THE INVESTIGATION OF CODE-SWITCHING OF STUDENT TEACHERS

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Abstract

The study is aimed at exploring the types of code-switching patterns applied by 35 student teachers at a technological college, and the functions such switches served. The investigation was made in an English teacher education course offered to majors of early childhood education. The participants were night school students who worked during the day. At the end of the semester, a questionnaire consisting of twenty items and one open-ended question was distributed to collect data. The findings indicate that most of the participants switched code from English to Mandarin in situations such as “classroom management”, “common command”, and “question and answer sessions”. The top three functions served by the code-switching in classroom interaction are as follows: “efficiency”, “ease of expression”, and “topic switching”. The results revealed that majors in early childhood education need to acquire more instruction on English education and the use of classroom English, so that they will feel more confident in expressing their meanings in English alone. Furthermore, code-switching from English to Mandarin serves many functions in English teaching, and may play an essential role in English teaching.

Key Words: code-switching (CS), code-mixing, bilingual education programs

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THE INVESTIGATION OF CODE-SWITCHING OF STUDENT TEACHERS

實習教師語碼轉換之調查研究

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摘要

本研究旨在探討實習教師的語碼轉換類型。本研究對象為三十五位在某技術學院修讀英語教學課程之幼兒保育系進修部學生。在學期末，以問卷收集研究資料來分析。結果顯示大部分的研究對象語碼轉換的情境為「教室管理」、「常見指令」及「問答期間」。而在教室互動中語碼轉換的前三大功能為「效率」、「易表達性」及「主題轉換」。本研究結果指出語碼轉換在英語教學中有許多功能，因此扮演一個重要的角色。

關鍵字: 語碼轉換，雙語教育課程

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1. INTRODUCTION

Early studies on code-switching (CS) centered on bilingual education programs for minority pupils in the United States in the 1970s and early 1980s (Martin-Jones, 1995). More recent studies have focused on describing language teachers' code-switching patterns in foreign language classrooms (See Greggio and Gill, 2007). Polio and Duff (1994) investigated the functions for which language teachers employed code-switching and reported that most functions involve classroom management or translation. However, few studies have been carried out examining the CS patterns of majors in early childhood education. This study is aimed at exploring the types of code-switching patterns applied by 35 student teachers in a technological college, and the motivations and functions such switches served. The investigation was made in an English teacher education course offered to majors of early childhood education in a technological college. The final assessment of this course required students to present a five-minute English teaching demonstration to the other classmates in the class. There are two research questions to be answered in this study: 1) In what situation would student teachers switch code from English to Mandarin? 2) What motivation and functions does student teachers' code-switching serve in the classroom interaction? The data were collected from classroom observations of the teaching presentations and questionnaires distributed at the end of the teaching presentations. The focus of the questionnaire is on situations of code-switching, and the motivation and functions for that code-switching. The results for the situations are shown as a percentage, and the results for motivation and functions are shown by means on a table.

2. LITERATURE REVIEW

2.1 The Definition of Code-switching

According to the *Longman Dictionary of Language Teaching and Applied Linguistics*, the definition of code-switching is as follows:

> Code-switching is a change by a speaker (or writer) from one language or language variety to another one. Code switching can take place in a conversation when one speaker uses one language and the other speaker

> answers in a different language. A person may start speaking one language and then change to another one in the middle of their speech, or sometimes even in the middle of a sentence. (72)

Wardhaugh (2010) also stated that people are usually required to select a particular code whenever they choose to speak. Furthermore, they may also decide to switch from one code to another or mix codes within sometimes very short utterances, thereby creating a new code in a process known as code-switching. The types of code-switching were also mentioned. The author indicated that code-switching (also called code-mixing) can occur in conversation between speakers or within a single speaker's turn. In the latter case, CS can occur between sentences (inter-sententially) or within a single sentence (intra-sententially).

2.2 Development of Classroom CS Research

It is expected that teachers in an ESL or EFL class use the target language only. However, teachers may need to use the learners' L1 to deal with a few classroom issues. For example, Turnbull and Arnett (2002) revealed three macro-functional categories of CS in the ESL classroom: pedagogical purposes, maintaining social interaction with the learners, and managing the classroom. Besides the purposes of CS mentioned by Turnbull and Arnett (2002), Liu et al (2004) presented two additional reasons for CS. One of the reasons was that teachers' knowledge in the target language is inadequate to explain the concept. The other reason was that using the learners' L1 may save more time while teaching the lessons. Causa (1996) reiterated what Turnbull and Arnett (2002) have mentioned about the reasons for CS, and presented another reason: assisting learners to compare and contrast the two linguistic systems. Canagaraja (1995) conducted a study on the functions of CS in the ESL classroom in Jaffna, Sri Lanka, and revealed that there was a "division of labor" between the two languages, English (TL) and Tamil (L1). He stated that the TL was employed for pedagogical purposes while L1 was for maintaining personal interaction. The results were different from the functions identified by Turnbull et al. (2002) since he mentioned that only the TL was utilized for pedagogical purposes in the Jaffna ESL classrooms instead of the L1. Accordingly, CS serves several purposes in the ESL classroom.

Early studies on CS around bilingual education programs for minority pupils in the

U.S. were carried out in the 1970s and early 1980s (Martin-Jones, 1995). These studies were quantitative in nature and aimed at illustrating the influence of CS in bilingual classroom communication on children's linguistic development. Milk (1981, 1982) and Guthrie (1984) initiated a breakthrough line of research in the realm of CS by departing from a purely quantitative study of classroom communication. They started using audio-recordings and descriptive frameworks to focus on the ways in which teachers and students fulfilled tasks using two languages. More recent studies have focused on describing the CS patterns of teachers in foreign language classrooms (See Greggio and Gill, 2007). Duff and Polio (1990) reported observations from several foreign language classrooms, observing that the use of the target language varied from 92% to 100%. Polio and Duff (1994) investigated the functions for which language teachers employed CS. They categorized cases of CS into functions such as classroom amount and purpose of first language (L1) use by five language teaching assistants. They reported that a "fair amount" of L1 was used, specifically for classroom management, showing solidarity or empathy, ensuring comprehension, offering a translation. Hobbs et al. (2010) compared the CS behavior of native and non-native speaker teachers in Japanese language learning classrooms. Following the same line of research, this study is aimed at exploring the types of CS patterns applied by 35 student teachers in a technological college and the motivation and functions served by such switches.

2.3 Functions of Codeswitching

Verschueren (1999) proposed a linguistic adaptation theory in which interlocutors make linguistic choices constantly. According to Wardaugh (2010), factors influencing the choice of codes included solidarity, accommodation to listeners, choice of topic, and perceived cultural and social distance. Malik (1994) conducted an empirical study on CS in India and presented functions of CS such as habitual experience, changes in mood, semantic significance, lack of register and facility, showing identity with a group and emphasizing a point. To sum up, the results of the aforementioned studies coincide with Verschueren's (1999) theory of linguistic adaptation theory.

3 METHODOLOGY

3.1 Research Context

The investigation was carried out in an English teacher education course offered to students majoring in early childhood education in a technological college. The purpose of this course was to offer students more knowledge and practice on English teaching in kindergarten, so that the students might have more opportunities to become English teachers or English teaching assistants in kindergarten. The final assessment of this course required students to present a five-minute English teaching demonstration. They offered the teaching demonstration to their college classmates. In the demonstration, each one of them had to teach at least five new words or a dialogue composed of two English sentence patterns. After that, they needed to conduct an activity which required learners to employ the words or sentence patterns just taught. The instructor of the course told the class that the language medium of instruction was expected to be English during most of the teaching activity time. However, if they did not feel comfortable using English, they were allowed to use Mandarin on occasion.

3.2 Research Questions

The intent of the questions was to describe the CS patterns in the student teachers' utterances and to explain the motivation and functions of the switches in the English teaching activity demonstrations. The following two questions were addressed in this study:

(1) In what situation would student teachers switch code from English to Mandarin?

(2) What motivation and functions does student teachers' code-switching serve in the classroom interactions?

3.3 Participants

Thirty-five subjects majoring in early childhood education in a technological college participated in this study. Their average age was 28 years old. They were night school students who worked during the day. Of this group, twenty-three subjects were currently pre-school teachers. Moreover, they were all females.

3.4 Data Collection

The researcher observed all of the teaching demonstrations presented by the thirty-five participants. She sat at the back of the class and made comprehensive field notes. Moreover, all of the presentations and teaching activities were videotaped. At the end of the semester, a questionnaire consisting of twenty items and one open-ended question was distributed. The questionnaire responses and classroom observations were employed as techniques in gathering data. The questionnaires focused on three areas: (1) background information, (2) situations triggering code-switching, (3) motivation and functions for code-switching. In part I, items 1 to 3 were devoted to gathering background information. In part II, in the eight items, the subjects were asked to think about the situation in which they would use Mandarin or English. In Part III, the subjects were asked to think about the motivation for code switching from English to Mandarin. The 5-point Likert scale was used in the third part of the questionnaire with responses ranging from “strongly disagree” (1 point) to “strongly agree” (5 points). In part IV, an open-ended question was included to elicit more information on motivation for code-switching. The questionnaire was written in Mandarin to make sure that every student could understand the questions.

3.5 Data Analysis

The results of the questionnaire, based on the effective responses from thirty-five subjects, were analyzed with the SPSS 20.0 software. The results from the second part of the questionnaires related to code-switching situations were tallied and shown as a percentage. In addition, the results for the third part related to the motivations and functions for code-switching were shown by means on a table. Furthermore, data collected from the open-ended question were analyzed and then categorized into three aspects.

4 FINDINGS AND DISCUSSION

4.1 Situations for Code-switching

The subjects were required to reflect on the situations of code-switching that occurred during their final English teaching presentations to the whole class. The situations

leading to code-switching are shown as a percentage as indicated in Table 1 below.

Table 1. *The Situations Leading to Code-switching*

Situations	*Mandarin only (percentage)*	*English only (percentage)*	*Both Mandarin and English (percentage)*
Vocabulary instruction	0	94	6
Sentence pattern instruction	0	83	17
Greeting (Good evening)	20	80	0
Questions and Answers (Ok? Are you ready?)	60	40	0
Classroom management (Be quiet)	77	23	0
Politeness (Thank you)	37	63	0
Common commands (Repeat/Listen)	71	29	0
Feedback and encouragement (Very good)	29	71	0

From Table 1, it can be seen that the subjects used more English in “vocabulary instruction” (94%), “sentence pattern instruction” (83%), “greetings” (80%), “feedback and encouragement” (71%), and “politeness” (63%). Most of the subjects switched code from English to Mandarin in situations such as for “classroom management” (77%),

"common commands" (71%) and "questions and answers" (60%). The result is similar to that of Polio and Duff's study on teachers' language use in 1994. In that study, they reported that a fair amount of L1 was used for classroom management.

4.2 Motivations and Functions of Code-switching in Teacher Talk

4.2.1 Quantitative Data

According to Simon's study on classroom code-switching (2001), teachers use CS as both a methodological and a social strategy in classroom interaction. The results of this study had the similar findings.

In the third part of the questionnaire, the subjects were asked to reflect on their motivation and functions for switching from English to Mandarin during the English teaching presentation. The results are indicated by means in Table 2 below.

Table 2. *The Motivation and Functions for Switching from English to Mandarin*

Motivation and Functions	*Mean*	*SD*	*Rank*
1. Ease of expression	4.49	0.70	2
2. Clarification	4.34	0.76	4
3. Efficiency	4.51	0.56	1
4. Topic switching	4.49	0.65	2
5. Affective function	3.86	1.17	8
6. Socializing function	4.11	0.87	7
7. Not knowing how to express the exact meaning in English	3.83	1.07	9
8. Getting nervous easily while speaking English	4.14	1.09	5
9. Not accustomed to speaking English	4.14	0.91	5

From Table 2, we can see that all the means for the motivation and functions mentioned in the questionnaire are greater than 3, which shows that most subjects agree on all the items of motivation and functions used to account for their switching from English to Mandarin during the English teaching presentations. The means are listed

from highest to lowest as follows: “efficiency” (4.51), “ease of expression” (4.49), “topic switching” (4.49), “clarification” (4.34), “getting nervous easily while speaking English” (4.14), “not accustomed to speaking English” (4.14), “socializing function” (4.11), “affective function” (3.86), and “not knowing how to express the exact meaning in English” (3.83). Items 7, 8, and 9 belong to the same motivation category of “linguistic insecurity”. The average mean score of the three items is 4.04. This shows that most subjects are not confident in speaking English.

4.2.2 Qualitative data

In order to gather more information, an open-ended question, “Why do you switch code from English to Mandarin in the final English teaching presentation?” was included in part IV of the questionnaire. Data collected from the open-ended question were categorized into three aspects and then presented as follows:

A. Ease of expression

－It is easier to express my ideas because Mandarin is my mother tongue. (S1; S11; S12)

－It is easier to express my thoughts. (S8; S20)

B. Efficiency

－Mandarin is easier for students to understand. (S2; S17; S25; S30; S34)

－Mandarin is easier for students to understand, especially in communication. (S15)

C. Linguistic insecurity

－I usually use Mandarin in the daily life, so I do not feel comfortable speaking English. (S2; S28; S29; S31; S32; S35)

－I am used to speaking Mandarin. Sometimes I forgot how to express my ideas in English. (S4; S22; S23; S33)

－I am not familiar with English, so it takes more time for me to think about using English. (S5; S9; S10; S18; S21)

－I feel very nervous when speaking English. (S7; S34)

－I seldom speak English, so I do not speak English fluently. (S14; S19; S16; S27)

－I do not feel confident in speaking English. (S24; S26)

Data collected from open-ended question verify the study results in the questionnaire and provide a thorough view about the reason why the subjects switch code from English to Mandarin in the final teaching presentation.

5 CONCLUSIONS AND IMPLICATIONS

The results of the questionnaires allow us to know more about the situations where code-switching occurs in the English presentations for the whole class. The analysis shows that most of the subjects use only English during vocabulary and sentence patterns instruction but most of them use English in the "greeting" (80%), "feedback and encouragement" (71%), and "politeness" (63%) categories. In addition, most of them switched code from English to Mandarin for incidences of "classroom management" (77%), "common commands" (71%) and "questions and answers" (60%).

As to the motivation and functions that code-switching serve in the English teaching presentation, most subjects agreed on all the motivation and function items in the questionnaire. The motivation and functions from the highest mean to the lowest mean are as follows: "efficiency" (4.51), "ease of expression" (4.49), "topic switching" (4.49), "clarification" (4.34), "getting nervous easily while speaking English" (4.14), "not accustomed to speaking English" (4.14), "socializing function" (4.11), "affective function" (3.86), and finally, "not knowing how to express the exact meaning in English" (3.83). The results show that majors in early childhood education need to acquire more instruction on English education and the use of classroom English, so that they will feel more confident in expressing their meanings in English alone. Furthermore, code-switching from English to Mandarin serves many functions in English teaching, and may play an essential role in English education.

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Appendix

The Questionnaire on Code-switching in an English Teacher Education Course

Please fill out the following questionnaire for this research study on code-switching.

I. Background information

1. Sex:_____
2. Age:_____
3. Profession: Teacher□ Other Profession □

II. Please check the language that you use in the following situations.

(M= Mandarin only; E= English only; Both= Both Mandarin and English)

1. Vocabulary instruction	M □	E □	Both □
2. Sentence pattern instruction	M □	E □	Both □
3. Greeting (Good evening)	M □	E □	Both □
4. Question and answer (OK? / Are you ready?)	M □	E □	Both □
5. Classroom management (Be quiet)	M □	E □	Both □
6. Politeness (Thank you)	M □	E □	Both □
7. Common commands (Repeat/ Listen)	M □	E □	Both □
8. Feedback and encouragement (Very good)	M □	E □	Both □

III. Please reflect on the motivation and functions that code-switching (from English to Mandarin) serve in the English teaching presentation. Please circle the item which best describes whether you agree or disagree with each statement.

(SA=Strongly Agree; A=Agree; N=Neither agree nor disagree; D=Disagree; and SD=Strongly Disagree)

1. Ease of expression	SA	A	N	D	SD
2. Clarification	SA	A	N	D	SD

3. Efficiency	SA	A	N	D	SD
4. Topic Switching	SA	A	N	D	SD
5. Affective function	SA	A	N	D	SD
6. Socializing function	SA	A	N	D	SD
7. Not knowing how to express the exact meaning in English	SA	A	N	D	SD
8. Getting nervous easily while Speaking English	SA	A	N	D	SD
9. Not accustomed to speaking English	SA	A	N	D	SD

IV. Please answer the open-ended question.

Why do you switch code from English to Mandarin in the final English teaching presentation?