THE EFFECTS OF THE SECOND LANGUAGE
ON THE FIRST

by

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A thesis submitted in partial fulfillment of the
requirements for the degree of

MEd in English Language Teaching

Faculty of Education

July 2009

DISSERTATION RELEASE FORM

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Abstract

The importance of a second language is immeasurable, but maintaining and developing the first language is just as important. The purpose of this study is to examine the effects that a second language may have on the first. To determine the amount of first language loss, Arab bilingual students who were born or raised in an English speaking environment were compared to their Arab monolingual counterparts who had little exposure to the English language. The bilinguals' Arabic texts were compared to the monolinguals'. Furthermore, the bilinguals' English and Arabic texts were also compared to assess both languages. The results indicated that the bilingual students were unable to express their ideas effectively in Arabic and evidence of poor academic writing skills was present throughout the task. However, the bilinguals performed much better in their second language literacy and made fewer errors. Overall, the bilinguals were much more confident in the use of the second language, and such preference was observed by the larger number of English words written by the bilinguals. The bilinguals were able to write more than 8500 words in the second language, but failed to write more than 3050 words in their own native language. Moreover, the total percentage of Arabic errors made by the bilinguals was more than 4 times the percentage of errors made by the monolinguals. The study concluded that the excessive use of the second language can diminish and deteriorate the first language.

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Chapter One: Introduction

One cannot deny the importance of learning a second language, a language that gives access to a new culture and opens up a new horizon. The ability to communicate and express thought in another language is a phenomenal experience on its own. In this study, I do not intend to neglect the significance of learning a second language; rather to look at the effects of a second language in a major field, that is to say, its influence on the first language and on the bilingual child.

It is believed that the mother tongue language has an effect on the second language, but can learning a second language diminish and influence the mother tongue? In this study I attempted to determine if learning a second language has an effect on the mother tongue. This study also attempts to clarify and shed some light on the negative aspects of a second language, the effects that a learner may encounter in the learning process. Such effects can either be related to the cognitive development of the child, the risk of suffering from a conflict of culture identity, or simply lacking the proficiency to communicate in the first language due to lexical gaps that may derive from the excessive use of the second language.

Many theories have come into existence on the effects of the second language on the cognitive development of bilingual children. Many linguists argue that bilingualism led to mental confusion, with some even reporting a linguistic handicap in bilingual children. However, Brown (2000) and Bialystok (2001) believe that the acquisition of a second language increases the mental flexibility of the bilingual child, leading to higher academic achievements.

The acquisition of a second language does not only have an effect on the cognitive development but also on the first language. Several researchers and linguists suggested that the acquisition of a second language can have an effect on the first language, and its excessive use can possibly deter the use of the mother tongue langue; as a result, the first language will most likely diminish. Cook (2003) argues that as an individual gains the ability to use a second language, the command of the first language may be lost. Conversely, Hamers and Blanc (2000) refer to Lambert's (1974) 'additivity' theory on how bilinguals can develop the

acquisition process of the second language with out diminishing the first. They also added that the second language will not threaten to replace the first if positive values are attributed to both languages.

On the other hand, first language loss can be accompanied by what Hamers & Blanc (2000) call deculturation. Deculturation takes place when a bilingual child abandons his first language and culture in favor of the new one. Moreover, Brisk (2006) acknowledges such dilemma by expressing great concern. Brisk states that students who abandon their culture and language will not only fail to connect with the host culture and its speakers, but will also lose connection with their own ethic group. Such culture loss can be harmful to the child; at the same time, failure to assimilate to the new culture can be just as harmful; leaving the child stranded and uncertain as to which culture he belongs to.

1.1 The Background and purpose of the study

I have always been fascinated by the way language is acquired. Whether by children or by adults, native speakers or learners of a new language, it is just remarkable. The effects of a second language on the first can never surpass or overshadow its benefits. The benefits of a second language are tremendous, and I am in no position to criticize its credibility; after all I am currently writing in a second language. Rather, the study focuses on the negative effects that influence the first language and the bilingual child.

During the school setting, the weakness of the Arabic language is somewhat evident among the bilingual students. The lack of reading and writing skills in the students' first language is a problem that is facing both the students and the teachers. As a concerned teacher, I had to ask some of the Arabic teachers at school to elaborate more on such a problem. As I was told, the students were facing difficulties in writing and reading Arabic. Such a problem can primarily be related to their little exposure to the literacy skills of the Arabic language, but I then came to realize that this was not the only obstacle that the students faced, but their spoken Arabic was at jeopardy and presented another challenge for the bilingual students.

As the students spoke Arabic with one another, it seemed that they did not have any problems. However, if examined closely, a person would observe the frequent use and insertion

of English words throughout the conversation. The use of code switching was evident, and its use was preferred by most of the bilinguals. The bilingual students always preferred to be with one another during break time and lineups, but once they spoke to monolingual students, lots of hand movement, pauses, and discomfort seemed to exist.

This persuaded me even more in pursuing and examining the cause of such a problem. I am fortunate enough to be able to conduct the investigation at the school that I currently teach at. Being familiar with the environment and knowing the students was an added value. Finding a class such as the one that I have selected will allow me to investigate the matter thoroughly. Coincidentally, all of the students in that section were bilinguals and have struggled within the Arabic language, but spoke English perfectly well, as they were born and raised abroad in an English speaking environment. The bilingual students, being now in an Arabic country after a long stay abroad, were still exposed to the English language on a daily basis. The medium of education is English, and the amount of Arabic language use was restricted to the hours spend in Arabic class.

Being fluent in English but speaking and writing Arabic with difficulty, the students left me with great confusion, as to whether call them balanced or unbalanced bilinguals. The term bilingual can be quite hard to define. According to Merriam Webster's Collegiate Dictionary (1997), a bilingual is someone who is able to use two languages with equal fluency. Moreover, Macmillan's Dictionary (2007) defines a bilingual as someone who is able to speak two languages extremely well. Furthermore, Cook and Bassetti (2005) explain the term bilingual in much more detail; they relate second language acquisition to monolinguals who are acquiring a second language, whereas bilinguals grow up using two different languages from their early childhood.

Likewise, Lightbown and Spada (1999) use the term simultaneous bilinguals to refer to children who hear more than one language from birth whereas those who begin to learn a second language are referred to as sequential bilinguals. Similarly, Hamers and Blanc (2000) assert that "Early acquisition of two languages often occurs in the same family context, while later acquisition of the second language often takes place in a school context distinct from a family context for the first language." (Hamers & Blanc, 2000: 28). Moreover, De Groot and

Kroll (1997) make a distinction between balanced and unbalanced bilinguals. They believe that balanced bilinguals may be relatively few, but unbalanced bilinguals are characterized by the dominance of one language over another.

According to the above definitions, an individual needs to have equal proficiency in both languages to be considered a bilingual. Therefore, the students that the study is conducted on can be referred to as unbalanced bilinguals. Furthermore, the bilinguals spoke and wrote English extremely well, but lacked the literacy skills of Arabic. Their spoken Arabic was weak and suffered from lexical gaps. However, throughout the course of the study and for the purpose of eliminating any type of confusion, the term bilingual will be used to refer to the students that the study is mainly concerned with; the students who are fluent in English, but are having some difficulties in Arabic.

This study is intended to measure the amount of first language loss by comparing the bilinguals' Arabic and English texts. Such comparison will be essential in evaluating the strength of one language over another. Moreover, the type of Arabic errors that are committed by the bilinguals can be closely identified by comparing the bilinguals' Arabic texts to those of the monolinguals.

The monolinguals who are studying at a nearby private school, with Arabic as the medium of instruction, will provide additional help by comparing their Arabic written tasks to those of the bilinguals. Such a comparison can give some sort of an indication as to where the bilinguals' Arabic level should be at. Furthermore, determining the amount of the bilinguals' Arabic language loss can also be achieved by comparing the lexical density of both the bilinguals and the monolinguals.

A number of similar studies have been investigated, with researchers whose comprehension might bring significant benefit to the study. Schmid (2005) points to the fact that some bilingual children may acquire literacy through the second language; meaning that they learn to write in the second language before learning how to write in their first language. As a result, the spoken second language becomes the first language in writing.

Similarly, Brisk (2000) reviews a study conducted by Trix-Haddad (1981) on two Arabic students who spoke English fluently, but had difficulties in their English literacy skills. The two students had been born and raised in the U.S. but never had the chance to be educated in their mother tongue language. In other words, the students failed in acquiring the appropriate literacy skills of both languages. Moreover, Fillmore (2005) conducted a study in the United States on 609 families who were mostly non English speakers and found that more than 50% reported less home language and more English use at home, while only 16% found that more home language was in use.

1.2 The Research Questions

The principal aim of the current study is to investigate the amount of language loss that may derive from the excessive use of a second language. Furthermore, the study will help in evaluating and understanding the types of errors made by the bilinguals in Arabic and English. The present study will be addressing the following research questions:

1. Can learning a new language affect the first?

2. Can a child's native language diminish within time?

3. How can a child maintain the fluency of his first language while acquiring another?

4. What is the role of the parents in sustaining and developing their child's bilingualism?

5. To what extent can losing the first language affect the identity of the child?

Chapter Two: The Literature Review

2.1 Monolinguals VS. Bilinguals

There has been a prolong debate over the acquisition of a second language, yet little has been documented on the effects of the acquisition process. Most research on second language acquisition has focused primarily on a comparison of monolinguals and bilinguals whether measuring the linguistic competence and cognitive development of the bilingual, trying to prove that bilinguals are equivalent to monolinguals, or showing that bilinguals suffer from mental confusion and cannot be compared to monolinguals. Little has been written on the effects of the second language on the first, and most research has mainly focused on the acquisition process itself.

The first section of this review sheds some light on how the first language can diminish and be replaced by the second language, as it is looked at by some of the most prominent linguists in the field of second language acquisition. The first section also tackles the issue of the cognitive development of bilinguals.

2.1.1 The diminishing of L1: L2 replacing L1

Cook (2003) referred to the effects of the second language on the first as reverse or backward transfer. He also states that the effects of the second language on the first can only happen at advanced stages of second language acquisition. "As a person gains the ability to use a second language, so he or she may to some extent lose the ability to use the first language. In circumstances where one language becomes less and less used, people do lose their command of it, whether as a group or as individuals." (Cook, 2003: 12).

However, Hamers and Blanc (2000) refer to Lambert's (1974) 'additivity' and 'subtractivity' theory. In the additive form, bilinguals develop the acquisition process of the second language with out diminishing the first language. "This situation is found when both the community and the family attribute positive values to the two languages; the learning of an L2 will in no case threaten to replace L1." (Hamers & Blanc, 2000: 99)

On the other hand, the subtractive form will develop when the first language and the second language are working against each other rather than completing one another. An example of the subtractive form is the way that some migrating families start looking down on their native language by persuading, if not forcing, their children to use the second language. This could be rather harmful to the child; after all, a loss of language is a loss of identity. This type of effect is what Lambert refers to as a subtractive form of binguality. "This form will evolve when an ethnolinguistic minority rejects its values in favor of those of an economically and culturally more prestigious group. This subtraction will manifest itself at several levels and will influence intellectual development and personality; language competence which first developed via the mother tongue will be affected." (Hamers & Blanc, 2000: 100)

In a study conducted by Fillmore (2005), 609 families of different background from the United States were questioned on whether or not there had been any kind of change in language use at home. In simple terms, whether the home language was used less or more at home. The 609 families were mostly non English speakers, and were monolinguals of another language and not bilinguals. Fillmore found that 30.9% of the families found no noticeable change, while 16.1% found positive changes with more home language in use. However, 50.6% reported negative changes with less home language and more English use at home.

On the other hand, the distinction between spoken and written language is clearly stated and acknowledged by Schmid (2005) particularly when it concerns migrant communities and linguistic minorities. "As far as speech is concerned, some people acquire language A as their mother tongue and then learn language B as a second language at school, but the spoken second language may turn out to be the first language through which literacy is achieved." (Schmid, 2005: 185)

Schmid provides some examples of how bilinguals can acquire literacy through the second language, and how bilingual children learn to write in language {B} before learning how to write in language {A}. As a result, the spoken first language becomes the second language in writing. To support his idea, Schmid refers to the 40 million Hispanics in the U.S.A and how they are literate in English and not in Spanish, their first language. He also speaks of the 12 million Kurds who acquire literacy in the Turkish language.

With a similar study to that of Schmid, Brisk (2000) looked at a study by Trix-Haddad (1981) on two Arabic students who had been born and raised in the U.S.A. The two students, that the study was conducted on, spoke English fluently, but had difficulties in their English literacy skills 'such as reading and writing'. Like most bilinguals raised in the U.S., they never had the opportunity to be literate in their native language. The students never had the chance to be educated in their mother tongue language, and they did not acquire appropriate education in their English literacy skills.

Brisk acknowledges the dilemma and relates it to two facts. "Their parents do not teach them reading and writing in the native language because they deem it unnecessary. Teachers ignore the fact that these students are bilingual because they speak English and do not work with them as bilingual individuals." (Brisk, 2000: 81). Hamers and Blanc (2000) add to what Brisk has said by stating that negative consequences can exist if the parents do not have excellent command of the host language. As a result, "The child is no longer exposed to an adequate linguistic model in the home. A strong support of the mother tongue in the home and in the community typically benefits the child's academic results." (Hamers & Blanc, 2000: 86)

2.1.2 The Cognitive Development of Bilinguals

Bialystok (2001) argued that fluent bilingualism increased metalinguistic abilities and led to higher levels of academic achievement. Brown (2000) refers to Lambert's (1972) results which state that bilingual children are more facile at concept formation and have a greater mental flexibility. However, Hamers and Blanc (2000) looked at studies undertaken by Pintner and Keller (1922) who reported a linguistic handicap in bilingual children. They also referred to another study by Saer (1923) whose results were somewhat similar to that of Pintner and Keller. Saer considered the bilingual cognitive functioning as a mental confusion.

Hamers and Blanc, when speaking of cognitive consequences of bilinguality, divided such development and consequences into two periods. The first period can be named the Pre-Peal and Lambert era, the period before the 1960's in which negative effects were more repeatedly reported than the positive ones. "Early studies on the relationship between bilinguality and cognitive development, sometimes undertaken in order to demonstrate the

negative consequences of bilingual development, supported the idea that bilingual children suffered from academic retardation, had a lower IQ and were socially-maladjusted as compared with monolingual children. Bilinguality was viewed as the cause of an inferior intelligence." (Hamers & Blanc, 2000: 86) The second period can be named the Peal & Lambert era which changed the perception of many critics, scholars, and skeptics that once doubted the possible benefit of a second language; as a result more positive results were reported than the negative ones.

Hamers and Blanc (2000) refer to a finding by Peal and Lambert (1962) to support their review. The study, carried out by Peal and Lambert, compared ten-year-old bilinguals in Montreal to English and French monolinguals. According to the study, bilinguals had to achieve higher scores in both languages, whereas monolinguals had to have low scores on one of the languages. The groups were matched for age, sex and socio-economic level. The study found that bilinguals received higher results than the monolinguals on tests of verbal and nonverbal intelligences. Hamers & Blanc (2000) focused on the explanation put forth by Peal and Lambert, that the higher results of the bilingual subjects on the intelligence measures could be related to mental flexibility and to how bilinguals can adjust themselves to two symbolic systems.

On the other hand, Genesee (2006) Refers to a study by Pearson (1993) on a group of 27 children raised in Spanish and English in Miami, Florida, that found that bilingual children scored lower on standardized test of vocabulary than monolingual children when examining the two languages separately. Genesee, however, comments on the finding of Pearson and relates the results to three main reasons: (1) "they, like monolinguals, have limited long-term memory in the early stages of development but must retain full vocabulary from two languages in contrast to monolinguals': (2) bilingual children's exposure to each language is less than that of monolinguals', and (3) the context for learning each of two languages is likely to be less than the total context for learning one language and, thus, bilingual children's vocabulary repertoire in each language is likely to be less than that of monolingual. It is likely that vocabulary knowledge in each language would expand as the context for using each language expands." (Genesee, 2006: 49)

Genesee refers to another study by Fennel (2002) that reported "while 17-month old monolingual children were able to attend to fine phonetic detail in minimal word pairs, bilingual children exhibited the same discrimination only later, at 20 months of age." (Genesee, 2006: 50). Like Fennel (2002), Pearson (1993), and Genesee (2006), Bialystok (2005) recognizes the fact that the bilingual mind is different than that of a monolingual. "Bilingual minds cannot resemble the more homogeneous mental landscape of a monolingual. It is uncontroversial that the configuration is more complex than that of a monolingual, for whom concepts and languages ultimately converge in unambiguous and predictable manners." (Bialystok, 2005: 417).

Likewise, Kecskes (2000) believes that bilinguals perceive their language differently than monolinguals. "People with more than one language have different knowledge of their first language than do monolingual people, and this difference can mainly be due to the effect of subsequent languages on the development and use of L1 skills." (Kecskes, 2000: 2) Moreover, Cook (1995) believes that bilinguals are not two monolinguals in the same head.

A distinction is also made here by Walters (2005) between bilinguals and monolinguals as he characterized the articulatory aspects of bilingual production as: (1) "Bilinguals produce language at a slower rate than monolinguals. (2) Bilinguals show more evidence of speech dysfluency, which takes the form of hesitation false starts, and lexical repetitions. (3) Bilinguals have smaller vocabularies than monolinguals in each of their languages, but taken together have a larger overall lexicon." (Walters, 2005: 218)

However, De Houwer (2005) examines bilingual children, under the age of 6, who are exposed to two spoken languages from birth. She makes no distinction between monolinguals and bilinguals, except for the fact that bilinguals can make themselves understood in two different languages, while the monolingual can only handle one. As far as morphosyntactic development is concerned, De Houwer sees that a bilingual who has been exposed to two languages from birth is no different than his/her monolingual counterpart, and views that there are no differences between them in the acquirement of basic language skills. Furthermore, she states that there is no empirical evidence that bilingual children develop both languages at a

rate that is slower than monolinguals. "There is no evidence that hearing two languages from birth leads to language delay." (De Houwer, 2005: 43)

De Houwer, based on a corpus of English utterances of a 3 year old child, found that it is virtually impossible to determine whether the utterances were produced by a bilingual or a monolingual child. She even proposed what she has called the Separate Development Hypothesis, claiming that bilinguals develop two distinct morphosyntactic systems, in which the morphosyntactic development of one language does not harm or effect the morphosyntactic development of the other language.

2.2 Socio-psycholinguistics Approach

As tyranny and oppression continue to grow around the world, more and more families are forced to flee their homeland in search of security and stability. With so much that is not in common with the migrating family's background, one has to consider some of the changes and challenges that the family will face. Whether language, adapting to a new place, trying to fit in, or even surviving for the sack of survival. Migrating families are not always sure about what to expect. Some don't even know what the future holds for them and for their children. Families will be faced with lots of obstacles at first, above all; the language barrier.

The second section of the literature review looks at deculturation. Like language loss, people can loss their culture and identity. The second section also attempts to discuss the relationship between home and school, and how both environments have to work hand in hand to help in developing the child's assimilation process.

2.2.1 Deculturation

Fillmore (2005) mentions two different types of pressures that are exercised on bilingual children. The first is external and the second is an internal one. External pressure is faced by bilingual children in the way of adjustment. Adjusting to a new culture and language is not an easy task and it can be difficult for both children and adults. Young bilinguals, as Fillmore (2005) states, are vulnerable to social pressures in their social worlds. This type of pressure can be exerted by their classmates, teachers, or the community itself, and if they want to be accepted they have to learn to adapt to that new culture. On the other hand, the internal pressure, which is the outcome of the external, can force the child to become much more motivated to abandon his/her first language in favor of the second. "Children are motivated to learn English. At the same time, they are motivated to stop using their primary languages all too often long before they have mastered the second language." (Fillmore, 2005: 303)

Hamers & Blanc define this process as deculturation. "When an individual adapts to a new culture at the expense of his primary culture we speak of a process of deculturation. Deculturation is associated with psychological distress. Extreme deculturation leads to assimilation, which may be accompanied to first language loss. If no assimilation into the host culture occurs, deculturation leads to anomie, a complex psychological state implying feelings of alienation and isolation." (Hamers & Blanc, 2000: 205). Furthermore, "If the child's two-fold cultural heritage is not valorized, he may either align his identity on one culture at the expense of the other or he may refuse to align himself on either culture, in which case he is likely to develop anomie." (Hamers & Blanc, 2000: 213)

Moreover, Brown (2000) tackles the issue by stating that "The acquisition of a new language ego is an enormous undertaking not only for young adolescents but also for an adult who has grown comfortable and secure in his or her own identity and who possesses inhibitions that serve as a wall of defensive protection around the ego." (Brown, 2000: 65).

Similarly, and in relation to what Hamers & Blanc (2000), Brown (2000), and Fillmore (2005) have quoted on deculturation, Brisk (2006) adds by saying that students who abandon

their culture and language will not only fail to connect with the host culture and its speakers, but will also lose connection with their own ethic group. Students who reject the host culture in favor of their own culture will be faced by isolation and alienation. Brisk asserts that "Intense prejudice from teachers and American Peers or rejection of American values by families drives students to socialize within their ethnic group." (Brisk, 2006: 87).

Hamers & Blanc (2000) looked at a study conducted by Child (1943) on second generation Italians living in the United States. The objective of the study was to investigate whether second generation Italians identified themselves as being Americans or identified themselves as being Italians and are part of the Italian community. The results found three different modes: some rejected the American style and identified themselves as being Italians, others chose the dominant culture and rebelled against their Italian community and background, and the third group refused to think of themselves as being Americans or Italians.

Furthermore, McCardle & Hoff (2006) explain the process of what they have called the 'three generation rule', in which the migrating family remains monolingual in their native language, but their children become fluent bilinguals knowing both the first language; the language of their parents, and the second language; the language of the host country. However, their grandchildren become mainly monolinguals of the English language.

Hamer and Blanc (2000) also observed that children who are suffering from a conflict of cultural identity achieved poorly in both languages, and suffered from low self-esteem. Moreover, Brisk (2006) feels that Academic success can be achieved only if bilingual students value their bilingualism, and appreciate both their cultural background and what the host culture has to offer. She also stresses on both families and schools to work side by side to ease the adjustment of the child to the new social environment. Furthermore, Brown believes that self-esteem is probably the most important element of any type of success. "It could easily be claimed that no successful cognitive or affective activity can be carried out without some degree of self-esteem, self-confidence, knowledge of yourself, and belief of your own capabilities for that activity." (Brown, 2000: 145)

2.2.2 The missing link between home and school

Bialystok (2005) points to the fact that there is no resemblance between the instructional discourse at school and the language at home, and sees that the acceptance of the divergence of both languages can either be common, that no threat is detected, or critical, in a sense that an impact on the child's cognitive process can exist.

Brisk (2006) on the other hand, talks about how students from different parts of the world feel when their culture and background is not being appreciated and provides an example on world history courses that only focus on European history because American schools consider them important, yet emphasis on the bilingual's own historical background and content is not present and is not taken into consideration. "The dominant American culture shaped nearly all public schools in the United States. School culture determines curriculum content, assumptions about the background knowledge, learning philosophies, teaching approaches, classroom interaction and management, school routines, and Parental participation. Differences in culture between the school and the students influence the teachers' perception of students and their families, the students' behavior and performance in school, and parents' interactions with school and their children." (Brisk, 2006: 63). Furthermore, Brisk (2006) quoting Kleinfeld (1979) who believed that bicultural curriculum should be present to the bilingual child, and the classroom content should not only focus on one culture or the other, it should rather concentrate on both cultures.

Hamers & Blanc (2000) relate such negative experience felt by the bilingual child to socio-cultural setting in which: {1} "The child comes from a socially disadvantaged subordinate group; {2} he speaks a mother tongue which is little valorized in the society at large; and {3} he is schooled through a prestigious L2 while the school system tends to ignore or denigrate his mother tongue." (Hamers & Blanc, 2000: 109)

Brisk (2006) sees that the performance of the students in school is sensitive to cultural divergences, and views that being unfamiliar with the behavior and curriculum content of the host country makes learning and interacting complex and difficult. "Students' performance and behavior are considered inadequate and inappropriate in the American school context. Often

such students are labeled as having the learning disorders, or being timid or silly, as having tuned out, or other misinterpretations of their reaction to the new cultural environment." (Brisk, 2006: 66).

If the child senses that his presence is unappreciated and that his cultural values are degraded, then this bilingual child may experience some sort of culture shock. Culture shock is referred to by Brown (2000) as a "phenomena ranging from mild irritability to deep psychological panic and crisis. Culture shock is associated with feelings of estrangement, anger, hostility, indecision, frustration, unhappiness, sadness, loneliness, homesickness, and even physical illness. Persons undergoing culture shock view their new world out of resentment and alternate between self-pity and anger at others for not understanding them." (Brown, 2000: 183)

The relationship between home and school is of the essence to the child's adjustment and assimilation. They are the main factor of any type of successful integration. "Home and community play important roles in students' bilingualism, socio-cultural adjustments, and school performance. Parents' knowledge, attitudes, and support systems determine the help they can provide their children in adjusting to the new society and to school. Parents play a crucial role in the linguistic development of their children and they should do so in their own native language." (Brisk, 2006: 90)

2.3 Code-Switching

Parents, teachers, students, and different social groups have all expressed great concern towards the use of mixed utterances. Parents of a bilingual child are somewhat unconscious and are unaware of the phenomenon behind code switching. They are somewhat worried, alarmed, and surprised when it comes to hearing mixed utterances produced by their young children; with some relating it to language confusion.

The third section of this review examines the alarming phenomenon of code switching. It seeks to provide some evidence on whether code switching is a normal part of bilingual speech, or it is simply a sign of poor language skills. This section also tries to investigate the reasons behind code switching and how code switching can be controlled by either the parents

or the bilingual child. Furthermore, the last section looks at how code switching is governed by a certain set of rules and how bilinguals follow those rules unconsciously.

2.3.1 Is Code Switching an Alarming Phenomenon?

Cook (1996) affirms that code switching is an ordinary fact of life, and it is not seen as some thing out of the ordinary; it is rather looked at as normal and something that exists in many different societies. Moreover, Brisk (2006) views code switching and the ability of bilinguals to shift, alternate, and mix languages while communicating, as something unique. Brisk, being in agreement with Cook, believes that code switching is a natural phenomenon and not evidence of poor language skills.

Similarly, Genesee (2006) comments on earlier research which concluded that code mixing reflected some sort of confusion and incompetence; he argues that code mixing reflects communicative competence and linguistic resourcefulness. However, Cook (2003) points out to the fact that if the child's second language becomes dominant, then that bilingual child will experience difficulties with retrieving words from his first language, and the speed of retrieval will be slower to that of a monolingual. Similarly, Hamers and Blanc argue that "code-mixing can express a lack of competence in the base language, such as, for example, lexical items, and in this case code-mixing can compensate for this deficiency." (Hamers & Blanc, 2000: 270)

De Houwer (2005) states that code switching is part of early bilingual production in children who have been raised in a bilingual environment, and does not see it as a lack of language skills. De Houwer believes that the phenomenon of code switching is a result of the type of language socialization practiced by the bilingual child's environment, and sees that the more tolerance there is for code mixing in the community, the more mixed utterances will be in existence.

De Houwer (2005) adds by saying that bilingual children acquire two separate linguistic systems, and they then learn which of the two systems to apply in their language production and choice based on what exists in their environment. "The use of mixed utterances is to be seen as one of the language choice possibilities within the socialization patterns present in

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bilingual children's linguistics environments rather than as a sign of insufficient linguistics skills." (De Houwer, 2005: 43)

Moreover, Brown (2000) makes a distinction between coordinate bilinguals, children who have learned a second language in separate contexts, and compound bilinguals. He claims that coordinate bilinguals have two meaning systems while compound bilinguals have only one for which both languages operate, adding that "It is clear that children learning two languages simultaneously acquire them by the use of similar strategies. They are, in essence, learning two first languages, and the key to success is in distinguishing separate contexts for two languages." (Brown, 2000: 67) Brown also believes that children do not have problems with mixing both languages in spite of the differences of contexts of both languages.

Genesee (2006) asserts that children who are acquiring two languages from birth are exposed to code mixing. He asserts that code mixing is an essential part of the bilingual child's language socialization. He, however, argues that communities have different social norms to appropriate kinds of mixing. Meaning that the way different social groups view the suitability and appropriateness of code switching in their environment can differ significantly from one community to another. Likewise, Myers-Scotton (2005) expresses some concern by stating that in some communities, code switching may be viewed as a sign of bad language.

Genesee (2006) looks at how code mixing can be perceived differently by different ethnical groups. Genesee at first refers to a study conducted by Poplack (1980) on code mixing patterns in a Puerto Rican Spanish-speaking community in New York City. The study found that members of the Puerto Rican speakers engaged in a fluent form of mixing that included several switches from Spanish to English. Genesee relates this to it as being an important marker of social identity, and sees that fluent mixing served to identify the speaker as both Puerto Rican and American.

Contrary to the first study, the second can be viewed as being negative, meaning that it is not accepted by the community. In this review, Genesee (2006) refers to another study conducted by Poplack (1987) on code mixing by French-English bilinguals in Ottawa, Canada, on how code mixing can be used less frequently among French Canadians. Once again,

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Genesee relates this to identity issues, arguing that it is the desire of members of the community in Canada to separate themselves apart from English Canadians, and that the use of code mixing can, without a doubt, blur their identity.

2.3.2 Why Do Bilinguals Engage in Code Switching?

Brown (2000) defines code switching as "the act of inserting words, phrases, or even longer stretches of one language into the other." (Brown, 2000: 67) He also states that bilinguals engage in code switching when communicating with other bilinguals. According to Brisk (2006) bilingual children code switch for many reasons. The first reason can be related to the fact that a word in one of the languages comes to mind first. The second, as Brisk claims, is related to the bilingual's choice of words that can more accurately expresses the meaning.

Lillis & McKinney (2003) view code switching as a dynamic phenomenon. They claim that code switching is used for social negotiation purposes. "The social negotiation of rights and obligations of speakers, based on the norms of particular speech communities and power relationships, are important in understanding why and how code switching occurs. The choice of language can depend on the social goals to be achieved in a particular speech situation." (Lillis & McKinney, 2003: 17)

Moreover, Genesee (2006) states that bilinguals engage in code mixing for many reasons: 1} to stress on what they are saying, 2} one of their languages may have more affect than the other, as they see it being more efficient in expressing their emotions as they speak, 3} it can be related to the socialization norms in their community and social groups, or 4} to fill in lexical gaps that may derive from the less frequent use of one of their languages.

Furthermore, Walters (2005) refers to Poulisse's (1997) distinction between 'intentional' and 'performance' varieties of code switching, and says that intentional code-switching has two origins, one is socially-motivated and the second is attributed to a greater lexical availability in L1 or to a lexical gap in L2. On the other hand, performance code-switching is influenced by both languages and it is explained as a slip of the tongue.

Meanwhile, De Houwer (2005) argues that even if the people in the child's community or the parents of the bilingual child try to communicate to the child by restricting themselves to one language, they will, even if not intended, use mixed utterances to address the bilingual child. De Houwer also argues that as a result of such unintentional use of mixed utterances from the child's surrounding environment, the child will not be exposed to two languages from birth, but rather to one. After all, he/she will be brought up hearing mixed utterances.

Moreover, Brisk (2006) believes that bilinguals have the ability to activate code switching and make use of both languages when communicating with other bilinguals, but at the same time, they also have the power to deactivate their other language when communicating with their monolingual counterparts. Furthermore, Genesee (2006) believes that parents of bilingual children can control the amount of code mixing that is produced by their children. They can either encourage the use of code mixing, or forbid such use. "Parental discourse strategies may therefore be one way in which children learn to make appropriate language choice." (Genesee 2006: 59)

Genesee (2006) examines a study carried out by Lanza (1997) on a bilingual family in Norway to show how the frequent use of code mixing can vary from one family to another in the same community, or from one parent to another in the same house setting. In this example, a two year old girl who is raised by bilingual parents, code mixed much more with her Norwegian speaking father than with her native English speaking mother. Her Norwegian speaking father had no problems with his daughter code mixing; he rather encouraged her to use both languages by code mixing himself when talking to her. On the other hand, her mother wanted her little child to use as much English as possible when communicating with her and knew that it was her only chance to use English. The mother did not allow her to code mix by pretending that she either did not understand what she said or by indicating that she wanted her to express herself in English.

To further strengthen his argument, Genesee (2006) observed two year old French-English bilinguals while interacting with their parents and found that despite the children's proficiency and dominance of one language over the other, they used more of their father's

native language to communicate with their father; however, they were able to simply switch and use more of their mother's native language when communicating with their mother.

2.3.3 The Orderly Fashion of Code-Switching

Cook (1996) notices that bilingual code switching takes place not only within sentences, but also between them. He also pointed out to the difficulty of trying to find out which of the two languages is the main language of the conversation, or even of the sentence. Cook (1996), Hamers & Blanc (2000), and other prominent linguists have all referred to Poplack (1980) when speaking of code switching.

Hamers & Blanc refer to Poplack (1980) when explaining the three types of code switching: 1} Extra-sentential code switching which is characterized by the insertion of a tag, or the insertion of extra words that do not need to belong there. 2} Intersentential code switching, on the other hand, is described by having one clause of the sentence in L1, and the second clause of the same sentence in L2. 3} Intrasentential code switching, however, takes place within the clause and even within the word itself such as the insertion of a morpheme from another language.

Furthermore, Cook (1996) writes down the two main restrictions claimed by Poplack (1980) on where code switching can take place. The first one is the 'free morpheme constraint' in which the speaker can not make a switch between a word and its endings unless the word is pronounced in the language of the ending. A switch can take place only if that single word has the same sound in both languages. Whereas, if the word does not have a similar sound in the other language; it would be impossible for a switch to exist. Cook provides two examples "an English/Spanish switch 'runeando' is impossible because 'run' is distinctively English in sound. But 'flipeando' is possible because 'flip' could be a Spanish word." (Cook, 1996: 85)

On the other hand, the second is the 'equivalence constraint' meaning that the occurrence of a switch can exist only if it does not violate the grammar rules of either language. Cook provides an example "'a car Americaine' or 'une American voiture', as they would be wrong in both languages. It is possible, however, to have the French/English switch 'J'ai achete an American car (I bought an American car)." (Cook, 1996: 85)

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Furthermore, Myers-Scotton (2005) notes that there is nothing random about how morphemes are organized in a clause by bilinguals. Once engaged in code switching, a bilingual speaker unconsciously selects what Myers-Scotton calls a 'matrix language' to provide morphosyntactic structure for his/her speech. At the same time, "speakers consider which of the participating languages is better suited to express specific intentions." (Myers-Scotton, 2005: 327)

Moreover, Myers-Scotton states that in bilingual speech the clauses in a sentence contain different grammatical frames from both languages. Here, Myers-Scotton explains the differences between the Matrix language and the Embedded language and the role they both play in code switching. It would be rather safe to say that bilinguals are generally fluent in both, the Matrix language and the Embedded language. The Matrix language, as he defines, is the most important structural role in the clause and it provides the morphosyntactic frame. As a result, the Matrix language can be considered to be the dominant language of the bilingual. Furthermore, the Embedded language can be the speaker's second language, or to say the least, it can be considered the language that is less frequently used by the bilingual. "The structural asymmetry between the participating languages implies that the Matrix language has a higher level of activation than the Embedded language." (Myers-Scotton, 2005: 329)

Chapter Three: Methodology

3.1 Participants

Participants included 58 grade nine male students. The first group (the study's main focus) consisted of 29 bilingual students studying at one of Dubai's private schools that follow an American Syllabus, with English being the medium of instruction. The bilingual participants ranging from different parts of the Arab world were between the ages of 14 and 16. Grade nine was the ideal class to investigate due to its students that have nearly mastered a second language, with the preference of using it over their mother tongue language.

The bilingual students were either born or raised in an English speaking environment, or studied abroad for quite sometime, allowing them to have a near perfect command of the English Language. The bilingual students' spoken Arabic was moderate, but once engaged in a controversial topic such as politics, history, or economics they seemed to face difficulties with terminology that they were unfamiliar with. The majority of the participants had only 2 to 4 years of education in an Arabic speaking country, yet at English medium schools, with only 6 to 7 periods of Arabic a week. The students were being exposed to English inside and outside the school boundaries, leaving them with minimal usage of their native language, and once the native language is in use code switching can be observed at any time of a spoken exchange.

The second group consisted of 29 monolingual students studying at a private school in Dubai that follows the U.A.E national curriculum, with Arabic being the medium of instruction. The monolingual participants were from different parts of the Arab world and had little exposure to the English language.

3.2 Procedures, Instruments, and Research Ethics

After obtaining permission from the schools' administration, the students were then given a choice to either do their own work quietly in class, or be part of the investigation by sitting in for a written task. Both groups wanted to take part in the research; as they knew that what they are doing will be of great help to me. "In some form of qualitative research, it is very difficult

to locate appropriate people for the sample. This may be because they do not wish to be associated as respondents with the subject of the research" (Oliver, 2004:129).

I informed the students that the results will be seen by others, but assured them that names of individuals and their own results will be kept hidden and anonymous and will be represented by numbers instead. This method was used to minimize any pressure felt by the participants in the task. The whole class participated in the study, and they were fully aware of their role in the research. The bilingual students were told that the purpose of the study is to assess the amount of first language loss and how it might be affected by the excessive use of the second language. On the other hand, the monolingual students were told that their written tasks will help in identifying the type of mistakes that students encounter when writing Arabic.

Comparing the bilinguals' Arabic and English texts can be of great help in evaluating the strength of one language over another. "Perhaps the best way to begin to appreciate the complexities in L2 writing is to contrast it with L1 writing." (Weigle, 2002: 4) Moreover, comparing the bilinguals' Arabic texts to that of the monolinguals can be supportive in determining the type of errors that are committed by both the monolinguals and the bilinguals, and whether those errors are somewhat similar or are completely different. Determining the amount of the bilinguals' Arabic language loss can also be achieved by such a comparison.

The main objective of this study is to determine the amount of language loss that may derive from the excessive use of a second language. The research question that is to be tackled and answered in this study is how much of an influence can L2 (being English) have on L1 (being Arabic), and what are the types of errors committed by the students in their native language relate to. After the initial instructions were given to make sure that all the students understood what they had to write, I handed out a piece of paper to each student with a written question asking each student "to write down and talk about their favorite sport and then mention its key players." Furthermore, the same procedures were followed for the English text.

Having little writing experience in Arabic, the bilingual students had to be encouraged and motivated, and for this to happen I had to create a much more relaxing but formal working environment. This was made through a five minute talk about the subject matter in Arabic, as it

was very strange for both the students and me to talk in Arabic for the very first time, as I was their English teacher and have never used a word of Arabic in or outside the classroom with the students before. Students then sat willingly for a 35 min period and wrote down as much as a page long.

The choice of question was mainly due to students' interest in such a topic, and it is something that they all can relate to and know quite a lot about. Due to the students' little exposure to the Arabic language, I intended to make the question as simple as possible so that each student can write down whatever he liked on this particular issue and express himself freely. Unlike spoken discourse, written discourse would allow each and every student to brainstorm and think of what is to be written with out any pressure, giving the student a chance to go back and revise what he wrote whenever necessary. "Spoken language happens in time, and must therefore be produced and processed on line. There is no going back and changing or restructuring our words as there is in writing; there is often no time to pause and think" (Cook, 1996:115).

After correcting the students' English papers on my own, I then needed the help of a much more experienced teacher with the Arabic texts. With the help of a dedicated and well respected Arabic teacher with over 20 years of Arabic teaching experience, we both began the diagnosis by correcting the Arabic texts word per word. The diagnosis will attempt to determine what sort of problems students face when writing Arabic. Moreover, the analysis will investigate many aspects of a language such as spelling, grammar, and lexis. The analysis will also determine the types of spelling mistakes that are committed by the students, the different kinds of grammatical errors that are present, and the total amount of lexical items that the students are acquainted with. The study will also attempt to examine what in L2, if any, affected the choice of words, grammar, and spelling of their native language.

3.3 Limitations of the Methodology

One of the limitations that I have faced was trying to obtain permission to conduct the Arabic written task during my English period. Conducting the English written task was much easier, as I was their English teacher, but having to carry out the research question and the

study in Arabic was extremely hard to do especially in trying to convince the authorized parties. Obtaining approval was difficult at first, but after referring to the school's director of academic affairs things began to work out. This had to be done through a person to person approach as the final exams were approaching and time was of great concern, but finally permission was granted.

Another obstacle that I have encountered was finding an Arabic teacher who had both the experience and knowledge in identifying the errors that have been committed by the students. Having to correct over 58 pages was not an easy task; it was both difficult and exhausting. Trying to figure out what is being written, spelling mistakes, word order, or ill sentence structure, was time consuming and needed hours of extra work and revision.

A final limitation was time. Knowing in advance that the bilingual students preferred the use of English over their first language, I wanted to find out the reasons behind such preference. Was the use of English and its preference by the students related to difficulties in the use of the Arabic language, or were they using English just because it was something that they were used to and had nothing to do with the difficulties of Arabic. I had intended to conduct a one on one interview with the students to tackle such an issue and to determine their point of view on the use of the Arabic language and how they felt towards such a use, but as the final exams were approaching, carrying out a one on one interview with most of the students was something that could not be accomplished.

Chapter Four: The Discussion of the Results

Having conducted a written discourse rather than spoken discourse has allowed me to investigate the effects of the second language on the first from a different perspective. Brown (2001) characterizes written language and distinguishes it from spoken language. Brown states that written language uses a greater variety of lexical items than the spoken one. Brown also argues that lower frequency words usually appear more in writing due to the fact that the writer has more processing time to write.

The purpose of this study is to investigate the effects of the second language on the first. In this discussion, I will attempt to cover some of the major problems that bilinguals face in their written discourse by comparing their first language skills to those of the second language. A comparison between the bilinguals' and monolinguals' written tasks can also be significant in determining the level of their written language. A look at the lexical density is just as important, and how students feel towards their Arabic written task can give us an indication of how the mother tongue written language is perceived by the bilinguals.

4.1 Bilinguals' Arabic abilities

Bilingual students have been used to the word order structure of English (S.V.O) while the Arabic language has the tendency to prefer the use of (V.S.O) word order. One would assume that such constant use of the English word order structure would have negative consequences on the bilinguals' writing abilities of Arabic. However, and with little exposure to the Arabic language and its rules, the bilingual students, as presented in (Table 1.1), were able to properly follow the verb subject order of Arabic.

Types of Error (Bilingual) (Arabic)	Missing/ extra word	Word order	Wrong word "Lexis"	Singular/ plural nouns	Singular /plural verbs	Verb tense	Prepositi ons	Spelling Errors	Punctuat- ion	Errors made by each student
Student # 1	2	1	3	1	0	0	1	3	4	15
Student # 2	0	0	3	0	1	0	0	1	2	7
Student # 3	0	0	0	1	0	2	0	1	2	6
Student # 4	0	2	5	1	1	0	1	14	5	29
Student # 5	3	2	3	0	0	0	3	2	4	17
Student # 6	3	0	9	3	2	0	2	14	5	38
Student # 7	1	0	3	0	0	0	1	2	0	7
Student # 8	3	1	3	1	0	0	3	13	4	28
Student # 9	0	0	1	1	0	0	1	4	5	12
Student # 10	4	0	8	0	3	0	0	15	5	35
Student # 11	1	0	3	0	1	0	0	6	3	14
Student # 12	0	1	1	0	0	0	0	4	3	9
Student # 13	3	0	0	2	0	1	1	13	3	23
Student # 14	3	1	3	1	0	0	1	4	2	15
Student # 15	2	1	4	1	0	0	1	7	5	21
Student # 16	0	0	3	0	2	0	0	9	4	18
Student # 17	3	2	3	1	4	2	3	5	3	26
Student # 18	1	2	4	1	1	0	0	12	3	24
Student # 19	1	0	0	0	1	0	1	12	3	18
Student # 20	1	0	2	1	2	0	0	5	4	15
Student # 21	3	0	0	0	0	0	1	2	4	10
Student # 22	3	0	1	2	0	0	2	0	1	9
Student # 23	0	0	1	1	0	0	1	4	3	10
Student # 24	1	1	3	0	1	0	1	2	3	12
Student # 25	2	0	0	0	1	0	6	8	8	25
Student # 26	0	0	3	0	0	0	0	1	5	9
Student # 27	2	0	0	0	0	0	0	2	4	8
Student # 28	2	0	2	0	2	0	1	10	2	19
Student # 29	4	1	9	0	0	0	2	12	3	31
Total # of Errors	48	15	80	18	22	5	33	187	102	510
Total % of Errors	9.4%	2.9%	15.7%	3.5%	4.3%	1%	6.5%	36.7%	20%	100%

Table 1.1 Errors made by bilinguals in Arabic

Conversely, spelling was a major obstacle and consisted of more than one third of the total number of errors.

*Spelling Errors:

An enormous amount of mistakes were committed by students who were unable to distinguish the differences between the following letters:

- The letters (د) D and (ض) Dd,

An example of such error (ريادة) where it should be (رياضة)

- The letters (س) S and (ص) Ss,

An example of such error (السدق) (al-sidq) where it should be (الصدق) (al- ssidq)

- The letters (ز) Z and (ظ) Dhh,

An example of such error (الزهر) (al-zahr) where it should be (الظهر) (al-dhhr)

- The letters (ت) T and (ط) Tt,

An example of such error (قتعة) (qita') where it should be (قطعة) (qitta')

- The letters (س) S and (ث) Th,

An example of such error (السعلب) (a-sa'lb) where it should be (الثعلب) (a-tha'lb)

- The letters (ز) Z and (ذ) Dh,

An example of such error (المزهب) (al-mazhab) where it should be (المذهب) (al madhab)

Dd ض	D د
Ss ص	S س
Dhh ظ	Z ز
Tt ط	T ت
Th ث	S س
Dh ذ	Z ز

Figure 1.1

If we would take a look at (Figure 1.1) students seem to prefer using the letters on the left hand side than the ones on the right. This might give us some sort of an indication that the students tended to use Arabic letters that may be similar to the ones of English, and refrained from the use of the ones that had no similarities.

*Errors related to grammar

 Some of the most common mistakes in grammar were related to:

Some of the students have inserted extra words to the sentence where its use was completely unnecessary. On the other hand, several students ignored the use of some of the words that were of great essence to the sentence, leaving the sentence stranded, ambiguous, and hard to understand. The "Missing/Extra word" section was a problem that some students have fallen into and those problems were mostly concentrated on the use of the article (the). Students were confused with such a use and seemed to either exceed in its use, or deem it as being unnecessary and had no place for it.

 * The use of the Arabic "article" -**Al** (ال) (The) - which is used as a definite article.

An example of such error:

The word basketball كرة السلة has only one article. Some students wrote it with two articles as (الكرة السلة) and others inserted the article on the wrong noun as (الكرة سلة) or did not insert an article at all as (كرة سلة). The different types of mistakes are considered to be serious grammatical errors. The above errors may be related to the negative interference of the English article (the). Basketball is a compound noun in English, but in Arabic it is two separate words. This interference may have resulted in adding an extra article to both nouns, where it should be added to only one, since (basket) is a noun and (ball) is another noun; the majority of the students were left puzzled

*Another problem that was faced by most students is (**Gender**); students had difficulties in the use of masculine and feminine nouns.

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 An example of such error:

'كوب' ،'cup' The word - الكوب الفارغة Some students wrote it as الكوب الفارغ - The empty cup is a masculine noun, so it needs a masculine adjective to agree with it not a feminine adjective like the above example used by some students. Once again this might be somewhat complicated for students who were taught and raised in an English speaking environment due to its absence in the English language.

* Demonstratives in Arabic proved to be a great obstacle. Most students faced the difficulty of not being able to recognize the differences between some of the most common demonstratives.

Examples of such errors:

The demonstrative **this** (هذا) for masculine nouns and (هذه) for feminine nouns; can be of great complication to some students.

This sport هذه الرياضة - The majority of the students were confusing the feminine 'this' هذه for the masculine 'this' هذا. Since 'sport' 'الرياضة' is a feminine noun then a feminine demonstrative needs to be present.

However, bilingual students had no difficulties in the verb tenses of Arabic and no serious mistakes were committed.

*Lexis (Choice of words)

When approaching the Arabic language, a person has to differentiate between what is spoken and what is written. When writing a formal letter or an essay, a student has to be familiar with the use of classical Arabic or as many call it standard Arabic. Colloquial Arabic or modern Arabic, on the other hand, can be used in less formal situations and is considered to be used in daily conversation. Using informal language in Arabic writing is considered to be an enormous mistake and can give the wrong impression that the writer himself/herself is uneducated.

When it came to lexis, students were playing it safe. The use of simple lexicon items was present throughout the essay, no risk was taken. The bilingual students preferred the use of words they were most familiar with. Most of the students did not face many problems in this regard, but some minor mistakes were observed:

The verb 'go' يذهب in formal Arabic was written as يروح which is used in colloquial Arabic.

The noun 'leg' قدم in formal Arabic was written as رجل which is considered to be informal.

The verb 'made' مصنوع in formal Arabic was written as معمول a word that cannot be used in Arabic writing.

Surprisingly, the use of formal Arabic was not a major obstacle (as shown in table 1.1) and this can possibly be related to the simplicity of the subject matter and word choice.

4.2 Bilinguals' English Abilities

The bilingual students made fewer mistakes in English than they did in their Arabic written task (as shown in Table 2.1). The bilingual students faced the problem of spelling. Spelling seemed to hinder their performance, but their overall evaluation can be considered as above average, and evidence of good piece of academic writing was present throughout the essay.

Types of Errors (Bilingual) (English)	Missing/ extra word	Word order	Wrong word "Lexis"	Singular/ plural nouns	Singular / plural verbs	Wrong verb tense	Preposi-ti-on	Spelling Errors	Punctuia-tion	Errors made by each student
Student # 1	0	0	2	0	0	2	1	5	6	16
Student # 2	0	0	0	0	0	0	1	3	3	7
Student # 3	8	0	6	1	1	2	3	3	2	26
Student # 4	6	2	5	0	4	7	7	4	10	45
Student # 5	1	4	3	1	0	0	3	0	2	14
Student # 6	1	0	1	0	0	0	1	1	1	5
Student # 7	3	1	4	0	1	5	1	1	4	20
Student # 8	1	0	3	0	0	1	1	4	5	15
Student # 9	5	1	2	0	0	0	1	4	5	18
Student # 10	5	1	5	1	2	7	1	17	6	45
Student # 11	2	0	1	0	0	0	2	3	2	10
Student # 12	3	0	2	0	0	0	0	0	1	6
Student # 13	2	0	3	1	0	2	5	14	7	34
Student # 14	1	1	6	0	0	1	2	10	3	24
Student # 15	2	0	2	0	0	0	1	3	4	12
Student # 16	2	4	0	0	0	1	1	7	3	18
Student # 17	2	1	3	0	3	5	2	0	1	17
Student # 18	4	0	2	0	3	3	5	15	5	37
Student # 19	4	0	5	3	1	8	5	8	9	43
Student # 20	2	1	4	1	0	2	1	7	3	21
Student # 21	4	1	1	0	0	1	2	9	6	24
Student # 22	4	1	8	0	0	1	2	2	4	22
Student # 23	3	0	1	0	0	2	6	0	1	13
Student # 24	1	0	0	0	0	0	0	0	1	2
Student # 25	4	0	2	0	0	1	6	6	13	32
Student # 26	4	0	2	0	0	1	4	1	7	19
Student # 27	2	0	2	1	0	2	1	5	5	18
Student # 28	0	0	0	0	0	0	0	4	4	8
Student # 29	3	0	3	0	1	0	0	9	7	23
Total # of Errors	79	18	78	9	16	54	65	145	130	594
Total % of Errors	13.3%	3%	13%	1.5%	2.7%	9.1%	11%	24.4%	22%	100%

Table 2.1 Errors made by bilinguals in English

4.2.1 Vowel and Consonant Blindness

Milton and Riordan (2007) and Schmitt and McCarthy (1997) refer to what Haynes (1984) has called the vowel blindness. Schmitt and McCarthy (1997) believe that Arab students ignore the existence of vowels. "Vowels are frequently mispositioned, omitted, or substituted

for each other." (Schmitt & McCarthy, 1997: 188) Similarly, Milton and Riordan (2007) observe that Arab learners of English are characterized by their inability to recognize vowels.

However, no emphasis or any noticeable argument has been put forth on the type of errors related to the consonants of English. Schmitt and McCarthy (1997) argue that consonants are unaffected. "The striking thing about errors of this type is that they almost always preserve the consonant structure of the target word. The vowels are often incorrect." (Schmitt & McCarthy, 1997: 186) Moreover, Milton and Riordan (2007) view that "The particular focus of Arabic readers on the consonants of the language is often thought to explain their inability to recognize vowels in English." (Milton & Riordan, 2007: 123)

Bilingual Students (English)	Vowels	Consonants	Total number of errors related to vowels and consonants
Student # 1	Brease – breeze Allawince - allowance Beauity – beauty	desighn – design medalin – medallion	5
Student # 2	Wierd – weird neighbrhood - neighborhood		2
Student # 3	Soo – so Cummunicate - communicate	Inocent – innocent	3
Student # 4	Sow – saw	lisence - license Qute – cute	3
Student # 5			0
Student # 6			0
Student # 7			0
Student # 8		Untill - until	1
Student # 9			0
Student # 10	Bottel - bottle Agian - again Manger - manager prblem - problem damged - damaged mony - money becaus – because	Sufered - suffered Parrents - parents Exaughsted – exhausted	10
Student # 11			0
Student # 12			0
Student # 13	Agian – again	Runing - running stoped - stopped siting - sitting ascident – accident	5
Student # 14	Perpus – Purpose	horible - horrible	2
Student # 15			0
Student # 16	streats – streets tierd - tired	gowing - going	3
Student # 17			0
Student # 18	Trubel – trouble		1
Student # 19		Affraid – Afraid battery - battery ridding - riding	3
Student # 20	Liying – lying	Disapointed – disappointed	2
Student # 21	Freind – friend beleive – believe	consious - conscious writting – writing	4
Student # 22	Beleived - believed		1
Student # 23			0
Student # 24			0
Student # 25	Injered – injured		1
Student # 26			0

Student # 27		Ours – hours Dissappears - disappears comunicate - communicate openned – opened	4
Student # 28	Spikey – spiky intorregation - interrogation	Bruttaly – brutally	3
Student # 29	Freind – friend Umbelunce – ambulance	untill – until	3
Number of Errors	29	27	56
Percentage of Errors	51.8%	48.2%	100%

Table 2.2 Vowel and consonant blindness

If examining the vowel errors in (Table 2.2) one can recognize that the type of vowel errors made by the bilingual students corresponds with what has been mentioned above. Similarly, if we observe the errors related to the consonants, we can also detect the same types of error, meaning that the consonants are mispositioned, omitted or substituted. (Table 2.2) provides evidence that the number of consonant errors (27) is by all means alarming and such problem has to be acknowledged.

Errors related to consonants are somewhat similar in number to those related to vowels. However, the majority of consonant errors were associated with either doubling a consonant

where it should have not been doubled or having a single consonant where it should have been doubled. Ex. ridding and riding, Stoped for Stopped, and dissappear for disappear. The above errors associated with consonant doubling exceeded 74% of the total errors related to consonants as a whole.

4.3 Bilinguals' Arabic Abilities VS. English Abilities

As we have observed by the students' written results, one can come to the conclusion that the bilinguals' native language became their second language in writing. Weigle states that "Perhaps the best way to begin to appreciate the complexities in L2 writing is to contrast it with L1 writing." (Weigle, 2002: 4). Comparing the bilinguals' Arabic and English texts can be of great help in evaluating the strength of one language over another.

Figure 3.1 represents the total percentage of errors made by the bilinguals in both of their languages. If further examined, it would appear that the bilingual students made fewer mistakes in Arabic than they did in English, but (Figure 3.1) represents the total percentage of errors made in each language, and not a comparison between the two languages.

Arabic & English Errors

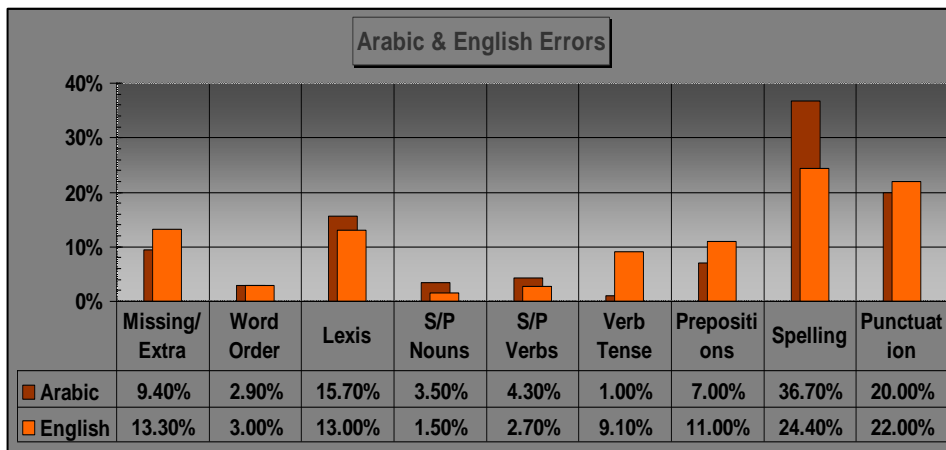|	Missing/ Extra	Word Order	Lexis	S/P Nouns	S/P Verbs	Verb Tense	Prepositions	Spelling	Punctuation
Arabic	9.40%	2.90%	15.70%	3.50%	4.30%	1.00%	7.00%	36.70%	20.00%
English	13.30%	3.00%	13.00%	1.50%	2.70%	9.10%	11.00%	24.40%	22.00%

Figure 3.1 The percentage of errors made by the bilinguals in both languages

On the other hand, (Table 3.1) shows a comparison of the percentage of error made by each bilingual student in both languages.

(Bilinguals) English & Arabic	Total # of Arabic Words	Total # of errors made in Arabic	Total % of errors made in Arabic	Total # of English Words	Total # of errors made in English	Total % of errors made in English
Student # 1	75	15	20%	326	16	4.9%
Student # 2	17	7	41.1%	103	7	6.7%
Student # 3	31	6	19.3%	363	26	7.1%
Student # 4	108	29	26.8%	225	45	20%
Student # 5	130	17	13%	416	14	3.3%
Student # 6	116	38	32.7%	380	5	1.3%
Student # 7	111	7	6.3%	264	20	7.5%
Student # 8	128	28	21.8%	362	15	4.1%
Student # 9	145	12	8.2%	288	18	6.2%
Student # 10	121	35	28.9%	209	45	21.5%
Student # 11	58	14	24.1%	239	10	4.1%
Student # 12	52	9	17.3%	317	6	1.8%
Student # 13	121	23	19%	225	34	15.1%
Student # 14	81	15	18.5%	319	24	7.5%
Student # 15	125	21	16.8%	238	12	5%
Student # 16	88	18	20.4%	201	18	8.9%
Student # 17	31	26	83.8%	209	17	8.1%
Student # 18	127	24	18.8%	197	37	18.7%
Student # 19	130	18	13.8%	250	43	17.2%
Student # 20	82	15	18.2%	218	21	9.6%
Student # 21	140	10	7.1%	276	24	8.6%
Student # 22	189	9	4.7%	452	22	4.8%
Student # 23	163	10	6.1%	328	13	3.9%
Student # 24	98	12	12.2%	357	2	0.5%
Student # 25	180	25	13.8%	430	32	7.4%
Student # 26	112	9	8%	449	19	4.2%
Student # 27	138	8	5.7%	282	18	6.3%
Student # 28	37	19	51.3%	393	8	2%
Student # 29	116	31	26.7%	261	23	8.8%
Total # of Words-Errors-Percentage	3050	510	16.7%	8577	594	6.9%

Table 3.1 Percentage of errors made by each bilingual student in Arabic and English

Finding the percentage of error can be calculated by dividing 100 by the total number of words and then multiplying it by the total number of errors. As presented in (Table 3.1), the majority of the students had a much larger number of errors in Arabic than they did in English. Ex. Student number (2) made 7 mistakes in Arabic (41.1%) and 7 in English (6.7%), Student number (17) made 26 mistakes in Arabic (83.8%) and 17 in English (8.1%), and Student number (28) made 19 mistakes in Arabic (51.3%) and only 8 in English (2%).

Percentage of Error by Bilinguals

16.7%

6.9%

■ Arabic Errors
■ English Errors
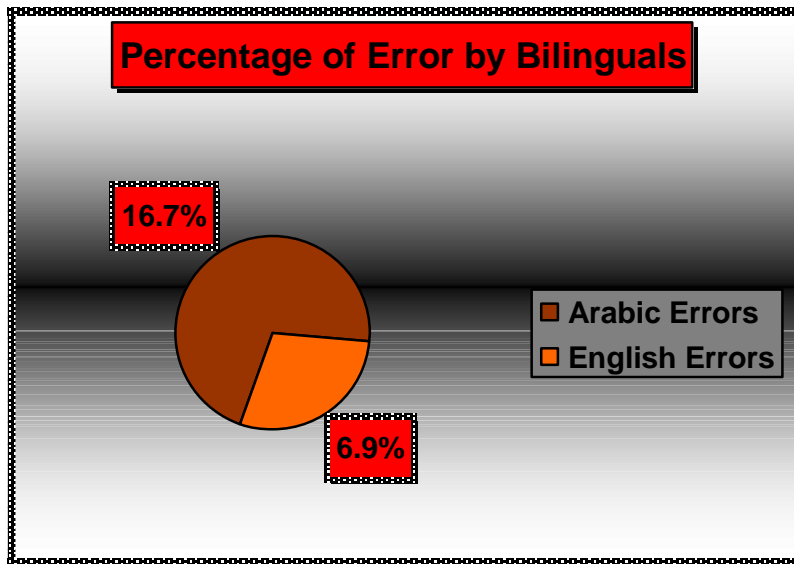
Figure 3.2 Total percentage of errors made by the Bilinguals in both languages

Moreover, if we take the total percentage of errors made in Arabic (16.7%) and compare it to the total percentage of errors made in English (6.9%) as shown in (Figure 3.2) then one can observe that the number of errors made by the bilinguals in Arabic is more than double the number of errors made in English.

4.4 Bilinguals VS. Monolinguals

The monolinguals demonstrated some good and solid understanding of academic Arabic writing skills. The ideas were well supported and organized and evidence of creativity was present throughout the essay. Weigle (2002) believes that "In first language settings, the ability to write well has a very close relationship to academic and professional success." (Weigle, 2002: 4). However, like the bilinguals, the monolinguals highest percentage of error was related to spelling (as shown in Table 4.1). Spelling was not a major obstacle for most monolinguals, but approximately one fifth of the students found spelling to be challenging.

Types of Errors Monolingual (Arabic)	Missing/ extra words	Word order	Wrong ` word "Lexis"	Singular/ plural nouns	Singular /plural verbs	Verb tense	Preposit- ion	Spelling Errors	Punctuat- ion	Errors made by each student
Student # 1	3	0	4	2	0	1	4	2	2	18
Student # 2	3	0	3	0	1	0	2	7	5	21
Student # 3	1	0	0	0	0	0	0	1	2	4
Student # 4	1	0	0	0	0	0	0	1	0	2
Student # 5	2	0	2	0	0	0	1	8	2	15
Student # 6	0	0	1	0	0	0	0	1	0	2
Student # 7	2	0	0	0	0	0	0	1	0	3
Student # 8	1	0	0	0	0	0	0	0	0	1
Student # 9	0	0	0	0	0	0	0	1	0	1
Student # 10	0	0	0	0	0	0	0	1	0	1
Student # 11	0	0	0	0	0	0	0	3	1	4
Student # 12	1	1	0	0	0	0	1	0	0	3
Student # 13	0	1	0	0	2	0	0	0	0	3
Student # 14	0	0	1	0	0	0	0	2	0	3
Student # 15	0	0	0	0	0	0	0	0	0	0
Student # 16	3	0	3	0	0	2	5	14	4	31
Student # 17	0	0	0	0	0	0	0	0	1	1
Student # 18	3	1	3	1	0	0	2	9	4	23
Student # 19	0	0	0	0	0	0	0	1	0	1
Student # 20	2	0	0	0	0	0	0	1	0	3
Student # 21	3	0	3	0	1	0	0	15	0	22
Student # 22	0	0	0	0	0	1	0	0	1	2
Student # 23	2	0	0	0	0	0	2	0	0	4
Student # 24	0	0	0	0	0	0	0	2	0	2
Student # 25	1	0	0	0	0	0	0	0	1	2
Student # 26	1	0	0	0	0	0	0	2	0	3
Student # 27	1	0	2	1	0	0	1	11	5	21
Student # 28	0	0	0	0	0	0	0	3	0	3
Student # 29	0	0	3	0	1	1	5	9	2	21
Total # of Errors	30	3	25	4	5	5	23	95	30	220
Total % of Errors	13.6%	1.4%	11.4%	1.8%	2.3%	2.3%	10.5%	43.1%	13.6%	100%

Table 4.1 Errors made by the monolinguals in Arabic

Errors related to spelling were not similar to the ones made by the bilinguals. The monolinguals did not confuse letters for one another nor did they insert or omit letters, but the monolinguals' spelling errors were related to the use of (hamza), something that the bilinguals refrained from using. The hamza (الهَمْزة), which proved to be a great difficulty, was problematical for the reason that it can be written in four different ways. On the other hand, another problem that some of the monolinguals encountered was the spelling of the Moon letters (الحروف القمرية) and the Solar letters (الحروف الشمسية). The Solar letters are written but are not pronounced, meaning that the article (the) (ال) is written, but it is silent in pronunciation.

Percentage of Error (Bilinguals VS. Monolinguals)

	M/Extra Words	Word Order	Lexis	Singular /Plural	Singular /Plural	Verb tense	Prepositi	Spelling	Punctuati
Bilinguals	9.40%	2.90%	15.70%	3.50%	4.30%	1%	6.50%	36.70%	20%
Monolinguals	13.60%	1.40%	11.40%	1.80%	2.30%	2.30%	10.50%	43.10%	13.60%

Figure 4.1 Percentage of error made by the bilinguals and the monolinguals in Arabic

(Figure 4.1) illustrates the total percentage of errors made by the bilinguals and the monolinguals in Arabic. If we investigate (Figure 4.1), we then have to apprehend that the monolingual students may have a higher percentage of error, but this doesn't mean that they made more mistakes. What this figure represents is the percentage of error made in each section; keeping in mind that the monolinguals had a great number of word count, and had less mistakes than the bilinguals.

Bilinguals Vs. Monolinguals	Bilinguals			Monolinguals		
	Total # of Arabic Words	Total # of Errors made by each student in Arabic	Total % of errors	Total # of Arabic Words	Total # of Errors made by each student in Arabic	Total % of errors
Student # 1	75	15	20%	210	18	8.6%
Student # 2	17	7	41.1%	141	21	14.9%
Student # 3	31	6	19.3%	218	4	1.8%
Student # 4	108	29	26.8%	172	2	1.2%
Student # 5	130	17	13%	196	15	7.7%
Student # 6	116	38	32.7%	201	2	1%
Student # 7	111	7	6.3%	285	3	1.1%
Student # 8	128	28	21.8%	177	1	0.6%
Student # 9	145	12	8.2%	130	1	0.8%
Student # 10	121	35	28.9%	233	1	0.4%
Student # 11	58	14	24.1%	186	4	2.2%
Student # 12	52	9	17.3%	256	3	1.2%
Student # 13	121	23	19%	166	3	1.8%
Student # 14	81	15	18.5%	287	3	1%
Student # 15	125	21	16.8%	211	0	0%
Student # 16	88	18	20.4%	197	31	15.7%
Student # 17	31	26	83.8%	141	1	0.7%
Student # 18	127	24	18.8%	261	23	8.8%
Student # 19	130	18	13.8%	228	1	0.4%
Student # 20	82	15	18.2%	249	3	1.2%
Student # 21	140	10	7.1%	137	22	16%
Student # 22	189	9	4.7%	118	2	1.7%
Student # 23	163	10	6.1%	319	4	1.3%
Student # 24	98	12	12.2%	228	2	0.9%
Student # 25	180	25	13.8%	241	2	0.8%
Student # 26	112	9	8%	291	3	1%
Student # 27	138	8	5.7%	177	21	11.9%
Student # 28	37	19	51.3%	276	3	1%
Student # 29	116	31	26.7%	194	21	10.8%
Total number and Percentage of errors	3050	510	16.7%	6126	220	3.6%

Table 4.2 Percentage of errors made by bilinguals and monolinguals in Arabic

As presented in (Table 4.2), more than half of the monolingual students made 3 errors or less, whereas this low number was not found by any bilingual student. The bilinguals had a

much larger number of errors. Such low number of errors by the monolinguals can be related to the students' proficiency in Arabic.

Percentage of Error in Arabic
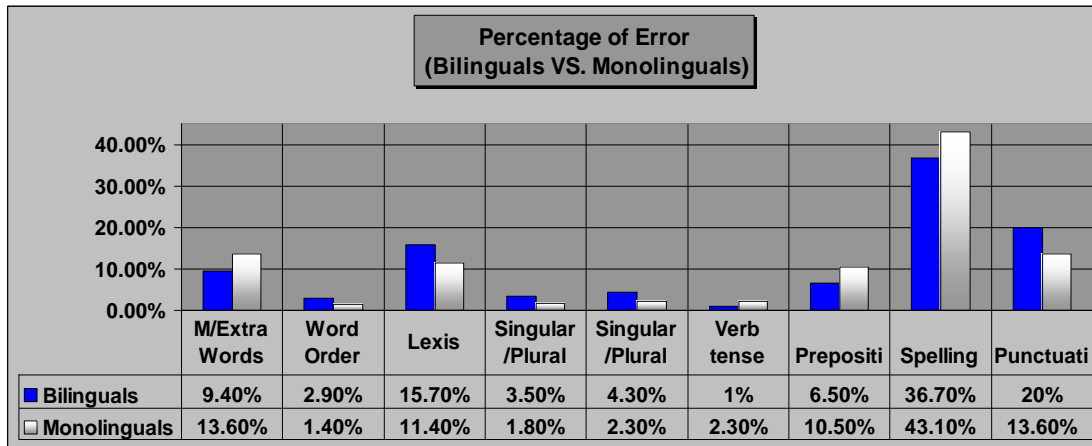
16.7%

☐ Bilinguals
☐ Monolinguals

3.6%
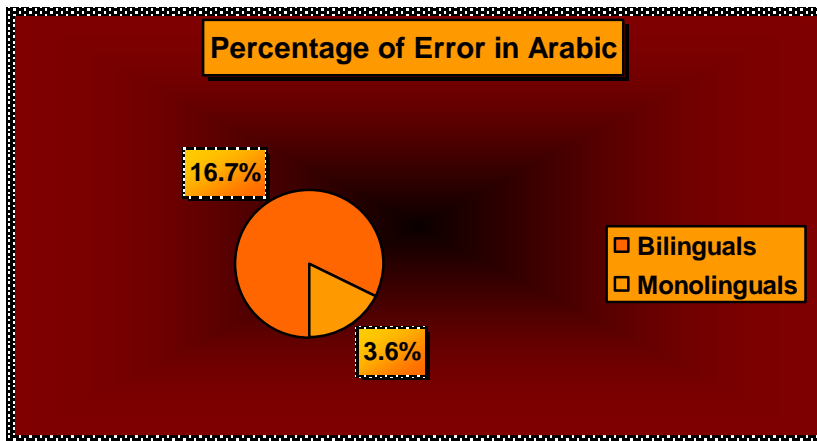
Figure 4.2 Total percentage of errors made by the bilinguals and the monolinguals in Arabic

Moreover, if we take the total percentage of errors made by the bilinguals in Arabic (16.7%) and compare it to the total percentage of errors made by the Arab monolinguals (3.6%) as illustrated in (Figure 4.2), we can then observe that the total number of errors made by the bilinguals in Arabic is a little more than 4 times the number of errors made by the monolinguals.

4.5 lexical Density

Measuring the lexical density of a task can be an enormous task. According to McCarthy (1990) "The lexical density of a text can be measured by counting the total words in a text and then counting the lexical words, that is, the content words, excluding the grammar or function words, and calculating the lexical words as a percentage of the total words; the higher the percentage, the higher the lexical density." (McCarthy, 1990: 71) Similarly, Lewis (2002) defines lexical density as "The ratio of content carrying words to total running words." (Lewis, 2002: 100)

Knowing the lexical density and variety of a text can be of great assistance in determining the amount of words that students are already familiar with, and words that the students ought to be acquainted with. Calculating the lexical items can also be of great importance in identifying the percentage of words that a student can recognize in any given

page. According to Byram (2000) if an individual is familiar with the thousand most frequently used English words then he/she will recognize 75 percent of the words on any given page, and if the number of words were to be doubled then the range will jump to 80-90 percent. Moreover, McCarthy (1990) asserts that counting lexical items can give us an estimate amount of vocabulary introduced in any given text, and counting the lexical variety of a text can also be helpful in determining the degree of difficulty that a text may possess.

Bilingual Students (Arabic)	Based on the first 50 Words	Lexical Words	Lexical Density	Total # of Words Per Student	Lexical Words	Lexical Density
Student # 1	50	28	56%	75	44	58.66%
Student # 2 *	17/50	11	--%	17	11	64.70%
Student # 3 *	31/50	15	--%	31	15	48.38%
Student # 4	50	30	60%	108	57	52.77%
Student # 5	50	33	66%	130	75	57.69%
Student # 6	50	25	50%	116	56	48.27%
Student # 7	50	30	60%	111	73	65.76%
Student # 8	50	29	58%	128	69	53.90%
Student # 9	50	33	66%	145	81	55.86%
Student # 10	50	29	58%	121	54	44.62%
Student # 11	50	31	62%	58	37	63.79%
Student # 12	50	33	66%	52	35	67.30%
Student # 13	50	31	62%	121	61	50.41%
Student # 14	50	29	58%	81	42	51.85%
Student # 15	50	29	58%	125	66	52.80%
Student # 16	50	31	62%	88	48	54.54%
Student # 17 *	31/50	13	--%	31	13	41.93%
Student # 18	50	31	62%	127	71	55.90%
Student # 19	50	33	66%	130	66	50.76%
Student # 20	50	29	58%	82	44	53.65%
Student # 21	50	35	70%	140	78	55.71%
Student # 22	50	29	58%	189	91	48.14%
Student # 23	50	32	64%	163	97	59.50%
Student # 24	50	33	66%	98	62	63.26%
Student # 25	50	26	52%	180	86	47.77%
Student # 26	50	34	68%	112	60	53.57%
Student # 27	50	32	64%	138	89	64.49%
Student # 28 *	37/50	25	--%	37	25	67.56%
Student # 29	50	21	42%	116	56	48.27%
Total Number of Words & the Percentage of the Lexical Density	1366	820	60%	3050	1662	54.5%

Table 5.1 The Lexical Density of the Bilingual Students in Arabic

After measuring the lexical density of the students' written tasks, a look at the first 50 words is just as important. Determining the lexical density of the first 50 words can be of great assistance in comparing a small part of the text to the total number of words in the full text.

(Table 5.1) shows that student number (2, 3, 17, & 28), all wanting to take part in the investigation, only wrote down a text size of less than 50 words. Such low number can be difficult to analyze, evaluate, and consider in any investigation. According to Hamp-Lyons (1991) a written task has to have a minimum amount of words "Each individual taking the assessment must actually, physically write down at least one piece of continuous text of 100 words or longer." (Hamp-Lyons, 1991: 5) Similarly, McCarthy affirms that "As with all averaging counts, longer stretches of text are to be preferred in order to produce more reliable averages." (McCarthy, 1990: 73)

Bilingual Students (English)	Based on the first 50 Words	Lexical Words	Lexical Density	Total # of Words Per Student	Lexical Words	Lexical Density
Student # 1	50	30	60%	326	106	32.51%
Student # 2	50	28	56%	103	74	71.84%
Student # 3	50	22	44%	363	79	21.76%
Student # 4	50	25	50%	225	68	30.22%
Student # 5	50	29	58%	416	110	26.44%
Student # 6	50	30	60%	380	164	43.15%
Student # 7	50	30	60%	264	61	23.10%
Student # 8	50	31	62%	362	100	27.62%
Student # 9	50	37	74%	288	87	30.20%
Student # 10	50	30	60%	209	65	31.10%
Student # 11	50	27	54%	239	87	36.40%
Student # 12	50	34	68%	317	97	30.59%
Student # 13	50	27	54%	225	74	32.88%
Student # 14	50	26	52%	319	98	30.72%
Student # 15	50	27	54%	238	73	30.67%
Student # 16	50	30	60%	201	70	34.82%
Student # 17	50	26	52%	209	59	28.22%
Student # 18	50	30	60%	197	58	29.44%
Student # 19	50	31	62%	250	90	36.00%
Student # 20	50	27	54%	218	69	31.65%
Student # 21	50	29	58%	276	87	31.52%
Student # 22	50	33	66%	452	130	28.76%
Student # 23	50	37	74%	328	134	40.85%
Student # 24	50	37	74%	357	155	43.41%
Student # 25	50	34	68%	430	150	34.88%
Student # 26	50	30	60%	449	164	36.52%
Student # 27	50	31	62%	282	146	51.77%
Student # 28	50	34	68%	393	194	49.36%
Student # 29	50	32	64%	261	85	32.56%
Total Number of Words & the Percentage of the Lexical Density	1450	874	60.2%	8577	2934	34.2%

Table 5.2 The Lexical Density of the Bilingual Students in English

(Table 5.2) shows an increase in lexical density for the first 50 words, but a lower amount of lexical density for the full text is also present. The total amount of lexical items of the

bilinguals' English composition is almost double the amount of lexical items found in Arabic, yet the lexical density of the English composition, with which the bilingual students are much more familiar with, is significantly lower.

Monolingual Students (Arabic)	Based on the first 50 Words	Lexical Words	Lexical Density	Total # of Words Per Student	Lexical Words	Lexical Density
Student # 1	50	33	66%	210	101	48.09%
Student # 2	50	26	52%	141	84	59.57%
Student # 3	50	35	70%	218	131	60.09%
Student # 4	50	28	56%	172	95	55.23%
Student # 5	50	35	70%	196	105	53.57%
Student # 6	50	30	60%	201	119	59.20%
Student # 7	50	37	74%	285	155	54.38%
Student # 8	50	33	66%	177	97	54.80%
Student # 9	50	34	68%	130	88	67.69%
Student # 10	50	30	60%	233	90	38.62%
Student # 11	50	31	62%	186	104	55.91%
Student # 12	50	26	52%	256	117	45.70%
Student # 13	50	26	52%	166	72	43.37%
Student # 14	50	37	74%	287	133	46.34%
Student # 15	50	34	68%	211	120	56.87%
Student # 16	50	28	56%	197	105	53.29%
Student # 17	50	35	70%	141	89	63.12%
Student # 18	50	26	52%	261	126	48.27%
Student # 19	50	33	66%	228	129	56.57%
Student # 20	50	33	66%	249	107	42.97%
Student # 21	50	27	54%	137	68	49.63%
Student # 22	50	29	58%	118	66	55.93%
Student # 23	50	33	66%	319	123	38.55%
Student # 24	50	38	76%	228	106	46.49%
Student # 25	50	28	56%	241	77	31.95%
Student # 26	50	26	52%	291	134	46.04%
Student # 27	50	36	72%	177	93	52.54%
Student # 28	50	32	64%	276	145	52.53%
Student # 29	50	29	58%	194	84	43.29%
Total Number of Words & the Percentage of the Lexical Density	1450	908	62.6%	6126	3063	50%

Table 5.3 The Lexical Density of the Arab Monolingual Students (Arabic)

After weeks of trying to figure out the lexical density of each and every text, the results were not as anticipated. The main purpose of measuring the lexical density of the students' written tasks was to support my argument and to provide further evidence that the bilinguals' Arabic texts are far less dense than those of the monolinguals. Moreover, one would assume that advanced language learners would have much more lexical density than those with poor language skills, and the percentage of the lexical density would be higher for the more fluent

learners of a language. "Learners with big vocabularies are more proficient in a wide range of language skills than learners with smaller vocabulary." (Brown, 1996: 37)

On the contrary, the more proficient users of the Arabic language had less lexical density than the bilingual students who were not regularly exposed to the Arabic language. (Table 5.3) shows that the lexical density of the Arab monolinguals is 50%, a percentage that can be considered as above average when compared with the total amount of words, but looking back at (Table 5.1) we can notice that the percentage of lexical density scored by the bilinguals in Arabic is much higher than that of the monolinguals who have been exposed to the Arabic language since birth. Therefore, the more you write, the more lexical items, but the less lexical density.

To further examine (Table 5.1, 5.2, & 5.3), one can observe that the first 50 words are much more lexically dense than the full text as a whole. This can be related to the fact that the first 50 words can be relatively found in the introduction. The introduction is lexically dense because it gives a brief idea of what will be discussed, and what to expect in the essay. The following paragraphs will certainly have dense lexical items, but to say the least, some of the words will be directly obtained from the introduction.

4.6 Psycho-Socio Analysis

The bilingual students felt much more comfortable with the use of the English language. They were more familiar with the different styles of English. This preference can be observed by the number of words written by the bilingual students in English. On the other hand, the number of Arabic words, written by the bilingual students, was minimal, and it was mainly due to the limited amount of lexical availability. McCarthy (1990) argues that communication can't happen in any meaningful way without words that express a wide range of meanings.

(Bilinguals) Word Count in English & Arabic	Total # of Arabic Words	Total # of English Words	Total # of words by each student in Arabic and in English
Student # 1	75	326	401
Student # 2*	17*	103	120
Student # 3*	31*	363	394
Student # 4	108	225	333
Student # 5	130	416	546
Student # 6	116	380	496
Student # 7	111	264	375
Student # 8	128	362	490
Student # 9	145	288	433
Student # 10	121	209	330
Student # 11	58	239	297
Student # 12	52	317	369
Student # 13	121	225	346
Student # 14	81	319	400
Student # 15	125	238	363
Student # 16	88	201	289
Student # 17*	31*	209	240
Student # 18	127	197	324
Student # 19	130	250	380
Student # 20	82	218	300
Student # 21	140	276	416
Student # 22	189	452	641
Student # 23	163	328	491
Student # 24	98	357	455
Student # 25	180	430	610
Student # 26	112	449	561
Student # 27	138	282	420
Student # 28*	37*	393	430
Student # 29	116	261	377
Total # of Words for all the bilingual students	3050	8577	11627
Total % of Words in each language	26.2%	73.8%	100%

Table 6.1 word count for the bilinguals' Arabic and English tasks

As mentioned earlier, Schmid (2005) points to the fact that bilinguals can acquire literacy through the second language, and that some bilingual students learn to write in language "B" before learning how to write in language "A". As a result, the spoken first language becomes the second language in writing. Therefore, if we would consider that the bilinguals' Arabic is their second language in writing then a look at the argument of Weigle (2002) can be crucial in understanding why the number of Arabic words was limited. Weigle answers the question by asserting that "Because of the constraints of limited second-language knowledge, writing in a second language may be hampered because of the need to focus on language rather than content." (Weigle, 2002: 35)

Student number (2, 3, 17, & 28) who had difficulties in trying to write more than 50 words of continuous Arabic writing showed some exceptional abilities in English writing. The word counts of both languages were incomparable, for example, student number (2) wrote 17 words of Arabic and 103 in English, student number (3) wrote 31 in Arabic and 363 in English, student number (17) wrote 31words of Arabic and 209 in English, while student number (28) wrote 37 words of Arabic and 393 in English. Similarly, and as shown in (Table 6.1), the whole class wrote a larger number of words in English than they did in Arabic.

Bilinguals	Total # of Words by the Bilinguals in Arabic	Monolinguals	Total # of Words by the Monolinguals in Arabic
Student # 1	75	Student # 1	210
Student # 2	17	Student # 2	141
Student # 3	31	Student # 3	218
Student # 4	108	Student # 4	172
Student # 5	130	Student # 5	196
Student # 6	116	Student # 6	201
Student # 7	111	Student # 7	285
Student # 8	128	Student # 8	177
Student # 9	145	Student # 9	130
Student # 10	121	Student # 10	233
Student # 11	58	Student # 11	186
Student # 12	52	Student # 12	256
Student # 13	121	Student # 13	166
Student # 14	81	Student # 14	287
Student # 15	125	Student # 15	211
Student # 16	88	Student # 16	197
Student # 17	31	Student # 17	141
Student # 18	127	Student # 18	261
Student # 19	130	Student # 19	228
Student # 20	82	Student # 20	249
Student # 21	140	Student # 21	137
Student # 22	189	Student # 22	118
Student # 23	163	Student # 23	319
Student # 24	98	Student # 24	228
Student # 25	180	Student # 25	241
Student # 26	112	Student # 26	291
Student # 27	138	Student # 27	177
Student # 28	37	Student # 28	276
Student # 29	116	Student # 29	194
Total # of Words for all students	3050	Total # of Words for all students	6126

Table 6.2 word count for the bilinguals' Arabic and the monolinguals' Arabic

When compared to bilingual students, the monolinguals were able to express themselves much more freely. The bilinguals, on the other hand, had difficulties in trying to figure out what to write next. Such low number of words, as shown in (Table 6.2), can be related to the limited amount of lexical availability that may derive from the less frequent use of Arabic.

Student number 28 wrote at the top of the page "don't blame me for the mistakes." What the student wrote can be considered as significant, meaning that he acknowledges the fact that he has poor language skills and, at the same time, knows that he is not the one to be blamed. Acknowledging the problem is a good first step. However, student number 28 and other bilingual students can either develop their language skills or surrender to the idea that it is not their fault and do nothing about it. Brown (2000) believes that "Human beings are emotional creatures. At the heart of all thought and meaning and action is emotion. It is only logical, then, to look at the affective 'emotional' domain for some of the most significant answers to the problems of contrasting the differences between first and second language acquisition." (Brown, 2000: 63)

As presented in (Tables 6.1 and 6.2), the word count can give us a clear indication that the bilingual students suffered from inadequate lexical availability and were unable to convey and express the subject matter as they would have liked. Being unable to express thoughts, ideas, and even exercise the simplest right, that is, the right of freedom of speech can all be hindered by the lack of language competence. As a result, those students can feel frustrated, irritated, and annoyed when they are unable to make themselves understood.

Chapter five: Recommendations and Conclusion

5.1 Recommendations

The current study provided some fascinating findings on how acquiring a second language can diminish and deteriorate the native language. The results revealed that most of the bilingual students showed more preference and felt much more comfortable in the use of the second language over the first. Most of the bilinguals had difficulties in the use of the Arabic language as they were unable to make themselves understood throughout the discourse. The following recommendations are to be addressed to the parents of bilinguals, the community, school boards, and teachers who may be extremely influential in developing the child's bilingualism by encouraging and appreciating the use of both the first and the second language.

The parents' situation in sustaining and developing their child's first language is quite essential. After all, the student will be exposed to the second language at school, and it is in the parents' best interest to work on the development of the first language at home. Parents must recognize the importance of their native language, and must encourage their children in learning and developing that first language. McKay (2006) stresses on the importance of the first language and believes that students who have little literacy in their first language will be affected and their second language literacy will be weak.

Parents have to persuade their children in practicing the use of the first language. This can be accomplished through daily use of the native language, reading first language content, yearly visits to the country of origin, if possible, and above all meeting and interacting with other emigrants. If the child is not exposed to his/her native language on a daily basis, then the weakness of that language will emerge. The child will never feel any threats of loosing his first language unless he makes a visit back to his hometown, where he will then be faced by native speakers who are entirely monolinguals. As long as the child is far away from his hometown, he will never realize the influence of the second language on his first.

Moreover, during his stay abroad, conversation in the native language is practiced with other bilinguals, and the frequent use and replacement of second language vocabulary in place of the first is noticeable. However, engaging in code switching as I personally believe is the first sign of first language loss and deterioration. Code switching is part of every bilingual's speech, but it is not part of the monolinguals'. As a result, the bilingual will face difficulties in retrieving first language lexis since code switching can no longer be activated, and failure in engaging in a fluent conversation can be both challenging and stressful.

Living and studying in Canada for a little over 10 years, I had never felt that my first language was under any threat. When calling the family once a week, or when speaking with other Arabs in Canada, it seemed that I spoke the first language fluently. However, once my stay in Canada was over with, I had to return back to my hometown. Engaging in a conversation was something impossible. Being surrounded by Arab monolinguals and family members, communication had to be in Arabic and nothing else but Arabic.

Code switching was no longer available to fill in any lexical gaps and it could not be triggered as it was in the past. If a word is uttered in a language other than the first then it would be considered as something that is totally inappropriate, and it would also be viewed as if the speaker is being disgraced by his own culture and language. Being unable to engage in a conversation was frustrating, and lacking the appropriate terminology for any given subject was infuriating.

It is important to recognize the difficulties of learning a second language. Sacrifices have to be made, but not on the account of the first language. Losing the first language will affect the student's self-esteem in society, as he/she is no longer able to express thought properly. How can the student later on in life be able to communicate with other people in his own society or in the work place if he lacks the proficiency of his/her own first language.

The importance of learning a second language is immeasurable, but maintaining the first language is just as important. However, the parents of bilinguals, the community, school boards, and the teachers ought to work hand in hand to develop the child's learning process in acquiring a second language while maintaining, if not developing, the first language. Some sort

of bridge has to be built and established between migrating families and school boards to fill in the gaps and obstacles that bilinguals may face and fall into.

Moreover, the bilingual's environment has to be supportive by encouraging the use of both languages. Furthermore, families and teachers of bilinguals have to work hand in hand to pave the way for successful second language acquisition while safeguarding and developing the first. "The recognition of discontinuity between home and school has contributed to what is known as the culture discontinuity hypothesis. This hypothesis suggests that second language students acquire different learned ways of talking and communicating, and when they enter school, their linguistic behavior and communicative styles are unappreciated and misunderstood." (Johnson, 1995: 65)

Language teachers and school boards have to recognize the child's bilingualism, and under no circumstances should the bilingual student be compared to his monolingual counterpart. The bilinguals' background has to be appreciated and acknowledged to enable both teachers and bilingual students to work side by side in facilitating, developing, and improving the acquisition process. Brisk (2006) stresses on the importance of understanding bilinguals as unique individuals, rather than two monolinguals, and believes that such understanding is crucial for designing classroom practices.

Larsen-Freeman and Long (1991) pointed to what I believe to be an ideal classroom environment for bilingual education programs. They claimed that the main purpose of bilingual education programs is to help in maintaining and developing the child's native language while acquiring a second language. Giving equal importance to both the first language and the second language will benefit the bilingual student in acquiring both languages, and will not threaten to diminish the first language.

5.2 Conclusion

The study investigated the effects of the second language on the first. It pointed out to the negative consequences that may derive from the excessive use of the second language. The study also looked at how bilingual students, parents of bilinguals, and teachers can cooperate with one another to facilitate the acquisition of a new language while maintaining and developing the first. Moreover, the study tackled the type of social pressure that is exerted by the community on the bilingual child, and how such pressure can lead to a conflict of culture identity.

The results of the study revealed that the bilingual students faced difficulties in their first language literacy, and were much more comfortable and confident in the use of the second language over the first. When the bilinguals' Arabic written texts were compared to their English texts, students made more mistakes in Arabic than they did in English. The total percentage of errors made in Arabic (16.7%) was more than double the total percentage of errors made in English (6.9%). Aside from spelling mistakes, the bilinguals' English work was well presented. They were able to provide and support their ideas adequately; something that was not found or present in their Arabic texts.

On the other hand, the bilingual students were unable to express their ideas effectively in Arabic. Most of their ideas were not well supported, and evidence of poor academic writing was observed throughout their written texts. When compared to their Arabic monolingual counterparts, the bilinguals were not as proficient as the monolinguals were. The total percentage of Arabic errors made by the bilinguals (16.7%) was a little more than 4 times the percentage of errors made by the monolinguals (3.6%).

Looking at the results, we can notice that the bilinguals performed much better in the English written tasks than they did in their Arabic tasks. Such better performance in English can be related to the less frequent use of the Arabic language which, as a result, will lead to preferring one language over another. Furthermore, the bilinguals' preference of the second language over the first can be observed by the amount of words written in both languages. The bilingual students were able to write more than 8500 words of English, but failed to write more

than 3050 words of Arabic. Some of the bilingual students were puzzled and confused when it came to writing Arabic, they did not know what to write next. On the other hand, the Arab monolinguals wrote more than 6100 words, a number that is two times more than what the bilinguals wrote. Moreover, some of the bilingual students failed to write more than 50 words of Arabic, but those same students, having a greater lexical availability in the second language, were able to write English effortlessly and with exceptional abilities.

The effects of the second language on the first were observed throughout the research, and the bilinguals' first language was both diminishing and deteriorating. The study also concluded that the excessive use of the second language did not only affect the first language, but it also affected the bilinguals' abilities in making themselves understood and in expressing their own thought and opinion.

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