Code switching in ESL classrooms: A study of adult Arabic learners

Manar Larbah  
Curtin University

Rhonda Oliver  
Curtin University

Code switching (CS) between the first language (L1) and the target language (TL) in the second language classroom has been the focus of recent second language acquisition research. This paper reports on a study that investigated adult Arabic students’ use of CS in four university classrooms in Western Australia.

An analysis of the data found that the use of CS was present in second language classrooms. Further, regardless of Arabic students’ proficiency level, CS fulfils important functions. Overall, access to the L1 through CS assisted the learners to develop linguistic competence in the TL and worked to benefit their language learning. Therefore, it is important that teachers understand that switching between L1 and the TL can enhance language acquisition.

Background

Code switching (CS) is a widely observed phenomenon, especially in communities in which two or more distinct languages or dialects (i.e., linguistic codes) are spoken. In fact, it is one of the consequences of communication in multilingual communities. It is also found with frequency in the mental activities of those speakers who have access to more than one linguistic code (Auer, 2002, p. 158; Myers-Scotton, 1989; Nation, 2003). Hence CS is both a social and a cognitive behaviour.

Over the last few decades there has been increasing interest in CS, particularly as it pertains to education and especially in relation to those students learning a second language (L2) or dialect (Grote, Oliver, & Rochecouste, 2014). This interest has triggered much pedagogical and theoretical debate, with arguments about whether or not CS is beneficial for L2 learning (Auer, 2002; Wardhaugh, 2011, pp. 90–92). On the one hand there is the position based on Krashen’s comprehensible input hypothesis that students best learn their L2 in the same way that they learn their...
first – through constant exposure to the target language (TL) (Al-Nofaie, 2010). On this basis it is proposed that CS should be only used for a limited time (Tang, 2002). The alternative position supports the underlying value of CS. Canagarajah (2005), for example, suggests that CS constitutes a valid medium of communication. In more recent years, there has been a shift towards the inclusion of first language (L1) and the specific use of CS in the language classroom. Further, the use of CS is supported by a steadily growing number of second language acquisition (SLA) research studies. Research has shown there are clear benefits of using CS in L2 classrooms as it increases student comprehension, the development of complex communication skills, and overall L2 learning (Cook, 2001; Tang, 2002; Wells, 1998). Additionally, for learners, CS may serve a variety of functions particularly in the L2 classroom context (e.g., Antón & Dicamilla, 1998; Reyes, 2004; Storch & Wigglesworth, 2003). The purpose of CS will be determined, to a large extent, by the nature of the teaching approaches, the learning context and by the learners themselves.

The positive contribution of CS to learning occurs because it assists learners with their understanding, particularly when the words being used during instruction do not carry the same meaning, value, status or functions for different speakers in the class (Skiba, 1997). More globally, CS allows learners to redefine the learning context and, of particular importance at an individual level, the language learners’ identity within this context (Moore, 2002).

Reyes (2004) highlights the communicative function of CS. For example, within the classroom CS facilitates the comprehension of difficult topics and does so with expediency. It also allows speakers to express themselves and present pragmatic meaning (Romaine, 1989). CS also promotes classroom communication as it supports interaction between the students. Further, it enables learners to initiate topics, ask questions and give emphasis as required. At the same time, by using the L1 as a mediating tool, learners can gain access to L2 forms, find meanings and also seek clarification in ways that would be unavailable through the exclusive use of the L2 (de la Colina & Mayo, 2009).

At a social level, CS can be used by learners to enable them to work collaboratively, to signal friendship and solidarity, and to develop and maintain relationships. Learners may also use CS as a way of maintaining each other’s interest in classroom tasks, for developing strategies to complete tasks, and, for general problem-solving discussions (Antón & Dicamilla, 1998). CS can also ease tension and allow the injection of humour into classroom conversations (Baker, 2011, pp. 15–16). Tarone and Swain (1995) found that older L2 high school learners used CS for personal reasons and for social interactions. Specifically, it enabled both the signalling of group identity and communication of friendship.
Given the various functions it can serve in the classroom, CS has been the focus of a number of empirical research studies undertaken in ESL, EFL and other second language classrooms (e.g., Metila, 2011; Mustafa & Al-Khatib, 1994; Swain & Lapkin, 2000). The L1 and the TL of the learners in these studies have involved various languages, including English, French, Swedish, Spanish, Japanese, Sri Lankan, Malaysian, Finnish and Arabic. For example, Swain and Lapkin (2000) undertook their study with English L1 learners of French. When they observed these students performing two tasks in the classroom they found the learners’ use of CS seemed to be intentional, and that lower achieving learners tended to use their L1 to problem-solve more than did the high achieving learners.

Other classroom studies have also found that CS reflects the relatively unequal mastery of the language learners’ L1 and L2. If students know one language better than the other, it is natural that they will switch to the language that they know and feel secure in using (Simon, 2001). However, Valdés-Fallis (1978) claimed that students’ CS should not be automatically considered as a manifestation of a lack of language proficiency, rather it may be that the students are operating within the complex systems of the two languages in order to fulfil certain communicative ends.

Further, findings from other studies (e.g., Metila, 2011; Tarone & Swain, 1995) indicate that when students switch codes, it does not necessarily mean that they are deficient in the L2, instead there are a multitude of reasons why students CS in the classroom. For instance, when Metila (2011) observed 34 female adolescents in a L2 classroom in the Philippines, he found that his participants used CS for clarifying language items, getting vocabulary instruction and just as part of normal classroom interaction. He further claimed that CS appeared to have a strong effect on students’ performance.

Despite the body of research, there have been only few studies on CS in Australian classrooms. One such study, by Tognini and Oliver (2012), involved observation of 10 French and Italian classes in Australian primary and high schools. They found that through peer interaction, the use of L1 helps learners support each other in their L2 learning (e.g., in the development of their understanding of L2 grammar).

There is also a dearth of studies conducted with Arabic speakers, both in Australia and elsewhere. One exception is a study by Mustafa and Al-Khatib (1994) who found that CS was mostly used by the Iranian participants for translation purposes. This is a similar finding to that of Merritt, Cleghom, Abagi and Bunyi (1992) who undertook their study with language learners in Kenya. Whether the same pattern of CS use exists for adult Arabic speakers in ESL classrooms in Australia is unclear. On this basis, the current study seeks to answer the following question:

For what purpose do university-level Arabic students use CS in ESL classrooms in Australian university?
**Methodology**

**Participants**

The participants in this study were 30 Arabic students who studying in an ELICOS language course at a university in Western Australia. The four ELICOS classrooms from which the participants were drawn include students from a variety of speaking backgrounds (e.g., Chinese, Vietnamese, Thai, French, and Arabic). On average there were 15 to 18 students in each class. Because of the nature of the research question, the classes that were observed were those with the most Arabic students (i.e., a sample of convenience).

On the basis of enrolment there were a mix of Arab females (n=10) and males (n =20) of similar age, (i.e., between 22 and 28 years old). Table 1 outlines the profile of the Arab participants in each of the four observed classes. For all of the participants in this study, their L1 is Arabic and their L2 is English. The students come from different Arabic speaking countries including Saudi Arabia, Libya, Oman, Kuwait and Iraq.

Table 1

<table>
<thead>
<tr>
<th>Classroom</th>
<th>Level</th>
<th>F</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Beginners</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Beginners</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Intermediate</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Intermediate</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Beginner students and intermediate students were chosen as the data set for the current study. By focusing on these levels it was possible to compare CS of relatively beginning learners with that of intermediate learners, enabling a comparison to be made of the CS practices of students with different English proficiency levels.

**Data collection and analysis**

Classroom observations were undertaken in each class over a period of two consecutive weeks with a particular focus given to the instances of CS. These classes were observed twice, each time for two hours (i.e., four hours in total for each class). Therefore, a total of 16 hours of recorded data was collected.

The lessons were audio-recorded and then transcribed in full for further analysis. Most of the female students did not want the observation to be recorded for cultural and religious reasons. However, all the male students agreed that the observations could be recorded. Therefore, at the commencement of each observation, the main audio
All examples of CS were identified from the transcription. These were then translated into English and coded according to various functions that they served. These categories were compared to those that already exist in the literature and any new and different reasons for CS were identified as required. Thus, this qualitative method enabled the analysis to situate the present study in the literature and at the same time highlight the unique nature of CS for this particular cohort.

**Findings**

For these Arabic speakers studying in ESL classrooms in an Australian university, it appears that CS serves pedagogical, communicative and social functions. Thus these results provide further support for previous research. However, within these general functions unique purposes of CS do emerge.

1. **Pedagogical functions**

   The pedagogical functions that were identified in the current data included using CS for i) translation to improve understanding, ii) providing the learners assistance with their vocabulary, and iii) grammar development. These findings are similar to those of Metila (2011), McLellan and Chua-Wong (2001), Tognini and Oliver (2012) and Unamuno (2008). Further, these three functions served to save time, and address the concerns of learners because of the grammar-orientation of the exams and about their studies more generally.

   i) **Translation**

   It seems that CS from English to Arabic was used by the students to translate meanings at the various levels of language (i.e., for words, sentences or language function levels). However, this occurred mostly in the beginner classrooms and less so in the intermediate-level classrooms (see Example 1 below).

   **Example 1**

   In one of the beginner classes, a task was done where the learners were required to listen to a text containing lots of academic words. In this example, the students used CS in order to translate whole sentences. (Please note that in the examples in this paper where Arabic conversations have been transcribed, the Arabic utterance appears first [from right to left] and the English translation appears in italics below [from left to right].)

   [[Student 1: هل تعرف معنى هذه الجملة؟ (The car is going on a high speed limit)]]
Student 1: Do you know the meaning of this sentence ‘The car is going on a high speed limit’?

الطالب 2: حسناً، أن أعرف فقط معنى الجزء الأول منها وهي السيارة تمشي.

Student 2: Well, I only know the meaning of the first part of it which is ‘The car is going’.

الطالب 1: وماذا عن باقي الجملة؟

Student 1: What about the rest of the sentence?

الطالب 2: انتظر قليلاً، سوف أبحث عنها في القاموس. معناها السيارة تتحرك بسرعة مفرطة.

Student 2: Wait a minute, I will look it up in my dictionary. It means the car is moving really fast.

الطالب 1: هل يمكن أن تبحث عن هذه الجملة أيضاً؟ (it is rush hour)

Student 1: Can you also look up, ‘It is rush hour’?

الطالب 2: نعم، جزء من اليوم حين يبلغ ازدحام السيارات الدروه.

Student 2: Yes, it is a period of the day when traffic is at peak.

الطالب 1: توا بعد الترجمة، فهمتها.

Student 1: Now, after translating it, I understand it.

ii) Assisting with vocabulary development

CS also appeared to be used by the students in order to help with their understanding of individual vocabulary items. Again, this occurred more often in the beginner and less so in the intermediate ELICOS classrooms. For example, in one of the beginner classes a task was done where the learners were required to match pictures with words. The students used CS in order to figure out unknown words. Example 2 illustrates this:

Example 2

الطالب 1: هل تعرف معنى كلمة؟ (suitcase)

Student 1: Do you know the meaning of the word ‘suitcase’?

الطالب 2: إنها كلمة سهلة، معناها شنطة سفر.
Student 2: It is easy, it is a bag you take with you when you travel.

للطالب 1: ومعنى كلمة (platform)

Student 1: What about 'platform'?

الطالب 2: انتظر قليلاً، سوف أبحث عنها في القاموس. معناها المكان الذي ننتظر فيه القطار.

Student 2: Wait a minute, I will look it up in my dictionary. It means the place where wait you for a train.

iii) Assisting with grammar development

Another purpose of CS that emerged from the data was the way it was used to help in the development of appropriate English grammar. Occasionally, this occurred in the form of translation, such as where a clause is uttered both in Arabic and English, but the students’ focus was clearly on the form or grammar of the utterance. At other times, CS was used by the learners in order to understand a particular grammar rule (see Example 3). The examples that emerged provide support for Swain and Lapkin’s (2000) claim that students ‘learn grammar in the L1’ rather than in their L2 and do this in an L2-L1-L2 sequence.

Example 3

In this example, CS appears to be used for the purpose of grammar translation and explanation in an adjective exercise.

الطالب 1: في الحقيقة، لم أنفهم هذه القاعدة، هل تعرف معنى (comparative) و (superlative) باللغة العربية.

Student 1: Actually, I did not understand this rule, do you know the meaning of comparative and superlative in Arabic?

الطالب 2: باللغة العربية (comparative) ومعناها صيغة التفضيل. (superlative)

Student 2: Comparative in Arabic is (......) and superlative is (......).

الطالب 1: لماذا عن القاعدة النحوية، هل فهمتها من المدرسة؟

Student 1: What about the grammar rule, did you understand it from the teacher?

الطالب 2: نعم فهمتها، بالنسبة لصيغة المقارنة المدرسة قالت عندما نقارن شيئين نضيف ‘er’ للصفة.أما بالنسبة لصيغة التفضيل لم أفهمها، هيا بنا نعمل واجب صيغة المقارنة فقط.
In the current study it was clear that the Arabic students used CS to enhance group participation in class activities. The learners used CS to help each other maintain interest, to complete the task and to undertake problem solving. This is shown in Example 4.

**Example 4**

In this example, beginner students worked to identify words for some pictures that the teacher had put on the blackboard (there were two columns of pictures and students were required to find the correct word for each picture). They used CS in a collaborative way which enhanced the process of working together as a group:

الطالب 1: أحمد هل يمكنك استخراج الكلمات المناسبة للعمود الأول للصور وانا سوف اعمل العمود الثاني. لن أنهي هذا النشاط اذا عملت كل هذا بنفسك.

Student 2: Yes, as for the comparative, the teacher said when we compare two things we add ‘er’ to the adjective. However, when the adjective is long we add ‘more’. As for the superlative, I did not understand that one. Let’s do the comparative exercise only.

_Student 2:_ (more expensive)

_Student 1:_ So this means ‘small’ becomes ‘smaller’ and ‘expensive’ becomes ‘more expensive’.

_Student 2:_ Yes that is right, do all the exercise in the same way?

From these examples it appears that learners are not sufficiently familiar with English terms and CS provides an efficient way of assisting students’ understanding. Thus, it would seem that the use of CS in the classroom serves to assist Arabic students’ language learning.

2. Communicative Functions

Another function of CS in the current data appears to be one that can be classified as communicative. In particular, it was apparent in the current data that CS allows speakers to express themselves and present pragmatic meaning. In particular the use of CS assisted by i) enhancing group participation, ii) allowing a point to be emphasised, and iii) enabling requests for help to be made.

*i) Enhancing group participation*

In the current study it was clear that the Arabic students used CS to enhance group participation in class activities. The learners used CS to help each other maintain interest, to complete the task and to undertake problem solving. This is shown in Example 4.
Student 1: Ahmad, what about you finding the words for the pictures of the first column and I will try to do the second column. If I am going to do all this activity by myself, I will not finish.

طالب 2: إنها فكرة رائعة.

Student 2: Great, what a good idea.

طالب 1: لقد أنتهيت الصورة الأولى، دراجة نارية، الثانية حافلة، والثالثة شاحنة، وأما الرابعة فلا أعرفها.

Student 1: I have finished, the first picture is scooter, the second one is bus, the third is lorry and the fourth, I do not know.

طالب 2: حسباً بالنسبة لي، الصورة الأولى محطة وقود، أما الصورة الثانية فهي مطار، وأما الثالثة فلا أعرفها، وبالمثل بالنسبة للرابعة فأعتقد أنه رصيف.

Student 2: Well for me, the first picture is petrol station, the second one is airport, the third one I do not know and the fourth, I think it is platform.

طالب 1: الطالب 2: هل تعلم الصورة الرابعة في خانتي؟ بالنسبة للصورة التي لم تعرفها، إنه قطار الأنفاق. أنا متأكد من ذلك.

Student 1: Do you know the fourth picture in my column? For the one you did not know, it is underground. I am sure.

طالب 2: لا، أنا لا أعلم، اترك الباقية، سوف نسمع للإجابة.

Student 2: No, I do not know, just leave the rest, we will listen for the answer.

**ii) Emphasising a point**

CS was also used as a strategy by the students when they wished to emphasise a point or to make a contrasting point. This is illustrated in the example below as it shows how the students used CS to their L1 to call attention to a required task or to correct their peers and explain the activity.

**Example 5**

Here two students were doing an exercise where they had to add a suffix or a prefix to a word and one student saw that his friend was doing the wrong thing and he corrected him by talking in Arabic.

طالب 1: أنا أعتقد أنك تفعل في الشيء الخاطئ، هل فهمت ما هي البادئ واللاحقة في اللغة؟
Student 1:  I think you are doing the wrong thing, did you understand what a prefix is and what is a suffix?

الطالب 2: نعم ، كنت أعتقد أنني أفعل في الصواب.

Student 2:  Yes, I thought I was doing the right thing.

الطالب 1: البادئ في اللغة تستخدم في بداية الكلمة واللاحقة وتستخدم في نهاية الكلمة ، ولكنك تستخدم الشيء المعاكس.

Student 1:  A prefix is used in the beginning of the word and a suffix is used at the end of the word, but you are doing the opposite.

الطالب 2: هل تعني أن الكلمة الأولى كان علي أن أضع البادئة، لقد أضافت اللاحقة.

Student 2:  You mean the first word where I should put a prefix, I added a suffix.

الطالب 1: نعم ، هذه الكلمة يجب أن تكون "لم يتم كشفها".

Student 1:  Yes, so this word should be ‘undetected’.

iii) Requesting help

From an analysis of the data one common function of CS for Arabic students, as has been found in other studies (e.g., De la Colina & Mayo, 2009; Storch & Wigglesworth, 2003; Swain & Lapkin, 2000), appears to be that of requesting help. According to these studies, students appear to use higher levels of the L1 for task management (e.g., division of labour, refocusing attention, guiding, planning, and developing strategies). In the current study, such requests for help appeared in the data in both beginner and intermediate classrooms.

For example, one case of quite frequent CS occurred when the pupils were asking each other about the line numbers in a text.

Example 6

الطالب 1: علي ، لم أتمكن من أن أجد التعبير الذي نتوافقنا إليه ، أيه هو؟

Student 1:  Ali, I could not find the phrase we just listened to, where is it?

الطالب 2: إنه في الصف الثاني ، وماذا عن التعبير الثاني ، هل وجدته؟
Therefore, like the findings of Swain and Lapkin (2000), it seems that when working in groups, learners’ use of CS is quite intentional. Students switch from one language to another to request help to address practical issues related to the completion of the assigned class activities and tasks. In this way it does seem that CS assists Arabic students as it provides an efficient way for students to share information and supply each other with strategies that enable success within classes.

3. Social functions
Finally, from the analysis it appears that CS also serves social functions. However, from the current data it does seem that these social purposes do differ according to the participants, their background, the setting and the theme of the conversation. It was found with the current cohort that CS was often used to i) express identity and ii) to establish friendships.

i) Expressing identity
When CS occurred, it appeared to foster a learning environment where the students’ identities were easily accepted. In turn, this seemed to contribute in positive ways to the learning environment, as illustrated in Example 7.

Example 7
In the following example, the teacher asked a question and as one of the students answered he first used an English word and then immediately uttered an Arabic word.

Teacher: What is the meaning of the word ‘perceptual’?
Student: It means ‘consciousness and awareness of something’
Student [in Arabic]: I am excellent.
Teacher: What was that?
Student: Oh, I forgot, I spoke in Arabic.
Teacher: And what does it mean?
Student: It means I am an excellent student.
Teacher: So you are praising yourself, yes you are a good student.

The teacher leaves and the conversation then continued between the original student and another, in Arabic.

الطالب 1: لاحظت أنا ذكي ، لقد أجبت عن السؤال ، ليس ملك.

Student 1: You see I am clever, I answered the question, not like you.

الطالب 2: لا، أنا أيضا أعرفه، ولكن هي أختارتك أنت للإجابة عنه.

Student 2: No, I also know it, but she chose you to answer it.

الطالب 1: أنا ذكي جداً ، أعرف لماذا أنا أتعلم الإنكليزية.

Student 1: I am so clever, I do not know why I am learning English.

الطالب 2: أنت جيد حقاً في مدخ نفسك ، أنت تجعلني أضحك.

Student 2: You are really good in only praising yourself, you made me laugh.

ii) Establishing relationships

CS also seemed to be used by the Arabic speaking students to establish relationships. For instance, by chatting about things unrelated to the lesson, the participants could establish friendships and feel a bond with their peers. This is shown in Example 8.

Example 8

الطالب 1: لأننا ندرس معا في الألكوس ونعمل معظم الواجبات معا، هل تريد أن تلعب كرة قدم بعد الظهر؟

Student 1: As we are studying together in the ELICOS classroom and doing most of the activities together, do you want to play football with us this afternoon?

الطالب 2: لا علي أن أعد كتابة واجب العرض.

Student 2: I can’t I have to write the presentation assignment.

الطالب 1: تعال والعب معنا ، سوف أساعدك في إكمالهم.
As has also been found in previous research (e.g., Canagarajah, 2005; Flyman-Mattson & Burenhult, 1999), in this study the learners' CS was used to establish a sense of community. This is particularly the case for students who find speaking in the TL difficult. The findings also support Moore (2002) who suggests that the use of more than one language in the classroom allows participants to re-define the learning context and the language learners' identity.

**Conclusion**

From the current classroom observations it appears that where students bring other L1s into the classroom, and in this case Arabic, they do engage in CS in the classroom. Specifically it was found to be used by students in both beginner and intermediate classes, to various degrees and for a variety of reasons. When the participants did use CS it appeared to fulfil three important functions: pedagogical, communicative and social, all of which were particularly evident when the students worked on group activities.

Overall, the current findings suggest that CS is a communicative resource that contributes in positive ways to the language learning experience. It is beneficial as it acts as a critical tool that enables learners to construct effective collaborative dialogue and to express themselves meaningfully. It assists students to develop their content understanding and to engage meaningfully (e.g., by emphasising a point, and requesting help) which, in turn, enhances group participation. In addition, it appears to help learners with their vocabulary and grammar development.

CS helps learners establish and express their identity, develop relationships and engage socially with others. By CS learners are assisted in their ability to express...
their personal values and acquire an understanding of others, especially with respect to culture. Thus, the use of CS in the ESL classroom emerges not merely as a way to generate content and to reflect on the language produced, but also importantly, as a means to create a social space which supports language learning and academic success in a multidimensional way.

These insights may be useful for ESL and other L2 teachers. Given the CS behaviours of learners it is important for teachers to understand that its use can support the acquisition of the TL. However, practitioners may need professional development to increase their awareness about the crucial pedagogical, communicative and social roles that CS can play in assisting learning and in the development of a positive classroom environment. By educating current (and future) teachers about CS, and then facilitating the development of their instructional practices that incorporate it, they will be better able to help their students and cater for the needs of individual learners.

In this way the current study has contributed to the knowledge and understanding of CS in a L2 learning context, particularly for Arabic students in the Australian ESL context. However, it must be acknowledged that this is small-scale study involving only 30 students. Further research is needed to test the generalisability of these findings, not only for Arabic students, but also for other language learners.

**Acknowledgements**

The editors would like to thank Hazen Kawafha, PhD student at Macquarie University, for his assistance with the Arabic script in this article.

**References**


**Manar Larbah** has recently completed Master of Philosophy (Education) where she has developed a particular interest in research on code switching, multilingual education and second language learning.

Zlarbah@yahoo.com

**Rhonda Oliver** works at Curtin University. She is an active researcher with an extensive publication list and a strong track record of language and education research. Her research focuses on studies of second language acquisition including large-scale studies on international and Indigenous university students, and on migrant and Aboriginal children acquiring English as a second language/dialect.

rhonda.oliver@curtin.edu.au