THE USE OF CODE SWITCHING UTTERED BY MATH AND NATURAL SCIENCE TEACHERS AND STUDENT'S PERCEPTION TOWARD IT AT *RSMABI* 3 PADANG

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ABSTRACT

Penelitian ini bertujuan untuk mengetahui persepsi siswa mengenai fenomena Code switching di kelas bilingual RSMABI 3 Padang. Berdasarkan hasil penelitian, ditemukan bahwa tipe code switching yang paling sering di pakai guru adalah Situasional code switching, yaitu code switching yang terjadi tanpa adanya perubahan topik pembicaraan. Selanjutnya, alasan utama terjadinya code switching adalah untuk memperkuat pemahaman siswa. Selain itu, persepsi siswa terhadap code switching yang dilakukan guru ketika mengajar adalah siswa tidak merasa terganggu apabila guru melakukan code switching karena bagi siswa yang terpenting adalah isi dan konsep pelajaran.

Key words:, Code switching, *RSMABI* class, Students' Perception, Math and Natural Science.

INTRODUCTION

In Indonesia, the trend for people to speak at least two languages, known as bilingualism, is getting popular. Mostly, they become bilingual people to gain their prestige and to show their ability to speak more than one language. The foreign language that is mostly used by Indonesian is English. The phenomenon of bilingualism also occurs in educational world in which it commonly occurs in International schools. For this reason most of parents tend to send their children to *RSMABI* (bilingual school that fulfill the National Education Standard) class to cope this trend.

As English is demanded to be used as the medium language in *RSMABI* class it is expected that the teachers of *RSMABI* deliver the content of the materials dominantly in English. In contrast to this demand, some of the teachers still tend to switch the language in delivering the material. In fact, some of the teachers tend to combine English with Indonesian or even Minangkabaunese.

Based on the informal interview with two teachers and some students at *RSMABI* 3 Padang, there were several problems found in relation to the language use in that classroom. From students' experience, their teachers used two languages when delivering the material, which were Indonesian and English. This

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fact is strengthened by the teachers' statement about their language use in classroom. The teachers stated that sometimes they used English and sometimes Indonesian or Minangkabaunese, depended on the situation. This is called as "Code switching".

According to Myer-Scotton (1993: vii), Code switching refers to "the use of two or more languages in the same conversation". Futhermore, Essien (1995:271) defines code switching as "the process by which the speaker or the initiator of speech, changes or switches from one language or code to another, depending on the situation, audience, subject matter etc."

There have been some researches dealing with the use of code switching in educational field. The researches were conducted by Sert's (2001: 1-6), Ayeomoni's (2006: 1-10), and Hisham's (2009: 1-7). In general, those researches reveals that code switching positively help the learners to understand the lesson better. Moreover, they also concluded that code-switching could be categorized as one of the strategy on language use in the classroom.

Because of that, although some researchers state that Code-switching can be used as strategy to teach bilingual classes, more studies are needed. In this case, one of the researches that are related to code switching is the phenomena of Code-switching happened in *RSMABI* classes on Math and Natural Science teachers. This research also discusses students' perception toward the use of Code-switching as part of the language use in the classroom. Thus, this research was aimed at investigating the use of Code-switching by Math and Natural Science teachers of *RSMABI* 3 Padang and how the students' perception on teachers' utterance.

In educational setting, Myers-Scotton (1993) states that code switching is the selection by bilinguals or multilinguals of forms from an embedded language (or languages) in utterances of a matrix language during the same conversation. Baetens in Moore (2002: 288) states sone criteria of code switching, among which language distribution issues and language allocation in the classroom are ultimately indicative of the diversity of linguistic situations, school systems, and educational needs and goals. In addition, Muller and Ball in Clinical Sociolinguistic (2005: 49) state that code switching include: all phenomena where elements from at least two linguistic systems (separate languages or distinguishable varieties of one language) are used in the same speech situation.

Meanwhile, code switching is a closely related concept with code mixing. When we talk about code switching, it means we are going to talk about code mixing as well. In line with this, Wardaugh (2006: 101) says "Code switching (also called code mixing) can occur in conversation between speakers' turns or within a single speaker turn". From this definition, it can be inferred that Wardaugh sees code switching and code mixing as interchangable terms. According to Essien (2000) the basic difference between code switching and code mixing is the composition of the elements intermingled and the arrangement of such intermingling. In short, code switching is more randomly chosen than code mixing in bilingual classroom.

Moreover, Grosjean (1982: 145) states that Code-switching is defined as alternation of two languages within a single discourse, sentence, or constituent. In

more detailed way, Gal states (1979) "Code-switching is a conversational strategy used to establish, cross or destroy group boundaries; to create, evoke or change interpersonal relations with their rights and obligations". For Auer (1995:116), code switching means style shifting involving gradual transitions from dialect into standard that cannot be included, since it works very differently of mixture, often referred to as "interference phenomena", which occurs in the speech behavior of persons acquiring a second language.

There are several kinds of code switching. According to Wardaugh (1988: 102), there are three kinds of code switching, Situational code switching, Metaphorical code switching and Conversational code switching. First, Situational code switching is when the languages used changed according to the situation in which the conversant find themselves: they speak one language in one situation and another in a different one.

Second, it is Metaphorical code switching which occurs when a change of topic requires a change in the language. In short, we can distinguish that Situational Code -switching happens due to the change of situation during the communication, and Metaphorical code switching occurs as the result of the change of situation.

Third, it is Conversational code switching. Wardaugh (1986: 105) says that Conversational code switching involves the deliberate mixing of two languages without an associated topic change.

Another theory about types of code switching was stated by Poplack (1981). Based on Poplack (1981), there are three types of code-switching. First, there is tag-switching, which is related to the inclusion of a tag. This type of code-switching is very simple and does not involve a great command of both languages, since there is a minimum risk of violation of grammatical rules. The second type of code-switching stated by Poplack (1981) is the intersentential switching, which is at the phrase or sentence level, between sentences. The third and most complex type of code-switching is the intrasentential one (Poplack, 1981).

Based on the theories expressed by Wardaugh (1986) and Poplack (1981), it can be stated that they have different ideas about the types of code switching. Accordings to Wardaugh (1986), he divides the types of code switching based on situations, topic and for no reasons. However, Poplack (1981) divides the types of code switching based on the context of the sentence itself. It is related to syntactic and morphosyntactic constraints on langauge alternation. In linear with that, the researcher dicided to choose Wardaugh theory because this reseach was conducted in educational context or related to situation inside the classroom.

Kangas in Hoffmann (1991: 19) gives more detail explanation about the concept of bilingualism in the formal class. He explains that class bilingualism is involved within formal language teaching at class during which the learners does not normally have much opportunity to practice the language outside the classroom environment.

There are a number of motivations and reasons why a speaker does Code-switching. Grosjean (1982: 145) suggests some reasons for Code-switching. For example, some bilinguals mix two languages when they cannot find proper words or expressions or when the appropriate translation for the language is used.

Besides, Code-switching can be used for many other reasons, such as quoting what someone has said (and thereby emphasizing one's group identity), specifying the addressee (switching to the usual language of a particular person in a group will show that one is addressing that person), qualifying that has been said, or taking about past events. there are some reasons why speakers do Code switching while speaking. Generally, speakers do Code switching to find proper words or expressions while speaking. In educational setting, the reason of teachers do Code switching are to emphasize the point, to give detailed command, and to avoid missunderstanding between teachers and students.

In this case, it also needs the justification from students' perception toward the use of Code-switching as part of the language use in the classroom. Students have their own perception toward every subjects and everything surrounding them. According to Wirawan (2012: 86) perception happens when people receives stimulus from their sense organ and then transformed by their brain. Best (1989) also defines perception as an ability that is generated by sensory experiences. Because of that, this research aimed at investigating the use of Code switching and student's perception toward it at *RSMABI* 3 Padang.

METHOD

The type of this research was descriptive research. The data of this research were taken from two kinds of instruments. The data were analyzed by using qualitative method. The data from questionaire were transformed into number by using Likert scale. Finally, the data gotten from recorded were analyzed to find out the reasons why the teachers did code switching and the conclusion was drawn based on the findings in this research.

FINDING AND DISCUSSION

Types of Code Switching

From the recordings of language use uttered by Math and Natural Science teachers, there were found totally 29 code switching utterances. Those code switching can be classified into several types of code switching. The types were Situational Code switching and Metaphorical Code switching. In more detailed, it was found that the type of code switching which is mostly used by Math and Natural Science teachers is situational code switching. It was found that the teachers switch their language in the classroom according to the situation in the classroom. For example, when the teachers explain a lesson, they tend to use Indonesian. However, when they want to emphasize something to their students they switch from Indonesian into English (e.g. "True *atau* False?"). In another word, there is a direct relationship between language and social situation.

In the following is the example of situational code switching done by the teachers:

<div align="center">Datum 1</div>

Teacher   : *Assalamualaikum warrahmatullahi wabarakatu.*
Students   : *Walaikumsalam warrahmatullahi wabarakatu.*

Teacher   : <u>Ok, before we have to the class about kisi-kisi mid, I have this for you.</u>
Students   : *Pakai bahasa Indonesia aja Maam.*
Teacher   : *Ibu udah selesai meriksanya, tolong ini. Dari hasil kemarin yang paling tinggi adalah sembilan lima yaitu Fasni, kelompok Fasni.*

Datum 2

Teacher   : <u>Okay</u> , *sekarang kita lanjutkan ke pelajaran berikutnya yaitu kuat lensa atau juga disebut* <u>the power of lens</u> *atau juga bisa disebut dioptri.*
Students   : *Iya*
Teacher   : <u>the power of lens</u> *adalah besaran ,* <u>quantity</u> *ya , yang menyatakan ukuran lensa, yang kita bisa beri lambang P, yang ini P , nah yang disebelah sini.*
Students   : *Ndak nampak gambarnya pak.*
Teacher   : *Kita buat lambang f yang mana lambang f ini merupakan kebalikan dari jarak fokus,* <u>inverse of local length.</u>

Datum 3

Students   : <u>True False. False, false.</u>
Teacher   : *Udah, udah. Kamu perhatikan tabel enam dan tujuh mana lagi enam sembilan. Nah kalo gitu kita ambil kesimpulan bahwa tabel ke dua implikasi* <u>implication</u> *ya dia setara dengan nilai migasi i satu soal implikasi coba riki apa ciri-cirinya pake jika maka* <u>if then</u> *jika 5 tambah dua sama dengan? Mana lagi yang berequivalensi jika p maka q jika p maka q,* <u>okay do you understand? No?</u>
Teacher   : <u>Four minute</u> *ya, lima menit ya .*
Teacher   : Masih ada dalam tabel kita,megasi dari konjungsi, equivalensi dengan atau megasi p, kesetaraan. Ok, catatan, langsung dihafal.

Therefore, it can be concluded that the teachers switch their language but they do not change the topic of the conversation. To sum up, the type of code switching which is mostly used by Math and Natural Science teachers at *RSMABI* 3 Padang is situational code switching.

Reasons of Math and Natural Science Teachers at *RSMABI* 3 Padang in Doing Code Switching.

From the data collected, it was indicated that the main reason of Math and Natural Science Teachers at *RSMABI* 3 Padang did code switching was to emphasize the point. It was done by the teachers when she or he explained and elaborated a point. As the matter of fact, they switch from Indonesian into English to emphasize the point and give better understanding to the students. This is relevant with the teachers' consideration who think that their students might be not understand the content well if he or she kept using English in emphasizing the content of the lesson. This reality is contrary different from what is demanded by the rule about the language that should be used by *RSMABI* Math and Natural Science teachers. This rule point out that Math and Natural Science teachers

should matter about the ability to use English in giving repetition and responses, encouragement and confirmation. This rule should be revised since students might not understand the lesson completely if the teachers kept using English all the time in presenting Math and Science lesson.

The second main reason of the Math and Natural Science teachers in doing code switching is to explain particular formula which is commonly occur in Math and Natural Science lesson. In explaining the formula, the teacher has to change the language they use as the instruction from Indonesian into English.

Students' Perception about Teachers' Language Use in the Classroom

From the data collected, it could be inferred that more than half of the students thought that the important thing is the content of the lesson and does not bother with the language used in the classroom. However, the students can understand the content of the lesson more easily if their teachers combine English with Indonesian (do code switching).

In the point of language use used by Math and Natural Science teachers, there is a contradiction happen. A number of students agreed that the use of English by the teachers in the classroom can influence their improvement in using English and understand the examination which is commonly used English as the language on the test. However, some students felt that the use of English by the teachers in the classroom did not really influence their English language proficiency.

In the term of students' expectation toward the language use used by Math and Natural Science teachers in *RSMABI* 3 Padang, it was found that students expected teachers to use both English and Indonesian as the instructional language. Moreover, the students also expected their teacher to have better English in the future to be used. This fact was gained from the questionnaire distributed to the students.

Because of that, it can be concluded that the teachers less using English, it was only a few sentences and a few noun. However, the students can understand the content of the lesson more easily if their teachers combine English with Indonesian.

Based on the discussion about the use of code switching at *RSMABI* 3 Padang, it can be concluded that the type of code switching that was commonly used by the teachers was situational code switching. The fact proved that most of the teachers used Indonesian language in order to emphasize the important point of the lesson. In other words, it can be stated that the use of this code switching was demanded by the situation in order for helping the students to comprehend the materials. This finding is relevant with the theory derived from Wardaugh (1988: 102) who says that situational Code-switching is used when the languages used changed according to the situation in which the conversant find themselves: they speak one language in one situation and another in a different one. Furthermore, Sert (2001) also explains that, in educational setting, code switching can be used by the teacher to help the students in comprehending the the materials. This idea was supported by the research done by Hisham (2009). Through the research, he proved that the use of code switching can help the

students to understand the difficult and important points of the lesson. Because of that, it can be stated that code switching is one of the useful ways to help the students comprehend and understand the important and difficult materials.

Moreover, linear to students' perception toward code switching, it is proved that the students thought that the important thing in teaching and learning process was achieving comprehension of the content of the lesson. In another word, they did not bother with the language used in the classroom. This finding is relevant with the theory derived from the previous research conducted by Hisham (2009) who found that Code switching uttered by teachers had helped the students understand the difficult concept faced in learning. It is proved that the teachers have realized that the important points that the students' need was an ability to comprehend the lesson. It can be inferred that the students were not bothered by the phenomenon of code switching used by the teachers.

Based on the finding of this research, it can concluded that code switching, especially situational code switching, was commonly used in teaching and learning process. The use of code switching was aimed to help the students to understand and comprehend the important and difficult lessons. Moreover, this research also found that, comprehending the materials/ lesson was the most important point for the students. Because of that, the students did not bother by the use of code switching.

CONCLUSION

Code switching is one of the phenomena that caused by bilingualism. Code switching is the process of changes or switches from one language or code to another, depending on the situation, audience, and subject matter. In this case, code switching happens in educational context especially in bilingual classes.

The result of this research indicated that Math and Natural Science teachers in *RSMABI* 3 Padang rarely used English as the classroom language. As the matter of fact, they use English by combining it with another language, i.e. Indonesian. This phenomena is called Code switching. The common type of code switching that was used by the teachers was situational code switching. The purpose of using this code-switching by Math and Natural Science teachers were to emphasize, clarify, and to get students' attention. Moreover, based on students' perception, the result of this research shows that students' expected their teachers using English more often during teaching and learning process but also need Indonesian language as well as English in classroom. Because of that, it can be categorized that code-switching is one of the strategies for teaching in bilingual classroom.

SUGGESTIONS

Based on the research finding gotten, there are some suggestions addressed for teachers in *RSMABI* 3 Padang. As the teachers have a big contribution of the successful of teaching learning process, it is expected that the teachers can more often use English in teaching and learning process. It is aimed to stimulate students to be more active in using English for communicated so that the goals and aims of bilingual classroom can be achieved. For other researcher, it can be a referential to do the research of Code switching in other setting, with other respondents, and in other curricular areas in order to find out this Sociolinguistics phenomena of the findings.

Note: This article was written based on the writer's thesis in English Department of the State University of Padang. The advisors of the thesis were Dr. Hamzah, M.A., M.M. and Dr. Refnaldi, S.Pd., M.Litt.

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