes place without topic change and can involve various levels of language. People's first language influences their second language learning. These forms of code-mixing are observed based on speakers' different social conditions.

When students receive bilingual education, teachers teach students two languages in class. Instructors usually use their first language to teach their students a second language in class (Education Corner, 2022). In this view, the importance of bilingual education and the types of bilingual education are discussed. Baker and Wright (2017) argued that "bilingual education is viewed by educators as 'the pathway to bilingualism', which allows learners to develop proficiency and literacy in both their first and second languages." Students with competency in two languages can increase their chances to communicate with people from other parts of the world. Kong and Yu (2019) also stated that bilingual education promotes equal education. That bilingual education gives students a chance to perform the ability of their L1 has a positive impact on students' self-esteem based on Baker and Wright's sayings (2017).

Bilingual education not only introduces new linguistic features and maintains first languages but also develops cultural diversity. Baker and Wright (2017) pointed out, "Children in bilingual schools are likely to be more tolerant, respectful, sensitive, and equalized in status. Genuine cross-cultural friendships may develop, and issues of stereotyping and discrimination may be diminished". The official language policy of the International Baccalaureate Organization (2014) also emphasized "the importance of the cultivation of intercultural awareness, international-mindedness, and global citizenship in international bilingual schools." Other benefits of bilingual education are well-developed cognitive performance (Bialystok et al., 2009) ", particularly in the performance of complex tasks that are controlled by executive functioning processes and working memory" (Baker et al., 2016).

Examples of bilingual education programs are found around the world. Each program is unique and tailored to the needs of the local community. Canada has a bilingual education system with both French and English being the official languages. Students in many parts of Canada can attend schools that offer instruction in both languages. In Singapore, bilingual education is compulsory.

Students must learn both English and their first languages which include Mandarin, Malay, or Tamil. Many schools in India offer bilingual education in which students learn both English and a local language such as Hindi or Tamil. Belgium has three official languages: Dutch, French, and German. In several regions, schools offer bilingual education in two of these languages. South Africa has 11 official languages, and schools offer bilingual education in two of these languages such as English and Afrikaans. In Wales, schools offer bilingual education in Welsh and English, reflecting the country's official status as a bilingual nation. In Hong Kong, students can attend schools that offer bilingual education in Chinese and English.

Compared to the education system 30 years ago in Taiwan, students are receiving a more open and diverse education. To reach the goals of the Bilingual nation policy, MOE is eager to promote teaching methods and projects such as TETE and help teachers implement bilingual programs. Furthermore, MOE cooperates with many foundations including Fullbright to invite English Teaching Fellows (ETF) and English Teaching Assistants (ETA) for co-teaching in class. Also, Taiwan Foreign English Teacher Program (TFETP: https://reurl.cc/3o6zMR) and English Language Teaching Assistant Program (ELTA: https://reurl.cc/zZpVqV) are also recruiting different types of foreign teachers to provide our students with audio and oral environment. In Taiwan, the Implementation Project of Bilingual Instruction in Primary and Junior High School Education, originally called Immersion English Education Project for Primary and Secondary Schools, has been implemented since February 2018. The number of participating schools increased from 59 to 104. More schools are trying two-way immersion programs in different subjects. However, according to the data on the MOE website, Arts and Integrative Activities are mostly chosen as the schools' immersion programs as the two subjects are easier for most teachers to start the program as the words in the course content are easier and more abundant so teachers can put them into their course plans and teach them more easily. The MOE declared the University Bilingual Learning Project in 2021. Of the 110 schoolyears, National Sun Yat-Sen University, National Cheng Kung University, National Taiwan University, and National Taiwan Normal University are regarded as important universities in Taiwan. The MOE hopes that at least $10 \%$ of sophomore and graduate students can take at least two English as English Medium Instruction (EMI) programs. For elementary, junior high, and senior high schools, the MOE is promoting 'Teaching English Through English' to apply in class. It asks English teachers to teach at least $70 \%$ of the course content in English to improve students' language proficiency. By using classroom English and techniques of stimulating students' language learning motivation, the goal can be achieved to teach English through English in the classroom. EMI strengthens English as a killer language but may weaken other language skills such as Hakka, Taiwanese, and even Chinese, in Taiwan. Bilingual education provides an appropriate language learning environment for teachers and students in Taiwan. Students can gain greater chances to enhance their language proficiency through international exchange in international education. Though MOE tries its best to promote the bilingual education program, teachers are dazzled by many programs at a time. If these programs are simplified, the implementation of these programs will be carried out effeciently.

## 3. Methodology

In this study, 187 7th-graders in Penghu Magong Junior High School in Taiwan in a bilingual scout program were surveyed. A local teacher and a foreign teacher co-taught students in this program. The local teacher was certified in English and scout subjects, while the native English teacher assisted in teaching. The students were grouped into two: high proficiency (HP) and low proficiency (LP) groups according to their scores on the English sectional exam in the last semester. Students with over 80 points belonged to the HP group, while the other students belonged to the LP group. The scout bilingual program was recorded to observe their codeswitching and code-mixing in instructions to explore the timings of code-switching and code-mixing. A questionnaire to gauge students' reactions and attitudes toward bilingual classes was created for the survey (Appendix A). Based on the result, the effects of the bilingual program on students' language learning attitudes were discussed and pedagogical implications and suggestions for further studies were made. The result also was used to discuss pedagogical implications and future studies.

## 4. Data Analysis and Discussion

### 4.1. Students' English Proficiency and Attitudes Toward Bilingual Program

This section presents the relationship between students' English proficiency and attitudes toward the bilingual program. The students' responses were analyzed and compared based on their English proficiency. Table 1 shows the results of an independent ttest. The p-values of the four items are greater than .05 , so there is no significant difference between the student's attitudes toward the bilingual program in the HP and the LP groups. The results show that students were willing to face the challenge of the bilingual program no matter what level of English proficiency they are at. However, students of high English proficiency showed more positive attitudes toward the bilingual program than students of low English proficiency, especially for the part of understanding the teacher's teaching (Item 1). Students understood their teacher's teaching better if they had better English proficiency. As for items 2 and 4, the mean scores of the LP are close to 3.00. This indicates that students of low English proficiency understand the
teacher's bilingual teaching in class and the content of the bilingual course relatively well. For item 3, students with high English proficiency feel easier while taking an English test with the bilingual, while those with low low English proficiency do not. Students with low English proficiency feel less confident in taking tests. Thus, the overall positive attitudes help them show better performance.

Table 1. Comparison of the students' attitudes toward bilingual program between HP and LP.

| Item | English Proficiency | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | $\boldsymbol{t}$ | $\boldsymbol{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. After the bilingual program, how much do you understand your | HP | 146 | 3.58 | .960 | 6.422 | 0.416 |
| teacher's teaching in English? | LP | 41 | 2.46 | 1.075 |  |  |
| 2. What do you think about your teachers' bilingual teaching in | HP | 146 | 3.62 | .998 | 3.857 | 0.368 |
| class? | LP | 41 | 2.93 | 1.058 |  |  |
| 3. How much do you think the bilingual program helps when you | HP | 146 | 3.35 | 1.035 | 3.538 | 0.206 |
| take an English test? | LP | 41 | 2.68 | 1.171 |  |  |
| 4. In this bilingual class, how much have you learned about the | HP | 146 | 3.21 | 1.050 | 1.581 | 0.470 |
| content of the scout course? | LP | 41 | 2.90 | 1.200 |  |  |

HP: high English proficiency students who received over 80 in English in the last semester.
LP: low English proficiency students who received lower than 80 in English in the last semester.

Students show positive attitudes toward the bilingual program. 81\% of the students in the HP group and 61\% in the LP group think that they have improved their English proficiency through the bilingual program. Based on the statistical results, teachers can plan a language immersion and bilingual program to motivate students' interest (Table 2).

Table 2. Comparison of English improvement after bilingual program between HP and LP.

| Item | English |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Proficiency | $\boldsymbol{n}$ | Yes | \% | No | \% |

$68 \%$ of the students in the HP group and $76 \%$ in the LP group prefer to be taught by both foreign teachers and local teachers (item 1). For item 2, $69 \%$ and $49 \%$ of the HP and LP group prefer bilingual instructions. 47 out of 146 students in the HP group think bilingual programs make learning English more interesting (Table 3). They think they can have more chances to practice the four skills of English with the help of the bilingual program. Furthermore, students think the learning content related to their reallife helps them learn the target language better. Thus, teachers need to provide authentic language contexts for students' language learning.

Table 3. Comparison of students' preference of bilingual program styles between HP and LP.

| Item | English Proficiency | $n$ | FT | \% | LT | \% | Both | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. By whom do you prefer to be taught? | HP | 146 | 27 | 18.49 | 20 | 13.69 | 99 | 67.82 |
|  | LP | 41 | 3 | 7.31 | 7 | 17.07 | 31 | 75.62 |
|  | Total | 187 | 30 | 16.04 | 27 | 14.43 | 130 | 69.53 |
| Item | English Proficiency | $n$ | English only | \% | Chinese only | \% | Both | \% |
| 2. Which means of instructions do you prefer? | HP | 146 | 7 | 4.79 | 38 | 26.02 | 101 | 69.19 |
|  | LP | 41 | 1 | 2.43 | 20 | 48.78 | 20 | 48.79 |
|  | Total | 187 | 8 | 4.27 | 58 | 31.01 | 121 | 64.72 |

FT: foreign teacher only, LT: local teacher only.

However, students in the LP group rely on Chinese input in class. The number of the LP who prefer Chinese instruction and the number of the LP who prefer bilingual instruction is the same. For the LP group, using Chinese in bilingual programs is essential in the learning process. Most students in the LP group feel it is convenient to use Chinese in learning and communicating because Chinese is their first language. Hence, code-switching and code-mixing affect their language learning performance. The effect of code-switching and code-mixing on students' attitudes toward the bilingual program is discussed in the following section.

### 4.2. Students' Genders and Attitudes Toward Bilingual Program

As shown in Table 4, the mean scores of all the items are almost the same for male and female students as there is no significant difference with a p-value of higher than 0.05 . Regardless of the gender of the students, positive attitudes toward the bilingual program are observed (Table 4).

Table 4. Comparison of students' attitudes toward bilingual program between genders.

| Item | Gender | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | $\boldsymbol{t}$ | $\boldsymbol{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. After the bilingual program, how much do you understand your | Male | 93 | 3.28 | 1.174 | -0.716 | 0.034 |
| teacher's teaching in English? | Female | 94 | 3.39 | 0.997 |  |  |
| 2. What do you think about your teachers' bilingual teaching in | Male | 93 | 3.39 | 1.084 | -1.014 | 0.824 |
| class? | Female | 94 | 3.54 | 1.012 |  |  |
| 3. How much do you think the bilingual program helps when you | Male | 93 | 3.28 | 1.192 | 0.946 | 0.040 |
| take an English test? | Female | 94 | 3.13 | 0.997 |  |  |
| 4. In this bilingual class, how much have you learned about the | Male | 93 | 3.09 | 1.176 | -0.661 | 0.166 |
| content of the scout course? | Female | 94 | 3.19 | 0.998 |  |  |

Most students show positive attitudes toward the bilingual program. $72.04 \%$ of the male students and $80.85 \%$ of the female students think that they have improved their English proficiency through the bilingual program (Table 5). 143 students in total feel their English has improved through the bilingual program. Again, there is no difference by the gender of the students in the improvement of English proficiency (Table 5).

Table 5. Comparison of English improvement after bilingual program between genders.

| Item | English | Proficiency | $\boldsymbol{n}$ | Yes | \% | No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% |  |  |  |  |  |  |
| In this bilingual class, do you think you have improved your English? | HP | 146 | 118 | 80.82 | 28 | 19.18 |

Most students prefer to be taught by both foreign and local teachers in bilingual instruction. More female students prefer both teachers in the bilingual class than male ones. More male students want to be taught by a foreign teacher. Students think that the foreign teacher is more active and arouses interest in instruction and provides an authentic language learning environment (Table 6). As for their preference of instructions, bilingual class is their best choice in this section. From their comments, different language accents, inputs, and knowledge from local and foreign teachers are interesting and helpful to their language learning. Instructors can think about alternative ways of teaching based on the students' responses to these items to make their teaching more interesting and attractive to students.

Table 6. Comparison of students' preference of bilingual program styles between genders.

| Item | Gender | $n$ | FT | \% | LT | \% | Both | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. By whom do you prefer to be taught? | Male | 93 | 25 | 26.88 | 10 | 10.75 | 58 | 62.37 |
|  | Female | 94 | 5 | 5.3 | 17 | 18.08 | 72 | 76.62 |
|  | Total | 187 | 30 | 16.06 | 27 | 14.43 | 130 | 69.51 |
| Item | Gender | $n$ | English only | \% | Chinese only | \% | Both | \% |
| 2. Which means of instructions do you prefer? | Male | 93 | 5 | 5.37 | 33 | 35.48 | 55 | 59.15 |
|  | Female | 94 | 3 | 3.2 | 25 | 26.59 | 66 | 70.21 |
|  | Total | 187 | 8 | 4.29 | 58 | 31.01 | 121 | 64.7 |

### 4.3. Students' Genders and Attitudes Toward Bilingual Program

The timing of teachers' code-switching and code-mixing is investigated by analyzing the recordings of the bilingual class. Code-switching and code-mixing mainly happen in the following situations.

## Questions in Classes

Code-switching and code-mixing usually happen when the teacher asks students questions or asks students to answer the questions in Chinese (Fig. 1).

Bilingual Instructions


Fig. 1. Teacher: Can you guys answer the questions in Chinese?
After the teacher talks about the main ideas, instructions, or key points in English, the statements are explained again in Chinese to make sure that students understand. Sometimes, the teacher uses English to respond to students' Chinese statements (Figs. 2. and $3)$.


Fig. 2. Teacher: You should tie your rope in this way. It's OK. Student: Here? Teacher: Yes, use a frapping turn.


Fig. 3. Teacher: Do you remember frapping turn? What is frapping turn? We tie our ropes like a circle.
To make sure the instructions are understood by students, the teacher code-switches and mixes to make her instructions or descriptions clear (Figs. 4 and 5). Code-switching and code-mixing happen when questions are raised and bilingual instructions are given by teachers in classes. The number of code-switching is 34 , and that of code-mixing is 8 . The teacher uses English in about
$70-80 \%$ of instruction time. Code-switching and code-mixing are strongly related to the teacher's goal of making the students understand the course content.


Fig. 4. Teacher: Like this, like this. It's just like an $X$, right? (gestures can be seen).


Fig. 5. Teacher: You can tie your rope like a circle (gestures can be seen).

### 4.4. Influence of Frequency of Teacher's Code-switching and Code-mixing on Students'Attitudes Toward Bilingual Program

The frequency of the teacher's code-switching and code-mixing affects students' attitudes toward the bilingual program. The data is analyzed by one-way ANOVA to understand the influence of the frequency on students' learning. Students who understand local teacher's teaching in English show better scores in the bilingual program. Moreover, they have more positive attitudes toward their teacher's bilingual teaching. As for the number of the frequency of the teacher's code-switching, 139 students recognize that their teacher code-switched in class (Table 7). Therefore, most of the students are certain about different language inputs during the bilingual class. Code-mixing recognition by students shows a similar result to code-switching. If the teacher code mixes often, students feel more positive about the bilingual program. 123 students know that their teacher code-mixes in class. To explain the instructions clearly, the teacher uses Chinese sentences or phrases to explain what is said in English. That might be the reason why fewer students can recognize the appearance of code-mixing (Table 8). Despite this, code-switching and code-mixing play an important role in affecting students' attitudes toward language learning and bilingual programs.

Table 7. Influence of teacher's code-switching on students' attitudes toward bilingual program.

|  | How often does your local teacher code switch between English and Chinese in class? |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Never <br> $(\boldsymbol{n}=\mathbf{9})$ | Seldom <br> $(\boldsymbol{n}=\mathbf{3 9})$ | Sometimes <br> $(\boldsymbol{n}=\mathbf{6 2})$ | Usually <br> $(\boldsymbol{n}=\mathbf{5 4 )}$ | Always <br> $(\boldsymbol{n}=\mathbf{2 3})$ | $\boldsymbol{p}$ |  |
| 1. After the bilingual <br> program, how much do <br> you understand your <br> teacher's teaching in <br> English? | 3.33 | 3.00 |  |  |  |  |  |


| How often does your local teacher code switch between English and Chinese in class? |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | $\begin{aligned} & \text { Never } \\ & (n=9) \end{aligned}$ | Seldom $(n=39)$ | Sometimes $(n=62)$ | Usually $(n=54)$ | Always $(n=23)$ | $\boldsymbol{P}$ |
| 2. What do you think about your teachers' bilingual teaching in class? | 2.22 | 2.74 | 3.26 | 3.72 | 4.09 | *<0.001 |

Table 8. Influence of teacher's code-mixing on students' attitudes toward bilingual program.

| How often does your local teacher code mix between English and Chinese in class? |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | $\begin{aligned} & \text { Never } \\ & (n=9) \end{aligned}$ | Seldom $(n=39)$ | Sometimes $(n=62)$ | Usually $(n=54)$ | Always $(n=23)$ | $p$ |
| 1. After the bilingual program, how much do you understand your teacher's teaching in English? | 3.20 | 2.80 | 3.30 | 3.79 | 4.00 | *<0.001 |
| How often does your local teacher code mix between English and Chinese in class? |  |  |  |  |  |  |
| Item | $\begin{aligned} & \text { Never } \\ & (n=9) \end{aligned}$ | Seldom $(n=39)$ | Sometimes $(n=62)$ | Usually $(n=54)$ | Always $(n=23)$ | $\boldsymbol{P}$ |
| 2. What do you think about your teachers' bilingual teaching in class? | 3.47 | 3.10 | 3.52 | 3.74 | 3.70 | <0.050 |

## 5. Conclusions

Based on the data analysis and findings, the following results are obtained. There is no significant difference in the mean scores between students with high English proficiency and those with low English proficiency. Both groups are satisfied and optimistic about the bilingual program. There is no significant difference in the mean scores between male students and female students. Students feel comfortable about facing the challenge of the bilingual program. However, more male students prefer to be taught by foreign teachers, not by local teachers. New appearance, personalities, different cultural backgrounds, and interesting teaching methods might be the reasons why male students choose foreign teachers or both foreign teachers and local teachers. Teachers usually code-switch and code-mix when they ask students questions, explain the steps and the main ideas, and repeat the instructions or descriptions. The frequency of code-switching is higher than the frequency of code-mixing in the bilingual class. Teachers' codeswitching and code-mixing are essential when students learn the course content in a bilingual class. They are helpful to language learning and motivate students to acquire the main points from the course content.

The purpose of the study is to investigate the participants' attitudes toward bilingual programs in Taiwan after their implementation over the past few years. Teachers can use the findings of this study to supplement their bilingual teaching. First, teachers need to recognize and notice the importance of code-switching and code-mixing in the bilingual program. Then, teachers must practice the teaching techniques in their classes. Besides, the recruiting of foreign teachers, or English teaching assistants, is required. Foreign teachers help build a proper bilingual learning environment. Students will be active in participating in the language learning activities with their assistance. The result of this study provides a reference for educational administrations to plan their future language education program. However, only six bilingual classes are included in this study, which may not be enough to have a generalized conclusion. In addition, the course content of the bilingual scout program is broad due to difficulties in implementing different topics in the bilingual class. These limitations can be overcome in future studies where more subjects and students'
responses can be studied in bilingual education. It is necessary to include more subjects such as physical education, art, or music. In this way, more precise and diversified results can be obtained.

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Conflicts of Interest: The authors declare no conflict of interest.

## Appendix A

## Students' Attitudes Towards Bilingual Program Questionnaire

Dear students:
I would like to thank you for taking your time to answer this questionnaire. The aim of this questionnaire is to find some evidence for this topic and provide suggestions for the educational administrators. Your data will be kept anonymous and confidential. It will not affect your grade in this subject. Thanks for your cooperation.

NKNU Doctoral Program
Teaching of Listening and Speaking
Professor: Dr. Spring Lin
Student: Kuan-yu Chen
I. Basic Information

1. Gender: $\qquad$
2. How often do you use English in your daily life?
$\square$ Always $\square$ Usually $\square$ Sometimes $\square$ Seldom $\square$ Never
II. Attitudes Towards Bilingual Teaching in Class

| 1 | How often does your local teacher code switch between English and Chinese in class? $\square$ Always $\square$ Usually $\square$ Sometimes $\square$ Seldom $\square$ Never |
| :---: | :---: |
| 2 | How often does your local teacher code mix between English and Chinese in class? $\square$ Always $\square$ Usually $\quad$ Sometimes $\quad$ Seldom $\quad$ Never |
| 3 | After the bilingual program, how much do you understand your teacher's teaching in English? $\square$ All of it. $\quad \square$ Most of it. $\quad \square$ Half of it. $\quad \square$ Some of it. $\quad \square$ None. |
| 4 | What do you think about your teachers' bilingual teaching in class? $\square$ Great $\square$ Good $\square$ Average $\square$ Bad $\square$ Very bad |
| 5 | When you speak in English in class, how much do you think your classmates understand you? $\square$ All of it. $\quad$ Most of it. $\quad$ Half of it. $\quad$ Some of it. $\quad$ None. |
| 6 | When your classmates speak in English in class, how much do you understand them? $\square$ All of it. $\quad \square$ Most of it. $\quad \square$ Half of it. $\quad \square$ Some of it. $\quad \square$ None. |
| 7 | In this bilingual class, do you think you have improved your English? $\square$ Yes. $\quad$ No. |
| 8 | How much do you think the bilingual program help when you take an English test? $\square$ Very helpful. $\square$ Helpful. $\square$ Neutral. $\square$ Not so helpful. $\square$ Helpless. |
| 9 | In this bilingual class, how much have you learned about the content of the scout course? $\square$ All of it. $\quad$ Most of it. $\quad \square$ Half of it. $\quad$ Some of it. $\quad \square$ None. |
| 10 | By whom do you prefer to be taught? <br> $\square$ The foreign teacher only. <br> $\square$ The local teacher only. |


|  | $\square$ Both. |
| :--- | :--- |
| 11 | Which means of instructions do you prefer? Why? <br> $\square$ English only Reasons: <br> $\square$ Chinese only Reasons: <br> $\square$ Bilingual Reasons: |

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