## Chapter One

## 1. Introduction

### 1.1 Background of the Research

As the world is moving towards a new era, with technology improving every minute, and humanity thriving to develop into a unified culture, learning English which is now an international language, has become a requirement to many people (Hamers \& Blanc, 2000). There are approximately 1.8 billion people worldwide who speak English, either as their mother tongue or as a second/foreign language. Richards and Rodgers (2001, p. 3) claim that " $60 \%$ of today's world population is multilingual." This is estimated over half of the world's population. These authors also affirm that "today English is the world's most widely studied foreign language." This is because of the many existing English-speaking countries in the world, as well as educational systems that are either based on a U.S/U.K curriculum or are bilingual, or teach English as a foreign language. As a result, scholars acknowledge a need in acquiring this globally-recognized language.

A number of different methods are utilized in the bilingual classrooms for second language acquisition (SLA), yet there are diverse positive and negative opinions and attitudes towards each one. Hence, it is of great significance to investigate and study these methods and techniques in order to improve ESL/EFL learning in the classrooms. One of the most important concepts in the field of bilingual education is Code-switching (CS) which first initiated in Blom and Gumperz's sociolinguistic theory in 1972. According to Evans (2009), CS is used amongst those bilinguals who are fluent in both languages and alternate for diverse communicative functions. Learning English as a bilingual student and teaching this language to bilingual students in Iran created an opportunity to observe and experience the use of CS in the L2 classrooms. In a personal opinion, CS was perceived to be beneficial to young L2 learners' SLA. In consequence, it was of great interest to examine this concept in the bilingual classroom environment in Iran. The main goal of this research was to investigate the impact of CS on bilingual students' L2 learning.

### 1.2 Overview

As CS occurs amongst bilingual students, it is essential to define and explain the terms 'bilingual' and 'bilingualism' to further explicate the main focus of this research. In a common sense, Webster's dictionary (1961) has defined a bilingual as "having or using two languages especially as spoken with the fluency characteristic of a native speaker; a person using two languages especially habitually and with control like that of a native speaker". Accordingly, bilingualism is also defined as "the constant oral use of two languages". As a result, CS takes place in a bilingual environment where both languages are used constantly within bilingual speakers who are fluent in both L1/ L2. This study has examined bilingual students who are fluent in both languages and are in regular contact of the L2. By all means, they use the L 2 as a communication strategy for learning the second language.

As discussed in [1.1], one of the most recently accepted techniques is the use of CS amongst bilinguals. CS is essentially described as alternating from one language to another in speech (Gardner-Chloros, 2009). Then again, as Cook (1992) articulates, CS simply occurs amongst those bilinguals who are fluent in both languages. For instance, when a bilingual switches from English to L1, he/she is speaking to another bilingual who is proficient in both languages as well, or else this alternation would seem pointless. Scholars have recently been paying attention to the concept of CS, as for years, using the mother tongue was forbidden in an EFL/ESL classroom setting and CS was perceived as "a sign of incompetence" (Hamers \& Blanc, 2000, p.258). Many scholars such as Hyrkstedt and Kalaja (1998) affirm that there are positive and negative effects of using CS in the classroom; thus, it is imperative to investigate and study this concept in depth and detail.

For the past few decades, scholars have conferred more attention to the concept of CS. Gardner-Chloros (2009, p. 9) implies that "over the past forty-odd years, there has been an explosion of interest in CS." This is because scholars are being more drawn towards the use of oral/verbal skills in SLA. Many scholars (Krashen, 1988; Chomsky 1995; Brown, 2000) have referred to CS as a way of communicating without difficulties. Faerch and Kasper (1983) argue that there are both linguistic and social reasons for CS, as it may improve learners' self-esteem level when speaking in an L2. Although a considerable amount of
research has been conducted regarding the Iranian L2 teaching and learning, (Maghsoudi, 2008; Mirhasani \& Jafarpour-Mamaghani, 2009; Momenian \& Ghafar-Samar, 2011), most of this research is not applied in a bilingual school setting, as the majority of the schools in Iran are monolingual and merely sustain a few hours of English teaching each week. However, this study has investigated the influence of CS at a bilingual classroom environment where students are in regular contact with the L2 and are required to orally use it. In addition, it must be mentioned that the students informally CS in and out of the classroom.

### 1.3 Statement of the Problem

Many researchers find CS a useful method, for example, Cook (1991) indicates that CS can be utilized as a method of teaching as she believes that it facilitates the improvement of SLA. Likewise, some scholars such as Krashen (1988) and Chomsky (1995) consider CS as a communication strategy, in other words, they claim that CS assists young learners in communicating with one another. Duran (1994) also suggests that CS has a function of encouraging and supporting thinking and communication, no matter how the outward information may appear. In contrast, the followers of the Direct Method assume that CS prevents the improvement of L2. Similar to this notion, it has been argued that (WongFillmore, 1983; cited in Rahimi-Isfahani \& Kiyoumarsi, 2010) CS hinders the development of language skills. It has been personally observed that many L2 learners are fluent in their reading and writing skills, as students are not motivated enough to use the L2 in speech. Thus, contradictory perceptions are witnessed amongst linguists and the question of whether CS is beneficial in L2 learning or not rises. For that reason, this study has investigated the use of CS in the classroom to examine its impact on bilingual learners' SLA.

### 1.4 Purpose of the Study

The main purpose of this study is to investigate the affect of CS on bilingual students in Iran. A case study is rendered in order to examine the use of CS and how altering from one language to another can influence young learners' SLA. A total of thirty students were selected from a bilingual school in Iran. The participants are in grade eight and are all consisted of females. As the students have learnt EFL since kindergarten, they are all fluent
in English, which is one of the requirements of CS. A number of tools are utilized in this investigation, such as observations in an attempt to monitor the affect of CS, a teacher interview to distinguish the teachers' perception on this concept, and a student questionnaire to identify 'when' and 'why' students feel the need to alter from one language to another. Furthermore, the main purpose of this study is to examine the use of CS and its impact on Iranian bilingual students' SLA.

### 1.5 Research Questions

As mentioned in [1.5], this study aims to examine the impact of CS, the reasons that prompt it, and teachers' perception on this concept. In order to reach these goals, two questions are introduced in this section as well as two sub-questions for question 1 by means of examining the affect of CS in the bilingual classroom setting in Iran.

1. What is the impact of code-switching on bilingual students' language learning in Iran?
a) Why do bilinguals switch to Persian?
b) When do bilinguals switch to Persian?
2. What are teachers' perception on code-switching and its impact on language learning in the classroom?

### 1.6 The Organization of the Dissertation

This dissertation has been divided into six different chapters that are subcategorized into various sections to portray the essence of this research to the readers. The second chapter is the literature review that has conveyed diverse insights towards the concept of CS, whilst the third chapter of the study has focused on the methodology, discussing the research design, the methods of data collection, and so on. The results are discussed in the fourth chapter of this research and the fifth chapter is concentrated on the discussion of the findings. The sixth and final chapter of this dissertation is consisted of a general summary and conclusion in addition to the limitations of the study and recommendations for future research.

## Chapter Two

## 2. Literature Review

### 2.1 Introduction

The purpose of this study is to investigate the impact of CS on bilingual students in Iran. Extensive research has been conducted in the area of L2 teaching and learning and through the past few decades, scholars around the globe have implemented various amounts of research within this field. First, it is essential to define 'language' in order to comprehend the concept of L2 teaching and learning. Brown (2000, p. 5) disputes that it is not feasible to imply one exact definition of language, yet he mentions that according to the Concise Columbia Encyclopedia (1994:479), language is a "systematic communication by vocal symbols." In spite of that, he believes that a teacher's understanding of the concept of language highly depends on how he/she teaches that specific language.

According to Cook (1996, p. 1), "since the 1970s a new academic subject has emerged, called second language (L2) learning research or second language acquisition (SLA)." She claims that contrary to the teaching basis of the Audio-lingual and the Direct methods that focus on teaching an L2 based on L1 structures, learning an L2 is very different from first language acquisition. This is simply because the L1 is acquired spontaneously as the child is aging, however, diverse methods and techniques are required for teaching the L2. For that reason, this research has investigated the use of CS with the intention of examining its impact on SLA.

### 2.2 Bilingualism

As discussed in [2.1], most individuals acquire their mother tongue inevitably. On the contrary, SLA necessitates distinct methods and techniques of teaching. It must be mentioned that the students who are proficient in both L1 and L2 are referred to as bilingual speakers.

Hamers and Blanc (1953: 56; cited in 2003, p. 6) ascribe bilingualism as "the native-like control of two languages." These authors argue that (p. 258) after the Blom and Gumperz's theory of 'Social meaning in linguistic structures: CS in Norway' in 1972, it has been acknowledged that CS occurs amongst bilinguals of the same languages in speech. Hamers and Blanc believe that altering from one language to another is highly effective when learning an L2.

In line with this concept, Dewaele et al. (2003) dispute that when bilinguals of the same language are communicating with one another, they may need to mix codes by means of expressing themselves. For instance, if two bilinguals face a problem when speaking in an L2, they automatically search for an equivalent word, phrase or clause in their mother tongue and thus CS takes place. As a consequence, CS occurs for both social and linguistic reasons. Similar to the above perception, this study also suggests that CS may linguistically and socially facilitate bilinguals in using an L2.

### 2.3 Overview of Code-switching

Bearing the above in mind, it is now imperative to discuss a general overview of the concept of CS. In her book Code-switching, Gardner-Chloros (2009) remarks that CS was first observed in Europe amongst bilinguals who would alternate from one language to another in speech, wherever necessary. Accordingly, they switched to L1/L2 in order to clarify, explain or express themselves in a conversation.

For many years, bilinguals in many societies and communities switched to L1/L2 to be capable of communicating with other bilinguals. Gardner-Chloros (2009, p. 4) describes CS as "the use of several languages and dialects in the same conversation or sentence by bilingual people." She justifies that not only is CS occurred in language, but it is also used in dialects. In line with this definition, Niemiec (2010) affirms that CS is the alternation of language forms amongst bilinguals in speech and adds that CS may entail a word, phrase, clause or multiple sentences.

Nevertheless, the extent of CS varies, as Cook (1991) verifies that in a normal conversation, there is $84 \%$ single word switches, $10 \%$ phrase switches, and $6 \%$ clause switches. This explicates that the majority of CS amongst bilinguals takes place in single word alternations. It has also been personally experienced that single-word CS is mainly occurred within bilinguals. Years of teaching L2 at a bilingual school in Iran has created an opportunity to observe CS. It has been distinguished that students feel the need to switch to L1 in with the intention of enduring their conversation and to be enabled of communicating with one another.

### 2.3.1 Blom and Gumperz's Theory

Along with many scholars, Nilep (2006 p. 3) confirms that the notion of CS has been initially identified by Blom and Gumperz's (1972) theory of "Social meaning in linguistic structures." The most influential linguist in the area of CS is Gumperz whose work had an enormous impact in the area of 'linguistics, sociology of language, anthropology and sociolinguistics' (Nilep, 2006). In view of that, by the year 1972 the word 'code-switching' was recognized amongst most linguists and sociolinguists. Gumperz has pointed out the limitation of the theory of Situational or Metaphorical CS as he preferred to use the term Conversational Code-switching. He claimed that "it is generally difficult for analysts to identify particular language choices as situational or metaphorical" (Nilep, 2006, p. 9). In other words, Gumperz believed that L1 speakers do not maintain a common perception of their individual conversational CS. Similar to other contextualization cues, Gumperz perceives CS as a way for speakers to "provide information beyond referential content."

### 2.3.2 Why and when do Bilinguals Code-switch?

At this instant, it is necessary to identify the reasons why bilinguals CS from one language to another. Linguists have diverse opinions towards this matter. For example, Dulay, Burt, and Krashen, (1982) propose several reasons as to why CS takes place. First, they imply that it is utilized to "symbolize ethnic identification," which suggests that some individuals CS in order to represent their cultural/national identity. Second, they claim that at times CS is used because some bilinguals may perceive a word, phrase, or sentence to be more suitable in one language than the other.

These authors mention a third reason in the area of sociolinguistic, which is CS for 'social' purposes. Faerch and Kasper (1983) agree with the above explanations as they offer two main reasons for CS. They also believe that bilinguals alternate to L1/L2 for both linguistic and social reasons. They argue that linguistically, bilinguals CS "to avoid a difficult target language form or one that has not yet been learned" and socially, to be accepted by their friends or classmates. In consequence, language alternation occurs due to both linguistic and social motives, which are specifically taken into consideration in this research.

Bearing in mind the reasons why CS takes place, it is now essential to discuss when bilinguals feel the need to CS. Cook (1996) confirms the work of Grosjean (1989), as she discusses that there are two modes of languages amongst bilinguals. Subsequently, she states that the first one is (p. 84) "when they speak either one language or the other," whereas the second mode is "when they code-switch from one to the other during the course of speech." The second mode clearly signifies the theory of CS. Likewise, Cook also adds that there are four main circumstances in which bilinguals have a tendency to switch from one language to the other. CS fundamentally takes place when the speaker is (1999, p. 87):

- Reporting what someone has said
- Highlighting something
- Discussing particular topics
- Emphasizing a particular social role

Thereafter, she also asserts that rather than becoming an imitator of a native speaker, an L2 learner can switch to his/her mother tongue whenever he/she finds it necessary and appropriate. Furthermore, Cook (1999, p.86) asserts that CS is "inevitable in the classroom if the teacher and students share the same languages." As a result, she believes that this alternation of languages occurs under particular situations where the speakers are fluent in both languages and feel the need to CS. In a personal opinion, experience indicates that students CS for both linguistic and social reasons. As students face difficulty when speaking in an L2, they decide to use L1 equivalents. This alternation has been observed many times through personal teaching experiences. Similarly, this study has investigated 'when', 'why' and under what conditions bilingual students feel the need to CS.

### 2.3.3 Code-switching, Code-mixing and Borrowing

Over the years, linguists have referred to many expressions regarding CS. Niemiec (2010, p. 20) explains that "language alternation across sentence boundaries is known as intersentential CS; while language alternation within a sentence is known as code-mixing and has been referred to as intrasentential alternation." He contends that CS is the alternation beyond one sentence, whereas code-mixing is involved in the bounds of a clause or sentence. Hamers and Blanc (2000) agree with this concept as they argue that CS is either insertional or alternational. They clarify that in insertional CS, one language is predominate/primary whereas the other is secondary. This conception is referred to as code-mixing and indicates that CS is essentially a way of borrowing.

According to Hamers and Blanc, the difference between CS and code-mixing is the size and form of the language element that is alternated. They exemplify that borrowing is "a single lexical element", whereas in CS "a whole phrase or clause" is alternated. Niemiec (2010, p.21) confirms this viewpoint and explains that borrowing is initiated by laziness, exhaustion or anxiety. He adds that borrowing may be used by both bilinguals and monolinguals; nevertheless, CS is basically utilized by bilinguals for linguistic and social rationales. Not to mention, this study has focused on the second type of alternation which is CS for linguistic and social reasons. This type of language alternation includes CS in a word, phrase, clause or sentence.

### 2.4 Code-switching and Theories of SLA

Despite the positive outlooks on CS, there have also been some negative attitudes regarding this concept. For instance, Skiba (1997) believes that CS is used amongst learners as a compensation for communication difficulties. Similarly, Ellis (1984) also affirms that teachers' alternation to L1 in the classrooms avoids students from using the L2. It must be mentioned that CS has been linguistically recognized during the early 1970s, which is the reason why it is not interrelated with many existing teaching methods and has been criticized by some linguists. Moreover, it is important to mention that there has not been an extensive amount of research carried out within this field. Nonetheless, some of the research that has
been applied in this area around the globe includes the work of Stigter (2006), Sichyova (2005), Carceller and Chadwick-Jones (2001), and so on. In view of that, this study has strived to collect and review the existing theoretical and empirical research within this field, in order to convey support and reliability to what has been accomplished.

### 2.4.1 Code-switching and Communication

As mentioned in [1.2] communication is an essential part of SLA and scholars are now moving towards the communicative methods of L2 teaching and learning. As CS is presumed to prevent communication breakdown and assist students in speech, it is essential to covey a brief overview of the premise of Communicative Language Teaching (CLT) in order to comprehend this notion better. CLT was first originated in the late 1960s in Britain. Richards and Rodgers declare that (2003, p. 153) CLT basically deals with the "functional and communicative potential of language." Therefore, CLT is similar to the concept of CS, as it emphasizes communication and encourages students in the oral use of L2.

Although CS stresses on the use of L1 in the L2 classroom, the main goal of its use is to encourage students to communicate in the second language. According to Brown (2000, p. 266), CLT is not a method, rather it is an approach, as he claims that it is "a unified but broadly based theoretical position about the nature of language and of language learning and teaching." In other words, CLT emphasizes the procedures of communication in SLA instead of merely focusing on the proficiency of linguistic forms (Nunan, 1999), which is highly interrelated to the notion of CS, as it emphasizes communication in L2 and focuses on ways to reduce hinders in speech.

In her book 'Code-switching', Gardner-Chloros (2009) discusses that CS is essentially a communication strategy for bilinguals in which they are enabled to switch to L1 in an attempt to overcome communicative obstacles. In line with personal experience, this simply implies that CS facilitates communication and helps prevent communication breakdown. As a consequence, CS is involved with the CLT approach, as it occurs in speech and amongst bilingual learners.

In contrast to the CLT approach, the followers of the Audio-lingual and the Direct Methods of teaching are majorly critical in terms of using the L1 in the bilingual classroom as they believe that it hinders the development of L2 (Rahimi-Isfahani \& Kiyoumarsi, 2010). As mentioned in [1.1], despite the informal CS that occurs amongst the participants in this study, the school system is based on the Direct Method and thus forbids CS. However, teaching at this school for many years has proved that CS occurs constantly and has been observed to facilitate students in communication. Consequently, it is critical to create a balance in using the L 1 in the ESL/EFL classroom setting.

### 2.4.2 Language Interaction and Code-switching

The concept of CS takes place during communication and involves language interaction as it occurs when students are speaking to one another. Thus, CS is consistent to the widely recognized method of language interaction. Ellis (1999, p. 3) has referred to interaction as "the interpersonal activity that arises during face-to-face communication," and "intrapersonal activity involved in mental processing." In addition, according to Vygotsky (1978; cited in Ellis, 1999), interpersonal interaction is 'face-to-face communication’ whereas intrapersonal interaction is 'inner speech.' It must be mentioned that CS is highly linked to the theory of interaction. This is due to the reason that CS is involved in face-to-face communication amongst bilinguals which also requires interaction. Likewise, CS is evolved in L2 learners' 'inner speech,' as they attempt to distinguish and utter diverse terms in the L2 and CS if they face unknown novel information.

Chomsky's theory of Universal Grammar (UG) specifically emphasizes the role of 'internal mechanisms' and does not reflect upon interaction in SLA (Zilgary, 2008). Conversely, Ellis has emphasized on 'oral' input rather than 'written' input, as he adds that the difference between these two types of inputs is that the former basically involves interaction. He claims that interaction will most likely develop input in ways that may assist 'word acquisition' in L2 learning which is correspondent to the concept of CS as language alternation is used in oral speech and facilitates L2 learners in SLA. Similar to personal experience of CS, Ellis (1999) exemplifies that when an L2 learner hears an unfamiliar term that avoids him/her from comprehending the full meaning of that statement, he/she inquires
further explanation in order to completely understand it. This technique is coherent to the concept of CS as it is used for clarification and understanding of foreign terms.

### 2.4.3 Input Hypothesis and Interaction Hypothesis

The main purpose of the use of CS is to help L2 learners understand and communicate in the second language. This is linked to Krashen's theory of Input Hypothesis which simply states that "we acquire language by understanding messages, that 'comprehensible input' (CI) is the essential environmental ingredient in Language Acquisition" (Alatis, 1991, p. 409). This theory basically suggests that input is the basis of SLA. Krashen believes that CI has a massive influence on individuals' language learning proficiency and affirms that 'exposure' to an L2 results in further proficiency of that L2. He asserts that learners must use the second language on a regular basis in order to improve their language skills.

However, CS suggests that if young learners are not aware of a term in the L2, it is significant to switch to L1, by means of sustaining the conversation. On the other hand, the theory of Interaction Hypothesis is simply SLA through interaction (Ellis, 1999). He argues that interaction is a conversational exchange used by L2 learners to endure a conversation or prevent communication failure. Additionally, in line with the notion of CS, the Interaction Hypothesis theory emphasizes on retaining a conversation and avoiding hinders in speech, which is also similar to the aim of this study.

### 2.4.4 Sociolinguistics and SLA

As mentioned above, CS occurs due to linguistic and social motives. This entails that one of the reasons that leads to CS amongst bilinguals is the avoidance of feeling unaccepted or alienated amongst their peers. Research (Rezaeian, 2009; Iannacci, 2008) indicates that students may feel embarrassed or introverted of using a particular term in the foreign language and hence switch to the mother tongue. This switch may be due to social reasons, as they find a foreign term unfamiliar or unrecognizable and turn to L1 to prevent being humiliated. These feelings were personally witnessed amongst young learners who have low self-esteem levels and are pressured to fit in with their peers.

Contrary to Piaget's cognitive perspective, Vygotsky suggests that social interaction plays a crucial role in young learners' L2 improvement (Fletcher \& Garman, 1986). Strictly speaking, Piaget emphasizes on "the importance of language acquisition for cognitive development," whereas Vygotsky has emphasized on the role of social interaction in SLA (p. 11). Accordingly, with the intention of acquiring an L2, it is significant to assist students in improving their linguistic and social skills. This is where CS plays a major role, as it emphasizes on both the social and cognitive development of language learning and facilitates students in improving these major skills.

### 2.5 The Classroom Component

There is a strong debate in terms of using the first language in the bilingual classroom environment. To exemplify, in an article written by Arrifin and Husin (2011), it has been disputed that most scholars perceive CS as a natural phenomena that arises from fluency in more than one language, whereas some believe that it removes the integrity of language per se. Likewise, Alenezi (2010, p. 5) points out that there are some scholars who suppose that CS is used "to compensate for language deficiency." However, personal experience signifies that not only is CS beneficial to students' linguistic skills, it also assists them in overcoming their fear of speaking in L1. This is due to the reason that they are enabled to use the L1 when facing problems. In this manner, students are encouraged to communicate in L2, as CS helps them interact with their peers.

### 2.5.1 Use of Code-switching in the Classroom

Although there has been a considerable amount of empirical and theoretical research applied within the linguistic aspects of the use of CS, scholars have recently been focusing on the social aspects of this concept. Bond and Tat-Ming (2011) have implemented a study on the social characteristics of CS and assert that some students may feel embarrassed to use the L2 in the classroom as they may feel a lack of fluency. These authors believe that it is crucial to permit L2 learners, especially at a young age, to switch to L1 wherever necessary, as it may assist them to overcome their fear of speaking in an L2. Likewise, experience indicates that young learners do not communicate in L2 to prevent embarrassment.

Research (Gulzar, 2010) designates that although most linguists have advised the presence of the mother tongue in the L2 classroom setting, they believe that there should be a restricted use of CS. This may be due to the reason that extensive use of the L1 may result in an absence of the L2, Not to mention it has also been personally observed that the extensive use of the L1 prevents students from speaking in the L2 and ultimately results in a lack of communication. Personally, this matter has majorly been observed amongst younger students. Therefore, it is significant to create a balance in using both languages.

### 2.5.2 Teachers and Students Code-switching in the Classroom

It is now crucial to signify whether or not both teachers and students are required to switch to L1 in the bilingual classroom. Some researchers such as Macalinga-Borlongan (2009) have attempted to investigate the impact of the use of CS by both teachers and students, whereas some have preferred to examine one or the other. In a study performed by Abosede-Adebola (2011), it has been insisted that teachers may switch to L1 for linguistic reasons such as explaining a term/phrase/ clause or simply because it is more appropriate to use some terms in the first language.

Then again, it is essential to note that students CS for both linguistic and social reasons. (Then \& Su-Hie, 2009). For the purpose of this study, it is implied that both teachers and students must be permitted to use the L1 in the classroom, as it is suggested to be beneficial to students' SLA. This is simply because teachers can facilitate students' L2 skills by switching to L1 in order to clarify, translate, give instructions, and so on. Hence, this study has attempted to investigate the use of CS by both teacher and students to discover its impact on L2 learners' SLA.

### 2.6 Conclusion

To conclude, CS is essentially referred to "the use of two languages simultaneously or interchangeably" (Valdes-Fallis, 1977; cited in Duran, 1994). In essence, CS is occurred in speech due to both linguistic and social reasons. Linguistically, students switch to L2 for emphasis, clarification, understanding, etc., whereas from the socio-linguistic perspective, CS
takes place when bilinguals feel embarrassed, bashful or hesitant to speak in the foreign language (Rezaeian, 2009). According to Gardner-Chloros (2009), regardless of the negative insights of the alternation of languages in the classroom, there has been a widespread appeal of the concept of CS amongst scholars through the past few decades. This is simply due to the fact that communication and interaction are considered very significant in many educational systems today with an emphasis on the oral use of the L2. As a result, CLT teaching is being practiced in many countries and school authorities are emphasizing on interaction in SLA. This approach is linked to the concept of CS as it occurs in communication and interaction is required for CS to take place.

Even though there has been numerous amounts of empirical and theoretical research applied in the area of CS, there has not been adequate research conducted in the Iranian bilingual setting (Fakharzadeh, 2009). For that reason, the main purpose of this research is to distinguish the positive and negative effects of CS in regards to the attitude of the teachers towards this concept in an Iranian bilingual school. Also, this study has examined the reasons that prompt CS. Strictly speaking, this study has aimed to explore 'when' and 'why' students feel the need to switch to their mother tongue. In other words, it has aimed to discover the conditions and circumstances in which students necessitate CS. In summary, this research has intended to examine the impact of the use of CS by the use of a qualitative/quantitative method in a bilingual school setting in Iran where students are in regular contact with the L2 and CS informally in and out of the classroom.

## Chapter Three

## 3. Methodology

### 3.1 Introduction

This study has investigated the use of CS in the classroom and its impact on bilingual students' SLA. Additional purposes include teachers' perception towards the use of CS in the L2 classroom and exploring 'when' and 'why' students tend to CS. As stated in [2.4], there are positive and negative points of views towards the concept of CS. Some scholars (Ellis, 1984; Skiba, 1997) believe that switching to L1 may hinder the improvement of the L2 and that the regular use of the L1 may instigate an avoidance of using the L2.

In contrast, many researchers (Gardner-Chloros, 2009; Faerch \& Kasper, 1983; Cook, 1991) are in favor of CS, as they believe that the use of L1 not only facilitates students' linguistic abilities, it also assists them in overcoming their fear of socializing in L2. As mentioned in [1.1], personal experience indicates the effectiveness of CS in the classroom. Not to mention, CS has been personally observed to be influential regarding both the linguistic and social skills of L2 students.

### 3.2 The Iranian Context

### 3.2.1 The Iranian Curriculum

As the main focus of this study is on bilingual students in Iran and has investigated the impact of the use of CS in the Iranian classroom setting, it is significant to review the Iranian context to some extent. Every educational system is distinct regarding its curriculum in every part of the world, and Iran is not an exception. As many non-English speaking countries are now recognizing English as an essential subject in their curriculum, the Iranian school system has also been paying additional attention to SLA.

The Iranian curriculum includes compulsory English courses (General English) that initiate in secondary school up to grade twelve (Rahimi \& Eftekhari, 2011). Nonetheless, the students do not have adequate exposure to the English language and most pupils in Iran deal with L2 for merely two to four hours a week. This simply signifies that teaching English as a second language is not a significant subject matter in the Iranian curriculum. On the contrary, some private school sectors have recently been developing bilingual education with the intention of teaching English as a second/foreign language.

### 3.2.2 Bilingual School Setting in Iran

Then again, in spite of the inadequate attention of governmental schools to SLA in Iran, some private school divisions have managed to form bilingual schooling. Even so, most bilingual schools in Iran are yet utilizing the Direct Method of teaching English as a second/foreign language (Rahimi-Isfahani \& Kiyoumarsi, 2010). As declared in [1.3], this method emphasizes the use of the L2 and forbid the existence of the L1 in the bilingual classroom. Accordingly, these methods are clearly not in favor of CS as they perceive it as restraining the enhancement of the second language. However, despite the school regulations in Iran, an informal use of the L1 is practiced in most classrooms.

Working at a private bilingual school in Iran, it has been personally observed that most students and some of the teachers felt the need to CS from time to time. CS was perceived to be beneficial to their L2 learning skills. It also helped students in their social skills especially in communicating with their peers. In addition, this study has investigated the impact of CS at a bilingual school in which CS is prohibited but is unofficially practiced by most students and teachers in the L2 classroom environment.

### 3.2.3 Code-switching in Iranian Classrooms

In a research article by Alenezi (2010), it has been mentioned that CS in bilingual classrooms around the world is occurred frequently and sensed as a natural phenomenon. Thus, extensive research has been conducted within this field. Rezvani and Eslami-Rasekh (2011, p. 18) declare that the research that has been carried out in the past regarding
'classroom CS' has concentrated on "both teacher-learner interaction and the influences CS may exert on students' learning." These authors claim that despite the further attention that the Iranian educational system has recently conferred to SLA in comparison to the past few decades, a lack of classroom interaction is observed in governmental schools in which L2 is not orally/verbally used. Nonetheless, it is apprehended that in classrooms with a low degree of L2 communication, an alternation between the languages would not likely take place, as CS occurs in speech (Eslami-Rasekh, 2005). In view of that, this research has been specifically conducted at a bilingual school, where supplementary communication and interaction is observed amongst bilinguals on a daily basis.

### 3.3 Approaches in the Code-switching Research

### 3.3.1 The Qualitative Approach

According to Holliday (2002, p. 7), a qualitative research "looks deep into the quality of social life." He believes that statistics do not convey adequate results and that the gathered data should be viewed in depth and detail. He essentially stresses on the importance of the fact that researchers must manage subjectivity as a qualitative method may become somewhat biased and the researcher may include his/her own opinion in the findings of that particular research. In regards to the theory of CS, most researchers have attempted to use a qualitative approach (Ozturk et al., 2009; Bani-Shoraka, 2005; Hill, 2009). This may be due to the reason that CS is a concept that needs precise monitoring and observation. Strictly speaking, an objective point of view that is evolved from statistics may not be adequate for examining the use of language alternation. Most scholars have examined CS via the use of observations and interviews. A number of case studies (e.g., Huerta-Macías \& Quintero, 1992) have also been applied by researchers throughout the years in an attempt to investigate and observe this subject in particular.

### 3.3.2 The Quantitative Approach

In correspondence to what is mentioned above, a qualitative method of research may become biased and subjective. Thus, many researchers tend to use a quantitative method which deals with numbers and bestows statistical results. A quantitative method is very
popular amongst researchers who strive to discover an estimated numerical data. It is widely used by governments, administrations and organizations that aim to "count occurrences across a large population" (Holliday, 2002, p. 7). Nevertheless, in terms of educational researching, one must consider the fact that numerical data does not specifically include cognitive results. Furthermore, for most studies, it may be more applicable to implement a combination of both a qualitative and quantitative method. For the purpose of this study, a mixture of both methods (observation, interview and questionnaire) is applied with the aim of ascertaining a more consistent, unbiased result.

### 3.4 Research Design

A case study has been rendered for the purpose of this research by means of exploring the impact of the use of CS in a bilingual classroom environment. According to Li and Moyer (2008, p.98), case studies are basically "in-depth investigations of a single participant or a small group of participants." These authors affirm that case studies are usually used in qualitative methods of research; however, this study has proposed a combination of both a qualitative and quantitative methods.

Interviews and observations were used in this study in order to discover an in-depth explanation of the subject matter, as well as questionnaires to be enabled of detecting an objective perspective of the area under discussion, as a qualitative research may become somewhat biased (Holliday, 2005). This study has been implemented amongst bilingual students who learn English as a foreign language but are exposed to the oral/verbal use of the L2. This is specifically crucial, as CS takes place in speech amongst bilinguals who are fluent in both L1 and L2.

### 3.5 Issues in Conducting a Research

Conducting a research requires extensive amount of time and deliberation regarding every aspect and phase of the study. One of the most important matters when applying a research is ethical considerations. Ethics in research is essentially described as (Fouka \&

Mantzorou, 2011, p. 4) "the protection of dignity of subjects and the publication of the information in the research." Similar to this notion, Behi and Nolan (1995, p.712) claim that "ethical considerations influence and relate to many aspects of the research process and help researchers to decide whether a field of study [...] is ethically acceptable." These authors also emphasize on the anonymity and confidentiality of the research data, as participants may not feel comfortable conferring their personal information to the public.

Therefore, it is very important for the researcher to reassure the participants that the results of the data will be merely used for the purpose of their study. This research has paid close attention to ethical issues as all the respondents involved in this survey have been assured of the privacy matters at the outset. Moreover, it has been specifically stated on the student questionnaires that the results of the survey will remain absolutely confidential (See Appendix 3).

A very useful way to prevent ethical problems is to formulate an Informed Consent form. According to Fouka and Mantzorou (2011), the informed consent form signifies that the participants are fully aware of the purpose of the research and have knowingly enrolled in it. It is also imperative to perform a voluntarily survey. Specifically speaking, the participants must have a choice of enrolling in the study, as an obligation of completing an inquiry may lead into false responses and reactions. In this study, the participants were particularly assured that the questionnaires are voluntarily and those who are not in favor of doing so were to be dismissed. Also, the teachers involved in this research have all approved and signed the consent form.

Other than the ethical considerations that are discussed above, there other issues that one must reflect upon when performing a research. First and foremost, it is fundamental that the researcher considers gaining access in advance. This is due to the reason that most academics, especially in private sectors, are not very overwhelmed with permitting researchers to examine their students. However, not only were this specific school's officials very supportive and welcoming in regards to permitting access and authority, the students were also very friendly towards the researcher.

### 3.6 Setting and Participants

This study has been implemented at a bilingual international school which is located in Shiraz, one of the largest cities of Iran. It is an all-girls school system, which is based on a bilingual curriculum and offers classes from kindergarten to high school. In spite of that, for the aim of this research, grade eight female pupils aged thirteen to fourteen are taken into consideration. The students have the opportunity to learn every subject in English at this school for three hours each day. The participants in this study are consisted of both teachers and students. A total of thirty students in two separate classes were observed. The first class is consisted of fourteen students whereas the second one has a total of sixteen students. The teachers in both classes are also enrolled in this survey in an attempt to examine their perception towards the use of CS in the L2 classroom.

### 3.7 Instruments

### 3.7.1 Qualitative

Two instruments have been used for the qualitative method of this research. The first one which is an observation was carried out in both classes. An observation tool was utilized to indicate the reasons that lead to CS (Gulzar, 2010; see Appendix 1). Observations are very beneficial in terms of monitoring 'when' and 'why' CS takes place as the researcher is enabled to inevitably deliberate the classroom activities. It creates an opportunity for the researcher to observe the classroom environment in person. The second type of qualitative instrument that was used in this research is a teacher interview. According to Li and Moyer (2008), "interview is a fairly versatile technique for gathering data," on bilingualism. In this study, both teachers were interviewed by using a tool (Then \& Su-Hie, 2010; see Appendix 2) with the intention of distinguishing their outlook towards the use of CS.

### 3.7.2 Quantitative

A quantitative method of research has also been applied in this study. Questionnaires are the most popular form of data collection amongst researchers, as it is easy to construct (Dorneyi, 2002). In order to investigate 'when' and 'why' these bilingual students necessitate

CS in speech, a questionnaire (Momenian \& Ghafar-Samar, 2011; see Appendix 3) was used to approximate their responses. The students were assured of the confidentiality and the anonymity of the research questions. They were also informed that their participation in the survey was completely voluntarily to offer them a choice of enrolling in the research.

### 3.8 Methods of Data Collection

Once again, the purpose of this research is to investigate and monitor the impact of the use of CS in a bilingual classroom environment. In order to reach that goal, a combination of qualitative and quantitative methods of research has been applied in this study. As mentioned above, three types of instruments have been utilized. It is now necessary to confer an in-depth description of each method.

### 3.8.1 Observation

The first method of qualitative research that has been used in this study is observation. Furthermore, both classes have been observed in a total of four sessions, which indicates that each class has been observed twice. Two types of tools have been utilized in the observation process. The first one is a standard note-taking in which the researcher jots down whatever he/she observes. A second technique that was used in this research is an observation tool that examined the reasons that prompt students to CS in the bilingual classroom. This tool has been selected from an article by Gulzar (2010; see Appendix 1). The author has used this tool with the aim of indicating the significance of CS in the L2 classroom.

By all means, this tool has been modified to correspond to the aim of this study. The modified version of this tool is consisted of seven reasons for CS which are: a) Clarification, b) Translation, c) Socializing, d) Linguistic Competence, e) Ease of Expression, f) Emphasis, and g) Creating a Sense of Belonging. The observer is to fill in the box next to each one, if he/she is to observe it in the classroom. There is also a choice of indicating further comments at the end of the sheet that enables the researcher to identify other reasons that prompt CS.

### 3.8.2 Interview

The next instrument that has been applied in this research is an interview. Both teachers have been interviewed with the aim of identifying their insight towards the use of the L1 in the L2 classroom setting. According to Li and Moyer (2008), there are two forms of content information that researchers can obtain in interviews. The first one is factual details and the second one is perspective information. In this study, the 'factual details' that the interviewees were to state are their age, years of employment and acquired educational degree. Not to mention, both teachers are female. They were assured of the anonymity of the survey and were informed of the purpose of the research in advance. The second part of the interview which concentrated on the 'perspective information' of the interviewee is consisted of eight open-ended questions in which each participant is to explain their response in detail. The interview questions were modified for the aim of this research (Then \& Su-Hie, 2010; see Appendix 2). In line with the purpose of this study, these authors had also designed the interview questions with the intention of discovering secondary bilingual teachers' perception on the use of L1 in their classrooms.

### 3.8.3 Questionnaire

The third and final instrument that has been used in this research is a questionnaire to measure 'when' and 'why' students CS. Questionnaires are typically used in a quantitative method and in this study, a self-administered written questionnaire has been proposed (Dornyei, 2003). This questionnaire has been selected from a study conducted by Momenian and Ghafar-Samar, (2011; see Appendix 3) and has been modified to be compatible to the purpose of this research. It is compromised of two parts of factual questions and behavioral questions. As it is an all-girls school, the factual question in this survey was merely the students' age, which ranked from thirteen to fourteen. The second part which refers to the behavioral questions measures 'when' and 'why' these participants CS. A total of ten closeended questions were presented. With the intention of avoiding complexity as the participants were very young, the questions were fairly straight forward with a choice of 'yes or no' responses. At the end of the questionnaire, they had an optional choice in which they were to indicate other reasons for CS that may not have been included in the questionnaire.

### 3.9 Data Collection Procedures

The aim of this research is to investigate the use of CS in a bilingual classroom setting and its impact on students' SLA. This study has used a combination of a qualitative and quantitative method and has applied three instruments of observations, teacher interviews and a student questionnaire. The data collection process initiated at the beginning of February and endured an entire week.

## Stage 1:

The observation was the first instrument that was employed in this research. On the whole, four sessions have been observed which implies a total of two sessions for each class. This designates that the observations were equally divided into two teaching sessions for both teachers. Moreover, Science and General English were taught in these sessions. The first two sessions were observed on February fifth and the last two took place on February seventh. At the beginning of the data collection procedure, the researcher introduced herself and bestowed a brief proposal of her motives for observing the classrooms. The participants were assured that the results were confidential and their participation in the survey was completely voluntarily. Indubitably, all students and teachers willingly enrolled in the study. With the approval of school authorities, all four sessions were video-taped for reference, validity and accuracy. Each session endured forty-five minutes which suggests a total of one hundred and eighty minutes of observation. As discussed in [3.8.1], the researcher used an observation tool and wrote down all that was perceived during the four sessions.

## Stage 2:

Following the observations, a questionnaire was used with an aim of identifying 'when' and 'why' these students CS. The questionnaire was carried out on February ninth during school hours. Once again, the students were given a brief explanation of the aim of the study and reassured of the anonymity of the questionnaire. They were notified that there is no obligation in their participation and they were not marked on the questionnaire, as some students mistakenly assumed that it was some sort of an examination. The researcher invited the students to complete the questionnaire individually and to ask for assistance wherever
necessary. The process endured fifteen minutes whilst the researcher explicitly explained all ten questions one by one in order to certify that every student has completely comprehended the message to each question. A final 'thank you' note along with a 'smiling face' figure was conceived at the end of the questionnaire (see Appendix 3). This is significant as the participants are doing a favor and it is specifically essential to thank them for their cooperation in the research (Dorneyi, 2003). Over and above, as the participants are very young, they found the 'smiling face' somewhat interesting.

## Stage 3:

The last instrument that has been utilized in this study is a teacher interview. Both teachers were interviewed by means of signifying their outlook towards the use of L1 in their classrooms. The interviews were performed at the end of the data collection procedure on February eleventh during school hours. Each teacher was interviewed separately and their participation was absolutely voluntarily. They were asked some demographical questions at the outset, such as their age, years of teaching experience, and educational degree as well as a total of eight open-ended questions regarding their insight of the use of CS in the classroom. Every interview lasted for approximately ten minutes and was specifically audio-recorded for further reference and to ascertain the validity of the findings and results. Despite that, the researcher wrote down as much as possible during the interviews.

### 3.10 Data Analysis Procedures

As previously alleged, the data collection procedures in this study were processed through February and lasted an entire week. By the same token, the data analysis procedures initiated in midst March and ended in late April. Strictly speaking, the data analysis procedure is (Holliday, 2005, p. 99) "the process of making sense of [...] the data," for that reason, it is imperative to indicate the procedures of analyzing what has been collected. As this research is concentrated on a qualitative/quantitative method, diverse techniques were implemented by means of analyzing the data. The data analysis procedures are discussed in the following sections.

### 3.10.1 Qualitative Analysis

This study is based on classroom observations and teacher interviews so as to investigate the effect of CS amongst bilinguals. During the data analysis procedure, the observation notes were referred to and the videos have also been watched repeatedly. As the researcher is not enabled to particularly observe every single detail without more ado, the video-tapes created an opportunity to analyze the sessions carefully and thoroughly afterwards. Li and Moyer (2008, p.194) claim that transcription "is already a first step in interpretation and analysis." This signifies that it is very crucial to transcribe the audio/videorecorded data for comprehension and analysis of the collected data. Transcribing the data also assists the researcher in interpreting an in-depth analysis of what has been collected. As both the observation and interview data are descriptive, the video and audio tapes were cautiously assessed and reviewed with the aim of indicating the effects of CS and how it may facilitates learners in improving their linguistic and social skills.

### 3.10.2 Quantitative Analysis

With the purpose of indicating 'when' and 'why' L2 students need to switch to L1, a quantitative method of research was also applied in this study. Contrary to the qualitative data analysis procedure that mainly concentrates on a descriptive analysis of what was observed or perceived, the quantitative analysis simply deals with statistics and numerical data (Murtonen, 2001). It is critical to point out that the data in this study is a non-parametric data and a Chi square test was used with the intention of determining the significant differences between the two groups of students. By means of verifying any significant correlation between the questions in the questionnaire, Kendall's tau_b Correlation test was also applied. Consequently, these tools were used in an attempt to distinguish the relationship between CS and bilinguals' SLA.

## Chapter Four

## 4. Data Analysis and Results

### 4.1 Introduction

The purpose of this research was to investigate the influence of the use of L1 in the bilingual classroom. Moreover, this study has also examined 'when' and 'why' students tend to CS as well as the teachers' perception on the use of CS in their classrooms. This research has been carried out in a bilingual school in Iran. A total of thirty grade eight female students have participated in this study as well as both their teachers. Two particular classes are taken into consideration in which one class is consisted of fourteen students whereas the other is comprised of sixteen.

A combination of a qualitative/quantitative method of research has been applied with the purpose of reaching the main goals of this study. A total of four sessions have been observed which indicates that each classroom was observed twice. The observations created an opportunity to distinctly monitor the use of CS amongst bilingual students. A teacher interview has also been implemented by means of indicating the teachers' opinion towards the use of L1 in the L2 classroom. In addition, a student questionnaire was also carried out with the aim of identifying 'when,' 'why', and under what circumstances the students felt the need to CS.

### 4.2 Analysis of Qualitative Data

As stated in [3.7], for the qualitative segment of this study, classroom observations as well as teacher interviews have been carried out. A total of one hundred and eighty hours has been observed by means of signifying the impact of the use of CS as well as the reasons that prompt students to CS in the classroom. The researcher has also video-taped all four sessions for supplementary reference and guidance. The teachers were also interviewed in order to
distinguish their outlook towards the use of CS in their classrooms. Likewise, both interviews were also audio-recorded in an attempt to give validity to the research findings.

The data collection was carried out during school hours at the beginning of February and was followed by the data analysis procedures. The observations and interviews created an opportunity for the researcher to be enabled of perceiving and monitoring the classroom atmosphere as well as observing the students and teachers individually. In line with the above literature, the results of the qualitative data indicate that CS affects students' SLA. It also suggests that students switch to L1 for both linguistic and social reasons. It is now significant to discuss the results of the findings in-depth and detail.

### 4.3 Analysis of Observation Data

Bearing the above in mind, it is important to mention that two distinct classrooms were examined. For the purpose of this study, the first class is labeled as Group 1 whereas the second is identified as Group 2. The subjects in both classes were General English and Science, thus two sessions of General English and two sessions of Science were observed. In all four sessions, the researcher attempted to distinguish the impact of the use of CS in the bilingual classroom setting as well as the reasons why students switch to L1. At this instant, a brief description of the classrooms' environment is conferred.

### 4.3.1 Group 1

The first group of students (Group 1) that were observed is consisted of a total of fourteen pupils. In both sessions the topic was introduced by the teacher in L2. She initiated the session by introducing some new terms to describe the objectives of the lesson. It was observed that the teacher defined all terms in English. However, if the students were not familiar with a single word, she would ask for a Persian equivalent at times. The teacher also used English synonyms and antonyms in order to clarify new L2 words to the students. It was also observed that the teacher set a number of examples in L2 by means of explaining herself whenever the students found difficulty with the new subject matter.

She also used English idioms and proverbs to express herself. Nevertheless, it was evident that some students were struggling in comprehending the new English terms from time to time, but the teacher avoided using the L1. This may be due to the reason that they are dealing with the L2 and do not majorly switch to L1 on a regular basis. Therefore, some confusion was observed a number of times during both sessions. As mentioned in [3.10], all sessions were video-taped and transcribed. As a result, in order to demonstrate the use of CS in Group 1, two examples are given in the following sections:

## Extract 1: (Group 1, Session 1)

Teacher: "So... uh, does anybody know the meaning of insulator in Persian? Insulator or...?" Student: "Na rasana?" (Note: 'Na rasana' is the Persian equivalent of the word 'insulator'). Teacher: "Aha... na rasana."

## Extract 2: (Group 1, Session 2)

Teacher: "Intimate friends or close friends means what?"
Student: "Samimi?" (Note: "Samimi" is the Persian equivalent of the word 'intimate').
Teacher: "Aha..."

As it is exemplified above, the teacher switched to L1 with the intention of clarifying or translating a novel English word to the students. This example of CS was observed several times in the classroom by both the teacher and students. The teacher asks the students to confer the Persian equivalent to the words 'insulator' and 'intimate,' which indicates that the teacher is emphasizing on the word in order to certify that every student has understood the meaning of the new words.

### 4.3.2 Group 2

The second group (Group 2) that was observed is comprised of sixteen students. The teacher introduced the lessons by giving feedback in L2. She used Persian equivalents for
new English terms and/or vocabulary with the intention of clarifying herself to the students. She also switched to Persian at times by means of emphasizing on the new subject matter. It was also observed that the teacher switched to L1 a number of times to make certain that the students comprehended the unfamiliar vocabulary. Likewise, some students also switched to L1 for emphasis and understanding.

Nonetheless, it was perceived that some students faced complexity in comprehending some of the novel English terms, but the teacher not only refused to use any method to clarify herself, she also avoided CS. This avoidance of the use of CS led to students' whispering with one another in Persian to assure the understanding of the new vocabulary. Some students were very quiet and felt embarrassed when asked questions in L2, and consequently decided to speak in L1. It was also observed that some students faced difficulty in speaking in L2 but refused to CS. Likewise, a couple of examples are provided below for a demonstration of the use of L1 in Group 2.

## Extract 3: (Group 2, Session 1)

Teacher: "Why is the wire in plastic?"
Student 1: "Because plastic doesn't... uh... it's not...uh..."
Teacher: "In Farsi? No matters."
Student 1: "Na rasa?" (Note: 'Na rasa' is the Persian Equivalent for 'insulate')
Teacher: "Very good! Na rasa... it means?"
Student 2: "Insulate."
Teacher: "Right..."

## Extract 4: (Group 2, Session 2)

Teacher: "Have you ever had... um friends that had a lot of influence on your behavior?"
Student: "Uh..." (Student shakes her head as if she hasn't had that experience.)
Teacher: "Never?"
Student: "What is influence?"

Teacher: "What does it mean? Influence... You can say it in Farsi!"
Student: "Baztab?" (Note: ‘Baztab’ means 'consequence’ in English.)
Teacher: "Uh, no... influence means tahte tasir. Something like this, okay?"
Student: "Oh okay. Yes, I had."

As it is observed in Extract 3, the student is having some trouble uttering the English equivalent of an unknown word. Thus, the teacher asks her to CS and the student switches to L1 to certify that she is aware of the meaning of the new English word. Ultimately, the student states the English equivalent with confidence. In the same way, in Extract 4, the teacher is asking a question in which the word 'influence' is unfamiliar to the student. Therefore, the student unknowingly responds negatively to the question. However, when the teacher translates the word to Persian, the student suddenly responds positively and declares that she has had friends who had influenced her.

### 4.3.3 Analysis of Observation Tool

The researcher has also selected and modified an 'observation tool' in order to distinguish the reasons that prompt students' CS in the L2 classroom (Gulzar, 2010; see Appendix 1). This tool has been consisted of seven options of a) Clarification, b) Translation, c) Socializing, d) Linguistic Competence, f) Ease of Expression, g) Emphasis, and h) Creating a sense of belonging, in which the researcher has selected the most observed choices. In line with the examples that are bestowed above, it was observed that the students mainly CS for clarification, understanding, translation and emphasis.

In both Classrooms, the students tend to use CS for clarification predominantly. It was observed that at times, CS occurred for emphasis and translation as well. Social reasons for CS were also observed a number of times where students started to talk to one another in Persian with the aim of clarifying what the teacher had said. Some social aspects of being introverted or embarrassed to speak in L2 were also perceived in the observations. Overall, the use of CS in both groups majorly occurred for clarification and translation of unfamiliar novel words or terms.

### 4.4 Analysis of Interview Data

As mentioned in [3.8.2], the second part of the qualitative method in this research is a teacher interview. The interview questions are selected and modified (Then \& Su-Hie, 2010; see Appendix 2) for the aim of this study. The first part is consisted of the demographic information of the participants which suggests that both teachers are female, have eight years of teaching experience and hold a Masters Degree in the area of Teaching. The second part is comprised of eight open-ended questions regarding the teachers' perception and insight towards the use of CS in the bilingual classroom setting. Each teacher is labeled in order to differentiate them in this study (Teacher A and Teacher B). A brief description of the interviews is discussed in the following segments.

### 4.4.1 Teacher A

The aim of the interview was to investigate the teachers' behavior towards CS and to distinguish whether or not they use it in their classrooms, despite the fact that the school forbids the use of the L1. Teacher A majorly responded uncertainly to all questions regarding the use of CS in the classrooms. She believed that if it is not prohibited in the school system, it would be perfectly fine to switch to L1. She also mentioned that she uses other techniques to clarify an unknown English term to students, (as observed in the sessions) such as using examples, synonyms, antonyms and so force.

When asked if she uses CS in her classroom, even though it is not permitted, she explicitly said no. However, she perceived CS as a useful technique for rare occasions when the teacher faces difficulty explaining novel terms to students. Teacher $A$ also added that she would mainly CS for clarification if it were permitted. Yet, she affirmed that she would never CS if the school officials were to observe her classroom, as it is against the school policies. Below is a brief part of the transcribed interview with the first teacher.

## Extract 5: (Teacher A, Question 3)

Researcher: When would you usually code-switch in your class? Why?

Teacher A: Um... (Pause), at the time when I'd find it necessary to do it, I'd code-switch, otherwise I won't.

Researcher: Why would you find it necessary?
Teacher A: For... explaining and um, clarification... yeah, especially for clarification.

### 4.4.2 Teacher B

Contrary to the first teacher who was essentially in a dilemma towards the concept of CS, the second teacher was mainly in favor of this technique. She believed that CS is a practical way of facilitating students in understanding of the second language subject matter. She adds that it is very beneficial if teachers CS in the classroom especially when teaching abstract words, as she perceives it to be very difficult to teach. Unlike the first teacher, she was certain of the idea of CS and confirmed the use of CS in her classroom, despite the school regulations.

In her opinion, due to years of teaching experience, she has observed CS to be very influential, as it has enabled students to communicate in L2. Teacher $B$ asserts that other than CS, she uses paraphrasing and synonyms in order to clarify new vocabulary. Similar to Teacher A, she also mainly uses CS for understanding and clarification. However, like the first teacher, she also states that she would never CS in the classroom if the school authorities were to observe her class, as it is against the school's regulation. The following is an example of the transcribed interview with Teacher B.

## Extract 6: (Teacher B, Question 6)

Researcher: Can you tell me some of your experiences of code-switching in your class?
Teacher B: Yeah! You see that... uh, once I wanted to talk about the concept of, I mean that it was in General English, and I wanted to talk about the... the concept of consciousness, okay?

Researcher: I see... okay?
Teacher B: And you see, they couldn't understand it, I meant that I... I paraphrased it a lot, I gave examples, and so on... but you see that again, they did not understand me. Uh, so I had to, uh... (Pause), I had to do it and it was great. You see... finally they could understand it.

### 4.5 Analysis of Quantitative Data

In addition to the qualitative method, a quantitative method of research has also been applied in this research. For the aim of this study, a student questionnaire (Momenian \& Ghafar-Samar, 2011; see Appendix 3) has been selected and modified to distinguish 'when' and 'why' bilingual students switch to L1. This questionnaire is essentially consisted of ten 'yes/no' questions. The students also had a choice of indicating other reasons for CS that may not have been included in the questionnaire. They were reassured of the confidentiality and anonymity of the research findings. The researcher assisted the participants in answering each question by means of avoiding any misunderstanding. The result of this questionnaire indicates that students CS for both linguistic and social reasons.

### 4.5.1 Analysis of Questionnaire Data

In order to examine 'when' and 'why' bilingual students CS, a questionnaire has been used in this study. The questionnaire is consisted of ten close-ended questions which measured the conditions in which students need to CS. The table below demonstrates the demographic information of the participants in both groups:

## Table 1:

| Age |  |  |
| :---: | :---: | :---: |
|  | Frequency | Percent |
| 13 | 14 | 46.7 |
| 14 | 16 | 53.3 |
| Total | 30 | 100.0 |

Group

|  | Frequency | Percent |
| :--- | ---: | ---: |
| 1 | 14 | 46.7 |
| 2 | 16 | 53.3 |
| Total | 30 | 100.0 |

## Table 1:

According to the table labeled as Age, 14 students are aged thirteen, whereas 16 students are fourteen years old. The second table labeled as Group, shows that the participants in Group 1 are consisted of 14 students, whereas Group 2 is comprised of a total of 16 students.

## Graph 1:



## Graph1:

As it is demonstrated in Graph 1, $46.7 \%$ of the participants are from Group 1 whereas, $53.3 \%$ of them are from Group 2. The chart also illustrates that an equal range of seven students in each class is aged thirteen, whilst seven students aged fourteen are in Group 1 and nine students who are aged fourteen are in Group 2.

## Table 2:

The participants have responded to all ten questions and it is now essential to indicate the results of the findings. Table 2 illustrates the number of 'yes' and 'no' responses and the percentages of each question. It is estimated that 29 students have responded positively to Question 4, whereas 25 students have responded negatively to Question 10.

## Table 2:

| Question | Number of <br> Students |  | Percentage of <br> Students |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Yes | No |
| Q1 | 26 | 4 | 86.7 | 13.3 |
| Q2 | 6 | 24 | 20.0 | 80.0 |
| Q3 | 21 | 9 | 70.0 | 30.0 |
| Q4 | 29 | 1 | 96.7 | 3.3 |
| Q5 | 18 | 12 | 60.0 | 40.0 |
| Q6 | 18 | 12 | 60.0 | 40.0 |
| Q7 | 23 | 7 | 76.7 | 23.3 |
| Q8 | 9 | 21 | 30.0 | 70.0 |
| Q9 | 11 | 19 | 36.7 | 63.3 |
| Q10 | 5 | 25 | 16.7 | 83.3 |

## Graph 2:



## Graph2:

The above graph reveals that most participants have conferred positive responses to questions $1,3,4$ and 7 , whereas the majority of these students have responded negatively to
questions $2,8,9$ and 10 . Not to mention, there was an equal eighteen positive responses to questions 5 and 6. As it is observed in Appendix 3, most participants have stated that they essentially CS due to four reasons. Question 1: they use an English equivalent whenever they face an unfamiliar term. Question 3: they give a comment or talk about something in hand. Question 4: when they feel like their peers do not understand their message, so they need to clarify themselves in Persian. Question 7: indicates that most students switch to L1 to cast a comic sense to their utterance.

On the contrary, Graph 2 suggests that these students do not CS due to the four following reasons: Question 2: CS to hold the floor in an interaction; Question 8: CS to add color to an utterance; Question 9: CS to gain self-confidence; Question 10: CS to attract attention so as to take the floor in a conversation. There was nearly an equal positive and negative response to: Question 5: CS to express themselves; Question 6: CS to emphasize on their utterance.

### 4.5.2 The Relationship between Group 1 and Group 2

Bearing the above in mind, it is now important to distinguish the relationship between the questions in both groups. The inferential statistics in this study indicates that the data of this research is a non-parametric data and a Chi square test is used which reveals that there exists no significant difference between Group 1 and Group 2 responses to all questions except for question 6 . The tables below illustrate this matter in detail:

Table 3:
Q6 * Group
Crosstab

| Count |  | Group |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 |  |
| Q6 | Yes | 12 | 6 | 18 |
|  | No | 2 | 10 | 12 |
| Total |  | 14 | 16 | 30 |

## Table 4:

Question 6: "I code-switch because I want to put emphasis on the utterance." A one-tailed test is used for identifying the statistical significant difference in Question 6 between both groups ( $\chi^{2}(1)=7.232, p=0.009$, one-tailed). As it is displayed in Table 3, this fundamentally suggests that most students in Group 1 responded 'Yes' to Question 6, whereas the majority of the students in Group 2 responded 'No' to the same question. Contrary to Group 2, most participants in Group 1 stated that they CS to put an emphasis on their utterance. Table 4 below explicates the process in which the Chi-square test has been rendered:

## Table 4:

| Chi-Square Tests |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Value | df | Asymp. Sig. (2sided) | $\begin{gathered} \text { Exact Sig. (2- } \\ \text { sided) } \\ \hline \end{gathered}$ | Exact Sig. (1-sided) |
| Pearson Chi-Square | $7.232^{\text {a }}$ | 1 | . 007 |  |  |
| Continuity Correction ${ }^{\text {b }}$ | 5.363 | 1 | . 021 |  |  |
| Likelihood Ratio | 7.727 | 1 | . 005 |  |  |
| Fisher's Exact Test |  |  |  | . 011 | . 009 |
| Linear-by-Linear Association | 6.991 | 1 | . 008 |  |  |
| N of Valid Cases | 30 |  |  |  |  |

a) 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 5.60.
b) Computed only for a $2 \times 2$ table.

### 4.5.3 The Relationship between the Questions

## Table 5:

As discussed above, there exists a significant difference between the responses to questions 6 amongst the participants in Group 1 and 2. In spite of this, it is imperative to distinguish the relationship between all ten questions. The results of the data reveal that there exists a significant difference between the responses to questions 3 and 6 , and a significant difference between the responses to questions 8 and 9 . Furthermore, this simply suggests that the majority of the students who have responded 'yes' to question 3 have also responded 'yes' to question 6 or vice versa. This relationship is also observed in questions 8 and 9. The table below simply demonstrates the statistical significant differences that exist between the above mentioned questions:

## Table 5:

Kendall's tau_b Correlation Tests:

|  |  |  | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kendall's tau_b |  | Correlation Coefficient <br> Sig. (2-tailed) <br> N | $\begin{array}{r} .196 \\ .291 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .171 \\ .357 \\ 30 \\ \hline \end{array}$ | $\begin{array}{\|r} -.073 \\ .695 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .080 \\ .666 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .080 \\ .666 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .247 \\ .183 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.171 \\ .357 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.312 \\ .093 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .175 \\ .345 \\ 30 \\ \hline \end{array}$ |
|  |  | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  | $\begin{array}{r} -.036 \\ .845 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .093 \\ .617 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .238 \\ .200 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.102 \\ .583 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .276 \\ .137 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.327 \\ .078 \\ 30 \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline-.208 \\ .264 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .000 \\ 1.000 \\ 30 \\ \hline \end{array}$ |
|  |  | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  |  | $\begin{array}{r} -.122 \\ .513 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .208 \\ .263 \\ 30 \\ \hline \end{array}$ | $\begin{array}{\|r} .505 \\ .007 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.189 \\ .308 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .111 \\ .550 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .196 \\ .291 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.098 \\ .599 \\ 30 \\ \hline \end{array}$ |
|  |  | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  |  |  | $\begin{array}{r} -.152 \\ .414 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.152 \\ .414 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .337 \\ .070 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .122 \\ .513 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .141 \\ .447 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .083 \\ .655 \\ 30 \\ \hline \end{array}$ |
|  | Q5 | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  |  |  |  | $\begin{array}{r} -.250 \\ .178 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .193 \\ .299 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .089 \\ .631 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} -.085 \\ .648 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .183 \\ .326 \\ 30 \\ \hline \end{array}$ |
|  | Q6 | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  |  |  |  |  | $\begin{array}{r} -.129 \\ .488 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .089 \\ .631 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .198 \\ .287 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .000 \\ 1.000 \\ 30 \\ \hline \end{array}$ |
|  | Q7 | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  |  |  |  |  |  | $\begin{aligned} & .017 \\ & .926 \end{aligned}$ | $\begin{array}{r} -.071 \\ .703 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .035 \\ .849 \\ 30 \\ \hline \end{array}$ |
|  | Q8 | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  |  |  |  |  |  |  | $\begin{array}{r} .709 \\ \\ .000 \\ 30 \\ \hline \end{array}$ | $\begin{array}{r} .293 \\ .115 \\ 30 \\ \hline \end{array}$ |
|  | Q9 | Correlation Coefficient <br> Sig. (2-tailed) <br> N |  |  |  |  |  |  |  |  | $\begin{array}{r} .031 \\ .868 \\ 30 \\ \hline \end{array}$ |

*Note: the high-lighted boxes demonstrate the correlation between the questions.
(A correlation is observed in Questions $3 \& 6$ and a correlation is observed in Questions 8 \& 9)

## Chapter Five

## 5. Discussion

### 5.1 Introduction

This study has investigated the effect of the use of CS on bilingual students and how its existence in the classroom may assist young L2 learners in developing their linguistic and social skills. This research has been conducted by using a combination of a qualitative/ quantitative method. Therefore, classroom observations, teacher interviews and a student questionnaire have been utilized. As discussed in [2.2], a bilingual is one who is proficient in both languages (Hamers \& Blanc, 2003). The students who participated in this study are proficient in L1 and are becoming fluent in L2; hence, they are aiming to become bilingual. Not to mention, the school system is based on a bilingual curriculum. Thus, the students are referred to as bilinguals who acquire the L2 in an environment where CS takes place. This is simply because CS occurs amongst students in bilingual surroundings.

The results of this study reveal that bilingual students majorly CS due to linguistic reasons. However, social motives that ultimately led to CS were also observed. In line with the above literature (Gardner-Chloros, 2009), this study suggests that the use of CS by both teachers and students in the bilingual classroom setting is beneficial in terms of L2 learners' SLA. As a result, similar to the work of Faerch and Kasper (1983), the results of this research indicate that L 2 learners CS for both linguistic and social reasons. It is now significant to discuss the results and findings in an attempt to explore the effect of CS.

### 5.2 Discussion of Qualitative Findings

### 5.2.1 Research Question 1

1. What is the impact of code-switching on bilingual students' language learning in Iran?

The first aim of this research was to examine the impact of the use of CS in the Iranian bilingual classroom setting. A number of instruments have been applied by means of achieving this goal. As discussed in [3.8.1], observations were carried out which signified that most students involved in this study use CS for clarification, translation, emphasis, and ease of expression. Genuinely, the results of the observations specify that students mainly CS for linguistic reasons, however, a number of social motives was also observed in these sessions. Both teachers and students CS in the classroom which was perceived to be beneficial to their understanding of the new subject matter. CS was observed to help students understand the message of a statement and seemed beneficial in their SLA.

The first technique that has been utilized by means of investigating the impact of CS in the bilingual classroom setting is a classroom observation. Both classes have been observed for the same amount of time in order to maintain an in-depth perception of the classroom environment and how the use of CS may be beneficial to L2 learners. As stated earlier, the results of these observations indicate that young learners essentially tend to CS for linguistic reasons, which is similar to the CLT approach that emphasizes the proficiency of linguistic forms (Nunan, 1999). The results of the observation tool suggest that CS mainly occurs in these classes for clarification, understanding, translation and emphasis. This is highly related to the study conducted by Rezaeian (2009) which implies that linguistically, students need to switch to L 1 for the above mentioned reasons.

In Extract 1, the student CS for emphasis, as she speaks in Persian in order to assure that she understands the meaning of the new term 'insulator.' Likewise in Example 2, the teacher asks students to CS in an attempt to ascertain that all students have comprehended the meaning of the new English word. These examples are for the most part similar to the work of many scholars in this field. For instance, as Ellis (1999) asserts that students use CS when they face unfamiliar words/terms in the L2 and switching to the mother tongue is beneficial to their SLA as it helps them understand the meaning of the new words.

As mentioned in the literature, most linguists believe that CS assists students in their SLA. Some scholars such as Dewaele et al. (2003) affirm that CS is occurred for ease of
expression and at times students need to CS to express themselves. Correspondingly, in the observations in this study, it was also witnessed that students switched to L1 wherever they felt difficulty to express themselves. As it was demonstrated in Extract 3, that particular student faced problems explaining herself and kept pausing to find a word from the English vocabulary but did not succeed. Nevertheless, when the teacher permits her to CS, she immediately responded.

Another reason that led students to switch to the mother tongue is translation. For instance, in Extract 4 it is witnessed that the students did not comprehend the teacher's statement as they were not familiar with the word 'influence'. Consequently, the teacher translated the word in Persian to enable the students to understand the meaning of that word which ultimately led to a comprehension of the message in that statement. As discussed in the literature, many scholars such as Krashen (1988), Brown, (2000), Chomsky (1995) have described CS as a way of communicating with no complication. This study also suggests that CS assists bilingual students in avoiding communication difficulties.

As it was mentioned in Chapter 2, Ellis (1999) affirms that Interaction Hypothesis is learning an L2 via interaction and stresses on avoiding communication breakdown. In the observations in this study, it was perceived that the lack of knowledge of a single word/term in L2 led to a communication breakdown amongst students. It also caused confusion and misconception whenever they faced novel vocabulary. For that reason, it was observed that using the L1 helped these students avoid hinders in speech. As discussed in [2.3.3], linguists have divided CS into two distinct types of intersentential and intrasentential (Niemiec, 2010). The former is referred to as alternating beyond one sentence whereas the latter is occurred within a sentence. In this research, it was recognized that CS mainly takes place within a sentence. In line with Cook's theory (1991), most students and teachers in this study used a single word to alternate to L1. However, contrary to Niemiec (2010) who believes that this act is caused due to laziness or exhaustion, it was observed in these sessions that students CS for both linguistic and social motives. As mentioned above, it was also noticed that these L2 learners CS whenever they felt difficulty in expressing themselves in the second language and thus switched to L1.

Even though in this study, the participants mainly CS for linguistic reasons, social incentives for language alternation were observed as well. Vygotksy's theory of social interaction in SLA (Fletcher \& Garman, 1986) is very fundamental regarding the social aspects of CS. This is due to the reason that CS assists bilingual learners in interacting with one another. It was distinctly observed in this study that L2 learners possessed a fear of communicating in L2. For instance, some students were caught whispering in Persian in order to avoid L2 failure. In addition, various students remained quiet during the sessions but started to speak once the teacher asked them to alternate to Persian.

This clearly reveals that these students did not speak in English as they were afraid of making mistakes. However, it was witnessed that allowing them to CS wherever necessary led to more socializing amongst these pupils. Although Vygotsky and Piaget's theories are contradictory in terms of SLA, this study confirms Piaget's theory of cognitive development in learning an L2 as well. This research affirms that the use of CS in the classroom is beneficial to learners' intellectual improvement of an L2, as it provides an opportunity for students to understand new substances in L2 by using the L1.

### 5.2.2 Research Question 2

3. What are teachers' perception of code-switching and its impact on language learning in the classroom?

The second purpose of this research was to investigate teachers' viewpoint towards the use of CS and how it may influence L2 learning in the classroom. The results of this study propose that both teachers are in favor of the use of CS and believe that it facilitates students in their SLA. They both perceived CS as a beneficial technique to clarify and translate unfamiliar English terms. Nevertheless, Teacher A claimed that CS should not be used regularly as it may discourage students in speaking the second language. As observed in her classroom, she used other techniques such as synonyms, antonyms and so on to clarify herself. On the contrary, Teacher $B$ supported the use of CS and admitted of using the L1 in her classroom, despite the school regulations. Overall, both teachers encouraged the use of CS and recognized it as beneficial to students' L2 learning.

Teacher A declared that CS is useful if it is essential and permitted, whereas Teacher $B$ claimed that it must be used constantly. Thus, this study confirms Brown's insight (2000) which indicates that teachers' comprehension of language depends on how they teach that language. As a result, as it is exemplified in Extracts 5 and 6, both teachers tend to educate their students based on their outlook towards that language. In contrast to Ellis's (1984) claim that teachers' use of L1 in the classrooms prevents students from communicating in the second language, both teachers that participated in this study believed that their use of CS is beneficial to students' SLA. It was also personally observed that the teachers' CS helped students comprehend new subject material and encouraged them to socialize in L2. However, similar to the literature, this study also suggests that an excessive use of L1 may result in the avoidance of using the L2. (Gulzar, 2010)

### 5.3 Discussion of Quantitative Findings

### 5.3.1 Sub-questions of Research Question 1

a) When do students code-switch to Persian?
b) Why do students code-switch to Persian?

Another purpose of this study was to investigate 'when' and 'why' bilingual learners CS in the classroom. A student questionnaire was selected and applied in this survey in order to distinguish the reasons that prompt students' CS per se. As a quantitative method basically deals with numbers and statistics, a number of graphs and tables are demonstrated in Chapter 4 by means of exemplifying the results and the findings of this study. This questionnaire has revealed 'why' and 'when' students switch to L1. As it is illustrated in Table 1 and Graph 1, a total of thirty students aged thirteen to fourteen have participated in the questionnaire. As declared in [4.5.1] Group 1 is consisted of fourteen students whereas Group 2 is comprised of sixteen in total.

The results in Table 2 and Graph 2 reveal that that most participants have indicated four main reasons for CS. The statistics reveal that the main reason students switch to L1 is because their peers do not understand their message and thus they CS to clarify themselves
(Question 3). This statement signifies a social rationale for CS, as students switch to the first language with the intention of socializing with their peers. The positive responses to this question confirms the third reason for CS that is bestowed by Dulay, Burt, and Krashen, (1982), which is language alternation for 'social' purposes. The next reason for CS that was observed in the questionnaire is using a Persian equivalent of an unfamiliar word/term (Question 1). This is correspondent to the observations in which students switched to L1 whenever they faced a new English term. In other words, an intrasentential type of CS takes place. (Niemiec, 2010).

In line with the responses to the above questions, the majority of the participants have responded positively to questions 3 and 7. According to the findings, another main reason that leads to CS is because they want to cast a comic sense to their utterance (Question 3). This simply suggests that these L2 learners are not familiar with the humor in English, and hence choose to switch to Persian. Furthermore, this question is interrelated with question 7 which designates that these students CS to talk about or give a comment in hand in Persian. Both questions 3 and 7 are highly correspondent to one of the main reasons that Cook (1999, p.87) proposes for CS which is "discussing particular topics." According to Cook, some L2 learners tend to CS by means of discussing and talking about a certain subject matter. As observed above, most of these participants also CS because they want to talk about, give a comment or cast a comic sense to their utterance in Persian.

Considering the positive responses, it is now critical to point out that the participants mainly responded negatively to questions $2,8,9$ and 10 . The results in regards to the mentioned questions signify that these students rarely CS for social reasons. Moreover, the findings of the research reveal that these students do not CS to hold the floor in an interaction, to add color to their utterance, to gain self-confidence, and to attract attention in a conversation (Questions 2, 8, 9, and 10). Therefore, as perceived in the observations, these bilingual learners do not CS to be socially acceptable. The result of the data is contrary to Faerch and Kasper (1983) who claim that bilingual learners CS with the aim of gaining selfesteem and attracting attention. Despite the few social reasons that was noticed, the observations of this study indicate that CS mainly occurred for linguistic motives,

In order to distinguish the relationship between the participants' response to each question, a Chi square test was applied. The findings reveal that there exists a significant difference between the responses to question 6 . As demonstrated in Table 3 and 4, this entails that the majority of the students in Group 1 have responded positively to question 6 whilst the participants in Group 2 have responded negatively to the same question. Thus, the results signify that contrary to Group 2, most of the participants in Group 1 CS in order to put an emphasis on their utterance. The response to this question confirms Cook's statement (1999, p. 87), which determines CS by means of "highlighting something." This simply implies that students tend to CS in order to emphasize on their utterance, which was also personally observed in the classrooms.

As illustrated in Table 5, a Kendall's tau_b Correlation Tests was applied in this study in an attempt to identify the relationship between the responses to the questions amongst Group 1 and 2. First of all, the findings of this study expose that there is a significant difference between the responses to questions 3 and 6 . This simply proposes that the majority of the students who feel that they CS in order to give a comment in hand in Persian, also CS by means of putting an emphasis on their utterance. Similar to this notion, the results reveal that there is a significant difference between the responses to questions 8 and 9 . Then again, this also proposes that the participants who did not CS to add colour to their utterance also responded negatively to using CS with the aim of gaining self-confidence. In addition, this allocates a relationship between the above-mentioned questions. To conclude, the results reveal that CS occurs due to both linguistic and social reasons and the use of CS in the classroom facilitates students' SLA.

## Chapter Six

## 6. Conclusion

### 6.1 Overview of the Research

This study has aimed to investigate the impact of the use of CS in the bilingual classroom setting and how it facilitates students in their SLA. CS was first identified by Blom and Gumperz's in 1972 when they proposed the theory of "Social meaning in linguistic structures." The term CS is referred to as "the alternate use of two or more languages in the same utterance or conversation" (Grosjean, 1982; cited in Bamiro, 2006, p.24). In other words, CS is simply switching from one language to another in speech. As discussed above, there are positive and negative attitudes towards to the use of CS, however, linguists have been paying additional attention to this concept through the past few decades (GardnerChloros, 2009). Scholars such as Brown and Dowling (1998), Krashen (1988), Chomsky (1995), and Duran (1994) claim that CS is a communication strategy that assists students in speaking in an L2. Nevertheless, some scholars such as Skiba (1997) recognize CS as a compensation strategy for communication complexities. In line with this notion, Ellis (1984) also believes that the use of CS by teachers in the classroom prevents students from using the second language. Despite the positive and negative viewpoints towards the use of CS, this study has examined its effect on L2 learners' language learning progress.

This research has been implemented in a bilingual school in Iran where students are exposed to English on a regular basis. The participants are consisted of thirty female eighth grade students aged thirteen to fourteen. Two classes are taken into consideration for the aim of this research in which the first class is consisted of fourteen students whereas the second class is comprised of sixteen in total. The instruments that have been applied in this research are classroom observations, teacher interviews and a student questionnaire. With the aim of indicating the effect of the use of CS in the classroom, four sessions have been observed by the use of an observation tool to distinguish the reasons that prompt student to switch to the mother tongue. Each class has been observed twice while each session endured forty-five minutes. In addition, both teachers have been interviewed in an attempt to explore their
attitude towards the use of CS in the classroom. The interview is consisted of ten open-ended questions and each interview endured ten minutes. Lastly, a student questionnaire was rendered in which the students were to respond to ten close-ended questions with the aim of indicating 'why' and 'when' they switch to L1.

### 6.2 Conclusions

The results of this study reveal that CS is beneficial to L2 learners' language learning improvement and facilitates students in communicating in L2. The findings also designate that the use of CS is advantageous to students' linguistic and social skills. In proportion to the above literature (Faerch \& Kasper, 1983), there are many reasons that stimulate CS in speech. The observations in this study imply that bilingual students majorly CS for clarification, understanding, translation and emphasis, which is similar to the reasons that are stated in a research by Rezaeian (2009). As mentioned in the literature, Cook (1991) explains that $84 \%$ single word switches are occurred amongst bilingual speakers in a conversation. Similarly, the results of this research signify that CS mainly takes place in single word switches. The participants in this research also CS for social reasons, such as the fear of making a mistake (Nilep, 2006). For that reason, they tend to alternate to the mother tongue to avoid being humiliated amongst their peers.

With the intention of distinguishing teachers' viewpoint on the concept of CS, both teachers were interviewed in person. The results of the interviews basically suggest that both of these teachers are in favor of the use of CS in the classroom. They stated that switching to L1 assists students in clarification and understanding of new subject materials. Both teachers supported the use of CS in the classroom, although Teacher B approved this concept more. A student questionnaire was also rendered by means of designating the circumstances in which bilingual learners need to CS. The results of the questionnaire reveal that students mainly CS for linguistic reasons. In other words, CS mainly occurs among these participants to clarify themselves to their peers and to use a Persian equivalent for an unknown English term. Richards and Rodgers (2001), emphasize on 'communicative proficiency' in SLA. This study reveals that CS is beneficial in improving L2 learners' communication skills.

### 6.3 Limitations of the Study

The purpose of this study was to explore the impact of CS on bilingual students' SLA. The results of this study imply that CS assists students in relation to their linguistic and social skills of learning an L2. There are several limitations to this study. First, this study is concentrated on a limited group of participants which results in a small sample size. Also, the participants are consisted of thirteen to fourteen year old females. Thus, this study may not represent all bilingual students in Iran. Secondly, it is highly possible that both students and teachers act differently when one is to observe their classroom. Thirdly, the responses to the questionnaire and interviews may not correspond to their actual behavior towards the question. As a result, a possibility of false responses must be taken into consideration. Fourthly, although this research is applied by using a combination of a qualitative and quantitative method, one must consider that qualitative data may become biased as the researcher evaluates the results personally and a quantitative data is basically dealt with numbers and may not embody the participants' definite perception.

### 6.4 Implications for Future Research

Regardless of the limitations, certain implications and suggestions for future research is offered in this study. As this research reveals, single word alternation in attempt to use an English equivalent of an unfamiliar term is mainly occurred amongst bilinguals. It is crucial to use CS as a technique for improving and encouraging students in communicating in L2. It is essential that the teacher controls the amount of CS that occurs in a classroom, as it may avoid students from using the mother tongue (Wong-Fillmore, 1983; Ellis, 1984; Skiba, 1997). As discussed earlier, Teacher $B$ was more interested in CS and often used it in her classrooms, rather, Teacher A stated that she does not CS at all. Likewise, the teachers' perception on CS affects their instruction. It is suggested that this topic must be applied within a larger population in an attempt to examine the effect of CS on bilingual students. Moreover, a mixture of both male/female students should also be studied to indicate both genders' attitude towards CS. As this study deals with young students, it is suggested to extent this research on older learners as well. In addition, further in-depth study and analysis of this topic is necessary to investigate its outcomes in a more distinct aspect.

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## Appendix 1:

Observation: Modified version of an observation tool selected from an article by Gulzar (2010).

## Reasons that prompt students' code-switching in the classroom:

1. Clarifications

2. Translation $\square$
3. Socializing
4. Linguistic Competence
5. Ease of Expression $\square$
6. Emphasis $\square$
7. Creating a Sense of Belonging $\square$

## Further Comments:

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Appendix 2:

Teacher Interview: Modified version of the teacher interview selected from an article by Then \& Su-Hie (2010).

## Part 1:

## Demographic Information:

1. Age: $\qquad$
2. Gender: $\qquad$
$\qquad$
3. English Teaching Experience: $\qquad$

## Part 2:

1) What do you think of a teacher who code-switches in the classroom?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
2) If it was permitted, would you code-switch in your classes? Why or why not?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
3) When would you usually code-switch in your class? Why?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
4) If you do not code switch, why not? What do you usually do?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
5) What makes you decide to code-switch or not in your class?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
6) Can you tell me some of your experience of code-switching in your class?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
7) Do you think code-switching is beneficial for students? Why/why not?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
8) Would you code-switch if the officials were to observe your class? Why/why not?
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Appendix 3:

Student Questionnaire: Modified version of the questionnaire which is selected from an article by Momenian \& Ghafar-Samar (2011).

This survey aims to examine the use of code-switching amongst bilingual students and its effect on their language learning proficiency. It must be noted that this is completely voluntarily and the results are strictly used for this research only. It can be assured that the results of this research will remain absolutely confidential. Please feel free to ask questions wherever necessary.

## Part 1:

Demographic Information:
Age: $\qquad$ Gender: $\qquad$

## Part 2: <br> Please fill in the empty box next to your choice:

1. I code-switch because I do not know the English equivalent, so I use a Persian word.

Yes $\square$ No $\square$
2. I code-switch because I want to hold the floor in an interaction through using Persian speech fillers.

Yes

3. I code-switch because I want to talk about or give a comment in hand in Persian.

4. I code-switch because my peers could not understand my message, so I need to clarify it in Persian.

Yes


No $\square$
5. I code-switch because I want to express myself.

Yes


No $\square$
6. I code-switch because I want to put emphasis on the utterance.

Yes $\square$ No
7. I code-switch because I want to cast a comic sense on my utterance.

Yes

$\square$
8. I code-switch because I want to add colour to my utterance.

Yes

9. I code-switch in order to gain self-confidence.

Yes


No $\quad \square$
10. I code-switch to attract attention so as to take the floor in a conversation.

Yes


No $\square$

## Part 4:

## Please indicate other reasons for code-switching:

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

