

LECTURERS' AND STUDENTS' BELIEFS IN CODE-SWITCHING: A MALAYSIAN POLYTECHNIC CONTEXT

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Abstract: This research is to discover whether lecturers' beliefs coincide with their practices in their daily teaching. The focus will be on the belief in the use of code-switching in the classroom. At the same time, it is also worthwhile to indicate whether there are differences in the beliefs between the lecturers and the students. For that purpose three lecturers from an engineering department of a polytechnic in a northern region as well as the students in the classrooms were chosen to participate in this research. The methods designed include classroom observations, questionnaires for both the lecturers and students, and interviews with the lecturers after the classroom observation. The findings showed that the lecturers mostly used reiteration and message qualification functions when code-switching. They believed that it was intended mainly to enhance their students' understanding and to save their time from lengthy explanation whenever the students are in doubt. This was agreeable by most students as they believed that code-switching could help them understand the lessons better. Some recommendations are made based on the findings and analysis of the results, expecting that it would further improve the teaching of Mathematics, Science and technical subjects in the Malaysian polytechnics.

Keywords: code-switching, Malaysian polytechnic, teachers' beliefs, students' beliefs, ETeMS (English in the Teaching of Mathematics and Science)

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Teachers' beliefs, practices and attitudes are important in understanding and improving educational processes. They are closely linked to teachers' strategies for coping with challenges in their daily professional life for their general well-being. At the same time, they shape students' learning environment and influence students' motivation and achievement. Undoubtedly, teaching is a complex process which can be conceptualized in a number of different ways as mentioned by Richards and Lockhart (2000).

The teachers' beliefs in using code-switching in the classroom could also be linked to the strategies that they believe will work in their teaching and learning. Code-switching is one of the common communication skills among bilinguals and is known to be a naturalistic occurrence outside the classroom environment (Macaro, 2014). Then and Ting (2009) have identified code-switching as an apparent phenomenon in Science and Mathematics classrooms. It was intended to ensure that the students would understand the contents better and at the same time follow the education policy and reach a compromise for the students' level of proficiency. The result has shown that code-switching complements both teaching and learning process.

Therefore, the aim of this research is to identify the lecturers and students' beliefs in code-switching as well as to confirm whether there are differences in the beliefs.

Teacher's roles can be divided into roles reflecting institutional factors, roles reflecting a teaching approach or method and roles reflecting a personal view on teaching (Richards & Lockhart, 2000). This research focuses on the third role: the roles reflecting a personal view on teaching. Different teachers have different view on what their roles are in the classroom. Their views are basically linked to their own beliefs, the teacher's belief. The source of their beliefs may have been their own experience as language learners, experience of what works best, established practice, personality factors, educationally based or research-based principles or principles derived from an approach or method (Richards & Lockhart, 2000). Individual teachers are actually shaping their belief systems based on the goals, values, and beliefs they hold in relation to the content and process of teaching, and their understanding of the systems in which they work, and their roles within it. However, their belief systems are built up gradually over time and might be varied.

One of the beliefs is the use of code-switching as a tool in the teaching and learning in a classroom. Code-switching can be observed from linguistic, sociolinguistic, pragmatics, psycholinguistic, grammatical, and pedagogical perspec-

tives. It also takes place without a change of topic and can involve various levels of language: phonology, morphology, grammatical structures or lexical items as clarified in Richards (2002). Code-switching is a dynamic phenomenon of language use, and therefore, the definitions of code-switching have changed in time. Macaro mentioned that there are different terms associated with code-switching. For example, as cited in Macaro (2014, p. 11), Kharma & Hajjaj (1989) called it as “the use of the mother tongue” and Levine (2011) called it a “code choice”. However, this research uses the term code-switching to refer to the change and switch between the two languages, English and Malay, which is also known as *Bahasa Melayu*.

The MOI (medium of instructions) for the Mathematics, Science and technical subjects in the polytechnics have switched from Malay into English since 2008. These polytechnic lecturers, especially the engineering lecturers, may be proficient in English when it comes to writing, but may be less confident in speaking since they are not used to teaching in English. Therefore, to overcome this problem they tend to code-switch between Malay and English most of the time. Such code-switching practices could also indicate that the person intends to fill a linguistic gap (Valdés Fallis, 1978) or maybe he or she is not competent in the second language (Crystal, 1987). However, code-switching does not necessarily pose negative impacts as it could somehow be used as a part of teaching and learning strategies such as clarification purposes (Mattson & Burenhult, 1999). These lecturers may be competent in English but they might just want to ensure that their students understood what they have taught as these students are also getting used to the current MOI. Thus, this context is valuable to explore in order to find out what the beliefs of both lecturers and students on code-switching are in the subject content classroom.

METHOD

The first method is classroom observations. In this research, three lecturers were observed and the lessons were audio-recorded in order to identify the frequency of code-switching; which part of the lesson normally invites more code-switching and what will the effect be during the lessons on both the lecturers and the students. The frequency of technical lecturers' code-switching was also plotted down and analysed using Then and Ting's (2009) adaptation of Gumperz's (1982) semantic model. The functions are quotation, addressee specification, interjections, reiterations, message qualification, personalization vs.

objectification and situational code-switching. Studies using Gumperz's semantic model find the use of code-switching by students and teachers for a variety of conversational functions.

With the obtained consent from the Head of Department, the researcher asked the three lecturers and students to audio-record the lessons. The three lecturers were aware of the general purpose of this study, which is to investigate their classroom practice. However, they were not informed about the specific study focus in order not to affect their behaviors in the classroom.

Observations can be collected using several ways and in general, a narrative recording had been chosen to identify the verbal and non-verbal behaviors of the teachers and the students in the classroom. This was conducted to observe the real code-switching in action and to identify the frequency as well as the functions of code-switching that were used during the classroom observations.

A purposive sampling was chosen for this study. There were two groups involved in this study. The first group includes three lecturers from the Civil Engineering Department of Politeknik Ungku Omar in Perak who were involved in the classroom observations and interview. The selected lecturers vary in age, from senior to junior lecturers. The demographic profile of the lecturers can be seen in Table 1 below.

Table 1. Lecturers' Demographic Profile

	Gen- der	Race	Age (years old)	Academic Qualification	Years of Teaching Experience	Class in- volved
Lecturer A	Female	Malay	43	Master in Engi- neering (Highway & Transportation)	20 years	DKA 5B
Lecturer B	Female	Malay	27	Degree in Civil Engineering	2 months	DKA 5C
Lecturer C	Male	Malay	35	Degree in Civil Engineering	9 years	DKA 6B

The second group involved in the questionnaire were 25-30 students from three classes of semester five and six of Diploma courses (classes in which their lecturers were observed), since they were the earlier product of ETeMS (English in the Teaching of Mathematics and Science) previously from school. Based on

Table 2 below, all the classes in total had a balanced number of female and male students. Most of the participants were Malays and the main age range is between the age of 21 to 23 years old since they are all in semester five and six respectively. The details of their demographic information can be seen in Table 2 below.

Table 2. Students' Demographic Profile

	DKA 5B	DKA 5C	DKA 6B
Gender : Male	9	11	18
Female	20	19	7
Race : Malay	26	28	22
Chinese	2	-	-
Indian	1	2	3
Other	-	-	-
Age: 18 – 20	2	4	-
21 – 23	27	26	20
24 and above	-	-	5

FINDINGS AND DISCUSSION

In total there were 55 instances of code-switching, involving mainly English and Malay in all the three lessons (refer to Table 3 below).

Table 3. Frequency of Lecturers' Code-switching Instances

Lecturer	Topic	Code-switching instances
Lecturer A	Road Junctions	34
Lecturer B	Ratio	7
Lecturer C	Displacement	14
Total		55

Both Lecturer A (n=34) and Lecturer C (n=14) code-switched quite frequently during the lesson but Lecturer B code-switched very little when she gave equations for students to solve on their own (n=7). The frequency does not take account of the word 'OK' as an example of code-switching. The total number of 'OK' were 57 by Lecturer A, 4 by Lecturer B and 8 by Lecturer C. The inclusion of the word would over-represent the incidence of code-switching.

One example of code-switching is shown below. Some of the answers were actually elicited from the students (the lecturer did not elicit all the terms in English).

[MESSAGE QUALIFICATION]

T: λ is *perubahan panjang... perubahan panjang... (different of length) because of load*

[REITERATION]

and status. Different is added. Area of given? Area of given is A and E. Young modulus... in English?

Ss: *Modulus Young...*

T: *Modulus Young...*

In this example Lecturer C did not use the English term for “different of length”. Instead, he used the Malay term “*perubahan panjang*” in order to explain the meaning of the term. It is to re-confirm with the students that the right term was used. Thus, it was unnecessary for the lecturer to repeat it since he wanted to continue with his explanation. Then, he elicited the term of ‘*young modulus*’ into English from the students. The reiteration actually comes from the students in which he later confirmed that it was the right answer by repeating it. The lesson took place mainly in English except for instances when the teacher switched to Malay to help his students understand his explanation. Lecturer C was only translating important junctures but still giving most of the explanations in English.

The subject content based lessons shows that both Lecturer A and C were providing input to their students in the form of extensive explanations of concepts by switching to Malay for reiteration and message qualification. These two functions of code-switching co-occurred in the recent research. By using both languages, a double layered message was encoded: 1) this is how a junction works (Lecturer A) or this is how to calculate displacement (Lecturer C); and 2) this is important and you need to know this. The result is in line with Zheng (2009), who states that a message is clarified and emphasized when said in both languages (reiteration). Frequent message qualification was also found by Choi and Kuipers (2003) in their study of science students.

As the order of the language switch was generally from English to Malay and sometimes back to English, this shows that the base language for teaching was English for Lecturer A and C. The transcriptions also show that a larger

proportion of the lectures was in English. The use of code-switching by the teachers was a good teaching strategy to construct the information into a form that was more comprehensible for the students whenever their proficiency in English was presumed inadequate to understand the lecture.

In contrast to the content-lesson discussed earlier, the lesson by Lecturer B was a bit different. There were only seven instances of code-switching identified in the lesson. This could be because the lesson was more of a revision rather an introduction to a new topic like the other two lessons discussed previously. Although not so much interactions observed in Lecturer's B class, there was quite a few code-switching identified in her lesson. An example would be the mix used of interjection, reiteration, addressee specification and message qualification by Lecturer B in the following example:

[INTERJECTION]

T: Please make sure you write your name and matrix no. ye! Ok Guys, time's up! Pass it

[REITERATION] [ADDRESSEE SPECIFICATION]

over. Hurry up. Cepat sikit. Jangan tengok jawapan kawan (Don't look at your friend's answer).

Ss: Susahlah puan (It's difficult, madam).

[MESSAGE QUALIFICATION]

T: Just follow the cara kerja (working scheme) that I show you just now. Ok thank you class!

Ss: Thank you puan.

Very minimal classroom interaction was observed in this particular lesson since Lecturer B had employed a lecturer-facilitated lesson. Various questions were given to the students for them to look for the answers on their own. The lecturer was only there to check on their work by going around the class. Students would call her to clarify any doubt they had. After everyone has finished answering the questions, only then she would check the answers together. The lesson was more of a revision lesson rather than a transmission of new content. Therefore, code-switching is lesser in this lesson as there is lesser need to clarify and comprehend new knowledge.

The low frequency of code-switching was also due to the lower amount of lecturer talk in Lecturer B's lesson. Lecturer A was talking more than the other two teachers; the total word count for the classroom interaction was about 3163

words as compared to Lecturer B (223 words) and Lecturer C (551 words). The students in Lecturer A's lesson were also more responsive, although their responses were brief, unlike the other two classes where there were longer silences whenever questions were posed. For this particular lesson, which was audio-recorded for analysis, language content such as explanation of grammar rules and specialized vocabulary for an unfamiliar topic were not involved. The lesson preferred elicitation of information from the previous lesson and students' background knowledge related to the topic. Hence, Lecturer B could facilitate her lesson with minimal lecture and code-switching.

The stimulated recall interview was done immediately after the lecturers had finished their lessons or later on, but still on the same day, so that they would still remember the uttered code-switching instances and the reasons for doing so. Moreover, their opinions will be more valid and accurate since they were still fresh in their mind. Although all of them never heard of code-switching before, but after receiving an explanation on code-switching, all of them agreed that they code-switched during the lessons. When they were asked of the reasons for doing so, Lecturer A stated that she did it so that her students could have a better understanding of the subject taught. This is supported by the result from the students' questionnaire where the majority of the students in DKA 5B (n=29), which is 72.4 percent, actually prefer their lecturers to use both languages because they could understand the lesson better and it was easier for them to learn the subject. Those who had chosen both languages as their options mostly have written down the reason of their choice as being able to understand the lesson easier when both languages were used.

In Lecturer A's opinion, the students can understand more as Malay is mainly the students' mother tongue. Moreover, she always uses simple English. The code-switched was spontaneous and unplanned. Other than code-switching, this lecturer also believed that translation could be another good strategy in teaching. For Lecturer B, when she was asked whether she was consciously code-switching, she admitted that she was conscious. It was a planned move. She already organized in her mind the appropriate time to code-switch. This strategy is also confirmed by Romaine (1989) that code-switching is not a random but rather a strategic and patterned linguistic behavior. Lecturer B needed to code-switch from English to Malay in order to explain the technical terms and also in case the students did not understand her. It was more of clarification purposes. She also believed that translation is used at times during her lecture.

Lecturer C also noticed that he code-switched quite a number of times in that particular lesson. However, the main reason that he code-switched from English to Malay was because he had forgotten the term in English. That was the reason why he resorted to translating the term into Malay. Since he had forgotten, the action was an unplanned one. This could be one of the strategies he had adopted in line to Valdés Fallis (1978) which was mentioned earlier, code-switching may be used to fill a linguistic gap or conceptual gap. Correspondingly, people mix and switch from one language to another as a result of inability to express oneself adequately in one language as mentioned by Crystal (1987). Thus, Ong (1990) stated that speakers with a low degree of English language proficiency would code-switch to ensure continuity of conversation. Another strategy that Lecturer C would use was by asking the students for the answer. An example of it is when he said 'very *sikit*', then one of the students replied 'very little' since he had forgotten the word '*sikit*' in English. Although he did not ask directly for the word, but the students somehow know that he had forgotten it.

Both lecturers A and B felt that they were not guilty of using both English and Malay in the lessons. For Lecturer A, she said that her aim is the outcome of the lesson. Students need to have good understanding of the lesson taught and there were needs to use Malay at times. Lecturer B believed what she did was right because her students would not understand her lesson if she spoke only English throughout her lesson. The students of DKA 5C (n=30), which is 76.7 percent also agree to the Lecturer B's choice of using both Malay and English languages in her lesson.

Lecturer C, on the other hand, felt a bit guilty for code-switching from English to Malay because he usually used Malay more often than English language. If he did not code-switch, the students might not understand at all and that would make him feel even guiltier. Table 4 below shows DKA 6B (n=25) preference of code to be used in the classroom:

Table 4. DKA 6B Preference of Code Used in the Lesson

	Frequency	Percent
English only	1	4.0
Malay only	10	40.0
Both languages	14	56.0
Total	25	100.0

The majority, 56 percent of them, felt that it is necessary to use both languages in the lesson. However, nearly half of the respondents (40 per cent) also believed that the lesson should be conducted in Malay. This could be due to Lecturer C's preferred choice of code to use all this while. He even admitted that he always uses Malay in his teaching making the students used to it already. Three of the respondents from the second group, i.e. the students; Respondent No. 71, 83 and 84 did mention some improvements that Lecturer C need to make. Respondent No. 83 stated that the lecturer needed to always talk in English so that both parties will be able to improve their English. Respondent No. 71 wrote down that Lecturer C needs to improve his English. Being a lecturer, it is compulsory to teach in English, and the lecturer had tried his very best to make sure the students' understand his lesson apart from the limitation that he has. Respondent No. 84 has encouraged the lecturer to continue using both languages rather than only Malay most of the time. By doing so, the lesson will be more enjoyable and fun.

All the lecturers believed that the terms should be taught in English, while the explanation should be given in Malay in order to improve students' understanding. This is also in line to Then and Ting's (2009) study that teachers code-switch to provide more information, clarity on topics, or contents taught. Whenever there was a need to explain difficult words, these technical lecturers preferred to speak in Malay to save time. Correspondingly, it was also their students' preferences.

The questionnaire was used to identify the lecturers' preferences of code to use at home or at workplace. As elicited during the interview session, they actually performed some of the code-switching functions similar to the observed lessons in the classrooms. Using both English and Malay has become the style of their teachings due to the change of policy stated by the Malaysian government.

CONCLUSIONS AND SUGGESTIONS

In summary, teachers' beliefs are consistent with their actual practice to some extent. As mentioned by Lee (2009, 13), "Research on teachers' beliefs has demonstrated that beliefs have an important impact on teachers' practices." The teachers in this study reflect very positive attitudes towards language teaching and they have tried their best to attract their students' attention by uttering some jokes and also at times code-switching to enhance their students' under-

standing. The students also had the same belief that code-switching has helped them understand the lesson better. This leads to a conclusion that language teaching is a complex process and teachers' performance will affect the students either explicitly or implicitly. Further studies appear beneficial in exploring how levels of language proficiency contribute to the teachers' and students' beliefs in the use of code-switching.

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