

LANGUAGE FLEXIBILITY:
The Effects of Finnish-Swedish Bilingualism
on EFL Acquisition

Department of English

University of Turku

Pro Gradu Thesis

Leena-Kaarina Ahtola

2007

TURUN YLIOPISTO

Englannin kielen laitos/ humanistinen tiedekunta

AHTOLA, LEENA-KAARINA:

Language Flexibility: The Effects of
Finnish-Swedish Bilingualism on EFL
Acquisition

Pro gradu – tutkielma, 103 s., 16 liites.

Englantilainen filologia

Joulukuu 2007

Tutkielmassa käsitellään vieraan kielen, ts. englannin, oppimista peruskoulussa. Hypoteesina oletetaan, että oppilaat, jotka jo hallitsevat kaksi kieltä, menestyvät paremmin vieraan kielen oppimisessa kuin yksikieliset oppilaat. Tutkielmassa vertaillaan kaksikielisten ja yksikielisten oppilaiden englannin kielen taitoja alakoulun kuudennen luokan päättyessä.

Kaksikielisyys voidaan ymmärtää monella tavalla, ja tutkimustulokset kaksikielisyyden vaikutuksista ovat usein olleet ristiriitaisia. Siksi tutkielmassa ensin määritellään kaksikielisyys, sen lajit sekä siihen liittyvää terminologiaa. Lisäksi kuvaillaan Suomen sekä erityisesti Turun kaupungin kaksikielisen väestön tilaa ja oikeuksia sekä keskustellaan aikaisempien tutkimusten perusteella mahdollisista ongelmista ja hyödyistä, joita kaksikielisyys liittyy. Kaksikielisyys on perinteisesti liittynyt myös paljon ennakkoluuloja, kuten pelko puolikielisydestä, jotka tieteellisten tutkimusten avulla pyritään kumoamaan. Mahdollisia muita ongelmia, kuten pienempi sanavarasto molemmissa kielissä verrattuna saman ikäisiin yksikielisiin sekä reaktioaikojen piteneminen, kuitenkin esiintyy. Kaksikielisuuden hyötyjä sen sijaan voivat olla mm. luovuus, kyky kielen analyyttiseen tarkasteluun, metalingvististen taitojen kehittyminen ja avoimuus muita kieliä ja kulttuureita kohtaan. Kaikki mainitut edut ja haitat myös vaikuttavat vieraan kielen opinnoissa menestymiseen. Myös mahdollinen positiivinen transferenssi otetaan huomioon.

Tutkimuksen empiiristä osaa varten vierailtiin kahdessa turkulaisessa alakoulussa, joiden kuudennen luokan oppilaat suorittivat kaksi englannin kielen tehtävää. Toinen kouluista oli suomenkielinen, jonka oppilaat edustivat yksikielistä vertailuryhmää (n=31). Ruotsinkielinen koulu valittiin edustamaan kaksikielistä ryhmää (n=34), sillä yleensä Suomessa ja kaupungeissa kuten Turussa vähemmistökielen puhujat hallitsevat käytännössä usein myös suomen kielen. Ruotsinkielisen koulun oppilaiden kaksikielisyys varmistettiin kielitaustakyselyllä.

Kaksikielisten oppilaiden tulokset molemmissa tehtävissä olivat hieman paremmat kuin yksikielisten. Yksikielisessä ryhmässä myös tulosten keskihajonta oli suurempi. Kaksikieliset näyttivät hallitsevan kielen analyyttisen tarkastelun paremmin sekä tekivät vähemmän kieliopillisia virheitä. Positiivisen transferenssin vaikutus oli myös nähtävissä. Toisaalta heillä oli enemmän oikeinkirjoitusvirheitä vastauksissaan. Merkittäviä eroja ei kuitenkaan englannin kielen oppimisessa voitu todentaa.

Asiasanat: kaksikielisyys, yksikielisyys, kielen omaksuminen, kielellinen lahjakkuus, toinen kieli

Table of Contents

List of Abbreviations

List of Figures and Tables

Introduction	1
1. Bilingualism and Bilingual Development	4
1.1. What Is Meant by Bilingualism	4
1.1.1. Semilingualism.....	9
1.2. Bilingualism in Finland	11
1.2.1. Swedish Speakers in Turku.....	15
1.3. The Age Factor.....	17
1.3.1. The Quality and Quantity of Input	18
1.3.2. Theoretical Perspectives on Age and Language Proficiency.....	21
1.4. One Mind, Several Languages	27
1.4.1. Transfer and Interference.....	27
1.4.2. Code-Switching.....	30
1.5. The Disadvantages of Bilingualism	33
1.5.1. Disadvantages in Intelligence and Cognitive Development	34
1.5.2. Disadvantages in Language Development and Social Development	38
1.6. The Advantages of Bilingualism.....	43
1.6.1. Advantages in Intelligence and Cognitive Development	43
1.6.2. Advantages in Language Development and Social Development	49
2. Research Methodology.....	54
2.1. The Sample	55
2.2. The Language Background Questionnaire	56
2.3. Testing Language Skills	59
2.3.1. The Grammaticality and Comprehension Test	60
2.3.2. The Essay Task.....	62
3. Results and Discussion.....	65
3.1. The Language Background Questionnaire	65
3.2. Quantitative Results and Discussion	72
3.2.1. Nouns.....	74
3.2.2. Adjectives	77
3.2.3. Verbs.....	79
3.2.4. Prepositions	80
3.2.5. Articles.....	83
3.2.6. Word Order	85
3.2.7. Reading Comprehension.....	86
3.3. Qualitative Results and Discussion.....	89
3.3.1. A Sample of Essays from Both Groups.....	94
4. Conclusion.....	100

References

Appendices

List of Abbreviations

adj.	Adjective
BICS	Basic interpersonal communicative skills
CALP	Cognitive and academic language proficiency
EFL	English as a foreign language
en.	English
fi.	Finnish
L1	First language
L2	Second language
L3	Third language
n.	Noun
pl.	Plural
pr.	Preposition
SD	Standard deviation
sw.	Swedish
v.	Verb

List of Figures and Tables

Figure 1	The Picture Sequence Used in the Essay Task.....	63
Figure 2	The Bilingual Pupils' Self Evaluation of Language Skills in Finnish and Swedish	66
Figure 3	Balanced and Dominant Bilinguals in the Study.....	69
Figure 4	Dominant and Balanced Bilinguals' Language Usage.....	70
Figure 5	Results from the Cloze Test.....	73
Figure 6	Results from the Reading Comprehension Test.....	87
Figure 7	Essay Word Count.....	90
Table 1	Percentages of Answers Marked as Correct for Both Groups.....	86

Introduction

In contemporary society, being able to communicate in foreign languages is an asset, and for speakers of minor languages even a necessity in order to be able to interact with other nations. In Finland, children usually start learning their first foreign language in their third year in comprehensive school at the age of 9; typically this language is English. However, the linguistic situation in Finland is such that some children are already fluent in two languages, *bilingual*, when starting to learn their first foreign language in school.

Finland has two official languages, Finnish and Swedish, and speakers of the minority language Swedish are often fluent in the majority language as well. In 2006, Swedish was the first language for 289 609 Finns, which is only 5.49 % of the total population (Tilastokeskus 2007). As a result, Swedish speakers are typically exposed to the majority language from early age, and may even come from homes where their parents have different first languages. Even if they have grown up in monolingual homes speakers of minority languages are almost always bilingual (Einarsson 2004: 40). The primary concern of this study is to investigate whether children from bilingual Finnish-Swedish backgrounds benefit from these linguistic skills at the primary level of their foreign language studies, i.e. in English, when compared to their monolingual Finnish speaking peers.

Contrary to popular belief, bilingualism in society is not an unusual phenomenon even though it in Finland is associated with a minority. Different language groups very seldom live in isolation, but interact with each other. Finland is also becoming increasingly multicultural: in 2005 there actually were more speakers of foreign languages in Turku, where this study was conducted, than registered Swedish speakers (Turun kaupunki 2007). However many prejudices are often

connected to bilingual speakers: I grew up in a small community with both mono- and bilingual speakers, and was confronted by these prejudices almost daily. The prejudices, and research results, are often controversial as both negative and positive attributes have been connected to bilingualism.

Bilingualism has been a concern for many and some tend to believe that, especially for children, a second language will weaken their skills in their first language. There are also beliefs that bilingualism will affect thinking harmfully and lead to *semilingualism*; the inability to communicate in either language. Other disadvantages associated with bilingualism include, for example, poorer literary skills and vocabulary, which would of course affect foreign language learning as well. On the other hand, at least in Finland bilingualism is often seen as a positive phenomenon as well, and an increasing number of parents decide to send their children to Swedish speaking schools in the hope of them becoming fluent speakers of both national languages. Research has also found that there are possible advantages of bilingualism especially for children. Østern (1991: 345) came to the conclusion that bilingual children are excellent communicators and more flexible in their language usage according to the situation than monolinguals. This linguistic competence and the awareness of two languages and differences in their systems, even if not yet on an abstract level, presumably furthers the ability to learn a new language as well. Baker (1996: 122) concluded that bilinguals have cognitive advantages over monolinguals and greater mental flexibility, and in Bialystok's studies bilingual children had greater metalinguistic knowledge (word awareness and syntactic awareness) than monolinguals (2001: 135-138). These abilities should definitely enhance foreign language learning.

In this study the performance of two groups of comprehensive school pupils will be investigated. Both groups performed tasks in English, and their results were compared; the pupils in the other group were bilingual Finnish-Swedish speakers and the pupils in the control group monolingual Finnish speakers. Both groups were tested in comprehensive schools in central Turku and were at parallel levels in their English studies. A questionnaire on language background was conducted in order to make sure that the subjects of the study are indeed bilingual: despite the linguistic situation, bilingual schools do not exist in Finland but children with Swedish as their L1 will go to Swedish speaking schools. With the tasks different aspects of language ability are measured, and the bilingual pupils were hypothesised to perform better in them as a result of the positive effects of bilingualism. Even though neither of their previous languages has been learned through formal teaching, the acquired language skills are hypothesised to benefit in learning new ones. A study of this scale is necessarily qualitative in nature: language skills can differ vastly between individuals and are always affected by multiple variables that cannot be controlled. A small sample such as this which is not longitudinal does not have a generalising power but can still establish guidelines.

Considering the controversy in results the first part of the study aims to outline the theoretical issues involved: in Chapter 1 the terminology and the theoretical issues involved is discussed, as well as previous research on possible advantages and disadvantages. The linguistic situation in Finland and especially in Turku will also be described, as well as transfer and interference and their possible effect on the Swedish speakers. Chapter 2 explains the research methods used here as well as the procedure. In Chapter 3 a report and a discussion of the results of the two test groups will be presented.

1. Bilingualism and Bilingual Development

Defining bilingualism might at first seem self evident: a bilingual person can speak more than one language. However, defining the term becomes more complicated when one starts to consider what knowing a language actually means and how one defines things such as fluency. Bilinguals' language proficiency may vary considerably from being able to communicate to some extent in a second language, to having considerable skills in both languages (Crystal 1987: 362). Since the speakers' skills in a second language (hereafter L2) might vary from native like competence to knowing only a few areas of usage, there are different degrees of bilingualism. Nevertheless people with restricted skills in their L2 may consider themselves to be bilinguals, whilst others do not even if they are fluent in both; individual opinions on bilingualism differ as well. In addition, attitudes towards bilingualism vary on societal levels as well. The attitudes and language planning of the surrounding community have an effect on both bilingualism and the individuals. A group of speakers can be identified as bilinguals even if the linguistic skills in the group vary considerably, for example with state bilingualism. Becoming an accepted member of the speech community may depend on numerous things, including being considered a bilingual by others. As there are many ways of looking and understanding bilingualism, it is necessary to clearly define the terminology used in the study before examining the effects bilingualism may have on an individual.

1.1. What Is Meant by Bilingualism

Several researchers have attempted to define bilingualism with the help of dichotomies and different kinds of scales. Usually they relate to three central criteria

in bilingualism: the (ultimate) level of proficiency, means of acquisition and age of acquisition. Sometimes other aspects, such as context of use are added.

As mentioned above, an individual's proficiency level in a L2 can vary greatly. The extreme view of bilingualism is mastering both languages with native like competence, and being able to use either language in any context or situation. This is often referred to as *balanced* bilingualism; being approximately equally fluent in two languages (Baker 1996: 8). A distinction is made between balanced bilinguals and those who only master their L2 partially but who have native competence in their first language (hereafter L1). They are defined as *dominant* bilinguals, who Hamers & Blanc present as having superior competence in one of their two languages (1989:8). These types of bilingualism are also sometimes referred to as *ideal* vs. *partial* bilinguals (for example Romaine 1995: 11). The minimum level of proficiency needed in a L2 in order to be considered a dominant bilingual remains undefined. Indeed, whether it is actually possible to master two languages completely in the way balanced bilingualism is defined (i.e. in all their aspects and equally well, as having two L1s) is also disputed and seems extreme. These definitions are the ends of a continuum scale and not the only two possibilities; the level of bilingualism can vary between the two ends in a continuum. Even though perfectly balanced bilingualism is disputed speakers can be close to that end of the scale. With dominant bilingualism proficiency in the L2 can vary but native competence in the dominant language is the norm. Bilinguals who have insufficient skills in both languages are referred to as *semilinguals*, to which I will return to in more detail later in this chapter.

In addition to defining the competence level, means of acquisition and age are also relevant issues. If the speakers learn and develop both languages in parallel

(learning two first languages at the same time) they are referred to as *simultaneous* bilinguals (Østern 1991: 40). This happens especially in bi/multilingual families where the decision to speak different languages to the child has been made from the beginning. Simultaneous bilingualism relates to *childhood bilingualism* where the speakers' have not made a conscious decision to learn both languages, but they are mostly acquired in an informal setting. If a L2 is acquired only after having the basic knowledge of a L1 the phenomenon is referred to as *consecutive* bilingualism (Østern 1991: 40). For children, balanced bilingualism is often the result of simultaneous learning, dominant bilingualism on the other hand of consecutive learning. Sometimes people who are dominant and/or consecutive bilinguals do not consider themselves to be bilinguals, but see them more of as foreign language learners, since they have acquired the L2 later on. The third level of looking at bilingualism is the age of learning.

According to Singleton, children do not seem to be aware that they are speaking two languages before the age of three (1989: 147), which is often considered to be age dividing simultaneous and consecutive bilingualism. Østern also considers childhood bilinguals consecutive if language(s) are learned after three years of age (1991: 40). *Adult and adolescent bilinguals* are always consecutive since L2 learning usually takes place in a formal language learning setting and after the general development (linguistic, neuropsychological, cognitive and sociocultural development) of the individuals have for the most part ended (Hamers & Blanc 1989: 10). Simultaneous childhood bilinguals are still going through these developments while acquiring language(s). In this study all the subjects are childhood bilinguals but the means (and to some degree the age) of acquisition may vary as there can be both simultaneous and consecutive bilinguals.

The way in which a child acquires multiple languages has been shown to affect long term usage and leads to different cognitive developments in the language systems in the individual's brain. I will return to these issues in more detail when looking at the possible advantages and disadvantages bilingualism may have. However the results of brain studies and other investigations into cognition can also form the basis for categorising bilinguals. In consecutive bilingualism, the child has often learned the languages in different environments, which may lead to a different kind of perception on the language mechanism compared to simultaneously learned languages. Romaine (1995: 78) argues that the words of two languages learned separately will also be kept separate in the memory with each word carrying its own specific meaning. This type of mental representation is called *coordinate* bilingualism; since words are learned in separate environments, their associations will also be dissimilar. For weaker (dominant) bilinguals, words will even have translation equivalents in the L1. A child who acquires two languages simultaneously in the same context, on the other hand, will have a "fused" representation of these meanings and labels (Romaine 1995: 79); a concept will have the same representation to the speaker in both languages. This is referred to as *compound* bilingualism. For example a Finnish-Swedish bilingual who has learned both languages at home will have two words that will have the same, compound, mental representation. For coordinate bilinguals on the other hand the mental representations may vary or the word in the dominant language may evoke the translation in the L2. Here as well a continuum occurs, and some bilinguals can be placed in the middle; partly compound and partly coordinate.

The ways in which bilingualism has been defined so far are solely linguistic. Bilingualism is nevertheless a multidimensional phenomenon. Skutnabb-

Kangas (1984: 30-34) takes up two more ways of defining the term from the fields of sociology and psychology; defining bilingualism by function and by attitude. Balanced bilinguals were supposed to be able to use either language in all situations. But typically bilinguals use the languages in different situations; this is referred to as *functional differentiation, diglossia* (Skutnabb-Kangas 1984: 31). In diglossia both languages have a separate function, and they are used on certain occasions. Diglossia is a very common phenomenon around the world, for example when one language is used with family and another with official contexts, such as school.

In the case of functional diglossia, the speakers often also identify themselves as bilinguals. In addition to this *internal identification*, people may be classified as bilinguals by others in *external identification* (Skutnabb-Kangas 1984: 32). Speakers of minority languages for example can be identified as bilinguals regardless of their actual proficiency in the majority language. Internal and external identifications may sometimes differ greatly since individual attitudes can be very different towards the languages and what kind of connotations they have for the speakers; as a result of diglossia some competent, balanced bilinguals may even consider themselves to be semilinguals since there are areas of usage that are unfamiliar to them in the other language.

Cultural identity may also create a further division into *bi-* or *monoculturals*. Some bilinguals identify themselves as members of two different cultures and two groups and others only with one of the groups, despite their language skills (Hamers & Blanc 1989: 11). Biculturalism can often be thought of as going hand in hand with balanced bilingualism, especially in multicultural families where each parents speaks a different language to the children. Monoculturalism is

often connected to dominant bilingualism and diglossia, if for example the L2 is only spoken in official contexts and remains remote.

It is impossible to evaluate how many bilinguals there are in the world, just as it is impossible to define bilingualism simply; opinions and proficiency vary to the individual. The terminology introduced above will be used in this study depending on the kind of bilingualism in question. In Finland, the Swedish-Finnish speaking bilingual children can be dominant or balanced, simultaneous or consecutive and compound or coordinate bilinguals as a result of a long and complex history between the language groups. The hypothesis in this study is that even though the degree of the subjects' bilingualism may vary, growing up bilingual is still an advantage. However, as noted above, worries that bilingualism leads to not knowing any language well sometimes surface. As this would be a very serious handicap, a closer look at semilingualism is taken before looking at bilingualism in Finland in more detail.

1.1.1. Semilingualism

Semilingualism, in the context of bilingualism, means that the speaker has insufficient competence in both languages. Baker describes semilingualism in terms of severe deficits on six language competences: size of vocabulary, correctness of language, unconscious processing of language (automatism), language creation, mastery of the functions of language (emotive, cognitive) and meanings and imaginary (1996: 9). When compared to monolinguals, semilinguals cannot express the same things with equal proficiency in either language. Baker continues that a semilingual person has

a small vocabulary and incorrect grammar, consciously thinks about language production, is stilted and uncreative with each language, and finds it difficult to think and express emotions in either language (Baker 1996: 9).

In Finland, the view that Swedish-Finnish code-switchers are semilinguals is occasionally heard, in the United States the Spanish-English switchers have been dubbed Spanglish speakers as a result of the same prejudices. If someone is in fact semilingual it is of course a serious deficit, leading to problems on many levels and hindering the individual from success in school and ruling out the possibility of further education. Qiang also notes that low competence level in both languages causes negative and detrimental effects (2000: 38); not being able to think or express emotions in either language would not only hinder success in school, but effect every area of life and normal social interactions. For example, in a classroom a semilingual person might suffer severely since s/he is unable to process the information on any language which results in learning difficulties in other areas as well and hinders intellectual development.

However, the notion of semilingualism has received criticism: the tests that measure semilingualism are often unrepresentative; the category is not clearly defined and does not take into account that some bilinguals use their languages for different purposes and that it is possible to develop languages above the semi state, they also fail to take other cognitive factors than language into account (critical overviews e.g. in Baker 1996: 9-10 and Singleton 1989: 239). In order to become a bilingual, a certain level of competence in L1 must be obtained in order to successfully learn another, an issue to which I will return in more detail later. Normally children acquire a language naturally as a result of social development, if this does not happen it is usually a question of cognitive abilities hindering language learning rather than the other way around. The occurrence of semilingualism would

require an environment where neither of the child's languages is supported and s/he is not encouraged to develop the languages in either natural or formal settings, which is very unlikely.

In this study, semilingualism can be ruled out since the pupils have grown up in a society where bilingualism is supported both socially and psychologically. Other, less severe, disadvantages may occur, but this kind of devastating effect on the children's overall development is not possible. Such children would be identified as having special educational needs early, and would be sent to a more appropriate school environment. In Finland the pupils are schooled mainly in one language only, which supports the development of a strong L1 essential for successful bilingual development. They also have rights and possibilities to use both languages in natural surroundings supporting their development as well. As this study is conducted in a bilingual town in Finland I will introduce the situation in Finland next to explain what kinds of bilingualism can be expected.

1.2. Bilingualism in Finland

Finland has two official languages, Finnish and Swedish. Swedish speakers form the biggest minority language group but in addition there are officially recognised minority languages, Lappish and Romany and a growing number of speakers of other languages. Still an overwhelming majority of Finns are monolingual Finnish speakers, which is why official decisions have been made to ensure the rights of Swedish speakers. Equal status for both languages was enacted in the constitution in 1919 (Beijar et al. 1998: 27). A special language statute was laid down 1922, and a new updated one came into force 1 January 2004. The basic rights are declared in the constitution and the language statute describes how these rights are enforced. The

constitution and statute ensure the right to use either Finnish or Swedish with all state and municipal authorities, legal venues and public administration (FINLEX 2006). Education all the way to doctorate levels can be completed in both languages. This is vital for the minority, since according to Beijer et al. minorities without a possibility of being educated in their own language have small chances of survival (1998: 45). In addition to education and official matters the right to use either language in ecclesiastic and military service matters are secured by relevant statutes (FINLEX 2006). The secured status of an official minority language provides for its survival and success.

The majority of the Swedish speaking population live on the west coast and along Southern Finland and the archipelago. In Finland, Swedish speakers are often externally identified as a bilingual group, even though for example around the city of Vasa on the west coast and in the Åland islands there are areas and communes where Swedish is the majority or even the sole language and can be used in all areas of life. However the Swedish speakers in Finland have greater possibilities to come into contact with both languages and becoming bilingual. Even though Swedish speakers are clearly a minority, speakers of both languages coexist peacefully due to the long history Finland has with Swedish speaking inhabitants. Especially in the continental areas they often form a local majority or a large minority, but are not isolated from speakers of the majority language; thus vivid linguistic contact and bilingualism is possible. Even though the law ensures Swedish speakers the right to use their own language, in practice most Swedish speakers are more proficient in Finnish than the officials are in Swedish. This is why Swedish speakers are often forced to use Finnish as their language of communication, especially in majority language areas. In Finland, many Swedish speakers have in practice clear functional

differentiation in their language use; nowadays Swedish is used in private situations and Finnish in public ones, despite the official right to use either language.

On the municipal level, communes are classified as bilingual if the minority language is spoken by at least 8% of the population or by 3 000 persons (FINLEX 2006). In 2007 there were 416 communes in Finland, of which 43 are classified as bilingual and 19 Swedish speaking (Kuntaliitto 2007). In these communes children can attend Swedish speaking schools. However one cannot attend bilingual schools in Finland, but must choose either a Finnish or a Swedish stream. Since the school reform in the 1970s, it has been compulsory for all children to study the other national language for at least three years in comprehensive school (Sandlund 1991: 6), which means that Swedish is studied in Finnish speaking schools and vice versa. But official bilingualism does not mean that all Finns are de facto bilinguals. Actually, for most Finnish speakers in monolingual areas Swedish will remain a foreign language taught in school but never used in everyday life. Bilinguals, balanced or dominant, are a minority covering mainly people who live on bilingual areas of the country and have an opportunity to use both languages in natural surroundings. The monolingual majority often sees bilingualism only as a peculiar occurrence. That is why in this study a group of pupils from a Swedish speaking school are hypothesised and tested as the bilingual group, and a monolingual control group is taken from a Finnish speaking school.

The status of Swedish evokes constant debate and discussion on both political and common ground, but careful language planning, protection by law and Swedish language institutions have secured the survival of the minority language, which is rare even on an international scale. The quantitative number of Swedish L1 speakers has stayed around 300 000 for over two centuries (Beijar et al. 1998: 39).

However, the population of Finland has constantly grown thus diminishing the proportion. Swedish speakers have assimilated into the Finnish population culturally and are a very heterogeneous group which enables for example marriages between minority and majority language speakers. As a result, consecutive and simultaneous as well as dominant and balanced bilingualism are found in Finland. Beijar et al. note that the minority identification that creates tight networks in the Swedish speaking minority is actually focused on language proficiency (1998: 60), and to be accepted as a member of the minority, one has to have high level of competence in the language as well. Nevertheless the Swedish speaking minority has a strong sense of Finnish identity; according to Ringbom (1985: 10) most Swedish speakers in Finland do not regard themselves as Swedes, but primarily as Finns with a different first language.

Despite the public debate about the role of Swedish, bilingualism in Finland is mainly viewed as positive. Even during heated discussions about abolishing obligatory studies in Swedish, the argument is usually in favour of introducing another, more 'useful', world language for the pupils to study. Bilingualism in Finland is supported both psychologically and sociologically which enables positive bilingualism. Especially those who are Finnish-Swedish bilinguals from childhood have a strong feeling of preserving both languages (Beijar et al. 1998: 64). Even some Finnish monolinguals voluntarily place their children into Swedish schools so that they can become proficient in the other national language. Skills in Swedish can be viewed as opening doors to Western Europe, because Finnish and Swedish are structurally very different; Finnish belongs to the Finno-Ugrian language family and Swedish to the Germanic one. Turku, where this study

was conducted, is a bilingual town with unique possibilities for the minority language speakers.

1.2.1. Swedish Speakers in Turku

Turku (sw. Åbo) is historically a vibrant market town which has long been inhabited by people with different L1s. Just over a hundred years ago, in 1870, the proportion of Swedish speakers was almost 43%, and as there were significant numbers of speakers of German and Russian as well, Finnish at the time was actually a minority language in the town (Abrahamsson et al. 2002:8). Nowadays those registered as having Swedish as L1 amount to only about 5% of the town's population (Abrahamsson et al. 2002:7). These statistics might be somewhat misleading however; they only take into account those who have officially registered Swedish as their L1, and ignore bilinguals who are registered as Finnish speakers (which also applies to statistics on national level). It should be noted also that immigrants are not allowed to register as Swedish speakers even if they are more proficient in it than Finnish. Even today, Turku is still has an international feel, in 2005 over 5.6% of the population had other L1s than Finnish or Swedish (Turun kaupunki 2007).

In 2005 there were 9 138 inhabitants who spoke Swedish as their L1 (Turun kaupunki 2007), and since the number is over 3 000 Turku is still officially a bilingual town according to the Finnish language statute. As a bilingual town, all the signs and services etc. have to be offered in both languages and children have the right to attend Swedish speaking schools. In Turku there are two Swedish speaking elementary schools (grades 1-6) (*Sirkkala skola* and *Cygnæus skola*) and one lower secondary school (grades 7-9) (*St Olofsskola*). According to Abrahamsson et al., the number of children wanting to attend Swedish schools in Turku is constantly rising

since schooling children in the minority language is popular among bilingual families (2002: 59). This supports the view that people have positive attitudes towards the minority language and bilingualism in Finland and especially in bilingual areas such as Turku. Indeed monolingual Finnish speaking families want their children to attend the city's Swedish schools in order to acquire the language through submersion.

In addition to the compulsory comprehensive school, *St Olofsskolan* also has a Swedish speaking upper secondary school. The only monolingual Swedish university, *Åbo Akademi* is also situated in Turku providing the possibility for Swedish speakers to complete an academic degree in Swedish as well. The Swedish speaking polytechnic *Sydväst* also offers education in Swedish. The university and the polytechnic bring hundreds of Swedish speaking students to Turku every year (who are also ignored in the statistics if they are still registered in their home towns). Nevertheless Turku remains a dominantly Finnish speaking city and in fact so much so that even if one lives in a Swedish speaking family it is virtually impossible to avoid hearing, and using, Finnish in Turku. The children in Swedish schools are in this study hypothesised to know Finnish on a relatively high level since they are forced to engage with it on a daily basis, and because the situation has been like this for long they will most likely have bilingual guardians bringing them up as well. Finnish speakers, on the other hand, do not have the same situation with Swedish; they may never need to use the language in an everyday environment.

In this study I am going to investigate pupils in their sixth year in both Finnish and Swedish comprehensive schools in Turku studying English as their A1-language (i.e. their first foreign language). Normally A1-languages start from the third year in comprehensive school, which is also the case with the subjects of this study. The study compares the results of the groups in achieving these goals and

whether or not the bilingual pupils benefit from their linguistic skills or if it works as a disadvantage. Often the Finnish-Swedish bilinguals have acquired both languages home early on, so the bilinguals in this study are childhood bilinguals living in an environment where acquiring two languages is favoured. They are classified as either balanced or dominant bilinguals since their backgrounds may vary but both types are considered relevant for this study. However a sufficiently high level of proficiency in both languages (i.e. ability to function on both receptive and productive levels) is expected to avoid negative consequences in development, and thus also providing for the advantages of bilingualism to occur. Since the age of acquisition was a further feature used to define bilingualism, I will next discuss issues connected to age in foreign language learning and the proficiency level in more detail before turning to the advantages and disadvantages of bilingualism.

1.3. The Age Factor

A common idea regarding language learning seems to be ‘the younger the better’: the younger one is when starting to learn a new language, the better the end result will be. Adult and childhood learning are also often considered to be fundamentally different; for example learning a new language after puberty is seen as slow and more difficult. In the light of these views, the subjects of this study are in a favourable position: the bilingual group have already acquired two languages in early childhood and in mainly natural surroundings, and both of the groups have started to learn a foreign language in school at a young age, which should lead to a good end result. This intuitive sense of children being better language learners can be supported with evidence from several studies attesting, for example, that children

from immigrant families learn the new language faster than their parents (Singleton 1989: 82-83).

However, research on the age factor has shown that the matter is not as straightforward as it might intuitively seem, after all people are fully capable of learning a language also during and after puberty. The results of language learning may vary greatly with the younger as well as with the older (foreign) language learners, suggesting that introducing the language at a young age is of itself not sufficient but other variables play a role as well (Singleton 1989: 93). In this light it is necessary to look at which variables might affect a child's language acquisition and what the strengths and weaknesses might be in consideration to the particular age group in this study. I will first look at similarities between adult and childhood learning and then concentrate on the possible differences.

1.3.1. The Quality and Quantity of Input

The problem with the kind of evidence noted above in connection with immigrant children is the essential differences in length of exposure and the quality of the input; children of immigrant background often have more contact with the new language in natural settings (in school and day care), whereas older language learners usually learn the language in a formal setting – the difference between formal and informal language learning affects both the quality and the quantity of the input. Exposure time per se is crucial in both L1 and L2 language learning (Singleton 1989: 237), which in the long run verifies the younger the better view: longer exposure time. There are also evidence from formal settings that support the younger the better view (Singleton 1989: 83), but here again the crucial factor of exposure time plays a role; obviously the younger one is when starting a new language in school the more

teaching and exposure one has by the time school finishes compared to peers who start later.

But also counterevidence suggesting that older learners are, in fact, better language learners has been found (for example Singleton 1989: 105). Older learners often do better in the beginning and are actually faster learners in the short term because they can actively indulge in conversation and analyse it whereas children often have gaps in understanding (Singleton 1989: 215). Older learners usually receive better input in terms of both quality and quantity, and have the ability to think in metalinguistic and abstract terms, skills that give them an advantage over young learners. Nevertheless, in the long run, both rely on exposure and training. Even if L1 learning seems to happen 'effortlessly', it involves years of exposure to the language, practicing and learning through error. According to Singleton, the age difference between children and adults is also of little significance as far as the L2 acquisition process is concerned (1989: 125). In L1 and L2 learning the order in which things are learned does not differ significantly.

In this study a crucial difference between the monolingual and the bilingual group is that the latter one has had extensive exposure and training to more than one language already in an informal setting, but for both of the groups English is taught formally in school. Having acquired two languages already may have given bilingual children the advantage older learners have in foreign language learning; a greater awareness of language and the differences between them. However in their studies in English the exposure time does not differ crucially since the number of hours for teaching is set in the national curriculum. In this sense their progress should be on average the same, unless the bilinguals actually benefit from their pre-existing

language skills (whereas there might be some variation to the quality of input due to different teaching materials and other possible variables).

The difference and usefulness between informal and formal learning have been debated since the seminal researches by Krashen, who speculated that children do not benefit from formal language learning (1981). In Finnish schools, formal language learning is the norm. This should be a problem for the young learners, however Krashen's ideas have been criticised and in practice good results have been received from formal learning in the classroom. Also it should be kept in mind that in Finland the English speaking culture is pervasive, and most likely the language classroom is not the only source of the target language for the pupils; for example media conveys a lot of information in English to Finns since TV-programs and films for instance do not tend to be dubbed. It seems that child and adult language learning are similar in terms for the need for input and exposure, both in formal and informal settings. What distinguishes young learners from the mature ones is the fact that they are still going through the general development and maturation process. This evidently lies behind the beliefs of both children being better learners and concerns about whether learning an 'additional' language might harm their overall development.

In this study the subjects are all children who have not yet reached puberty. Their age should not be an obstacle in foreign language learning, even though they are still going through the maturation process, and the bilingual subjects have successfully already acquired two languages. There are some theoretical issues connected especially to young language learners and their language proficiency that do not normally touch adolescent/adult individuals, and as quite a high level of

competence is expected from the bilinguals in their languages, and from all the subjects in the foreign language.

1.3.2. Theoretical Perspectives on Age and Language Proficiency

In this study it is hypothesised that bilingual learners benefit from their language background in many ways, for example in learning yet another, foreign, language. However there are possible disadvantages as well which would disturb the learning process of everything new, foreign languages included. Thus it is important to make sure that the bilingual subjects in this study actually have gained a level of bilingualism would enable positive impacts to follow, and also to look at how introducing a new language early at school might affect both mono- and bilingual children.

How early new languages should be introduced in school and the ideal age of L2 learning are often debated issues. Proficiency in L2 might differ depending on when a child starts learning it and arguments both in favour of early introduction and against it have been made (Beardsmore 1986: 167). The maturation process and cognitive development of children has to be taken into consideration when talking about (language) learning since they are still ongoing with younger learners, whereas for the older learners the processes have for the most part ended. In this sense L1 and L2 acquisition are not identical since L2 learners are usually older than L1 learners; they are further along in their cognitive development, and have by definition experienced one language before (Singleton 1989: 124). However with very young foreign language learners the learning of their L1 might still be at such an early stage of development that it can cause problems for the learning process. Although researchers have not agreed upon the ideal age at which learning a new language

should take place, it has been concluded that introducing a L2 in school early on pays no harm on L1 or general academic development for the child (Singleton 1989: 242). However there are certain conditions for the development to be positive. The seminal research by Cummins (for example 1979) which discusses these conditions will be examined below.

On the other hand, with regard to neurolinguistics (specialisation of the cerebral hemispheres) the idea of a critical period of language learning has been put forward. Mature neural systems are less adaptable than the immature systems, and this puts older L2 learners at a disadvantage; this lateralisation process is completed between the age of 4 and puberty (Singleton 1989: 157-161). This supports introducing languages early in school. All the subjects in this study have started learning a L2, or already are competent in two languages, before this lateralisation process is finished. Obviously it is still possible to learn languages after this age, as the emergence of abstract thinking that occurs after the lateralisation process can be useful in language learning.

The more obvious difference between adult and child learners is their emotional state and level of maturation. These psychological factors may affect language, or any other learning as much as neurological ones. The influence of motivation and attitude are acknowledged as affecting language learning, and these may vary between different age groups. Singleton claims that children of around the age of ten (or indeed younger) are less likely to be hostile to cultures other than their own than older learners (1989: 202). The fact that younger children are often still unaware of negative connotations and prejudices that have to do with the language is an advantage. The subjects of this study are 11-12 years old by the time they take the test, and have started a new language in school when they were nine. The bilingual

group have acquired a L2 at an age when prejudice was hardly an issue, and in Finland it is easy to identify with both groups since cultural differences are minimal.

As a result of the pervasive Anglo-American culture mentioned above identification with the foreign language they are learning is probably also relatively easy. Even for older learners, motivation is often the key to successful language learning. Singleton also notes another positive angle in introducing children to a new language: it brings them to an early understanding and appreciation of different cultures (1989: 243). This is also one of the goals in learning an A1- language in comprehensive school in the national curriculum; the goal is not only to learn a language but to become acquainted with the culture and possible similarities and differences compared to their own (Turun kaupungin 1-9 luokkien opetussuunnitelma 2007). In the light of these issues, introducing a L2 in school early on should not be a problem for either the mono- or bilinguals. But just as introducing a L2 to children causes concerns, so does introducing a third language (L3) to children who are already bilinguals.

Theories on how the negative effects of bilingualism (insufficient skills in both languages) can be avoided, such as the *threshold hypothesis*, have been developed. According to the threshold hypothesis there is a minimum level of linguistic proficiency (which however cannot be defined in absolute terms) which a child must attain in their L1 before learning a new one in order to avoid cognitive deficits (Cummins & Swain 1986: 6). If a child has a low threshold of competence in their L1, it is highly likely that they have a similar low level in their L2 which eventually leads to semilingualism. On the other hand, children with a high threshold level in their L1 are also in a position to attain a high level in other languages; this applies to both bilingualism and learning a foreign language. When the development

of L1 is in no danger of being replaced, access to two (or more) languages in early childhood can accelerate aspects of cognitive growth (Cummins 1979: 229). However, the cognitive growth comes into effect only after a certain threshold level in the L2 is reached as well (ibid.).

Similar ideas are expressed in the theory of common underlying proficiency – a child must acquire the common language proficiency base in order to function well in any language in cognitively demanding domains (Singleton 1989: 152), proficiency in one's first language is essential in order to develop this base. The bilingual subjects of this study should have obtained a high level of proficiency in their home language since both languages are culturally supported and have a secured position in Finnish society. They can also be used in almost all areas of life without hostilities from other language groups. The Finnish school system also supports L1 learning from the beginning of comprehensive school (whether it is Finnish or Swedish), i.e. two years before beginning studies in the foreign language. Thus it can be assumed that the both the mono- and bilingual subjects in this study have obtained a sufficiently high threshold in their L1 to develop positive bilingualism and L2 learning.

The bilingual students have often learned both languages from infancy or early childhood, although whether or not they obtain a high enough threshold level in both or either of the languages can be questioned. According to the *developmental interdependence hypothesis*, L1 and L2 skills are also related; the level of L2 proficiency children will attain depends on the type of competence they have in their L1 (Cummins 1979: 233). With these theories some of the controversial results of bilingual studies can also be explained; the development and support of L1 should not be ignored even with minority language speakers. If the outside environment

provides sufficient stimulus for maintaining the L1 then intensive exposure to a L2 leads to rapid bilingual development without detrimental effects to the L1 (Cummins 1979: 233). As discussed above, this is the case in Finland, and if both parents consistently speak different languages to the child they should both be sufficiently supported.

In a natural acquisition situation, children learning a second language generally do better than adult learners in the long run (Singleton 1989: 119). Learning both languages from infancy (balanced bilingualism) guarantees a sufficiently high competence level before starting school. The bilingual group in this study, however, may come from varying backgrounds; from families where two languages are spoken to different degrees to monolingual homes with either Swedish or Finnish as the sole language of the family. As noted, if both languages are acquired at home a high level of bilingualism can be expected. However, if the subjects only come into contact with the other language outside the home (for those who come from Finnish speaking families almost only in school, and with the friends they make there) the level of bilingualism varies, but in these situations the threshold level in L1 is even more secured. Since the study is conducted at the end of sixth year in school they should have obtained a rather high level in the L2 as well; by the end of their studies in comprehensive school they have come into contact with both languages in their everyday lives as well as had formal teaching in them in school.

As it can be stated that all the pupils in the Swedish speaking school (regardless of varying backgrounds) can achieve additive bilingualism, the proficiency level that they should have attained in both languages to be considered representative subjects for the study remains undefined. Distinguishing skills in language ability have been tried to explain by dividing them into 'basic interpersonal

communicative skills' (BICS) and 'cognitive and academic language proficiency' (CALP) (for example Cummins&Swain 1986: 152). Even if children seem to have good command of L2 (BICS) they may not be ready for academic instruction in it (CALP). According to Beardsmore, CALP is actually a cross-lingual skill and that once its features have been learned they are applicable to any language contact (Beardsmore 1988: 35). Thus all the bilingual subjects should have at least BICS in both languages, and balanced bilinguals also CALP in both languages. The possible dominant bilinguals who come from monolingual Finnish homes should have achieved both BICS and CALP in both languages as well, since they have native skills in Finnish and a long exposure to Swedish in school (six years), which is enough for a cross linguistic skill to develop. The only subjects that may not have CALP skills in the other language are those pupils who come from monolingual Swedish homes as they are educated in Swedish as well. Since their bilingual skills may vary, the group will be divided into different types of bilinguals. What the subjects' proficiency level in the foreign language they are learning by the end of year six should be is outlined in the national curriculum, which is designed according to their maturity level.

So far I have looked at what is meant by bilingualism and what effect the young age of the subjects in this study has to their language learning. Since the aim of the study is to investigate whether bilingual children benefit from their skills in learning a new language I will now turn to looking at bilingualism in more detail. I will first introduce a few phenomena that are related to bilingualism and language learning and can have either positive or negative effects, before concentrating on the possible advantages and disadvantages in more detail.

1.4. One Mind, Several Languages

There are some linguistic phenomena that relate to all language learners, but especially to bilinguals. Features such as code-switching, transfer and interference all have to do with being able to speak two or more languages or learning a new one. These phenomena are often connected as both positive and negative by-products of bilingualism, and also research have concluded that the effects can vary.

1.4.1. Transfer and Interference

The subjects of this study are all learning a foreign language, English, in school, have studied it for about the same time and their teaching follows the same curriculum. Learning a foreign language is always a slow and time consuming process, and as Ringbom notes, L2 learners are constantly seeking to facilitate their task by making use of previous knowledge (1987: 33). As the pupils in this study are at an early stage of learning the language they might refer to previous linguistic knowledge of other languages. For the monolingual group this means referring to Finnish, and for the bilingual group referring possibly to both Finnish and Swedish.

For the bilinguals their previous knowledge of Swedish might aid them in learning English as the languages are related; the facilitating influence of cognate vocabulary or any other similarities between the languages is called (*positive transfer*) (Odlin 1989: 27). Knowing a related language can be helpful in the process in many ways; transfer occurs in all linguistic subsystems (phonology, morphology, lexis and syntax) and both in informal and formal contexts (Odlin 1989: 152-153). According to Odlin, cross-linguistic similarities for example in vocabulary can produce positive transfer in reducing the time needed to develop good reading comprehension, similar syntactic systems can facilitate grammar learning and similar

writing systems can give a head start in reading and writing (1989: 36). As Swedish and English have similarities in all these aspects the bilingual group should gain an advantage. Ringbom notes that some Swedish-Finnish bilinguals were even capable of recognising spoken English words before starting their studies because of the lexical and phonological similarities (Ringbom 1987: 35). This possible advantage that the bilingual group gets in learning English as a foreign language, however, does not depend on their bilingualism, but to the fact that they already speak a related language to the target language.

For the monolingual Finnish speakers transfer, help to the same degree is not available since Finnish and English are not related and differ greatly in lexis, syntax, morphology and phonology. However, transfer from another language may not always be positive, but can also lead to incorrect forms of the target language. This is referred to as *interference* (for example James 1998: 179); for example using Finnish lexis or syntactic structures in producing English. The negative influence of another language may show with related languages as well, as under- or overproduction, substitutions, calques (mistakes that reflect native language structure) and misinterpretation (Odlin 1989: 37-38). Thus also the Swedish speakers may suffer from interference as the similarities between the languages do not always agree, for example with false friends.

Transfer or interference do not always fall back to the L1, but can occur with any of the language repertoire a person knows, even if their knowledge of it is only partial (apart from phonology, which according to Ringbom (2001: 59) almost always transfers from L1 and explains why many people retain a foreign accent). However, Cenoz has concluded that speakers borrow more terms from the language that is typologically closer to the target language (2001: 8); thus in this study the

bilingual group would refer more to Swedish than Finnish. The linguistic distance between the three languages plays a role to the students and they have a perception of the “transferability” of the languages as well (Cenoz 2001: 16). According to this view, bilinguals have a linguistic awareness of the languages and differences between them, even if they are not able to articulate them on an abstract level. If the bilingual group is capable of recognising that one of the languages they already are fluent in is similar to the new one they are studying, and can more or less consciously use transfer as an aid, then bilingualism is an advantage in foreign language learning this sense as well.

With bilinguals transfer and interference also play a role with their L1 and L2. Beardsmore claims that early childhood bilinguals are less prone to interference than late bilinguals (1986: 122). This might be the result of balanced bilingualism; early bilinguals have a near native like proficiency in both languages. Languages acquired later might have separate representations (compound bilingualism) which interfere with each other and a lower proficiency level in the L2. Thus interference is probably greater in languages learned in classrooms rather than acquired naturally. However Beardsmore also notes that in bilingual speech production it has shown to be almost impossible to have the output totally free from influences of the other language (1986: 124). This is taken as evidence of a bilinguals’ unified language system, which especially children (early bilinguals) seem to have.

Even though the bilingual group in this study may have an advantage over the monolingual one in positive transfer from knowing a related language, and as Ringbom notes this is a help especially in the beginning of their studies in L3 (2001: 66), it is not the only reason why they are hypothesised to perform better as foreign language learners. The positive cognitive advantages that result from their additive

bilingualism (discussed in more detail below) are hypothesised to play a more substantial role, which is why transfer and interference are not discussed in more detail here. They are, however, referred to in the discussion when necessary. I will next turn to another phenomenon connected with bilingualism, which is also very common with Finnish-Swedish bilinguals, and often considered as a corrupting element in language.

1.4.2. Code-Switching

Another phenomenon related to bilingualism is *code-switching*, switching between different languages mainly in speech. Code-switching may take a number of different forms: whole sentences, phrases or just individual words can be switched. One of the seminal researchers in this area, John Gumperz, defined code-switching as “the juxtaposition... of passages of speech belonging to two different grammatical systems” (1982: 59). Code-switching differs from a similar phenomenon called *borrowing*, as borrowed forms become part of the mental lexicon of the base language (Myers-Scotton 1993: 163), and also from interference, because various research have shown that code-switching actually supplements speech and is governed by linguistic rules, unlike interference. Nevertheless, code-switching is often viewed as a negative and irregular entanglement of languages. Frequent switching between languages has often been connected to insufficient skills in both languages, and thus also a big source of negative attitudes towards bilinguals in Finland.

However, the view of code-switchers being semilingual can be overruled by the linguistic constraints found underlying the switches: simultaneous operation of the different kinds of switching types and the constraints governing them requires

good active command on both languages and their syntactic rules (Poplack 1980: 589). This is why code-switching is not at all the same as semilingualism. The first influential publications on the syntax and grammar of code-switching were conducted by Poplack who found two linguistic factors constraining code-switching. The first one is *the free morpheme constraint* (Poplack 1980: 585). According to this rule switches are not allowed between a bound morpheme and a lexical form unless both are phonologically integrated within the base language. The second constraint is *the equivalence constraint*. This in turn means that language switches occur only in places where they do not violate the syntactic rules of either language (Poplack 1980: 586). Switches are also divided into different types according to their place in structure. *Intrasentential* switching occurs within the sentence or clause boundary, *intersentential* switching respectively at the sentence or clause boundary (Poplack 1980: 589). Being able to code-switch between languages thus requires a high level of proficiency in both languages. Results contradicting some of these linguistic constraints have been found, but even monolinguals do not always speak grammatically and in general research on the field has demonstrated their adequacy.

As with other phenomena connected to language, code-switching can also be looked at on both linguistic and societal level. Sociolinguistic studies of code-switching tend to focus on speaker motivation rather than linguistics. Gumperz divided switching into two broad categories: *metaphorical* and *situational* switching (1982: 60). Situational switching means that switches are triggered by a change in the situation: the languages available are appropriate in different settings and thus changes in situation forces the speakers to alternate between the languages. These kinds of switches are especially characteristic in diglossia (Gumperz 1982: 60), where the language of home for example, is different than the language of work. This

can partly explain why the Swedish-Finnish bilinguals are frequent switchers between the two languages. Metaphorical switching, on the other hand, is intended to satisfy some communicative intent. "The main concern is with the effect" (Gumperz 1982: 61), some things might sound better in the other language. Proficient bilinguals are able to recognise subtle differences in meaning between the languages, also demonstrating a high level of competence in both languages.

Gumperz also came to the conclusion that code-switching is comparable to monolingual contextualising cues (1982: 64). In monolingual spoken language, these cues are elements such as pausing and emphasizing, in non-verbal communication the cues can be gestural or kinesic. Even though code-switching is often seen as a distinctive feature of bilingualism some researchers claim that monolinguals have a similar strategy: "similar (psycho-) social motives seem to underlie language switching in ... bilingual communities, and style-shifting in monolingual communities" (Milroy 1987: 184). Monolinguals can also alter their speech by varying styles.

Nevertheless, languages are often associated with social stigmas, and Wei has argued that code-switching carries more weight than contextualising cues as a result of this (1998: 173), and because bilinguals can also use both code-switching and monolingual contextualising cues together. Zentella found out that people were very conscious about speaking the language that was the dominant language of other interlocutors, and that this was actually more influential than the topic (1997: 84). Code-switching might be used in order to send a message to the out group that they are in fact just that: outsiders. It can be a way of saying that switchers "belong to both worlds, and should not be forced to give up one for the other" (Zentella 1997:

114). Even though outsiders might view the mixed language as an improper mix, to the switchers it represents both languages, both identities.

In Finland, close contacts between Finnish and Swedish have led to frequent mixing of the languages and borrowing, giving the Swedish used in Finland a unique intonation pattern for example. The Swedish used in Finland is in fact a regional standard of Swedish with certain differences in syntax, phonology and word choice to standard Swedish spoken in Sweden (Einarsson 2004: 140). This invokes certain worries about the language; Leinonen & Tandefelt (2000: 13) argue that Finnish has affected the syntax of Swedish speakers in Finland, and according to them this is a negative influence that can only be avoided by systematically using the minority language and consciously taking care of it. Despite research that conclude code-switchers as proficient speakers of both languages comments like these do appear; similar to all areas of bilingualism the results are controversial. The varying results often seem to depend on the atmosphere and particular attitudes towards bilingualism at the time of the research, and the controversy might also lie in the methodology used by researchers, which is not problem free. I will next introduce the central advantages and disadvantages found in connection to bilingualism, and then turn to the methodology used in this study.

1.5. The Disadvantages of Bilingualism

Countries with a monolingual tradition and a strong majority language have frequently viewed bilingualism with prejudice and even fear, and thought that man is 'by nature' monolingual. Bilingualism is even seen as a cause of confusion and corruption. With childhood bilingualism, semilingualism is often expected, or that learning an additional language will be away from learning something else. Even

though some of these common beliefs, like semilingualism, can be ruled out, there is research that have concluded that bilingualism in relation to intelligence, cognitive development, language development, and social development might not always be totally unproblematic. As all of these would also affect foreign language learning, a discussion of the disadvantages is needed.

1.5.1. Disadvantages in Intelligence and Cognitive Development

Severe cognitive detriments would result from semilingualism, and in the earlier stages of bilingual research monolinguals, in fact, were often hypothesised to be superior to bilinguals in IQ tests. A Welsh researcher, Saer, concluded after several tests that bilinguals were mentally confused and at a disadvantage when compared to monolinguals (in Baker 1988: 11). Like many in his time in the first half of the 20th century, he used IQ testing as the basis of his research, which nowadays is not viewed as a representative measurement of general intelligence. Also, his conclusion did not take into account matters such as the level of bilingualism, socioeconomic background and the status of the L2 (Baker 1988: 12), which may all have very well affected the results in addition to the other problems IQ testing brings in. In addition to the methodological problems, political prejudice also played a role in research of the time. After these variables were taken into account, the results of neutral or even positive effects of bilingualism started to appear, to which I will turn in more detail in the next chapter. For example Qiang (2000) could not find either positive or negative effects of bilingualism on the pupils' general IQ. In addition to claims of semilingualism and poorer IQ, arguments of the detrimental effect of bilingualism on general intelligence are rare to find, and as with the above mentioned, they can not be argued in scientific terms.

However, with childhood bilinguals the development of some cognitive areas may be slower than with their monolingual peers, impeding school success. In 2006, the Finnish National Board of Education conducted a study examining the skills pupils in their third year have in L1 and mathematics in both Finnish and Swedish speaking schools (Opetushallitus 2006); in mathematical skills the pupils in Swedish schools scored on average 6 percentage units below the pupils in Finnish schools. The study did not take into account whether the pupils in Swedish schools were bilingual or not, but taken the linguistic situation in Finland explained above a large part of them can be assumed that at least on some level (with the exception of pupils in the Åland Islands); unfortunately the report only states that the pupils were a representative sample of all the provinces in Finland so drawing conclusions on the degree of bilingualism is difficult. The study also showed clear connections between mathematical skills and skills in L1; pupils who did well in one tend to succeed in the other as well (Opetushallitus 2006). When L1 skills were compared in the study the pupils in the Swedish schools scored on average 9 percentage units lower than pupils in the Finnish schools (Opetushallitus 2006). When it comes to reading and writing, part these results can be explained by the fact that Finnish is transcribed phonetically, whereas Swedish is not. Since the pupils in the Swedish speaking schools had poorer literary skills in their L1 it also affects their results in other school subjects as well; also learning a foreign language.

The Swedish media in Finland reported the research widely and also presented alternative reasons explaining the results; for example *Vasabladet*, a newspaper published in Swedish, takes up the lack of Swedish scientific publications and programmes in natural sciences in Finland (article published 14 February 2007). Nevertheless, even this article presents bilingualism as one of the reasons for

performing worse than the monolingual Finns in both “reading and calculating” (VB 2007), stating that bilingual proficiency may be away from something else - revealing that the negative attitudes are still present even amongst the minority. The claim is not totally out of context though, as research has shown that bilinguals writing and language proficiency might suffer at least in the beginning.

A study conducted by Toukoma (1975) in Sweden showed that immigrant children with a Finnish background were not able to achieve the same level of language proficiency in either Finnish or Swedish as their monolingual peers; the immigrant pupils had a smaller vocabulary in both Swedish and Finnish, and they had difficulties in understanding linguistic relations and abstract terminology (1975: 25-26). They also performed less well in mathematics, however these results can be seen as a result of the linguistic problems; the students’ achievement in content subjects depends very much on students’ proficiency in the media language (Qiang 2000: 29). Toukoma also concluded that the poorer results in mathematics result from language problems, since in non-linguistic tasks there were no significant differences between the immigrant and the majority children, and their intellectual maturity level when starting school was the same (1975: 25). Thus the fact that they were behind in linguistic development also hindered their success in other areas, a direct disadvantage of bilingualism. However, Toukoma concluded that if the pupils’ L1, Finnish, is supported enough, the negative effects can be erased (Toukoma 1975: 39); supporting the threshold hypothesis. Also Hyltenstam & Arnberg report several studies from Scandinavia that conclude that the bilingual pupils who receive instruction in both languages in school achieve better literary skills in both languages (1988: 495-504). This again is consistent with the view that

if both languages are supported, the negative effects of bilingualism can be levelled, or even ruled, out.

Mägiste reported another disadvantage in connection to bilingualism. She studied bi- and multilingual pupils in Sweden and concluded that bilingual students had slower reaction times to both verbal and numerical stimuli, and the more languages one knows, the longer the reaction times (Mägiste 1981: 272). This would mean that bilingual pupils need more time to solve tasks in school. The reaction times were even longer for balanced than for dominant bilinguals, which was seen as a consequence of the lack of automation with (balanced) bilinguals; monolinguals get more training in their one language without competing languages, for dominant bilinguals this happens with the dominant language (Mägiste 1981: 272). Mägiste tested the bilingual pupils' L1 and L2, not their reaction times to a foreign language, but since more languages correlates with slower reaction times it can be assumed that also in foreign language learning bilinguals may have problems in tasks where time is limited, such as the tasks in this study. A study by De Angelis & Selinker supports this view; trilinguals needed more time to perform the tasks in their L2 and L3 than bilingual subjects did in their L1 and L2. The more languages a speaker knows, the slower he/she may become especially if activation spreads to more than one language at a single point in time (De Angelis & Selinker 2001: 46)

Since the initial stages of bilingual research, detrimental effects on general development have rarely been reported, especially if compared to monolinguals with similar backgrounds and if the bilinguals both languages are supported and developed actively. A central result of Østern's study was that for the bilinguals she studied (between ages 6-8), bilingualism per se neither enhanced nor deprived their cognitive linguistic development, but that the bilingual pupils as well as the

monolingual control group were able to develop their ability to solve metalinguistic tasks through active training (1991: 354). Her study would suggest that cognitive linguistic development does not have to do with being bilingual or not, but with active metalinguistic stimulation and training. If this training supports both languages, they also develop naturally.

1.5.2. Disadvantages in Language Development and Social Development

One of the disadvantages often associated with bilingualism is that bilinguals are, if not semilinguals, still poorer in idiomatic language use and their language is less variable. There are studies that support this view. Leinonen & Tandefelt concluded that bilingual Finnish-Swedish speakers did not perform as well as monolingual Swedish speakers in an idiom test they carried out in vocational schools (2000: 62). The problem for many language learners and L2 speakers is that idioms and collocations are language specific and cannot be constructed only by knowing grammatical rules and vocabulary or by guessing. Furthermore they are also culturally specific, and as bilinguals can also be monocultural, as in Finland, they might lack some specific knowledge belonging to the other language culture. However, it is also noteworthy that no one even in the monolingual control group achieved full points on the test (Leinonen & Tandefelt 2000: 62); idioms can be so characteristic that even representatives of the culture cannot construct them if they have not learned them in a natural situation. Toukomaa noted in his research that the main differences in vocabulary were the recognition of synonyms in which the bilingual subjects performed below average (Toukomaa 1975: 23). This naturally

affects the richness of the language, but can be overcome by training and active participation in the language environment.

Another study by Marketta Sundman (1994) discussed bilingual children in Swedish schools in Finland and measured their achievement both in Swedish and Finnish. She used several types of tests and tasks to gather evidence, and concluded that bilinguals made somewhat more errors in both languages compared to the monolingual control groups. Nevertheless they used almost as rich and complex language in Swedish as monolingual Swedish speakers, both lexically and syntactically (Sundman 1994: 170). These studies suggest that monolinguals are more proficient and have more variety in their language usage than bilinguals. Again, bilingualism on its own and as such did not seem to be the decisive element in language proficiency, but how much one uses the language played a more significant role; the more language was used in everyday life, the higher the level of proficiency (Leinonen & Tandefelt 2000: 83). Ben-Zeev also noted that the bilinguals' vocabulary was more restricted in both languages compared to monolinguals, but that this difference levels out with age and experience, and that syntactically the bilinguals produced sentences that were as complex as with monolinguals (1977: 35). Bilinguals deal with two languages and cannot use both the languages in everyday life as much as monolinguals, thus their development in it may be slower than that of monolinguals. With language development the smaller vocabulary, at least on initial stages, seems to be the biggest problem connected to bilingualism.

On a social level, one of the most important issues is *anomie*, the feeling of personal disorientation and social isolation (Beardsmore 1986: 153-154). Bilinguals can be left battling between two competing languages and cultures if they are presented as conflicting. Dominant bilingualism, which occurs in Finland as well,

may result in the speaker not feeling confident in using their L2 and they might give up using it altogether, or their skills might be (or become) solely receptive; using the language in interaction might be impossible (Beardsmore 1986: 120). This may lead to the loss of the other language. As noted earlier though, this aspect hardly affects the Finnish-Swedish bilinguals in towns like Turku since both languages are supported psychologically and socially. However, moving to monolingual areas can affect a bilinguals use of one of their languages. Beardsmore further notes that this phenomenon can be less prevalent in young children and those who come from a mixed language families and background (1986: 156-158), who the subjects of this study represent.

Languages are often also charged with different values. Sociologically and psychologically bilingualism might cause problems if the individual feels that using a language will result in negative labelling in the society or even exclusion from it. The views of the surrounding community naturally affect the behaviour of bilinguals as well; some decide not to use the minority language or code-switch at all and simply use the majority language when interacting with negatively associated members of the out group. On the other hand, in countries where the status of the minority language(s) is legally protected, like in Finland and Canada for example, bilinguals might persistently use their minority language and refuse to switch to the majority code. For an individual, this results in a constant battle between trying to use their own language and trying to fit within the majority.

Political decisions can also have an effect as for example in Belgium, where positive attitudes towards language mixing and bilingualism were previously held, and there were linguistically diverse social networks (Treffers-Daller 1992: 145). However the tension between the two major languages has increased, and

Dutch speaking schools have taken a 'correct Dutch' approach in teaching (Treffers-Daller 1992: 152). The new purist attitudes of the society have eliminated for example code-switching from the speech of the younger population and at the same time making it difficult for them to identify themselves as belonging to both groups. In societies where negative attitudes are associated with bilingualism and code-switching speakers might want to stop, but cannot because of the unconscious nature of code-switching leading, in addition to anomie, to feelings of incapacitation and inadequacy. In this case the speakers themselves may view bilingualism as a disadvantage. Romaine noticed that people constantly 'promised' not to switch languages any more, but no decrease in the amount of switches in their speech occurred despite the negative prestige attached to it (Romaine 1995: 259). For some speakers this might be a burden. The disadvantage that bilingualism may give to political decision makers obviously has other motives. Luckily as noted above, in Finland the bilinguals do not suffer from this at least to the same extent as has been reported in some other nations.

Some of the negative results in earlier studies can actually be explained with social factors outside bilingualism. Sundman's (1994) research conducted in Finland showed that children from low-status backgrounds performed less well in the language tests than their more privileged peers, whether they were mono- or bilinguals. Success in school subjects is always dependable on many variables, and far reaching conclusions cannot be drawn without longitudinal studies on a statistically relevant sample. Beardsmore also notes that children of immigrant, often low-status backgrounds who are put in the majority language classroom early on often suffer from inadequate progress and subtractive skills in L2 (1986: 169). These children may have a low threshold in their L1, and since the language of school and

further education is in their L2 the immigrant children might lose the chance to succeed in them. Also the children Toukomaa (1975) studied, all came from heavily industrialised areas where there were a lot of immigrants, and thus their socio-economic background probably was an influencing factor. It would seem that early bilingualism, and immersion, are thus successful to some (proficient L1 speakers) and less so for others (minority language speakers who do not have the chance to develop their L1).

The possible disadvantages of bilingualism I have discussed in this chapter can be summarised as indicating that bilingualism itself is not problematic or essentially harmful to the individual in general as long as they have native like competence in at least one language. The problems associated with it can actually be levelled out if both languages are supported and strengthened. In fact, Cummins (1984) argued a number of reasons why bilingual students are overrepresented in classes for “the mentally retarded” in the United States, and usually are placed falsely with little to do with bilingualism. Many of the early general studies of bilingualism have concentrated on error analysis and looking at possible disadvantages, which is useful in analysing the problems that might arise. However, more recently research on the benefits of bilingualism in learning have been conducted. The goal of my study is to see whether these benefits can be identified in foreign language learning as well. I will next investigate the advantages bilinguals might have, especially when it comes to language learning and then discuss how these advantages were tested in this study.

1.6. The Advantages of Bilingualism

Research conducted both abroad and in Finland has concluded that bilingualism can have positive effects on the individual if their competence in one of their L1s is sufficient, which typically is the norm in bi- and multilingualism, and in Finland. Moreover, there are arguments stating that the better one is in the L1, the easier it is to learn another (Einarsson 2004: 93). This section looks at the possible advantages bilingualism may have. Several researchers make exhaustive reports of the possible advantages discussed in previous studies, for example Cummins and Swain (1986), who list things such as better linguistic skills, orientation to linguistic structures, sensitivity to feedback cues, general intellectual development and divergent thinking, and Diaz and Klinger (1991), who list advantages in concept formation, classification, creativity, analogical reasoning and visual-spatial skills, metalinguistic skills and sensitivity to language structure and detail. I will next examine the positive effects of bilingualism on intelligence, cognitive development and cognitive flexibility, and then turn to language and social development as was done in connection to the disadvantages.

1.6.1. Advantages in Intelligence and Cognitive Development

A seminal study conducted by Peal & Lambert (1962), was the first to suggest that rather than leading to mental confusion or neutral effects, bilingualism might actually be beneficial in terms of cognitive development and intelligence. In their study (rather small sample) of French Canadian children, they concluded after several different tasks that bilinguals have the ability to think more abstractly, less concretely and more independently of words, resulting in superiority in concept formation (1962: 16-21). These results were based on both verbal and nonverbal tasks and the

subjects' backgrounds were carefully controlled. In addition to this they also found the bilinguals to have greater mental flexibility and verbal fluency, and that the more enriched bicultural environment to which the bilinguals have been exposed may benefit their nonverbal skills (1962: 15). These results were already quite radical at the time, and Peal & Lambert even went as far as to suggest that mono- and bilinguals differ in intellectual structure, attitude patterns, achievement in school and achievement in languages (1962: 21). Since their article was published, the direction of bilingual research changed and results of varying possible advantages started to appear.

Bilinguals' school success has been investigated in great detail, especially in connection with immersion programmes. Some research from traditional classrooms can also be found, and the issue has been of particular interest in Finland since mono- and bilinguals go through the same national curriculum thus providing easily comparable data. A study conducted in Finnish schools showed that bilinguals achieved on average higher grades on all school subjects compared to monolingual control groups (Sundman 1994: 92), which would suggest positive effects on intelligence. Positive results were especially evident in balanced bilingualism. However, the balanced bilinguals in Sundman's study were also successful in other subjects besides their L1/writing skills, thus it is disputable whether bilingualism has a positive effect on other learning or whether the children who succeed in school also have a tendency to be gifted in language learning as well. The results may have been affected by a number of reasons besides bilingualism; balanced and simultaneous bilingualism, and good competence in two languages as such can be seen as evidence of developed intellectual skills in general in a child (Sundman 1994: 75). Thus some of the positive results of bilingualism also suffer from methodological problems. As

noted earlier, Sundman also concluded that other variables affect learning as well; for example, the children she grouped as balanced bilinguals generally came from families with higher social backgrounds, which also has an effect on school success and general linguistic proficiency (Sundman 1994: 96). This privileged background is often associated with proficiency in L1 and L2, and other skills needed in traditional schooling impeding the results.

Since there are multiple variables affecting intelligence, trying to connect bilingualism and intelligence is of course very complicated. Both phenomena are complex, controversial as well as being hard to define and measure. Both attributes are often culturally relevant and subjective as well. Measuring intelligence has traditionally been based on IQ testing and other kinds of tests which often represent a very narrow view of intelligence. Also, when testing bilinguals IQ, the causal relationship remains uncertain (Baker 1988: 7); does intelligence help bilingualism or the other way around? Thus when studying bilingualism it is usually necessary to compare bilinguals with monolinguals in order to identify possible differences, which is done in this study as well. However, according to Bialystok bilingual children “ultimately and inevitably process language differently from monolingual children” (1991: 139), leading to different cognitive development.

One of the problems connected to IQ testing is that there is only one correct answer for each question, emphasizing convergent thinking. Divergent thinking as a process is more creative and elaborative, and on the basis of bilinguals owning two sets of vocabulary for one object it can be hypothesised that bilinguals are superior to monolinguals in divergent thinking, which also suggests differences in their cognitive development. Several studies on divergent thinking tests seem to confirm the hypothesis (Baker 1988: 25). Also here the threshold hypothesis plays a

role; according to Cummins and Swain, bilinguals are better at divergent thinking only if they have attained a relatively high level of L2, and native competence in L1 (1986: 16). Good skills in both languages are needed in order to gain beneficial development in verbal flexibility and fluency. However, Cummins and Swain do note that bilinguals often perform better in both verbal and non-verbal intelligence (1986: 15), as long as this requirement is fulfilled. In relation to this study, bilinguals are hypothesised to be more divergent also in connection with learning a new language. This same flexibility can also benefit the bilingual in rule discovery, another sign of intelligence (Cummins & Swain 1986: 15), which also is a definite advantage in language learning.

Diaz & Klinger (1991) report several studies where positive connections between bilingualism and cognitive development have been reported. Diaz himself has been involved in a longitudinal study where significant differences in a non-verbal test between monolinguals and bilinguals were reported (1991: 170-171). The cognitive development of bilinguals often leads to them being more field-independent than monolinguals, i.e. they have a more analytic cognitive style, and are capable of *selective attention*, the ability to focus on relevant information in the context of misleading distractions (Bialystok 2001: 193-4). Language learning is more successful with individuals who know this style. In another study, Bialystok also argued that bilinguals benefit in yet another cognitive skill that will aid in learning; in developing higher metalinguistic skills. Since metalinguistic aspects are not necessarily specific to particular languages, their discovery may be influenced by the mastery of two languages (Bialystok 1991: 113). Diaz & Klinger offer an explanation as to what these skills may be: “metalinguistic awareness refers to an objective awareness and control of linguistic variables, such as understanding the

arbitrariness of word-referent relations and the capacity to detect and correct syntactical violations” (1991: 173). These skills are essential in learning foreign languages.

Another positive cognitive development often associated with bilinguals is their higher sensitivity to detail and to different cues. Ben-Zeev, for example, noticed that the bilinguals she tested with a picture sequence, noticed more often, and included in their stories, a necessary detail which integrated the parts of the picture sequence better (1997: 40-41). According to studies like these, bilinguals show unusual attention to details, this is another skill useful in foreign language learning. This can be seen as yet another consequence of metalinguistic ability in the form of early awareness of the arbitrary connection between forms and meanings.

Since bilinguals have the two sets of vocabulary, it is also often claimed that they have an ability to think more abstract, since having two sets of vocabulary frees them from meaning-referent thinking. If so, this also would be an advantage when learning a foreign language. Tasks testing this have been conducted where subjects have been asked for example to rename objects or change their names. Bilinguals have demonstrated greater skills in doing this: in substituting symbols not only with meanings but also with regard to the grammatical system (Baker 1988: 30). This seems to indicate that bilinguals are able to resist the thought of having only one, restricted meaning for all objects. Cummins and Swain report a study of grade 3 and grade 6 children in Ireland, where the bilingual pupils showed “greater awareness of the arbitrary nature of word-referent relationships and were also better able to evaluate non-empirical contradictory statements” (Cummins & Swain 1986: 31). This ability to think more abstract, eventually also leads to an ability to look at languages more analytically as well. In Bialystok’s study, for example bilingual and

biliterate children demonstrated advantage on items demanding high levels of analysis (1991: 132).

Ben-Zeev has gathered evidence from several carefully controlled experiments and concluded that bilinguals analyze language more intensively than monolinguals (1977: 32). In her studies of Hebrew-English bilinguals, she also concluded that the bilinguals were capable of separating the meaning of a word from its sound earlier than other children (Ben-Zeev 1977: 33), which can be helpful in language learning as the bilinguals are used to having different words for the same phenomenon. It is possible that the systematic separation of form and meaning that is experienced in early bilingual experience gives children an added control of language processing (Diaz & Klinger 1991: 175). The results of the study by the Finnish National Board of Education mentioned in the previous chapter concluded a significant difference between pupils in the Finnish and Swedish schools in linguistic knowledge, as the pupils in the Swedish schools scored on average 8 percentage units higher, regardless of the fact that they scored lower in L1 testing (Opetushallitus 2007).

Considering the underlying rules governing code-switching discussed above, it can also be seen as a sign of cognitive flexibility (Diaz & Klinger 1991: 168), although this is yet to be scientifically attested. However, Gumpertz & Cook-Gumperz argue that code-switching is a resource for bilingual children in working out the grammar and semantics of another language for example (2005: 21). Pupils with varying backgrounds attend Swedish speaking schools in Finland, which almost definitely leads to code-switching in the classroom. Gumperz & Cook-Gumperz argue that if this sort of peer group talk is allowed it can become a valuable resource

for the bilinguals (2005: 21). Having speakers of both languages in also acts as a model for dominant bilinguals, for example.

Ringbom compared the results of both Finnish and Swedish speakers in the Åbo Akademi English entrance exams, and concluded that on average the Swedish speakers did better in all areas measured during four years (grammar, composition, vocabulary etc.) (1976: 2-3). He accounted most of their higher achievement to positive transfer, but if all the possible advantages mentioned above are taken into consideration, bilinguals do benefit from having skills valuable in foreign language learning as well.

1.6.2. Advantages in Language Development and Social Development

As noted above, bilinguals seem to have a more analytic orientation to language instead of meaning-referent orientation. Observations have also supported the view that early bilingualism can accelerate the separation of sound and meaning enabling the individual to focus on other aspects of language in more detail (Cummins & Swain 1986: 20). This increased metalinguistic awareness can also affect bilinguals' behaviour outside the language, and lead to a certain type of sensitivity in language usage: bilinguals have to be aware of which language and respective words fit in the situation and pick up cues on which language to use in conversation.

Bilinguals' sensitivity to language has been discussed for example by Skutnabb-Kangas (1984). According to her, bilinguals get more practice than monolinguals at paying attention to the fine detail of social situations and reacting in various ways (Skutnabb-Kangas 1984: 233). Baker also notes that the accommodation of two systems requires sensitivity to their separateness (1988: 35).

This sensitivity means a greater ability to notice details and interpreting the emotions of their counterparts in conversation, which are also useful traits in learning. Kuure studied the effects of bilingualism on language development and concluded that the consecutive bilinguals tended to commit errors in the choice of gender and definite/indefinite forms in contrast to simultaneous bilinguals for example (Kuure 1997: 73); if one sees simultaneous bilinguals as more developed bilinguals it would support the view that they are able to analyse language more efficiently.

Cummins and Swain also discuss bilinguals' social development, and argue that there is evidence of both greater social sensitivity and greater ability to react more flexibly to cognitive and interpersonal feedback (1986: 13-14). Bilinguals' awareness of different languages (and possibly also of different cultures) facilitates understanding the communication of others and tolerating the variation that may occur. As bilinguals have to tolerate constant changes in their linguistic environment, they are also more sensitive and can pay attention to cues from linguistic input in social relations (Cummins and Swain 1986: 14). In learning a foreign language this can be an advantage too; in the initial stages of L2 learning, children draw more systematically on support and cues from their interlocutors (Singleton 1989:212), this is a skill in which bilinguals are already experienced. The capacity to engage in conversation and simultaneously tolerating variation, as well as responding to cues and feedback is necessary to all foreign language speakers. For bilingual children, learning a foreign language may also be less of a culture shock and result in a more open and positive attitude towards different languages.

People are aware that there are situations in which some forms of language are more appropriate than others. This is especially true in diglossic societies, where one of the languages is typically a high variety, more prestigious than the low

varieties (Baker 1996: 36). Switching from low varieties to the high variety or injecting prestige words to the utterance gives the impression that the speaker is also competent in the high variety and is socially powerful. Cummins and Swain argue that the bilingual child is exposed to a wider range of experiences due to the greater amount of social interaction involved in learning two languages as compared to one (1986: 15). In conversation, the speaker's focus is on the production of meaning, and knowing two different language systems and code-switching can be used to do this in several different ways. This experience in social interaction may benefit bilinguals in acquiring conversation skills, which Palmberg has studied (1979). He compared the communication strategies of monolingual Finnish speakers and bilingual Swedish-Finnish speakers communicating in English, and concluded that when encountering a problem the first problem solving skill that the bilinguals used was paraphrasing, whereas the monolinguals used avoidance as often as paraphrasing (Palmberg 1979: 69). This was the only discernible difference. Paraphrasing, however, is more of a risk-taking strategy than risk avoidance (Palmberg 1979: 57), and is definitely more helpful in foreign language learning.

Languages are also a way of expressing membership of certain groups; with code-switching also belonging to both cultures. In New York, the Spanish-English switchers were proud of their dual identity and saw it as "a positive way of identifying themselves" (Zentella 1997:82). The ability to code-switch is seen as a way of separating from the monolinguals and uniting the community, and can give the speakers a feeling of power if it is approved by the surrounding society. Having the courage to use different languages and maintaining good self-esteem can also be motivating factors in learning a foreign language.

These results support the view that learning another language does not happen at the expense of previously learned languages; on the contrary they would seem to support each other. But to state simply that bilingualism has either beneficial or detrimental effect on individual bilingual speakers is impossible since the phenomena are intertwined and complex, and affected by other, social, variables. All of the possible advantages mentioned are interconnected, and even though for example Baker notes that the more enriched bicultural environment also benefits the intellectual development of bilinguals (1988: 35), the causal relationship can be questioned with the lack of long term comparative data. Since all bilinguals are individuals as well with different backgrounds it is difficult to universalise the positive (or negative) results of bilingualism to the whole group. Bialystok and Cummins comment that bilingual children may also differ from each other in the patterns of development, since things such as cognition and linguistic operations develop autonomously (1991: 231). They add that bilingual children may differ from monolingual children in some but not all of the constituents of thought (Bialystok&Cummins 1991: 231); with stimulation monolingual children can also gain the advantages connected to bilingualism. Being proficient in two languages is nevertheless a bonus to the speaker, giving this stimulation to possible advantages 'for free'.

The aim of this study is to investigate whether bilingualism has an effect on learning a foreign language. As the effects of bilingualism can vary greatly, so can the level of bilingualism itself; the subjects in this study may have varying abilities in their L2, but the important matter is that they are able to communicate in more than one language and use both languages also outside the classroom. The bilingual pupils' do not have to be balanced, as it would be both difficult to find a

homogeneous group of balanced bilinguals and perhaps even more difficult to measure and verify native like competence in both languages. As a result, instead of testing them with a (second) language proficiency test, a self rating language background scale filled out by the pupils themselves is sufficient for this study to ensure their bilingualism. Since the bilingual group may have both balanced and dominant bilinguals in it, it is also representative and not restricted to a special group.

The pupils are in primary level in their studies of a foreign language, and by comparing the results from tasks provided a conclusion whether the bilingual children benefit from their previous linguistic skills compared to monolingual children, should be reached. The tasks include words and formulas that are slightly above their skill level in order to bring out possible differences between the groups. As the sample used in this study is relatively small and the test was executed only once, the reliability of the study can not be verified as being very high. However, both groups were chosen on a chance basis, at parallel levels in different schools, making the data comparable as a national curriculum is followed. Both groups will perform two different tasks to be analysed. I will next turn to the methodology of the study.

2. Research Methodology

A complex system such as a language and competence in that language are always complicated to measure and value. Firstly, deciding what constitutes good competence in a language is not an easy task. Secondly developing instruments to measure this competence is challenging. Language skills can be further divided into various different skills, e.g. to reading, listening, writing and speaking in which L2 can vary. But people do not use language only to communicate with each other; it is also the instrument for thinking. In order to measure linguistic abilities, one might think that all these components should be tested as well. Finding instruments to do this would, in practice, be an extremely difficult task and would require an enormous amount of resources. Since the focus of this study is not so much on making general assumptions but on testing the hypothesis this is not even necessary. The subjects' skills in English will be tested in reading and writing, and the conclusions will be drawn based on these skills, but the other skills are hypothesised to show similar results. Language is a complicated system that relies on other 'subsystems': phonology, morphology, lexis and syntax. From the material gathered, the pupils' skills in them in the foreign language will also be analysed (phonology will be excluded as all material is written). The analysis of the different parts will overlap since competence in one skill usually correlates with the other; for example, an extensive vocabulary often means competence in grammar as well.

Since half the subjects in the study are presumed to be bilingual on the basis of the school they attend, a language background test will be conducted in order to ascertain the accuracy of this assumption. Since they are supposed to be competent and active users of both languages, questions on all four skills will be posed, as well

as a questionnaire about which language they choose to use with different people and what languages are spoken to them. The information gathered from the questionnaire will reveal how actively the languages are used and whether the subjects feel confident in them, as well as to ensure the representativeness of the sample.

2.1. The Sample

In order to study the effect of bilingualism in foreign language learning a group of bilingual Swedish-Finnish pupils will be investigated. Since bilingual schools as such do not exist in Finland, the test school chosen is a Swedish speaking elementary school in central Turku; since the pupils are speakers of minority language living in majority language area, they are all presupposed to be at least dominant bilinguals. This will be verified with the language background questionnaire before the actual tests. A control group of monolingual Finnish speaking pupils from a parallel class in a Finnish speaking school will perform the same language learner tasks and the results of these two groups will be compared. The Finnish language school is also located in central Turku, and since all elementary schools in Finland are organised the same and follow a national curriculum a cluster sampling like this is both representative and retains the principle of randomness (Burns 2000: 90). Since the schools are located geographically close to each other, the pupils living environments and thus also socio-economic backgrounds are assumed to be similar although this was not tested.

Both groups performed the tasks in mid-May 2007. Since the school year ends in the beginning of June, the pupils were at the end of their studies in elementary school (6th year), and would next year start at lower secondary school. In the Finnish speaking school, the tasks were performed by 31 pupils and in the

Swedish speaking school by 34 pupils. In both schools, the pupils had been studying English since the beginning of year 3. In the Finnish school the pupils had also started studies in Swedish in the beginning of year 6, and in the Swedish school the pupils studied Finnish and some of them had started a third optional language as well.

As language skills and success in school are sensitive, personal issues the results of the tests will be presented anonymously. In the questionnaire and tasks, the subjects were asked to fill in their names in order to analyse the material, but all identifying details were removed in the presentation of the study. The results will mainly be presented in groups rather than as individual performances. Where a reference to an individual is made, it will be formulated as *oppilas 1-31* for pupils in the monolingual group and *elev 1-34* for the bilinguals, after the language of the school in question.

2.2. The Language Background Questionnaire

The language background questionnaire was conducted only in the Swedish speaking school to determine the level of bilingualism. The pupils were all hypothesised as being at the least dominant bilinguals (even though considerable variety in the language backgrounds was anticipated). The pupils in the Finnish speaking control group were hypothesised to be monolinguals and possible bilinguals were excluded by a simple interview at the beginning of the test. Since the primary aim is to compare mono- and bilinguals the groups will be compared to each other as a whole, however a further division according to the level of bilingualism will be made and used when necessary.

In the beginning of the test, a set of self evaluative questions on both productive and receptive use of language (can you speak/write/read/understand this language) are listed. The pupils are asked to tick a box out of four alternatives (very well/well/not well/not at all) concerning both languages, Finnish and Swedish. The purpose of these questions, in addition to the obvious purpose of finding out how confident they feel about using both languages, is also to reveal something about their own view and attitudes on the matter.

In addition to the self evaluation of skills, three sets of statements were given and the subjects were asked to indicate their responses to each of them on a Likert scale. Instead of using the traditional five point scale, the respondents were asked to mark their answer on a continuum scale. This scale is then manually divisible into 5 points (with decimals if necessary). By using the Likert scale, the excessive use of dichotomous and open questions was avoided (Cohen et al. 2000: 253), leaving the pupils with the same set of answers but at the same time still providing empirical data that is easy to categorise. This facilitated the analysis of the test and grouping the pupils depending on their degree of bilingualism. And as Burns notes, the homogeneity of the scales also increase validity and reliability (2000: 560). The questions on the Likert scale were divided into three parts: questions about which language the children themselves speak to different people in their lives, questions which language the child is spoken to by the same people and questions about which languages the children use in their daily lives.

Altogether seven persons or groups of people (in and outside the closest family) were listed in these parts of the questionnaire plus an optional eighth one if the subjects felt like someone important was missing from the scale. Asking both what languages the subjects speak as well as what languages are spoken to them is

meaningful since actual willingness to use both languages is essential in bilingual development. In addition there, was a similar set of questions on Likert scale on five general linguistic situations the child may encounter on everyday basis.

The ends of the scales are Finnish and Swedish, and from the answers a mathematical ratio on language usage and level of bilingualism can be calculated for each respondent. Theoretically the results may vary between -2.00 (= exclusively Finnish speaking) and 2.00 (= exclusively Swedish speaking). A value 0.00 means that both Finnish and Swedish are spoken an equal amount. This type of testing is based on and modified from the test Marketta Sundman has used (1994). Also the set of questions that Baker has developed have been used as a model (1996). In the questionnaire, the pupils are asked about their language behaviour with a variety of different people: from members of close family to teachers and cashiers in shops. Even though these people play a very different role in the subjects' language development and importance in life, a value according to importance was not added, but results will be analysed separately (for example when determining who is a balanced or a dominant bilingual).

The questionnaire relied solely on self evaluation and since the resources were limited the guardians did not fill in a questionnaire. In an ideal situation, the guardians L1s and attitudes towards different languages would have been evaluated too since they have a major effect on the child. The Likert scale is also problematic in some points; most people in test situations avoid being seen as extremists and choose alternatives on either end of the scale, there is no way of knowing whether the people tested are telling the truth and they cannot add information they might feel necessary (Cohen et al. 2000: 254). The possibility of dishonesty cannot be ruled out, but bearing in mind that the subjects are elementary school pupils, that the general

attitudes towards both languages are positive and that the answer sheet is scaled, it should not have harmful effects. Moreover, the subjects were mature enough to be able to evaluate their own skills reliably. The language background questionnaire is included as Appendix One.

2.3. Testing Language Skills

The two tasks that both groups completed are designed to be at a somewhat higher level than the subjects' skill level in order to discover differences and to make the extreme performances stand out. In the designing of the tasks, the textbooks and exercises the pupils are currently using in their English lessons were studied, keeping in mind the content of what the pupils are learning and have already learned, and compared to material used in 7th year, i.e. a grade above the level were the subjects are when taking the test. The schools used different teaching materials and textbooks, since publishing houses in Finland usually do not publish the same material in both languages. The monolingual group used a series called 'Yes! Friends' (published by WSOY) and the bilingual group a series called 'Good Luck' (published by Almqvist & Wiksell Ab). Since the pupils have different materials a direct comparison of exam results for example would not solely be adequate. Therefore the groups are tested with identical tasks; in addition observation in classes is also included.

However, the national curriculum is followed in both schools and its guidelines for elementary school studies in English have been used in designing the tests here as well. In the national curriculum, fields and areas of language that are to be taught are explained; according to the curriculum by the end of their sixth year the pupils have learned to communicate mainly orally and but also in writing about basic

issues that relate to their own experiences (Turun kaupungin 1-9 luokkien opetussuunnitelma 2007).

In both of the tasks, instructions were given in the language of the school as instructed by the schools. In the tasks, the subjects were encouraged to display divergent thinking and to use their imagination with a less restricted essay task, where they were asked produce a text in the target language. In addition, another task with convergent correct answers (a more traditional grammar-translation type exercise) was conducted, where grammatical skills were tested in a Cloze test and reading comprehension with open questions.

2.3.1. The Grammaticality and Comprehension Test

The grammaticality and comprehension task was designed to measure the subjects' skills in choosing grammatically correct answers and reading comprehension. The task is constructed as a Cloze –test, with empty slots in the running text where words are to be filled in. The translations of some of the words are provided in the language of the school under the slot to guide the pupils as to what to fill in. The words where translations are offered will, in addition to testing the range of vocabulary (nouns, adjectives, verbs and pronouns), also concentrate on the possible advantages and disadvantages transfer may have, mainly with the bilingual students since Swedish is related to English. Both Finnish and Swedish grammar books were consulted in the designing of the task (*Nykysuomen opas* and *Svenska Akademiens språklära*). Some of the slots did not have translations under them; in these the pupils were instructed to fill in articles or prepositions (these words were untranslatable since the Finnish language generally lacks both). This required an understanding of the text and how the syntax of the language works to be able to decide what to fill in. In addition there

were two slots that were to be left empty to test the pupils' skills in syntax. This was mentioned in the instructions.

In the Cloze test, the pupils' skills in orthography, morphology and syntax were tested in addition to lexis. There were words from several different word classes; with nouns and adjectives the subjects' basic vocabulary was tested from high frequency words to more specialised words to see whether any differences between the groups in their range of vocabulary come forward. The words had to be put in the right form and tense as well; in this way morphology and syntax were tested. One of the nouns could be derived from words given in the text to see whether the subjects had the linguistic skills to take advantage of this possibility, also on one part the subjects had to fill in a longer sequence of words to test their ability to put them in the right word order. The ability to use main verbs in the correct tense, as well as auxiliaries was tested. In this task, attention was also paid to orthography (more so than in the essay task), even though points in some cases were given even despite misspellings; nevertheless they provided useful material for the study.

The task tests both the pupils' productive skills in writing, as well as their receptive skills in reading. After the Cloze-test there are three open questions in the language of the school about the text. The pupils are asked to answer these questions in that language to test their reading comprehension. The text used in the task is a modified version of a piece in an English textbook for lower secondary pupils in their 7th year (*Go for Success 7*: 1996). Some of the answers to the questions could be found in a single sentence in the text, but there was also a question where the answer had to be constructed from different parts of the text and from the context, which requires a more wholesome understanding of the text. The Grammaticality and Comprehension Tests for both groups can be found in Appendices 2 and 3. This task

concentrated more on linguistic correctness, and the results are presented as quantitative data. The discussion, however, recognises that the size of the sample is such that these results cannot be treated as statistically significant for the Finnish population as a whole. The other exercise was designed to stimulate imagination and to get the subjects to express themselves in the language to be learned; the discussion is qualitative and the results are assumed to be indicative rather than absolute.

2.3.2. The Essay Task

In order to measure the subjects' language skills in English, an essay task will be conducted. With an essay task the subjects will produce longer pieces of free text, which thus also provides material for both vocabulary and grammar analysis. The essays will be written in a natural classroom setting, however without the help of dictionaries or other material. Unlike traditional essay tasks, the subjects were not given alternative topics to write their essay on, instead a picture series was presented and the essays were written on topics related to them – the subjects themselves decided what to write about, as long as the pictures related to their text. This was done to stimulate a variety of topics and for the pupils to use their imagination instead of restricting them to a specific area. A sense of possible differences between the sizes of the two groups' vocabularies could also be gained. The pictures were chosen by keeping in mind the national curriculum, and what subject areas the pupils should know by the end of their studies in comprehensive school, however including images of a more specialised area for example in the background as well for stimulation and to encourage variety.

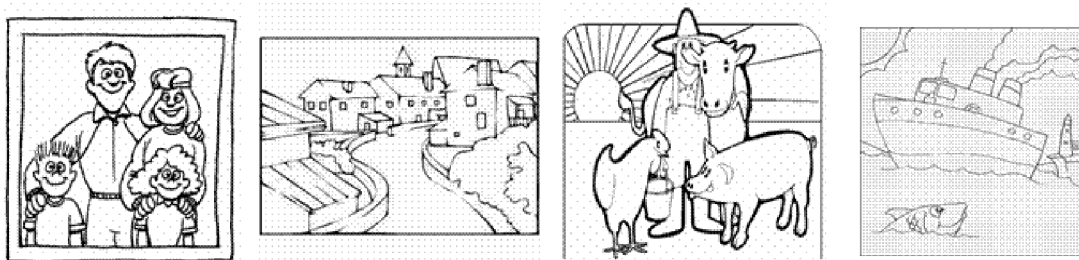


Figure 2 The Picture Sequence Used in the Essay Task

With the essay one can examine the possible differences between mono- and bilingual learners in creativity, which is often mentioned in connection to bilingualism. This will be done by looking at productivity, uniqueness and variation in the texts on both syntactic and lexical level. Thus the analysis of the essay task will not rely solely on error analysis, but focuses more on looking at how the pupils performed and what they are good at, although interesting errors will be looked at as well. Other areas that will be analysed are syntactic complexity, lexical complexity and error analysis.

Since the essay task is designed to produce relatively spontaneous text, and to encourage the pupils to use the language to express their feelings and ideas productivity can be analysed by a simple word count as well as with content analysis and how the pupils managed to incorporate the four pictures into their text in original ways. The syntactic complexity of the text is analysed partly through error analysis and through looking at syntactic constructions. The problem with vocabulary analysis is that the texts do not show what the pupils do not know; only what they use. This of course is also useful information. On the other hand, it can show the pupils ability to paraphrase, an excellent language learning skill which the bilinguals are supposed to be good at. Lexical complexity will be analysed by comparing the number of different words from the open word classes with the overall word count.

The problem with the essay task is that it relies on the willingness of the subject to perform and show their abilities in the free text. This might affect the validity of the task. Especially as the pupils were aware that the results of these tasks would not have an affect in their grades from English classes their motivation on writing text that can be as long or short as they like might be low. However this applies to both groups equally, so they are still comparable. The results and discussion from this task are presented as qualitative results, as I will mostly concentrate on analysing a sample of the essays. The Essay tasks for both groups can be found in Appendices 4 and 5.

3. Results and Discussion

Before analysing the results of the tasks the pupils in both schools performed, I shall examine the results of the language background questionnaire that the pupils in the Swedish speaking school filled in to confirm their bilingualism. The pupils in the Finnish speaking school did not fill in a questionnaire, instead they were asked orally before the test about their language background, and everyone claimed to come from monolingual Finnish speaking homes and were competent only in their L1, there were also no pupils with an immigrant or other ethnic background.

3.1. The Language Background Questionnaire

In the first part of the questionnaire performed by the pupils in the Swedish speaking school, the pupils were asked to evaluate their skills in both Finnish and Swedish in reading, writing, speaking and listening. Of the 34 pupils, no one evaluated their skills in either Finnish or Swedish in any skill areas to be “none at all”. In addition, there was only one answer in one area with “not so good”; all the rest being either “very well” or “well”. Based solely on this one can draw the conclusion that all the children themselves generally felt competent in both languages and use both in their daily lives.

Since in this part of the questionnaire there were four alternative answers to choose from, the mean was calculated from the pupils’ answers so that the answer “very well” equalled a numerical value 4 and the answer “not at all” equalled 1. In Finnish the highest average came from understanding spoken language, 3.91, suggesting that majority of the pupils think that they understand Finnish very well. The other receptive skill, reading in Finnish gave a somewhat lower average, 3.76,

which can in part be influenced by the fact that these pupils study the Finnish language in school as well, and they are usually tested on reading and writing, and all mistakes are corrected. This might also explain the lowest average of 3.35 that came from writing in Finnish. The only answer with “not so good” referred to writing in Finnish as well, by *elev 17*, who is actually classified as a balanced bilingual on the basis of speaking both languages home. The lowest averages from both languages came from writing, and as noted earlier in connection to the disadvantages that bilingualism might have, writing skills in both languages might develop later than with monolingual children. As well as understanding Finnish when it is spoken to them, the pupils also estimated their skills in speaking the language to be very high, the average score being 3.82. In all the areas, the average in Swedish skills was higher, though with a small difference. Also in Swedish skills writing had the lowest average, and understanding the spoken language the highest.

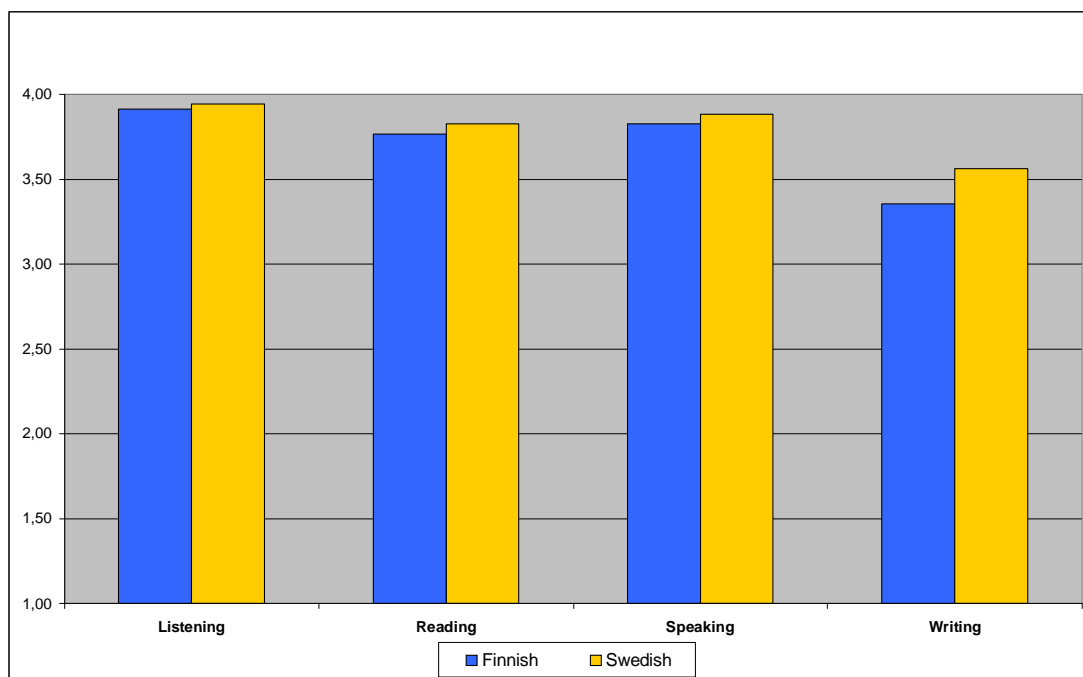


Figure 2 The Bilingual Pupils’ Self Evaluation of Language Skills in Finnish and Swedish

Comparing statistical data with a sample this small is not problem free, however a T-test was conducted and statistical significance in the results was not found; thus the hypothesis that the students were equally good in both languages could not be overruled. According to the self evaluation the majority of students felt slightly more competent in using Swedish in all language areas, but overall evaluated their language skills in both languages as very high: they all consider themselves to be bilinguals.

The part of the questionnaire where the pupils were asked to evaluate which language they use in certain situations, and what languages are spoken to them, revealed even more about their language background than the self evaluation of skills - these evaluations were marked on the Likert scale. Here speaking solely Finnish was translated to a numerical value of -2, speaking solely Swedish to +2, and using both languages equally gave a value of 0. On average, the answers circled around the value of 0, suggesting that the students also use both languages actively and people in their lives do that as well when speaking to them. It should be noted, that an analysing of the average values should be treated with caution however, since there was a great deal of variation between the pupils' language backgrounds. The biggest deviations came from the values given to speaking with the teacher (1.68, i.e. mostly in Swedish) and speaking to cashiers in shops (-1.24, i.e. mostly in Finnish). These results correlate with expectations; the official language of the school is Swedish, and this is the only language which should be used with the personnel there (although according to the pupils quite a lot of Finnish is used as well, which suggests that the personnel are bilingual as well), whereas the majority in Finland and Turku are Finnish speakers so in public mostly Finnish is used. Obviously these people carry a very different role in the development of the subjects' language skills

compared to each other and to members of family for example, but the cashiers in shops mirror the situation in Finland; in public life the students encounter Finnish speakers all the time, and in practice have to interact with them in Finnish as well, despite the official rules.

The students in this study are classified as balanced bilinguals if they reported in the questionnaire that one of the parents uses only Finnish when speaking to them and the other one uses only Swedish. The language in which the parents speak to the children (and not the other way around) was decided as the decisive point since that affects the child's linguistic development even before they themselves start using language/s actively. In the context of a study of this scale, it was decided that this is sufficient evidence to define an individual as a balanced bilingual. Of 34 pupils in the Swedish speaking school, as many as 20 reported this coming from "one parent one language" backgrounds. The majority of the remaining pupils reported that both languages are spoken at home, but one or the other more. In many cases, one parent speaks solely either Finnish or Swedish, and the other one speaks more or less both. In these kinds of situations it was decided that if the added numerical value from both parents equals 0 (i.e. both languages are spoken an equal amount at home), the pupils are also counted as balanced bilinguals. There was only one such case (*elev 17*), thus making the number of balanced bilinguals in the group 21; i.e. 61.8% of the sample. Nine pupils are classified as dominant bilinguals, although closer to balanced bilingualism since both languages are still spoken at home but one or the other more. The rest, i.e. only four, reported that they come from monolingual homes, two from a solely Swedish speaking family and two from a solely Finnish speaking family. They are thus classified as strongly dominant bilinguals in this study. These pupils still reported using both languages when talking

to their friends, teachers and other people outside home. As students from unilingual homes are nonetheless classified as dominant bilinguals in the study with the other nine pupils the percentage of dominant bilinguals is altogether 38.2.

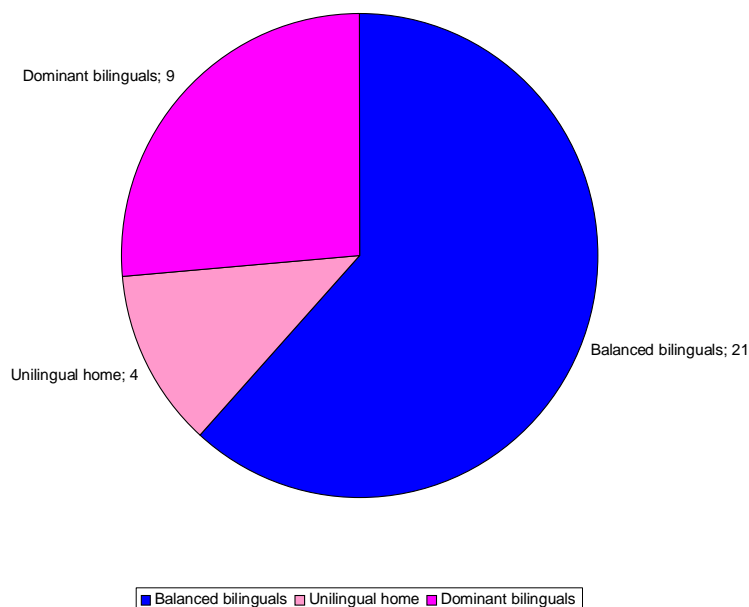


Figure 3 Balanced and Dominant Bilinguals in the Study

By comparing the average results between the students here categorised as balanced and dominant bilinguals, the results seem to follow similar guidelines with almost all the people or groups of people mentioned, especially in which language people outside the closest family speak to the pupils. The most extreme difference in the mean score came from what language the dominant bilinguals claimed to speak to ‘other important people’ in their lives; surprisingly only Finnish was mentioned. However, this question in the questionnaire was optional and everyone did not answer it; those dominant bilinguals who did so were mostly dominant in Finnish. Of those pupils who answered this question, about 40% of the subjects, added grandparents, best friends, people who they interact with in their free time activities or left the other important people unspecified but still answered on the scale (a few

mentioned pets as well, but those answers were not included since the animal cannot engage in conversation). Thus in Figure 3 all the other seven points were answered by the whole sample, except the one titled ‘other important people’ (in addition *elev 11* without siblings left that particular question unanswered, and there were two other unanswered questions as well by different pupils for an unknown reason).

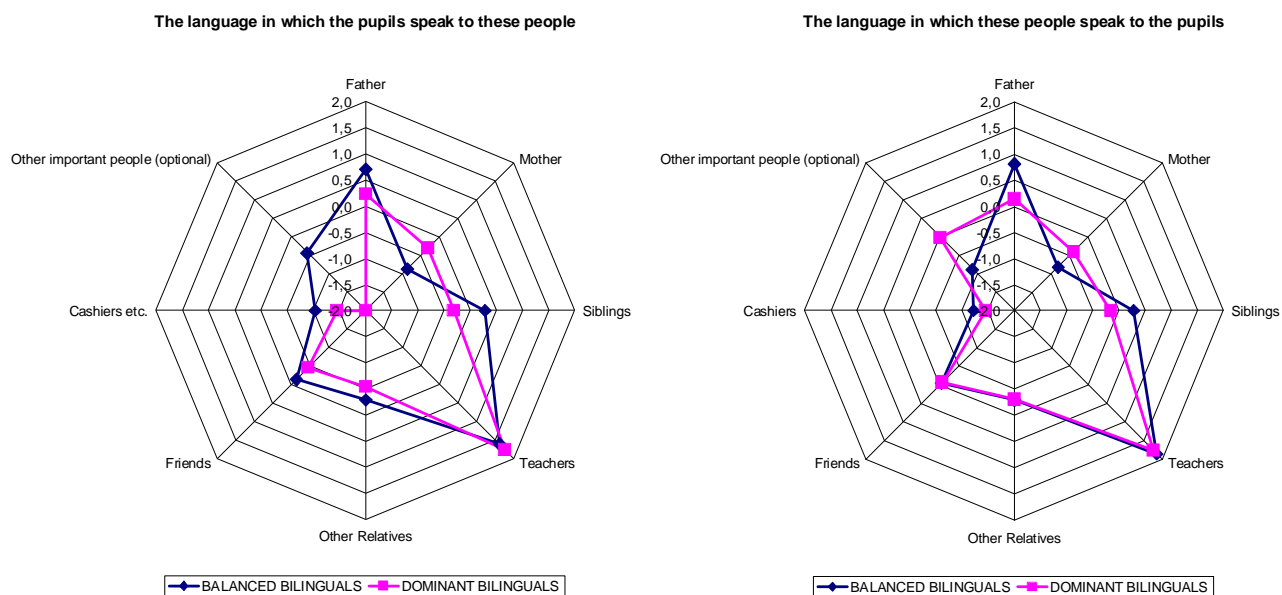


Figure 4 Dominant and Balanced Bilinguals’ Language Usage

Obviously one cannot draw far reaching conclusions from these average results, since the students’ backgrounds vary tremendously (from solely Finnish speaking families to solely Swedish speaking ones), but the answers from every individual can be found in the appendices. However no one reported speaking, or being spoken into, by all the different groups of people by one language only, so here too it became attested that all the subjects use both languages interactively.

In the final part of the questionnaire, the pupils were asked which language they use during different pastimes. Here Finnish seemed to be used more; especially listening to the radio seems to almost always happen in Finnish, which is probably explained by the fact that radio channels are overwhelmingly Finnish, although there

are a few national Swedish ones available as well. The above mentioned shopping also seems to happen in Finnish most of the time and, somewhat surprisingly, Finnish is used mostly with hobbies as well as the average gave a value of -1.03. In group activities where the majority are Finnish speakers, the bilingual speakers were unsurprisingly most likely to use that language as well, and many guided hobbies are probably only offered in Finnish in Turku. The fact that the children use both languages also outside the school in their freetime activities is a motivational factor that helps language learning and bilingual development (Cummins 244: 1979). With TV/DVD subtitles mostly Finnish is used again, but more Swedish too since with these media and the arrival of digital TV it is more easily available, and with reading the average came close zero suggesting that both languages are used as much, and that reading material in both languages is easily available.

The bilingualism of the pupils became also obvious by simple observation in the classroom and during the breaks between classes as the pupils proved to be frequent Finnish-Swedish code-switchers when speaking to each other as well as to the teachers, even though they were frequently advised to use the language of the school by the personnel. The pupils also had dialogues where the parties spoke different languages to each other without problems in understanding or fluency in the conversation, where both spoke the language they felt more confident in.

As the bilingualism of the pupils in the Swedish speaking school could be verified by the questionnaire as well as observation of the behaviour at school, I will from now on refer to them as *the bilingual group*; the students in the Finnish speaking school will be referred to as *the monolingual group* in analysing the results from the tasks. In addition, in analysing the results of the bilingual group they were grouped so that *elev 1-21* are the balanced bilinguals and *elev 22-34* are the dominant

bilinguals (furthermore *elev 31-34* are the ones who come from unilingual homes). The first part of the tasks, the Cloze test, was constructed in order to find out whether the bilinguals actually performed better in linguistic tasks than monolinguals, and also what role transfer and interference have on competent Swedish speakers.

3.2. Quantitative Results and Discussion

The Cloze test had in total 22 slots to answer, out of which two should be left empty. On the basis of the subjects' answers, an overall result was calculated; a point was given for each correct answer (also for leaving the slot empty when nothing was needed), giving a maximum score of 22 points. Answers with (minor) spelling mistakes were given a point as well as long as the word was recognisable (e.g. **between* instead of *between*, or **peopel* instead of *people*) and if form/tense were correct. No half points were given. By comparing the overall results of the Cloze test the bilingual group performed better than monolingual group with an average result of 14.7 points respective to an average of 12.5 points. No one achieved the full 22 points, and the best result, 20 points, came from the monolingual group (in the bilingual group the best result was 19). In addition to the highest, the lowest result (4 points) came from the monolingual group as well, whereas the lowest result in the bilingual group was 9 points. Thus the standard deviation (SD) between the groups varied greatly as well, with the bilingual group it was 2.73 compared to the monolingual groups 4.09: on average, the bilinguals scored better than the monolinguals in this test and also had less scattered results within the group.

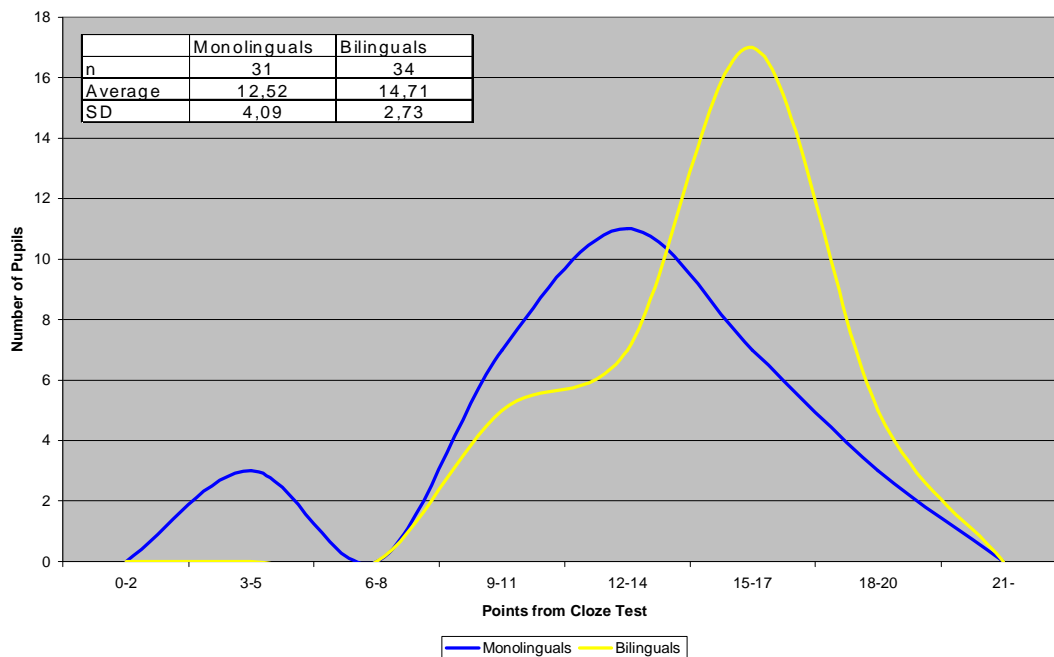


Figure 5 Results from the Cloze Test

The monolingual group showed clear differences between the weak and the strong performances in the group; it also had three pupils who scored under a third of the points compared to none in the bilingual group. Whereas 67.7% of the pupils in the monolingual group scored 14 points or below on the test (approximately two thirds of full points), the figure in the bilingual group was only 35.5%.

At the end of the Cloze test, a few open questions were put forward to test the pupils reading comprehension. These results were analysed in order to find out how well they actually understood the text and how the results from the reading comprehension correlated with the results from the Cloze test. In order to analyse the test results more thoroughly I will look at different aspects of the Cloze test next, and after that examine the results from the reading comprehension test.

3.2.1. Nouns

In five of the slots, the pupils were asked to translate a noun into English. These aimed at testing the pupils' vocabulary, as the words to be translated varied from basic to more unusual ones. In addition to analysing lexis only, their skills in plural and word formation (syntax and morphology) was tested as well.

The first one, *sailors* (pl), was presupposed as fairly easy since the text included the verb *sail*, from which the pupils could derive the noun. In fact the correct spelling of the word seemed to cause more trouble for both groups than translating the word; less than half the pupils in the bilingual group (44.1%) answered with the correct spelling, in the monolingual group the number was 35.5%. The most common misspelling in both groups was **sailers*, also **seylers* and **sealers* occurred. The bilingual group had the most variation in their misspellings, possibly because of the Swedish equivalent (sw.) *seglare* and its spelling. However, in this group all the pupils had put down a noun derived from *sail* despite the misspelling, (except for two unanswered slots), whereas the monolingual group had three verb like answers, e.g. **sailings* and **boathing* (as well as three unanswered slots). In addition the plural ending *-s* was missing in 16.1% of the answers in the monolingual group, compared to only 5.8% in the bilingual one; if the plural ending was missing, no point was given. Thus over 90% of the bilingual group got a point from this task, and also *elev 15's* excellent answer *seafarers* was noted as an accurate and a creative guess.

The second noun, *things* (pl), showed even a clearer difference between the groups as 88.2% of the pupils in the bilingual group answered correctly compared to only 58.1% in the monolingual group. The incorrect answers with the bilinguals consisted of only one unanswered slot and three answers with *stuff* (n.), which in a

sense is correct, albeit not register sensitive, and reveals the pupils' familiarity with popular culture. In the monolingual group 19.4% did not answer the question at all, and incorrect answers included *thinks* (v.) (four answers). This however might of course be just a misspelling of *things* (a very common misspelling for native Finnish speakers), but as it changes the meaning and even word class it was not accepted. Also an answer with *take* (v.) (different word class) and those without the plural ending occurred in the monolingual group, but not at all in the bilingual group (there even the answers with *stuff* were correct with a zero plural).

Similar results also occurred with the noun *men* (pl); even though every subject answered this slot, and all used the wordbase *man*, the vast majority of the bilingual group produced the correct plural form (82.4%). Here, positive transfer from Swedish is likely to have affected the results (the plural form of sw. *en man* is *män* /men/). Nevertheless the pupils in the Swedish school also spelled the word correctly, and no one used the Swedish spelling. In the Finnish school only 41.9% produced the correct plural form, whereas all the rest (incorrect) answers had the plural ending *-s* (e.g. **mans*, **man's*, **mens*). The monolingual group had not been taught the irregular plurals yet, which may explain the big ratio of incorrect answers, however in connection to this fairly common noun the irregular form had been introduced before. They also lack the benefit of positive transfer compared to the Swedish speakers, but as noted above the Finnish group also made more mistakes in constructing regular plural forms.

In the light of the results mentioned above, producing the plural noun *people* (zero plural) showed interesting results, as a clear majority of the Finnish group had the correct answer (74.2%). With the Swedish group the percentage was lower, 67.6%. On this question answers with spelling mistakes (such as **people*,

**peopel, *pepole*) were marked as correct, whereas incorrect answers consisted of words where the plural –s had been added; in both groups these answers were either **peoples* or **humans*. Again one pupil in the bilingual group, *elev 32*, had come up with an alternative answer *men*; a creative solution and grammatically correct even if maybe not semantically suitable. The fact that such a clear majority of the monolingual group answered correctly suggests that this particular word and its irregular plural form was either familiar to them, or that luck played a part as well; here not adding the plural –s resulted in a correct answer. The fact that only 22.5% of the monolingual group got all the four plural forms discussed so far correct would support the latter view; with the bilingual group the percentage was 52.9%. In the bilingual group no positive transfer from their L1/2 was present in this case, possibly explaining why on this question there were relatively more incorrect plural forms (negative transfer or interference).

The most difficult noun, and word in the whole test, was *tribes* (pl). Only three subjects produced the correct word and form (one from the monolingual group and two from the bilingual group). This fairly unusual term was added in the test knowing that it would be difficult in order to see what and how the subjects would try to answer. Many pupils left this slot empty (67.7% of the monolinguals and 44.1% of the bilinguals); however in both groups the pupils also produced alternative answers, guesses, for the word. There were relatively more guesses, and more variation in the guesses for the word in the bilingual group, which supports the view of the bilingual group being more creative and free to guess an unknown word rather than wanting to find one correct answer. Six pupils answered *groups* in the bilingual group, making it the most popular answer, in the monolingual group three pupils answered this (although none of them spelled the word correctly). Transfer from both

language groups was visible; the Finnish monolinguals had written down for example **heimos* and **hemous* (*tribe* in fi. is *heimo*) and the Swedish speakers had entries for **stams* and **stames* (*tribe* in sw. is *stam*). The guesses of the monolingual group concentrated on the above mentioned, whereas the bilingual pupils also produced words such as *villages* (*elev 3*), *smallstates* (*elev 9*) and *folks* (*elev 13*), which are all excellent attempts to paraphrase the word. Other suggestions included *stocks*, *flocks* and **hereds*. Again all the answers in the bilingual group had the correct plural ending, whereas in the monolingual group it was missing in 12.9%, and one of the incorrect answers even included an ending foreign to English: **hemoun*.

With nouns it would seem that in addition to more correct answers, the bilingual group was more sensitive to word classes, since their answers were in vast majority nouns even if incorrect ones compared to the monolingual group. The bilingual group also outperformed the monolingual one in linguistic skills by producing more correct plural forms, even irregular ones. In connection to unfamiliar words the bilingual group was also more innovative in their guesses, producing words such as *seafarers*, *smallstates* and *stuff* for example, instead of just leaving the slot empty. With adjectives similar results were found.

3.2.2. Adjectives

There were two adjectives to fill in on the Cloze test. The first one, *famous*, occurred in connection with the word *sailors* (n, pl.). Both of the groups produced a fair number of correct answers (58.8% of the bilinguals and 51.6% of the monolinguals). In the monolingual group misspellings of the word also occurred (e.g. *fomus*, *famoys*, *fames*), whereas in the bilingual group all spelled the word correctly. In addition six

bilinguals (17.6%) produced an adjective *known* (also spelled **cnown*), which no one in the monolingual group did – the bilingual children were able to derive the adjective from a verb. The translations of the words were given in the language of the school, with the bilingual group the translation was sw. *kända*, derived from the verb *känna* (en. v. *know*), possibly leading some of the bilingual pupils to do the same in English. These answers were reasonable translations and marked as correct in the Cloze test.

The same number (six pupils) answered *popular* (adj.) (spelled variously) in the bilingual group, a word with a somewhat synonymous meaning although not correct in the context. However this answer was marked as a correct one since the end result was understandable and agreed with the context. In the monolingual group only one student used *popular*, other guesses included answers such as **puplig* (interestingly, in Swedish the suffix *-lig* is used to form adjectives from verbs) as well as *stars* and *idol*, probably as a result of a popular talent show format that was running on television at the same time. Only two pupils in the bilingual group left this adjective unanswered (5.9%), whereas in the monolingual group the number was eight (25.8%). Again, all the bilinguals' answers were adjectives, even if incorrect ones, but in the monolingual group answers included nouns (e.g. *idol*, *human*) and even a verb (*hearing*).

The second adjective, *round*, was answered correctly by everyone in the bilingual group. This is most likely a result of positive transfer, as the Swedish translation *rund* was given in the answer sheet. However, all the pupils also spelled the word correctly. In the monolingual group, on the other hand, nearly half of the pupils left this slot unanswered (48.4%), and only 29.0% could answer it correctly. Unlike the Swedish one, the Finnish translation *pyöreä* offers no such help, but

instead probably some interference and thinking errors since four pupils answered *ball* (n.) and one *circle* (n.), again from the wrong word class. However, *oppilas 30* actually wrote a footnote in Finnish under her answer saying “*laitoin siihen pallo vaik pitäis olla pyöreä*” (“I wrote down *ball* even though it should be *round*”, my translation), showing that she was aware that her answer was incorrect but decided to put it down anyway as semantically close, which can be a useful tool in at least for communicative purposes. However the bilingual group performed better with adjectives as well. Words from one more open word class were tested as well.

3.2.3. Verbs

Judging from the results, verbs were the easiest part on the Cloze test. When the pupils were asked to fill in the simple present tense *find*, 94.1% of the bilinguals had the correct answer, as well as 90.3% of the monolinguals. Only one pupil in the monolingual group did not know the verb, and the few mistakes in both groups were mistakes in tense as the pupils had filled in *found* (past tense).

The second place where a verb was to be filled in the pupils had to write down an auxiliary verb as well as the main verb in present tense, *can find*, which the majority in both groups again answered correctly (64.7% in the bilingual group and 83.9% in the monolingual group). The problem for the pupils in the bilingual group, and also the reason for the low result, was the word order in this particular slot, which I shall examine in more detail below. If the problems with word order are ignored, as many as 91.2% of the bilinguals produced the correct auxiliary and main verb in the correct tense. In the bilingual group, the same pupils who had a tense mistake in the previous verb repeated the mistake here as well. In addition, *elev 30* had used another auxiliary, *may find*, which is grammatically possible but incorrect

in the context. The negative transfer from Swedish showed in *elev 22*'s spelling of *can* as *kan*, as it is in Swedish. In the monolingual group however, the mistakes varied in nature, from using the wrong tense to using no auxiliary (two pupils) and one unanswered slot.

The third verb tested the subjects' syntactic abilities because it was in the third person which acts morphologically differently in English compared to other person cases. In this case, the verb in question was an irregular one as well. Somewhat surprisingly all the pupils in the monolingual group answered correctly, whereas in the bilingual group five pupils (14.7%) answered with an incorrect form; instead of the correct singular *is*, they had used the plural *are*. Again interference might be the cause of this, in Swedish the translation is (sw.) *är*, which is typographically and phonologically similar to *are*.

With verbs both groups did well, and nearly all the answers were from the right word class. For children of that age, verbs as a word class are possibly easier to recognise, and are not as abstract as prepositions and articles for example, to which I will turn to next.

3.2.4. Prepositions

Unlike Indo-European languages (such as English and Swedish), the Finnish language usually uses case endings instead of prepositions. Therefore the bilingual pupils were hypothesised to perform better (at least in the initial stages of learning) in the parts where prepositions were to be filled in, even though there could be interference as to which preposition should be used; in that sense both syntax and lexis was tested. In addition to five slots where a preposition was to be added, there was one slot that was to be left empty. This required analytical and grammatical

judgement of the text, so metalinguistic skills were needed, in which the bilinguals are also supposed to be superior to their monolingual peers.

However, prepositions caused problems for both groups. One of the easiest prepositions seemed to be *between* (possibly since it is semantically a more concrete preposition) that 70.9% of the monolinguals answered correctly, respective to 64.7% of the bilinguals. In addition to five unanswered slots in both groups, there were answers such as *opposite*, *beside* and *behind* (which are also prepositions used in relative positions) and also **middle of* three times, a sensible translation but incorrect in the context, as well as grammatically incorrect as it lacks parts of the prepositional phrase. However, the monolinguals did better with this preposition than in other parts, their success partly explained by the fact that this particular preposition is also used in Finnish (fi. pr. *välissä*) and thus possibly less abstract to them than the other prepositions. In Finnish the few prepositions express concepts that resemble adverbs, *between* being an example.

The other slot that both groups did relatively well in was the one to be left empty. 64.7% of the bilinguals and 45.2% of the monolinguals did leave it unanswered; whether they actually knew it to be the correct answer or simply left it empty because they did not know what to fill in is difficult to determine. However, investigating the pupils answer sheets as a whole it would seem the average result of those who left the slot empty is higher than the average result of all students in both groups and a majority of students who had the correct empty answer here did not have on average more unanswered slots elsewhere in the test either. The vast majority of incorrect answers in both groups were *in* (and some other prepositions). In the monolingual group there were also three answers with the indefinite article *an*, which did not occur in the bilingual group.

The preposition *from* proved to be difficult for both groups as well. It was the correct answer in two slots, *from Spain* and *from Greenland*. In both cases only a small percentage answered correctly (*from Spain* correct with 12.9% of monolingual group and only 8.8% of the bilingual group, with *from Greenland* no one in the monolingual group answered correctly, in the bilingual group the percentage was 8.8 again). The poor achievements in connection to this preposition can be explained by possible difficulties in understanding the text, and thus causing difficulties in discerning spatial dimensions. The vast majority of answers in both groups were prepositions anyway, and only one person in the bilingual group had left the slot unanswered in both cases. In the monolingual group there were slightly more unanswered slots. Again, the percentage of pupils who had answered something other than a preposition (articles or conjunctions) was again decisively bigger in the monolingual group (16.1% and 6.5%) compared to the bilingual one (8.8% and 0% respectively).

One of the prepositions to be filled in reflected the concept of time, in which both groups performed somewhat better. Exactly 50% of the bilingual group and 29% of the monolingual group answered *in 1451*, but in both groups over 20% did not answer this question, and interestingly in the bilingual group the definite article *the* appeared four times, whereas in this case the monolingual groups wrong answers consisted of other prepositions, and one *year* (n.); a good guess in the context.

Most of the correct answers came from filling in a preposition in space position; *in Italy*. In the bilingual group 88.2% answered correctly, whereas the percentage in the monolingual group was 93.5. Here the bilingual group probably had positive transfer help from Swedish (cf. en. *born in Italy* and sw. *föddes i*

Italien), which also aided the bilinguals in avoiding the snare that followed; two slots were positioned after each other before the word *Italy*, the one for an article should be left empty. Only 11.8% of the bilingual group answered incorrectly **in the Italy*, whereas in the monolingual group 41.9% had answered either this or even **in an Italy* and **in to Italy*. Most of the incorrect articles filled in connection with the preposition (and thus also making the phrase ungrammatical) shadows the monolinguals performance in connection with this preposition as well. Articles are also a feature that the Finnish language does not have, but Swedish does: similar results were expected to be found in connection to other articles in the test as well.

3.2.5. Articles

In the test there were four slots for articles, of which one was to be left empty. In two places, the indefinite article *a* was to be filled in, as well as one indefinite *an*. According to the hypothesis, the bilingual group was expected to perform better here with the help of positive transfer and linguistic knowledge, however the results did not completely support this view.

As mentioned above in connection with prepositions, the slot that was to be left unanswered caused more problems for the monolingual group: only 45.2% left the article out as should happen in English in connection with proper nouns with a unique reference. The same applies to Swedish, thus giving the bilingual group positive transfer help; 85.3% left the slot correctly empty.

The three slots where an article was to be filled in showed interesting results. With the indefinite article *a* (*pancake*), the Finnish group actually outperformed the Swedish group with a small though insignificant percentage (87.1% correct answers respective to 85.3%). Interestingly where the few incorrect

answers in the Finnish group were empty slots, they in the Swedish group were incorrect articles *an* and *the*, as well as one answer with *as*, with no empty slots. With the indefinite article *a* (*Viking*), the number of correct answers was lower, but again slightly better for the monolingual group (35.5%, whereas the bilingual group had 35.3%). Here the most common mistake in both groups was understandably the definite article *the*, but the bilingual group here again had more wrong answers from other word classes (prepositions and conjunctions), which did not occur with the monolinguals. With the last article, the indefinite *an* (*Irish monk*), the results were similar but even more visible; the monolingual group had 45.2% correct answers, whereas the bilingual group only managed 35.3%. Also here, the bilingual group had more incorrect answers from the wrong word class (prepositions). However altogether the monolingual group did leave more article slots unanswered than the bilinguals; possibly suggesting once again that the bilinguals are more at ease with trying an answer even if they are not sure about the correct answer. The fact that their incorrect answers here came from a wrong word class here is surprising because this was very rare with the open word classes.

Rather surprisingly, the monolinguals performed slightly better with the articles, providing that one excludes the one slot that was to be left empty. Perhaps teachers pay more attention to articles with the monolingual group precisely because it is an unfamiliar phenomenon to them, this would explain the results here. Moreover, the bilingual group did not actually have clear transfer help with the articles, since in Swedish articles depend on the gender of the noun, which is not a feature in English with nouns themselves, and the definite article is actually a suffix added to the noun: thus the noun can reveal the relevant information carried by articles. In this sense the different but related grammatical features may even have

confused the bilingual group. Nonetheless, there was also another part in the test that caused clear difficulties to the bilingual group.

3.2.6. Word Order

There was one place in the Cloze test where three words were to be filled in after each other. This was designed to see whether the pupils in the bilingual group could manage the right word order since it in Swedish differs from English in this particular case (cf. en. *in history books you can find* to sw. *i historieböcker kan du hitta*). The syntactic interference seemed to attest itself: 29.4% of the bilingual pupils had incorrect word order, compared to no one in the monolingual Finnish group. In Finnish, word order is relatively free compared to Swedish or English, which can partly explain why the monolingual students outperformed the bilinguals; instead of unlearning their L1's word order, they only have to learn the new language specific one. This also showed in the percentage of correct answers as a whole, 77.4% of monolinguals answered correctly in all aspects and only 58.8% of bilinguals. The incorrect answers mostly had to do with incorrect verb forms or auxiliaries that I have looked at above, but interestingly the monolingual group also made pronoun mistakes, which did not occur at all in the bilingual group. One pupil in the Finnish school used the pronoun *it* instead of *you*, and there was also an answer with a preposition instead of a pronoun (*of you find*). Three monolinguals left this slot unanswered (9.7%), which none of the bilinguals did. In this case, the word order seemed to cause problems for the bilingual group, but otherwise their answers were once again from the right word class, whereas the monolingual group managed the word order but made mistakes in word classes and finding the correct words (e.g. one answer with **fant* instead of *find*).

Table 1 summarises the results of the Cloze test. With each word the greater percentage of correct answers is marked with bold numbers.

	nouns	adjectives	verbs	prepositions	articles	word order
<i>word</i>	<i>sailors</i>	<i>famous</i>	<i>find</i>	<i>in Italy</i>	<i>a pancake</i>	<i>you can find</i>
bilinguals	91.2%	94.1%	94.1%	88.2%	85.3%	70.6%
monolinguals	70.1%	54.8%	90.3%	93.5%	87.1%	83.9%
<i>word</i>	<i>things</i>	<i>round</i>	<i>can find</i>	<i>in 1451</i>	<i>a Viking</i>	
bilinguals	88.2%	100.0%	91.2%	50.0%	35.3%	
monolinguals	58.1%	29.0%	83.9%	29.0%	35.5%	
<i>word</i>	<i>men</i>		<i>is</i>	<i>from Spain</i>	<i>an Irish...</i>	
bilinguals	82.4%		85.3%	8.8%	35.3%	
monolinguals	41.9%		100.0%	12.9%	45.2%	
<i>word</i>	<i>tribes</i>			<i>from Green..</i>	<i>Italy</i>	
bilinguals	5.9%			8.8%	85.3%	
monolinguals	3.2%			0.0%	45.2%	
<i>word</i>	<i>people</i>			<i>between</i>		
bilinguals	67.6%			64.7%		
monolinguals	74.2%			70.9%		
<i>word</i>				<i>sailed _ to</i>		
bilinguals				64.7%		
monolinguals				45.2%		

Table 1 Percentages of Answers Marked as Correct for Both Groups

The overall result showed that the bilingual group performed better in this part of the test, and from Table 1 one can see that they did especially well with the open word classes where differences to the monolingual group were significant. With the closed word classes, the results were not as visible, and contrary to the hypothesis the monolingual group actually outperformed the bilinguals in many cases, sometimes only with an insignificant percentage though.

3.2.7. Reading Comprehension

The reading comprehension part of the test consisted of three questions in the language of the school (Finnish or Swedish), which were also to be answered in that language. A correct answer in each of the three questions gave two points, thus six being the maximum. The subjects could also be given one point for a correct but incomplete answer, whereas half a point or smaller were not given. On average the

bilingual group performed better on this task as well with an average result of 3.3, whereas the average with the monolingual group was 2.9.

However, with this task the SD was greater in the bilingual group; the group had more students who achieved higher points (5-6) but also those who got zero points which did not occur in the monolingual group at all; for some reason in the bilingual group three students did not answer these questions at all even though they were instructed to at least guess. These students did score in the lowest quarter of the whole group in the Cloze test as well, which would imply that they had problems in understanding the text as a whole and felt unable to answer these questions. The time to complete both tasks was also limited to 45 minutes (one teaching unit) for both groups, which also may have affected the results of some pupils, especially when keeping in mind Mägiste's (1981) results of monolingual advantage on reaction times. However, this is a surprising result as the bilinguals have been thought of as being creative and able to guess things with more ease.

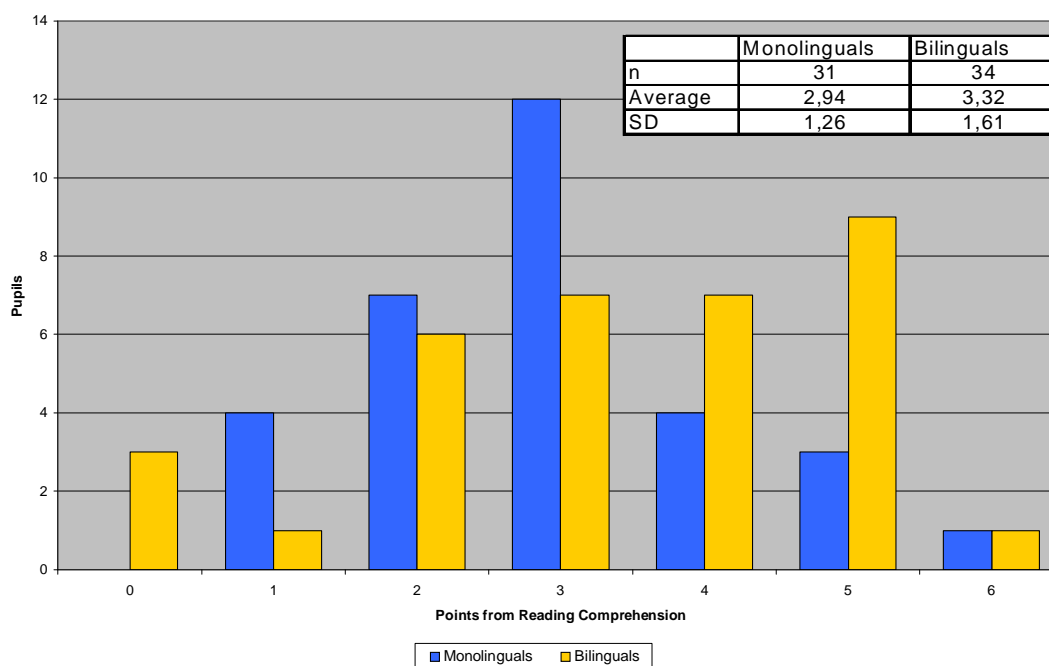


Figure 6 Results from the Reading Comprehension Test

Judging from the results, both groups had difficulties in understanding the text, but this was not a surprise since the text was taken from a textbook meant for pupils in their 7th year. With the monolingual group, the results from the test generally seem to follow the Gauss frequency curve, whereas with the bilingual group the curve is rising so that the greatest number of answers achieved points from the highest third.

Everybody (except those who did not answer anything) had understood that Columbus took back potatoes and tomatoes, but the reason for doing so remained unclear to many. In this case, with both groups transfer helped in translating the words. In that sense this question was the easiest as the least number of students failed to score in it. The question with the most answers that gave 2 points was the last one about *St Brendan* (64.7% of the bilingual group and 48.4% of the monolingual group). In these questions, the answer could be found in a single sentence, whereas the answer to the first question had to be constructed from different places in the text. This required a more overall understanding of the text and thus also was the most difficult one to answer. In the bilingual group 50% managed an answer with either 1 or 2 points, compared 41.9% of the monolingual group. Above it was mentioned that bilinguals are more sensitive to cues and details (Ben-Zeev 1997: 40-41), which may have affected here. In addition to a better total average on this task, the bilingual group also had more 2 point answers on every question, even though there were the three unanswered papers. Since only one person scored the maximum 6 points (*elev 15*), the correct answers in the questions were spread over different pupils. The fact that the bilingual group also succeeded on average better in this task as well correlates with the better result in the Cloze test; it is easier to fill in the gaps in the text if you understand what is being said. This view

is also supported by the fact that the pupils in both groups who scored in the lowest quarter in the Cloze test got 3 points or less in the reading comprehension.

One interesting point to be made on the answers in the reading comprehension task has to do with the bilingual group and code-switching. The answers were supposed to be made in the language of the school, with this group Swedish, and that was also the language in which the questions were posed. However, three pupils (*elev 9, elev 20 and elev 33*) had written the answers in English, and two (*elev 1 and elev 4*) in a mix of both English and Swedish in the answers; everyone except *elev 33* are balanced bilinguals. These answers were marked similar as the others written in the correct language, but why the pupils made this mistake remains unclear; maybe they did not read the instructions carefully enough. However the questions were made in the language of the school, and no one in the monolingual group answered in the wrong language. As mentioned in Chapter 1, balanced bilinguals have a fused representation of meanings and labels in their brain (Romaine 1995: 79), which would in this case mean Finnish and Swedish, could it be that here when learning a related language to Swedish they sometimes find it hard to switch between the languages in the middle of an exercise or that they get mixed as in the case of *elev 1* and *elev 4*. In the next task, the essay, the pupils were asked to write in English again.

3.3. Qualitative Results and Discussion

The purpose of the Essay task was not error analysis so much as in the Cloze test, but special attention is paid to things such as range of vocabulary and creativeness. The pupils were not given specific instructions on how long the essay should be, but instead were encouraged to write as much as they wanted to. A simple word count of

the essays revealed that no major differences between the groups occurred despite the indefinite instructions. The average in both groups was over 90 words (slightly higher for the monolingual group), and both groups had a similar numbers of the shortest and the longest essays – this showed no significant difference between the groups.

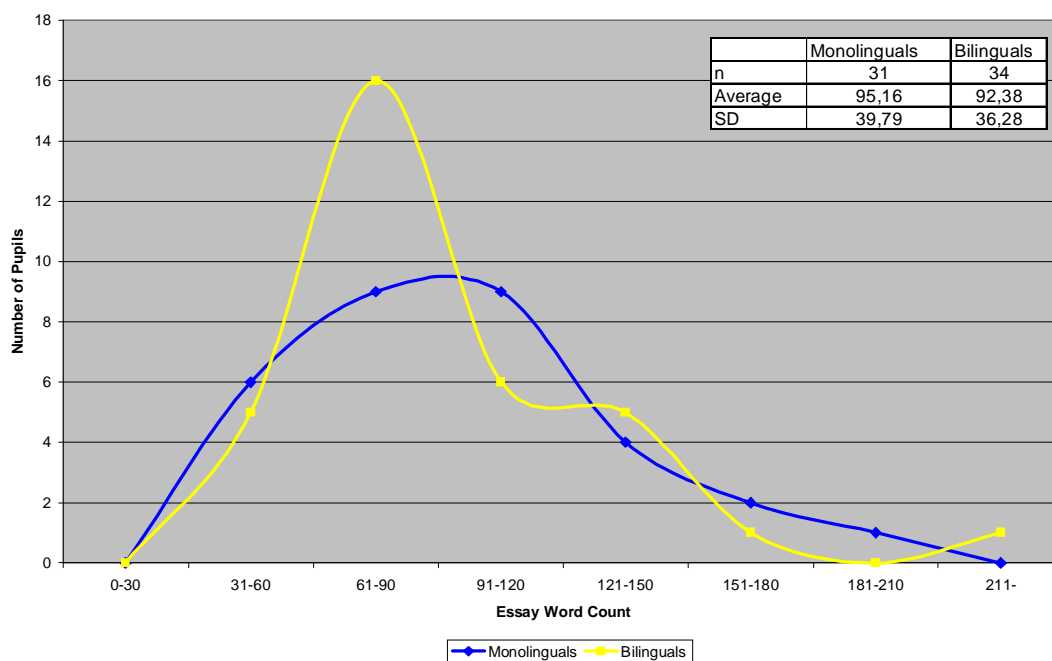


Figure 7 Essay Word Count

The pupils were also not explicitly instructed to use all the pictures in their essay, only to make sure that their text is somehow connected to them. Nevertheless 94.1% of the bilingual group did lucidly incorporate all the four pictures somehow into their text. Even the remaining two pupils had elements from three of the pictures into their text (for both of these students the word count was under 100) - the limited time they had to write the essays is likely to have influenced these results as well. With the monolingual group only 67.7% included all the pictures, and in that group there were two pupils who had only written about one of the pictures, and had no references to the others (both under 100 words). There were also two pupils with a

story on only two of the pictures (as well under 100 words) and six with three pictures incorporated (of which two were over a 100 words long). Taking this as a sign of lack of creativity or restricted vocabulary is far fetched, but nevertheless shows a difference between the groups; maybe the bilingual group was more eager to incorporate all the pictures in because they were uncertain whether they were supposed to do that or not. But as noted, bilinguals are supposed to be better at interpreting both verbal and nonverbal cues and to be more flexible, possibly making tasks like these easier for them.

When the errors in the texts are analysed and compared the bilingual group clearly outperformed the monolingual one. In the bilingual group there were nine essays without any mistakes in them (except spelling mistakes), whereas in the monolingual group there were no such essays; all of them had some sort of grammatical errors. However calculating a mark for the essays or ranking them based on the amount of mistakes and/or fluency for example was difficult since the word count varied; there were short essays with no mistakes in them and long ones with a lot of problems. However an average of mistakes per essay was calculated and the differences between the groups were vast: the monolingual group had on average 1.55 different kinds of mistakes per ten words in the running text, where as the number with the bilingual group was 0.36 (These figures refer to grammatical mistakes only, misspellings have not been included). This is such a significant difference that it is worth a closer look.

In connection with the Cloze test, the monolingual Finnish speakers were hypothesised to perform worse with articles and prepositions than the bilingual Finnish-Swedish speakers who benefit from already knowing a language that uses these constructions. With the essay task, this hypothesis seemed to attest itself;

nearly everyone in the monolingual group had both article and preposition mistakes in their text - they were overwhelmingly the most common mistakes made - whereas in the bilingual group only a minority made mistakes in these (23.5% had article mistakes and 27.4% had preposition mistakes). Moreover, unlike the results from the Cloze test, the bilingual group made fewer mistakes in word order than the monolingual group. In general, word order mistakes were rare. The monolingual group also had a greater variety of different kinds of mistakes, whereas with the bilingual group the mistakes were mostly of a similar kind. In the monolingual group there were for example verbless clauses, double negatives, incorrect pronouns and use of adjectives instead of adverbs, which did not occur in the bilingual group. In the monolingual group there were also three essays where the clauses were mostly simple *subject-verb* or *subject-verb-object* type; in the bilingual group all essays had also more complicated (correct) clauses.

The person and tense of verbs was a problem for both groups; third person verb forms caused difficulties even though they have been taught, with tenses the problem is more understandable since some of them are taught only in lower secondary school. The clear majority of the texts in both groups were written in the third person; usually because the subjects were describing a fictional family. However, in the monolingual group 22% of the pupils wrote their text in first person, compared to only 12% of the bilingual group. An even more obvious difference between the groups was shown in the tense: as the majority of the essays in the bilingual group were written in the past tense (74%), in the monolingual group the percentage was 48%, and the other half were essays in present tense. The essays in present tense (with both groups) were mostly descriptions of a family and their living environments, whereas essays in past tense were usually narratives about different

fictional incidences. In this sense the pupils in the bilingual group wrote more narratives, which also showed in their familiarity with the traditional English storyline as 26.5% started their essay with “*Once upon a time...*”. In the monolingual group only 9.7% used this, and the most popular opening in their group was “*Hey!*” or “*Hello!*” etc. (12.9%).

Names for elements in the picture series were recognised well by both groups; the names of family members and the farm animals in the pictures were recognised by almost all the subjects, as well as words such as *village* and *boat* to describe the other two pictures. Images from the background were incorporated only by a small minority (e.g. *lighthouse* by one pupil in both groups, *hat* and *fish/goldfish* by a few). Most of the essays followed a similar pattern in content, describing a family, their living environments followed by complications that were solved by taking the boat somewhere. Thus obvious differences in the range of vocabulary or creativity were not detected between the groups. The average number of different words from the open word classes (nouns, adjectives, full verbs and adverbs; according to Greenbaum & Quirk 1991: 16) was calculated for both groups; in this case the average for the monolingual group was higher, approximately 3.42 words per ten words in the text, whereas with the bilingual group the average was 3.33. Here again the standard deviation was bigger in the monolingual group, and the differences between the groups were small.

Interference with vocabulary could be seen in rare occasions with the bilingual group. For example *Elev 33* had written **billets* instead of *tickets* (cf. sw. *biljett*) and *Elev 31* used **reise* instead of *travel* (cf. sw. *resa*, interestingly German was not yet taught in school). Both of these pupils are dominant bilinguals, who come from monolingual homes; in Chapter 1 it was noted that compound bilinguals

are often more prone to interference (Beardsmore 1986: 122). Instead of using the indefinite article *a* some of the pupils from the bilingual group used *one*, also a sign of interference since the Swedish indefinite articles are also used as the numeral *one*.

The bilingual group had relatively more spelling mistakes than the monolingual group as they often spelled the words as phonetically or as a similar Swedish word is written. This was a rather surprising phenomenon as one would expect the monolingual Finnish speakers to have more problems with spelling as the spelling of Finnish and English differ greatly. For the bilingual group this can be seen as interference from the related language. In the monolingual group interference as such did not lucidly occur, but there were two pupils who had left an empty spot in the running text when they could not come up with a suitable word (e.g. “*my best friends are 11 _____ old*” *Oppilas 25*) or added a Finnish words in brackets (“*my cat live (siellä)*” *Oppilas 19*). This did not occur in the bilingual group, however there was one case where a pupil had added a Swedish translation in brackets to explain his choice of words; “*one day a killling (sjukdom) hit the village*” *Elev 24*. This pupil had tried to paraphrase the word that was lacking from his vocabulary, which Palmberg noted bilinguals doing more in conversation (1979). I will next take a closer look of a sample of interesting essays from both groups.

3.3.1. A Sample of Essays from Both Groups

In analysing the essays I have chosen a sample of answers from both groups that will be investigated in more detail; in addition to mistakes also syntactic and lexical complexity will be looked at. Three essays were chosen from the monolingual group (*Oppilas 4*, *Oppilas 6*, and *Oppilas 12*). From the bilingual group one essay per type of bilingualism is discussed: a balanced bilingual (*Elev 10*), and dominant bilinguals

(*Elev24*) and one from a monolingual home (*Elev 33*). With both groups the examples that were chosen included both essays that were longer and essays that were shorter than the group average. The same applied to the pupils score in the grammaticality and comprehension test; the scores are both over and under the group average. This was done in order to ascertain that the essays are representative of both groups.

From the essays that were chosen vast differences between lexis were not detected. The three bilingual subjects chosen had a slightly higher average of words from the open word classes. The monolingual group however, used more adjectives in their text. Nevertheless everyone had less than one adjective per ten words in the running text. With the other open word classes major differences did not occur. In fact, adverbs were hardly used in any of the essays.

In *Oppilas 12*'s essay the typical mistakes the monolingual group made were all present. She had left out most of the articles (e.g. *"*Family's dad George is police*") as well as prepositions and had incorrect verb forms (e.g. *"*her kids likes read books*"). If the bilingual group had interference problems with vocabulary, the lack of articles in the monolingual group can be seen as interference from Finnish, as the above mentioned example is a direct word to word translation from Finnish. The essay was written in the simple present, and only had declarative sentences in it, so syntactically it was not very challenging. Furthermore it only consisted of main clauses: the average length of the sentences was only eight words. However, even though she had 2.22 grammatical mistakes per ten words, she did produce for example a correct superlative form of an adjective ("*the happiest family*"). Lexically the essay did not demonstrate a great variety, but she did have mention computer

related words (e.g. *computer games, jam, switch off*) when describing the children's hobbies, which implies that acquiring vocabulary does happen outside school as well.

Oppilas 6 had only one picture incorporated in his text, but the word count of his text was still above the group average. In the essay he described a farmer who had a cow that could speak, which was a creative idea at least in the sense that no other pupil from the 65 pupil sample had used talking animals. His average for mistakes in the essay was below group average as well. However, when referring to the farmer he consistently confused the gender of the third person pronoun, referring to the farmer with both *he* and *she*. In the bilingual group this did not happen at all, probably because in Swedish third person pronouns express gender as well, whereas in Finnish they do not. He also made mistakes in verb tenses, and articles (e.g. **Then she pour some fresh mud to pig*"), however with the irregular verb *feed* he had produced a past tense, both the correct form *fed* as well as an incorrect **feeded*, suggesting familiarity with the past tense, although not consistency in the use. The whole essay was in past tense, and had a clear narrative, but used also only main clauses (average length seven words). In this sense it was not syntactically very complex. His text had a relatively high number of different words from the open word classes, suggesting a wide range of vocabulary, even if he only used one of the pictures as his reference point.

Oppilas 4's errors followed similar patterns typical of all the pupils in the monolingual group. He, for example, confused prepositions and articles or did not use them at all, and had problems with third person verb forms (**[he] goes to carage of his house and start to car*"), as well as used double negatives (**nobody don't cares*"). His essay as well had more than the group average of grammatical mistakes in it, and he lucidly used only three of the pictures. Nevertheless, the lexis

and content of the essay were original; the text was a narrative in third person about a businessman who drank contaminated water, decided to burn all his money and become a farmer. This and *Oppilas 6*'s essay demonstrate that the students who did not incorporate all the pictures in their essays were still produced creative texts with a varying vocabulary, possibly even more as these two texts had a unique content. *Oppilas 4* also used varying words in the correct context with other words (e.g. *go crazy*), and the essay was in its entirety coherent. In this essay, there were also subordinate clauses, so syntactically it was also more complex. This also showed as the longest average length of sentences in the sample of essay from the monolingual group: approximately 12 words.

The bilingual group had noticeably more spelling mistakes in their essays compared to the monolingual group, but fewer grammatical errors. *Elev 10* demonstrated this with a wide range of phonetic spellings, e.g. **Wans* (for *Once*) and **veigation* (for *vacation*). He also had problems with articles as he used incorrect ones or a numeral (e.g. **"...a happy family with one mother, one dad and two children"*, and **"...wanted to go on an veigation on an boat"*). *Elev 10* is classified as a balanced bilingual. His essay as well was a narrative in third person and past tense, and he was one of the pupils who started their essay with *Once upon a time...* and even ended with *The end*. Judging from the number of words from the open word classes he did demonstrate a quite wide range of vocabulary, but in terms of content his essay was not very original as it described a family who worked hard on a farm, but after a holiday on a boat they felt more relaxed. However he produced correct past tense forms throughout the essay and fairly complex sentence structures and subordinate clauses. In fact, his essay consisted of only six sentences, making them

approximately 15 words long; the structure of the sentences was grammatically correct.

Elev 24 was one of the pupils who wrote a grammatically false free text. He was classified as a dominant bilingual. His essay did not even include spelling mistakes, as the one mistake in his paper can be regarded as a slip: **“...a killing (sjukdom) hit the village and the decided to avoid it by moving out from the continent”*. Even though his 85 word long essay only included one adjective, he used a wide vocabulary, explaining how the family earned their income and what they did to avoid the catastrophe that hit their home. As mentioned above, he used his creativity to fill the lack in his vocabulary by word formation from a verb he knew. His narrative was in the past tense, consisted of different clause types and was coherent throughout. The average sentence length in this essay was 17 words.

Elev 33 came from a monolingual Finnish speaking home and was thus classified as a (strongly) dominant bilingual. As mentioned above, direct interference from Swedish showed in some of her word choices. In addition, the vocabulary she used was not very varied. She made two times more grammatical mistakes in her essay compared to the bilingual group average, but no article or preposition mistakes which were typical to the monolingual Finnish speaking group. However she did have problems with verb tenses and plural forms more than the bilingual groups did on average. Her essay was syntactically quite complex as it combined different tenses; she first described a family and how they met an old man in the present tense, and then switched into the past tense as the old man started to tell a story about his youth, and even had a sentence in the future tense as well. This complexity in the structure probably caused the problems she had with verb tenses. She did have a few subordinate clauses in her text, but her average sentence length was only nine words,

i.e. considerably shorter than the other two pupils from the bilingual group looked at above.

Significant differences in grammatical correctness and range of lexis between the types of bilinguals in the bilingual group could not be detected, possibly because of the small sample or because the differences turn out to be minimal by the end of studies in comprehensive school. *Elev 33* who came from a monolingual home had the weakest essay from the ones that were analysed here, but similar weaker performances could be found from the other types of bilinguals as well. When tested, the average word counts for the essay were not statistically significant either.

The differences in length were not significant between the bilingual and the monolingual group either. The same applied to the range of vocabulary when tested by comparing words used from the open word classes. However, differences between the groups were greater in terms of grammatical correctness and syntactic complexity, in which the bilingual group outperformed the monolingual one. The monolingual group, on the other hand, had fewer problems with spelling.

4. Conclusion

In this paper it is argued that bilingualism, if supported sufficiently, can have certain advantages for the individual. Previous research have concluded that bilinguals may be able to orient more analytically to languages, have greater metalinguistic awareness and are more flexible, for example. All of these attributes can also be associated with successful language learners, thus it was hypothesised that bilingual children would achieve better results in their foreign language studies compared to monolingual children. Finland, and Turku, offered an optimal environment to carry out the study as Finnish-Swedish bilinguals and monolinguals here live peacefully side by side. Both groups attend schools where a national curriculum is followed, and live in the same area so have similar socioeconomic backgrounds.

Judging by the overall results the bilingual group did perform somewhat better in the exercises than the monolingual control group. With the Cloze test the bilinguals' average was higher in both parts of the test, and thus also in the total (28 points altogether): their average score was 18 compared to the monolinguals' 15.5. A statistical difference between the groups could not, however, be detected, and because of the small sample size generalising the results to the whole population of mono- and bilingual language learners is not possible. Both groups were heterogeneous in their results; however the standard deviation was bigger in the monolingual group. Nevertheless some differences between the groups were demonstrated and similar results with other groups alike can be assumed.

Many of the mistakes the bilinguals' made often seemed to be the consequence of interference from their other language, Swedish. As Swedish is related to English, it no doubt had a positive effect in some parts as well. For the

monolinguals no such effect was available. The positive effect of already knowing a related language, for example in vocabulary acquisition, is acknowledged, but the primary concern of this study was to investigate other possible positive effects of bilingualism itself in foreign language learning.

In addition to the better average score in the tasks, the bilinguals also seemed to be more sensitive to word classes; even if their answer was incorrect, it often was from the right word class, whereas the monolingual group did more mistakes in them. This would support the view that bilinguals have a more analytic orientation to languages than monolinguals. Seminal researchers such as Bialystok (for example 2001) have previously argued that bilinguals have greater word and syntactic awareness. This can also be seen as a sign of better cognitive control, which however does not imply that the bilinguals are better in grammar. In the Cloze test the monolingual group left more questions unanswered than the bilingual group, which suggests that the bilingual group guessed more. This is in line with the results Palmberg (1979) gathered; that bilinguals used paraphrasing more as a problem solving skill than avoidance that was used by the monolinguals. The bilingual group also made fewer grammatical mistakes in their essays and their texts were more cohesive than the essays the monolinguals wrote, supporting the view that bilinguals are more sensitive to cues, and as Ben-Zeev (1977) noted are better at integrating things into a cohesive unit.

However, in the reading comprehension the situation was the opposite; here the bilinguals had more unanswered questions, even when the three totally empty answer sets are eliminated. Their average score was nevertheless better, which would imply that they did understand the text better. This, as well as the slightly lower average word count in the Essay task could be explained with the results

Mägiste (1981) reported in her study; she noticed that bilinguals' reaction times were slower compared to monolingual children, and the more languages are involved, the more time it takes for them to complete tasks (1981: 272). In this study, both groups had 45 minutes (one study unit in class) to complete the tasks. The bilingual group also made more spelling mistakes; as noted bilinguals can have problems in school with their L1, that is in reading and writing, which would also affect reading and writing in foreign language. This disadvantage however levels out with age, and bilinguals should be able to succeed in any school subject as well as monolinguals. When the results of the national matriculation examinations (taken at the end of upper secondary school) are compared, for example, the failure percentage is actually considerably higher for Finnish school (7.27%) than for Swedish schools (3.02%) (Ylioppilastutkintolautakunta 2007). However, here again, the bilingualism of all the students cannot be verified as the statistics are based solely on the language of the school.

The bilingual group was divided further into balanced and dominant bilinguals. As balanced bilingualism is associated with simultaneous bilingualism, they were hypothesised to perform better; this has been the result of previous studies mentioned in Chapter 1 as well, for example Sundman (1994). However, significant differences between the groups did not occur; in the Cloze test the average for balanced bilinguals was 14.8 and for dominant bilinguals 14.6, and in the reading comprehension the averages were 3.4 respective to 3.2. Both groups had low and high scores in both tasks as well. Here a larger sample would have been needed to draw conclusions on possible differences.

In Chapter One, age was also discussed in connection with language learning. Debates about when languages should be introduced in school are also

ongoing in Finland. Since no comparisons between different age groups were made here it is hard to say whether age had an effect on the results. However, both groups were by the end of elementary school able to produce text and comprehend a rather complex text in a foreign language. The early introduction of languages in school does seem to give good results, and should not be a problem for either group, since home languages are supported as well. Introducing languages early also increases the children's contacts with other cultures as well.

The particular situation that the Swedish speaking minority are in Finland and in Turku, means that the results cannot be generalised to other, less privileged, groups of bilinguals. Increasing internationality is evident in Finland as more and more immigrants settling here as well. This means that the amount of L1's that need systematic support in school increase as well. As the socio-economic situation for immigrant families is also often difficult, the school success of the children can be impeded, as well as them becoming successful bilinguals in learning the majority language, Finnish. This puts them in an even more unprivileged situation. Even with the limited resources our school system has, this issue is worth serious discussion. As noted, bilingualism is not uncommon or strange, and people are capable of handling it, and more languages as long as their L1 is sufficiently supported and developed. In order to be able to generalise the results of this study to the whole Finnish-Swedish bilingual population a greater sample and a longitudinal study is needed. In addition, a future research area could be a study on immigrant children in Finland and their bilingual development; how this process could be supported in order to gain beneficial effects.

REFERENCES

- Abrahamsson Birgitta et al. (eds) 2002. *Åboarna – En hemstadsbok om det svenska Åbo*. Åbo: Åbo samfundet ry.
- Auer Peter (ed.). 1998. *Code-Switching in Conversation: Language, interaction and identity*. London: Routledge.
- Auvinen Merja, Hutchings Jonathan, Karasjoki Seija, Koivu Anneli, Lang Ian and Mononen-Aaltonen Marja 1996. *Go for Success 7: Textbook*. Helsinki: Otava.
- Baker Colin 1996. *Foundations of Bilingual Education and Bilingualism*. Clevedon: Multilingual Matters.
- Baker Colin 1988. *Key Issues in Bilingualism And Bilingual Education*. Clevedon: Multilingual Matters.
- Baetens Beardsmore Hugo 1986. *Bilingualism: basic principles* 2nd ed. Clevedon: Multilingual Matters.
- Beijar Kristina et al. 1998. *Ett land två språk – den finländska modellen*. Espoo: Gummerus.
- Ben-Zeev Sandra 1977. Mechanisms by Which Childhood Bilingualism Affects Understanding of Language and Cognitive Structures. In Hornby (ed.): 29-57.
- Bialystok Ellen (ed.) 1991. *Language Processing in Bilingual Children*. Cambridge: Cambridge University Press.
- Bialystok Ellen 1991. Metalinguistic dimensions of bilingual language proficiency. In Bialystok (ed.): 113-140.
- Bialystok Ellen 2001. *Bilingualism in Development: Language, literacy, and cognition*. Cambridge, UK : Cambridge University Press.

- Bialystok Ellen and Cummins Jim 1991. Language, cognition, and education of bilingual children. In Bialystok (ed.): 222-232.
- Burns Robert B. 2000. *Introduction to Research Methods* 4th ed. London: Sage.
- Cenoz Jasone, Hufeisen Britta and Jessner Ulrike (eds) 2001. *Cross-linguistic Influence in Third Language Acquisition*. Clevedon: Multilingual Matters.
- Cenoz Jasone 2001. The effect of linguistic distance, L2 status and age on cross-linguistic influence in third language acquisition. In Cenoz et al. (eds): 8-20.
- Cohen Louis, Manion Lawrence and Morrison Keith 2000. *Research Methods in Education* 5th ed. London: Routledge.
- Crystal David 1987. *The Cambridge Encyclopedia of Language*. Cambridge: Cambridge University Press.
- Cummins James 1979. Linguistic Interdependence and the Educational Development of Bilingual Children. *Review of Educational Research* 2: 222-251.
- Cummins Jim 1984. *Bilingualism and Special Education: Issues in Assessment and Pedagogy*. Clevedon, Avon: Multilingual Matters.
- Cummins Jim and Swain Merrill 1986. *Bilingualism in Education*. London: Longman.
- De Angelis Gessica and Selinker Larry 2001. Interlanguage transfer and competing linguistic systems in the multilingual mind. In Cenoz et al. (eds): 42-58.
- Diaz Rafael M. and Klinger Cynthia 1991. Towards an explanatory model of the interaction between bilingualism and cognitive development. In Bialystok (ed.): 167-192.
- Eastman Carol M. (ed.) 1992. *Codeswitching*. Clevedon, UK: Multilingual Matters Ltd.
- Einarsson Jan 2004. *Språksociologi*. Lund: Studentlitteratur.

Ejerhed Eva and Henrysson Inger (eds.) 1981. *Tvåspråkighet*. Umeå: Universitetet i Umeå.

FINLEX – Valtion säädöstietopankki 2006. Kielilaki [online]. Available:

<http://www.finlex.fi/fi/laki/ajantasa/2003/20030423> (17 November 2006).

Gestrin-Hagner Maria 2007. Svenska barn sämre i skolan. *Vasabladet*: 14 February 2007.

Greenbaum Sidney and Quirk Randolph. 1991. *A Student's Grammar of the English Language*. Harlow: Longman.

Gumperz John J. 1982. *Discourse Strategies*. Cambridge: Cambridge University Press.

Gumperz John J. and Cook-Gumperz Jenny 2005. Making space for bilingual communicative practice. *Intercultural Pragmatics* 2: 1-23.

Hamers Josiane F. and Blanc Michael H.A. 1989. *Bilinguality and Bilingualism*. Cambridge: Cambridge University Press.

Hornby Peter A. (ed.) 1977. *Bilingualism: Psychological, social, and educational implications*. New York: Academic Press.

Hultman Tor G. 2003. *Svenska Akademiens språklära*. Stockholm: Svenska Akademien.

Hyltenstam Kenneth and Arnberg Lenore 1988. Bilingualism and Education of Immigrant Children and Adults in Sweden. In Paulston (ed.): 475-513.

Ikola Osmo 2001. *Nykysuomen opas*. Turku: Turun yliopisto.

James Carl 1998. *Errors in Language Learning and Use*. London: Longman.

Krashen Stephen 1981. *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon.

- Kuntaliitto 2007. Ruotsin- ja kaksikieliset kunnat [online]. Available: http://www.kunnat.net/k_perussivu.asp?path=1;29;341;486;496;30278 (16 January 2007).
- Kuure Olli 1997. *Discovering Traces of the Past Studies of Bilingualism Among School Pupils in Finland and in Sweden*. Oulu: Oulun yliopisto.
- Leinonen Therese and Tandefelt Marika 2000. *Svenskan i Finland – ett språk i kläm?* Helsingfors: Svenska handelshögskolan.
- Milroy Lesley. 1987. *Observing & Analysing Natural Language*. Oxford: Basil Blackwell Ltd.
- Myers-Scotton Carol. 1993. *Duelling Languages*. Oxford: Oxford University Press.
- Mägiste Edith 1981. De differentiella effekterna av automatisering och interferens vid tvåspråkighet. In Ejerhed & Henrysson (eds.): 272-279.
- Odlin Terence 1989. *Language Transfer: Cross-linguistic influence in language learning*. Cambridge: Cambridge University Press.
- Opetushallitus 2006. Luen, kirjoitan ja ratkaisen - Peruskoulun kolmasluokkalaisten oppimistulokset äidinkielellä ja kirjallisuudessa sekä matematiikassa [online]. Available: <http://www.edu.fi/julkaisut/aikima3.pdf> (6 March 2007)
- Palmberg Rolf (ed.) 1979. *Perception and Production of English: Papers on interlanguage*. Åbo: Åbo Akademi.
- Palmberg Rolf 1979. Investigating communication strategies. In Palmberg (ed.): 53-75.
- Palmberg Rolf and Ringbom Håkan. 1976. *Errors Made by Finns And Swedish-speaking Finns in the Learning of English*. Åbo: Åbo Akademi. (working papers by members of the error-analysis project, Department of English)

- Paulston Christina Bratt (ed.) 1988. *International Handbook of Bilingualism and Bilingual Education*. New York : Greenwood Press.
- Peal Elizabeth and Lambert Wallace E. 1962. The relation of bilingualism to intelligence. *Psychological Monographs* 27: 1-23.
- Poplack Shana 1980. "Sometimes I'll start a sentence in Spanish y termino en Español." *Linguistics* 18: 581-618.
- Qiang Yu 2000. *Bilingual Education, Cognitive Development and School Achievement*. Stockholm: Stockholm University.
- Ringbom Håkan 1976. What differences are there between Finns and Swedish-speaking Finns learning English? In Palmberg & Ringbom: 1-14.
- Ringbom Håkan (ed.) 1985. *Foreign Language Learning and Bilingualism*. Åbo: Åbo akademi.
- Ringbom Håkan 1985. Transfer in relation to some other variables in L2-learning. In Ringbom (ed.): 9-21.
- Ringbom Håkan 1987. *The Role of the First Language in Foreign Language Learning*. Clevedon: Multilingual Matters.
- Ringbom Håkan 2001. Lexical transfer in L3 production. In Cenoz et al. (eds): 59-67.
- Romaine Suzanne 1995. *Bilingualism*. 2nd edition. Oxford: Blackwell.
- Sandlund Tom. 1991. *Bilingualism in Finland*. Helsinki: Svenska litteratursällskapet.
- Singleton David. 1989. *Language Acquisition: The Age Factor*. Clevedon: Multilingual Matters.
- Skutnabb-Kangas Tove 1984. *Bilingualism or Not: The Education of Minorities*. Clevedon: Multilingual Matters.
- Sundman Marketta. 1994. *Tvåspråkigheten i skolan*. Åbo: Åbo Akademi.

- Tilastokeskus 2007. Suomen väestö 2006 [online]. Available:
<http://www.tilastokeskus.fi/til/vaerak/2006> (28 September 2007).
- Toukomaa Pertti 1975. *Siirtolaisoppilaan kielitaito ja koulumenestys: tutkimus suomalaisten siirtolaisoppilaiden kielellisestä kehityksestä ja koulumenestyksestä ruotsalaisessa peruskoulussa*. Helsinki: Työvoimaministeriö.
- Treffers-Daller Jeanine. 1992. French-Dutch codeswitching in Brussels: social factors explaining its disappearance. In Eastman (ed.): 143-155.
- Turun kaupunki 2007. Väestö kielen mukaan 1870-2005 [online]. Available:
<http://www.turku.fi/Public/download.aspx?ID=16500&GUID={63945AC0-D88A-45C8-A5D3-C03BB6BF819D}> (16 January 2006)
- Turun kaupungin 1-9 luokkien opetussuunnitelma 2007. Vieraat kielet [online]. Available:
<http://www.turku.fi/Public/download.aspx?ID=2264&GUID={3001C3E5-B6DF-4CC0-8D38-CCC7E04E1D08}> (19 February 2007).
- Wei Li 1998. The 'why' and 'how' questions in the analysis of conversational code-switching. In Auer (ed.): 156-174.
- Ylioppilastutkintolautakunta 2007. Ylioppilastutkinnossa hyväksytyt ja hylätyt kevät 2007 [online]. Available:
http://www.ylioppilastutkinto.fi/files/documents/Tilastot/yo-tutkinnossa_hyvaksytyt_ja_hylatyt_K2007.pdf (19 November 2007)
- Zentella Ana Celia 1997. *Growing Up Bilingual*. Oxford: Blackwell.
- Østern Anna-Lena 1991. *Tvåspråkighet & Lingvistisk Medvetenhet*. Åbo: Åbo akademi.

Appendix 1 The Language Background Questionnaire

namn: _____

Språklig bakgrund:

Kom ihåg att det finns inga fel svar!

	<u>finska</u>				<u>svenska</u>			
	(Mycket bra/Bra/Inte så bra/Inte alls)				(Mycket bra/Bra/Inte så			
bra/Inte alls)								
Kan du förstå det här språket om någon talar det med dig?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kan du tala det här språket?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kan du läsa det här språket?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kan du skriva det här språket?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vilket språk talas du med följande personer?

	<u>enbart finska</u>	<u>enbart svenska</u>
Far	I-----I	
Mor	I-----I	
Syskon	I-----I	
Lärare	I-----I	
Släktingar	I-----I	
Vänner/kompisar	I-----I	
Kassörer etc.	I-----I	
Andra viktiga personer i ditt liv:	I-----I	

Vilket språk använder följande människor när dem talar med dig?

	<u>enbart finska</u>	<u>enbart svenska</u>
Far	I-----I	
Mor	I-----I	
Syskon	I-----I	
Lärare	I-----I	
Släktingar	I-----I	
Vänner/kompisar	I-----I	
Kassörer etc.	I-----I	
Andra viktiga personer i ditt liv: _____	I-----I	

Vilket språk använder du för följande?

	<u>enbart finska</u>	<u>enbart svenska</u>
Att läsa (böcker, serietidningar dagstidningar osv)	I-----I	
Se på utländsk TV/DVDs (textad på vilket språk?)	I-----I	
Att lyssna på radio	I-----I	
Shoppande	I-----I	
Hobbyer/fritidssysselsättningar	I-----I	
Finns det andra språk du behärskar/använder? _____		

Tack!

Appendix 2 The Grammaticality And Comprehension Test – Monolingual Group

nimi: _____

Täytä aukot artikkeleilla (a/an/the), prepositioilla (esim. in/on/under..) tai alla pyydytyillä sanoilla. Muista että kaikkia aukkoja ei tarvitse välttämättä täyttää.

Christopher Columbus, one of the great explorers, was born _____ Italy _____ 1451. When he was 25, he went to Portugal, where many _____ lived at the time.
(kuuluisat) (purjehtijat)

Because he was quite sure that the earth was _____, not flat like _____ pancake, he planned to _____ a route to India sailing west. He crossed the Atlantic _____ Spain in 1492 and finally after weeks of sailing landed in the West Indies, south of Florida. When Columbus returned to Europe he brought strange and unknown _____ such as potatoes and tomatoes back. But in history books _____ people who went to America before Columbus. Nearly 500 years earlier, _____ Norwegian Viking, Leif Ericsson, sailed _____ Greenland and landed in 'Vinland', perhaps northern Newfoundland. He _____ only one of the Vikings who are thought to have sailed to North America. And in the 6th century, _____ Irish monk, St Brendan, sailed across the Atlantic when he was trying to get to the Canary Islands. But long before these _____ came to America, about 20,000-25,000 years ago, there was a land bridge _____ Alaska and Siberia. Hunters followed wild animals and crossed this 'bridge' from Asia. They lived in _____ and moved further south, some of them even went over to South America. These _____ were named Indians much later on by explorers who thought they had sailed _____ to India instead of finding America.
(löytää) (pyöreä) (asioita) (voit löytää) (on) (miehet) (välässä) (heimoissa) (ihmiset)

Vastaa kysymyksiin suomeksi:

Miten intiaanit alun perin pääsivät Amerikkaan?

Mitä tuotteita Columbus toi mukanaan Eurooppaan Amerikasta ja miksi?

Kuka St Brendan oli ja miten hän päätyi Amerikkaan?

Appendix 3 The Grammaticality And Comprehension Test – Bilingual Group

namn: _____

Fyll i luckorna med artiklarna (a/an/the), valfria prepositioner (t.ex.in/on/under..) eller de ord som indikeras. Kom ihåg att vissa luckorna kan lämnas tomma.

Christopher Columbus, one of the great explorers, was born _____ Italy _____ 1451. When he was 25, he went to Portugal, where many _____ _____ lived at the time. Because he was quite sure that the earth was _____, not flat like _____ pancake, he planned to _____ a route to India sailing west. He crossed the Atlantic _____ Spain in 1492 and finally after weeks of sailing landed in the West Indies, south of Florida. When Columbus returned to Europe he brought strange and unknown _____ such as potatoes and tomatoes back. But in history books _____ _____ people who went to America before Columbus. Nearly 500 years earlier, _____ Norwegian Viking, Leif Ericsson, sailed _____ Greenland and landed in 'Vinland', perhaps northern Newfoundland. He _____ only one of the Vikings who are thought to have sailed to North America. And in the 6th century, _____ Irish monk, St Brendan, sailed across the Atlantic when he was trying to get to the Canary Islands. But long before these _____ came to America, about 20,000-25,000 years ago, there was a land bridge _____ Alaska and Siberia. Hunters followed wild animals and crossed this 'bridge' from Asia. They lived in _____ and moved further south, some of them even went over to South America. These _____ were named Indians much later on by explorers who thought they had sailed _____ to India instead of finding America.

Svara på frågorna på svenska:

Hur kom indianerna ursprungligen till Amerika?

Vilka produkter tog Columbus med sig till Europa från Amerika och varför?

Vem var St Brendan och hur kom han till Amerika?

Appendix 6 Suomenkielinen tiivistelmä

Kielten opiskelu on kansainvälistyvässä maailmassa tärkeää, varsinkin pienille maille ja kieliryhmille. Suomessa vieraiden kielten opiskelu aloitetaan jo alaluokilla, ja useimmiten ensimmäinen pitkän oppimäärän vieras kieli (A1) on englanti. Suomessa on kuitenkin olemassa joukko lapsia, jotka jo hallitsevat kaksi kieltä, ovat *kaksikielisiä*, kun he aloittavat vieraan kielen opiskelun koulussa. Historiallisista ja poliittisista syistä maassamme on säilynyt ruotsinkielinen vähemmistö, joka elää valtaväestön, suomenkielisten, kanssa rinnakkain ja sopuisasti. Käytännössä ruotsinkieliset taitavatkin kuitenkin usein myös suomen kielen voidakseen asioida valtaväestön kanssa. Vaikka suurin osa ruotsinkielisestä väestöstä asuu Suomen rannikkoseudulla ja saaristossa, kontaktit suomenkielisen väestön kanssa ovat runsaat, eikä sosiokulttuurisia eroja ryhmien välillä juurikaan ole. Myös avioliitot eri kieliryhmien välillä ovat tavallisia.

Ruotsinkielisen vähemmistön asema on Suomessa turvattu lailla, jolla taataan heille oikeus mm. ruotsinkieliseen koulutukseen sekä muihin julkisiin palveluihin. Tämä takaa heille kansainvälisessäkin vertailussa harvinaisen etuoikeutetun aseman sekä otollisen ympäristön tutkielman suorittamiseen, sillä yksi- ja kaksikieliset eivät sosioekonomiselta ja kulttuuriselta taustaltaan eroa. Tutkielmassa oletetaan, että nämä suomenruotsalaiset kaksikieliset menestyvät paremmin vieraan kielen oppimisessa yksikielisiin verrattuna, koska hallitsemalla kaksi kieltä jo valmiiksi he ovat tietoisia kielten eroista sekä kokeneita eri kielten käyttämisessä.

Kaksikieliseen väestöön on perinteisesti liittynyt paljon ennakkoluuloja valtaväestön keskuudessa, mutta myös aiempien teoreettisten tutkimusten perusteella

kaksikielisistä ja heidän kielellisestä lahjakkuudestaan on saatu varsin ristiriitaisia tuloksia: toisaalta pelätään, että he eivät osaa kumpaakaan kieltä kunnolla, toisaalta kaksikielisten tulisi olla kielellisesti lahjakkaampia kuin yksikielisten. Tutkielmassa tarkastellaan useita aiempia tutkimuksia ja keskustellaan, miten niissä esiin tulleet edut ja haitat saattavat vaikuttaa vieraan kielen oppimiseen. Myös joitakin kaksikielisyyteen liittyviä negatiivisia ennakkoluuloja pyritään kumoamaan tieteellisten tutkimusten perusteella.

Kaksikielisyydestä

Kaksikielisyyttä ja kaksikielisiä tutkittaessa on ensin määriteltävä, mitä käsitteillä itse asiassa tarkoitetaan. Kielitaito toisessa kielessä voi vaihdella paljonkin ihmisten välillä, jolloin ongelmaksi muodostuu, ketkä määritellään kaksikieliksi. Myös ikä, jolloin kielet on opittu, sekä millä tavalla niiden omaksuminen on tapahtunut, otetaan usein määritelmässä huomioon.

Lapsuusajan kaksikielisyyttä liitetään usein tasapainoiseen kaksikielisyyteen, kykyyn hallita kaksi kieltä täydellisesti. Jos taidot toisessa kielessä ovat heikommat kuin äidinkielessä, puhutaan dominantista kaksikielisyydestä. Nämä kaksikielisyyden lajit voidaan nähdä jatkumon ääripäinä, joiden väliin puhujat sijoittuvat. On esitetty väitteitä, joiden mukaan täydellinen tasapainoinen kaksikielisyyttä on mahdotonta saavuttaa, sillä edes yksikieliset eivät hallitse äidinkieltään täydellisesti (esimerkiksi osaa kaikkia sanoja). Kaksikielisyyden voidaan myös katsoa kehittyneen eri tavoin: simultaani kaksikielinen on oppinut molemmat kielet samanaikaisesti, konsekutiivinen taas toisen kielen vasta äidinkielen kehittymisen jälkeen. Tasapainoinen kaksikielisyyttä yhdistetään usein simultaaniin oppimiseen, kun taas konsekutiivisen oppimisen katsotaan johtavan

dominanttiin kaksikielisyyteen. Konsekutiivinen oppija voi kuitenkin saavuttaa korkean kaksikielisyyden tason. Usein kaksikieliset käyttävät kieliään eri ympäristöissä, esimerkiksi jos toista kieltä käytetään lähiomaisten kanssa ja toista julkisissa yhteyksissä. Tällöin puhutaan diglossiasta. Tutkielman kannalta ei otettu kantaa siihen, tuleeko otoksessa olla ainoastaan simultaaneja ja/tai tasapainoisia kaksikielisiä, vaan kriteeriksi otettiin toiminnallisuus molemmissa kielissä arkielämässä.

Kaksikielisyyteen usein liitetty ongelma, kehittymättömät taidot molemmissa kielissä eli *puolikielisyys*, olisi tietenkin haitallinen kaiken uuden, myös vieraan kielen oppimisessa. Koska oletetaan, että kaksikielisyys päinvastoin on eduksi, täytyy puolikielisyyden mahdollisuus sulkea pois. Puolikielisyyttä onkin kirjallisuudessa kritisoitu: lapset omaksuvat kielen sosiaalisen paineen vuoksi, ja kielitaitoja on mahdollista kehittää koko eliniän. Mahdolliset kielellisen kehityksen ongelmat liittyvätkin todennäköisemmin yleisen kognitiivisen kehityksen ongelmiin eikä päinvastoin. Myös puolikielisyyteen usein liitettyä ilmiötä, *koodinvaihtoa*, tarkastelemalla voidaan puolikielisyys itse asiassa sulkea pois: useissa tutkimuksissa on todettu että koodinvaihto edellyttää huomattavia kykyjä molemmissa kielissä sekä molempien kielioppien hallintaa (Poplack 1980).

Positiivisen kaksikielisyyden kehityksen katsotaankin olevan mahdollista ainoastaan, jos äidinkielessä saavutetaan tietty osaamisen taso. Cumminsin (1979) mukaan kaksikielisyys voi kiihdyttää kognitiivista kehitystä, mutta vain mikäli toiset kielet eivät vaaranna äidinkielen kehitystä. Kun tietty taso äidinkielessä on saavutettu, näin ei enää voi käydä. Suomessa ja kaupungeissa kuten Turussa kaksikielisyyttä tuetaan mm. yllä mainittujen kielilakien avulla, ja lasten äidinkielen

kehitystä tuetaan koulussa. Täten voidaan puolikielisyiden mahdollisuus sulkea pois sekä todeta positiivisen kaksikielisen kehityksen olevan mahdollista.

Aiemmat tutkimustulokset kaksikielisyiden vaikutuksista ovat kuitenkin usein olleet ristiriitaisia. Kaksikielisyiden on katsottu sekä haittaavan että edistävän yleistä ja kognitiivista kehitystä. Usein tutkimukset on kuitenkin suoritettu lyhyellä aikavälillä pienellä otoksella, ja varsinkin kaksikielisyystutkimusten alkuvaiheessa poliittiset syyt vaikuttivat usein tuloksiin metodologisten ongelmien lisäksi. Ensimmäisissä tutkimuksissa raportoitiinkin useimmiten ainoastaan negatiivisia tuloksia; mm. kaksikielisten älykkyydosamäärän todettiin olevan yksikielisiä heikompi. Älykkyydosamäärätestit on sittemmin kyseenalaistettu, mutta myös muita kehityksen kannalta ongelmallisia tuloksia on raportoitu: kaksikielisten on usein todettu menestyvän koulussa yksikielisiä huonommin (esim. Toukoma 1975). Myös tämänkaltaisia tuloksia saaneita tutkimuksia on sittemmin kuitenkin arvosteltu metodologisista ongelmista. Haitalliset vaikutukset kognitiiviseen kehitykseen on järjestelmällisesti pystytty kiistämään, ja kaksikielisyteen liittyvät ongelmat johtuvatkin usein sosiaalisista syistä. Suomen oloissa näiden syiden ei pitäisi vaikuttaa vieraan kielen opiskeluun koulussa, jota tässä opinnäytetyössä tutkitaan.

Peal & Lambertin (1962) vaikutusvaltainen artikkeli oli ensimmäisiä jossa raportoitiin kaksikielisyiden positiivisesta vaikutuksesta kehitykseen. Heidän testiensä perusteella kaksikieliset kykenevät mm. jäsentämään abstrakteja käsitteitä paremmin, ovat älyllisesti joustavampia ja verbaalisesti lahjakkaampia, kaikki erinomaisia taitoja myös vieraan kielen oppimisessa. Tämän jälkeen useissa julkaisuissa on raportoitu vastaavia tuloksia. Kaksikielisten on lisäksi usein väitetty pystyvän tarkastelemaan kieltä analyttisesti, mikä edistää myös metalingvististen

taitojen kehittymistä (esim. Bialystok 1991). Diaz & Klingerin (1991) mukaan kaksikieliset pystyvät myös hallitsemaan kielen käsittelyn paremmin.

Näiden tutkimustulosten lisäksi kaksikieliset saattavat usein myös hyötyä aiemmasta kielitaidostaan positiivisen transferenssin kautta. Suomi ja ruotsi eroavat toisistaan sanastollisesti ja rakenteellisesti, kun taas englanti ja ruotsi ovat sukukieliä. Ruotsinkielisille tämä voi olla apu kielen opiskelussa, sillä sanaston lisäksi positiivinen transferenssi vaikuttaa myös fonologian, morfologian ja syntaksin tasolla. Yksikielisillä suomenkielisillä tätä etua ei ole, sillä myös suomi ja englanti eroavat suuresti toisistaan. On kuitenkin huomioitava, että tämä vaikutus ei aina ole positiivinen – toinen kieli voi vaikuttaa myös negatiivisesti uuden opiskelussa, jos kielen rakenteet tai samankaltaiset sanat siirtyvät virheellisesti uuteen kieleen. Tällöin puhutaan interferenssistä.

Tutkielmassa siis oletettiin kaksikielisen ryhmän hyötyvän kielitaustastaan myös vieraan kielen oppimisessa. Tutkielmaa varten vierailtiin kahdessa turkulaisessa peruskoulussa, joissa oppilaat suorittavat kaksi englannin kielen tehtävää, joiden tuloksia verrattiin toisiinsa.

Tutkimuksen tulokset

Turku on virallisesti kaksikielinen kaupunki, joten koulutusta tarjotaan joko suomeksi tai ruotsiksi. Tutkielman kaksikielistä ryhmää edusti joukko kuudennen luokan oppilaita (n=34) ruotsinkielisessä peruskoulussa. Toinen kouluista oli suomenkielinen, jonka oppilaat (n=31) edustivat yksikielistä vertailuryhmää. Tutkimus suoritettiin toukokuussa 2007, jolloin molemmat ryhmät olivat opiskelleet englantia kolme vuotta ja olivat päättämässä opintojaan alakoulussa. Perusopetuksen opetussuunnitelman perusteella molemmat ryhmät olivat siis saaneet yhtä paljon

opetusta vieraassa kielessä sekä opiskelleet samat kieliopilliset ja sisällölliset aihepiirit huolimatta eri oppikirjoista ja muista mahdollisista eroista koulujen välillä.

Kaksikielisten oppilaiden kielitausta tarkistettiin ennen tehtävien suorittamista kielitaustakyselyllä, jossa oppilaat arvioivat itse kielitaitonsa eri osa-alueilla sekä suomen että ruotsin kielessä ja selvittivät mitä kieltä/kieliä he käyttävät eri perheenjäsenten sekä muiden läheisten ihmisten kanssa. Kyselyn tulosten perusteella kaikki oppilaat arvioivat omat taitonsa molemmissa kielissä varsin korkeiksi, ja ainoastaan neljä oppilasta kertoi tulevansa yksikielisistä kodeista. Kuitenkin myös nämä oppilaat kertoivat käyttävänsä molempia kieliä päivittäin kodin ja koulun ulkopuolella. Heidät luokiteltiin dominanteiksi kaksikielisiksi yhdeksän muun oppilaan kanssa, joiden kodeissa kyllä käytettiin kahta kieltä, mutta toinen kielistä oli kuitenkin selvästi dominoiva. Loput 21 oppilasta sanoivat tulevansa kodeista, joissa vanhemmat järjestelmällisesti puhuvat eri kieliä lapsille. Täten heidät luokiteltiin tasapainoisiksi kaksikielisiksi. Kaikki ryhmän oppilaat voitiin siis todeta kaksikielisiksi. Yksikielisen vertailuryhmän kielitausta sen sijaan tarkistettiin suullisella kyselyllä ennen tehtävien suorittamista: kaikki oppilaat tulivat yksikielisistä kodeista, eikä kukaan ollut taustaltaan esim. maahanmuuttaja.

Molemmilla ryhmillä oli yksi oppitunti (45 min.) aikaa suorittaa tehtävät. Tehtävien taso suunniteltiin korkeaksi mahdollisten erojen esiin saamiseksi, ja tehtävien suunnittelussa käytettiin apuna yläkoulun seitsemännenn luokan oppikirjoja. Toisessa tehtävässä testattiin oppilaiden kieliopillisiä taitoja sekä sanavarastoa aukkoitehtävällä. Lisäksi tekstistä esitettiin avoimia kysymyksiä, joilla selvitettiin luetun ymmärtämistä. Aukkoitehtävään tuli lisätä sanoja useista eri sanaluokista, mutta osa aukkoista tuli myös jättää tyhjäksi: oikeita vastauksia varten oppilaiden oli siis kyettävä analysoimaan tekstiä myös syntaksin tasolla oikeiden sanojen

löytämisen lisäksi. Kaksikielinen ryhmä saavutti korkeamman keskiarvon aukkotehtävässä, myös keskihajonta ryhmän sisällä oli pienempi – yksikielisessä ryhmässä oli enemmän alhaisia pistemääriä.

Avoimissa sanaluokissa kaksikieliset pärjäsivät järjestelmällisesti paremmin, minkä voi tulkita laajempaan sanavarastona. Etukäteen oletettiin myös, että kaksikieliset hallitsivat paremmin artikkeleiden ja prepositioiden käytön, sillä niitä käytetään myös ruotsissa, mutta ei suomessa. Nämä sanaluokat olivat kuitenkin ongelmallisia molemmille ryhmille, ja yksikielinen ryhmä suoriutui useissa kohdissa jopa paremmin kuin kaksikieliset. Kaksikielisille tuotti myös ongelmia kohta, jossa tuli lisätä kolme sanaa peräkkäin: interferenssin vaikutus näkyi selvästi, sillä kyseisessä rakenteessa ruotsin ja englannin sanajärjestykset poikkeavat toisistaan.

Luetun ymmärtämistä testattiin kolmella tekstiin liittyvällä kysymyksellä. Kysymykset olivat koulun kielellä, ja niihin tuli myös vastata tällä kielellä. Kahteen kysymyksestä vastaus löytyi suoraan tekstistä, yhteen vastaus piti muodostaa useista eri kohdasta. Myös tässä tehtävässä kaksikielisten keskiarvo oli korkeampi, mutta tällä kertaa keskihajonta oli suurempi – kaksikielisessä ryhmässä oli yllättäen useita tyhjiä vastauksia. Tästä huolimatta kaksikielisellä ryhmällä oli enemmän täysien pisteiden vastauksia. He vastasivat paremmin myös kysymykseen, jonka vastaus tuli löytää tekstin lomasta suoran kääntämisen sijaan, mikä vaatii tekstin syvempää ymmärtämistä.

Toisessa tehtävässä oppilaita pyydettiin kirjoittamaan esse kohdekielellä. Valmiin otsikon sijaan tehtävälomakkeessa esitettiin kuvasarja, josta oppilaiden pyydettiin kirjoittavan: aihe oli muuten vapaa, kunhan kuvissa esiintyvät asiat ja esineet jotenkin liittyivät tekstiin. Myös tekstin sanamäärä oli vapaa, mutta oppilaita kannustettiin kirjoittamaan niin paljon kuin mahdollista. Esseetehtävän avulla

vertailtiin oppilaiden tuottavuutta, omaperäisyyttä ja kielellistä vaihtelevuutta sekä sanaston että kieliopin tasolla. Vaikka tehtävänannossa ei suoraan kehoitettu käyttämään kaikkia neljää kuvaa, valtaosa kaksikielisistä kuitenkin onnistui liittämään kaikki kuvat selkeästi tekstiinsä. Yksikielisessäkin ryhmässä enemmistö teki näin, mutta selkeästi useampi käytti vain muutamaa tai ainoastaan yhtä kuvaa esseessään. Kaksikielisten väitetty herkkyys yksityiskohdille sekä kielellinen joustavuus ja luovuus voidaan nähdä syynä tähän. Sanamäärän keskiarvoja verrattaessa kaksikieliset kuitenkin kirjoittivat hieman lyhyempiä tekstejä kuin yksikieliset, mistä voidaan päätellä, että eroja tuottavuudessa ei kuitenkaan esiintynyt.

Virheanalyysin perusteella kaksikieliset kirjoittivat kieliopillisesti merkittävästi parempia aineita. Ryhmä teki kuitenkin enemmän oikeinkirjoitusvirheitä kuin yksikieliset. Sanavaraston laajuutta vertailtiin laskemalla avoimiin sanaluokkiin kuuluvien sanojen määrät tekstissä kymmentä sanaa kohti. Keskiarvo oli hieman parempi kaksikielisellä ryhmällä, mutta merkittäviä eroja sanavarastossa tai luovuudessa ei havaittu. Interferenssin vaikutus lähinnä sanaston kannalta näkyi kaksikielisten teksteissä; positiivisen transferenssin vaikutusta sen sijaan on vaikea määritellä. Dominanteiksi ja tasapainoisiksi luokiteltujen kaksikielisten tuloksia molemmissa tehtävissä vertailtiin myös keskenään. Merkittäviä eroja myöskään näiden ryhmien välillä ei havaittu.

Lopuksi

Tutkielman oletusta, että kaksikieliset menestyisivät paremmin vieraan kielen opiskelussa verrattuna yksikielisiin, ei täysin pystytty todentamaan. Vertailtaessa koeryhmien tuloksia tilastollisen analyysin avulla merkittäviä eroja ei havaittu.

Kaksikieliset oppilaat saavuttivat kuitenkin virheanalyysissä korkeamman keskiarvon molemmissa tehtävissä, ja tulosten keskihajonta ryhmän sisällä oli pienempi. Tehtäviä analysoitaessa selvisi myös, että virheiden laatu ryhmien välillä vaihteli: yksikieliset tekivät enemmän kielioppi- ja sanaluokkavirheitä, kun taas kaksikielisille oikeinkirjoitus tuotti ongelmia. Kaksikieliset kuitenkin suoriutuivat tehtävistä järjestelmällisesti hieman paremmin ja kykenivät tuottamaan enemmän koherentteja vastauksia. On kuitenkin otettava huomioon tutkielman rajallisuus: pienen otoksen lisäksi tehtävät suoritettiin ainoastaan kerran, ja kaksikielisen ryhmän kohdalla positiivisen transferenssin vaikutukset on vaikea sulkea pois.

Tutkielman tuloksissa voidaan nähdä samankaltaisuuksia aiempiin tutkimuksiin kaksikielisyydestä huolimatta siitä, että niissä ei välttämättä tarkasteltu vieraan kielen oppimista. Kaksikieliset näyttivät kykenevän analysoimaan kielen rakennetta paremmin (esim. Bialystok 1991 ja 2001), sillä esimerkiksi aukko-tehtävässä he tekivät vähemmän kielioppi- ja sanaluokkavirheitä. Esseetehtävässä heidän teksteissään oli enemmän viitteitä annettuun kuvasarjaan, ja koko ryhmän tekstit olivat koherentteja kokonaisuuksia. Samankaltaisia tuloksia on tutkimuksissaan saanut esimerkiksi Ben-Zeev (1997), jonka mukaan kaksikieliset ovat herkempiä yksityiskohdille sekä erilaisille verbaalisille ja nonverbaalisille vihjeille; täten he pystyvät myös kiinnittämään enemmän huomiota yksityiskohtiin.

Tehtäviä tarkastellessa kaksikielinen ryhmä kuitenkin teki enemmän oikeinkirjoitusvirheitä verrattuna yksikieliseen ryhmään huolimatta siitä, että he lukevat ja kirjoittavat jo kahdella eri kielellä, joista toinen on jopa englannin sukukieli. Tutkimuksissa onkin havaittu että kaksikielisillä saattaa olla ongelmia lukemisessa ja kirjoittamisessa etenkin koulun alkaessa (esim. Toukoma 1975), mikä heijastuneekin myös vieraan kielen kirjoittamiseen. Häiriöt lukemisen ja

kirjoittamisen kehityksessä kuitenkin tasoittuvat iän ja harjoituksen myötä. Kaksikielinen ryhmä myös kirjoitti hieman lyhyempiä esseitä sekä jätti enemmän avoimia kysymyksiä vastaamatta, minkä voi ajatella johtuvan pidemmistä reaktioajoista, joita Mägiste (1981) käsitteli tutkimuksissaan. Aikarajoitus saattoi siis muodostua heille ongelmaksi. Myös De Angelis & Selinker (2001) havaitsivat että moni- ja kaksikieliset tarvitsivat enemmän aikaa tehtävien suorittamiseen. Kaksikielisen ryhmän keskiarvo luetun ymmärtämisessä oli joka tapauksessa hieman korkeampi, vaikka kaikkiin kysymyksiin ei oltu edes vastattu.

Vaikka positiivisia vaikutuksia vieraan kieleen oppimiseen ei pystytty aukottomasti todistamaan, mitään todisteita negatiivisista vaikutuksista ei tullut esiin. Suomessa ruotsinkielisen vähemmistön asema onkin tuettu, mikä mahdollistaa positiivisen kaksikielisen kehityksen. Kuten yllä todettiin, kun äidinkielen kehitys taataan, kaksikielisyys voi johtaa monenlaisiin etuihin eikä ole ongelma muun koulumenestyksen kannalta. Sujuva kahden kielen hallinta on jo sinänsä etu kenelle tahansa. Tutkielman kaksikielinen ryhmä onkin etuoikeutetussa asemassa verrattuna esimerkiksi maahanmuuttajataustaisiin oppilaisiin, joiden äidinkielen asemaa ei useinkaan voida samoissa määrin tukea.