ENGLISH IMMERSION IN FINLAND – DREAMS OR REALITY?

A case study on the Hollihaka early total English immersion programme, its structure, implementation and learning outcomes

A Licentiate Thesis

by

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ABSTRAKTI

HUMANISTINEN TIEDEKUNTA
SOVELTAVAN KIELENTUTKIMUKSEN KESKUS

Jaana Laitinen

ENGLANNINKIELINEN KIELIKYLPY SUOMESSA - UNELMAA VAI TODELLISUUTTA? Tapaustutkimus Hollihaan koulun vanhaisesta täydellisestä englanninkielisestä kielikylvystä; sen rakenteesta, toteuttamistavasta ja oppimistuloksista.

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Hollihaan koulussa annettavan englanninkielisen kielikylpyopetuksen päämäärit, toteutustavat ja edellytykset on asetettu kaksikielisydymen (bilingualism), kaksikielisen opetuksen (bilingual education) ja erityisesti kielikylpyopetuksen (immersion education) teoriakohdteen, ja englanninkielisen kielikylpyopetuksen antamisen oikeutusta suomalaisessa koululaitoksessa tarkastellaan tämän teoriakohdteen kautta. Työn tarkoituksena on vastata kysymykseen maamme koululoinnin soveltuvan kielikylpymallin kehittämisestä - Hollihaan kielikylpymallia esittävään mahdollisuutena, joka pohjautuu kanadalaisesta vanhaiseen täydelliseen kielikylpyyn, mutta jota tutkimuksen ja käytännön osoittamien tulosten kautta on kehitetty soveltumaan suomalaiseen koulukulttuuriin.

Tutkimuksen empirisessä osassa, jonka tuloksia tarkastellaan kansainvälisen kielikylpytutkimuksen tutustuvalta, käsitellään tärkeimmin kielikylpykielenä toimivan englanninkielien mittauksia (suullinen kielitaito, kuullun ymmärtäminen, tekstin ymmärtäminen, rakenne, kirjallinen tuottaminen ja passiivisen sanavaraston suuruus). Saatuja tulosten pohjalta voidaan katsoa, että kielikylpyoppilait ovat saavuttaneet ja osin ylittäneet peruskoulun 9.lk tason englanninkielessä jo 5. kielikylpyluokan keväaseen mennessä.

Asiasanat: varhainen täydellinen kielikylpy, kielikylpytutkimus, englanninkielien oppimistulokset
ABSTRACT

FACULTY OF HUMANITIES
CENTRE FOR APPLIED LANGUAGE STUDIES

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A Licentiate Thesis
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The most important goal of this thesis is to evaluate the feasibility of English immersion as a part of the Finnish school system. Normally, one of the leading requirements for a successful immersion model is for the immersion language to have an official status in the country where immersion is implemented - this not being the case with English in Finland. This study is a carefully documented case study of the early total English immersion model implemented in Hollihaka school classes 1-6 in the city of Kokkola. The thesis describes the immersion model in question, the learning outcomes in English (immersion language), the immersion pupils' social and linguistic background, and the immersion parents' expectations and opinions on the suitability of the immersion education as a school form for their children. The social and research network around the Hollihaka English immersion experiment as well as the internationalisation of our country and the status of the English language in Finland are discussed.

The goals, implementation and the contextual embedding of the Hollihaka English immersion are discussed in the theoretical frames of bilingualism, bilingual education and especially immersion education, and the feasibility of English immersion in the Finnish school context is viewed through this theoretical frame. The thesis aims at answering the question of how to develop an immersion model suitable for the mainstream Finnish school system - the Hollihaka immersion model is introduced as a possible solution that builds on the Canadian early total immersion model, but which has been developed to better suit our school culture. This development work has drawn on the outcomes of both research and practical experiences from the everyday school work.

The empirical part of the thesis, the findings of which are discussed in the light of international immersion research, discusses the immersion language (English) achievement (oral skills, listening comprehension, reading comprehension, grammar, creative writing and receptive vocabulary size) in most detail. The results show that the immersion pupils have reached and in some skills already exceeded the level of 9th grade English language arts teaching standards by the spring of 5th immersion grade.

Keywords: early total immersion, immersion research, English language achievement
PREFACE AND ACKNOWLEDGMENTS

A couple of years ago I ran across a quote from Ioan Bowes Rees cited in Baker and Pryj Jones (1998:1): "We bring up children to be bilinguals, not for the sake of language, but for the sake of children", which reflected my feelings to such an extent, that I felt like meeting a soul mate on my road of ideas, enthusiasm, hard work, setbacks and victories in developing a working model of an English immersion school in my hometown.

I became interested in the idea of immersion education about 8 years ago when my children were two and three years old. It was time to look for a day care place for them and as I found out that there was an English kindergarten in our town, I immediately reserved places for my son and daughter there. The fact that I am an English language teacher by profession also affected the choice – the English language happens to be one of the greatest passions in my life. As I myself had learned the language the traditional way struggling with word lists to be memorised, grammatical rules and exceptions to be learnt by heart and had come out of school and even university without learning how to actually use the language in the real world or how to communicate with other English speakers in every day situations, I wanted to offer my children a more naturalistic way to learn the language. I consider a living second language a great advantage to any child or adult in the present world in which information and communication technologies unite people from different nations and cultures via a common language – English, and thus wanted my children to be properly equipped for their future.

The English kindergarten of Kokkola has worked for over 20 years in Kokkola. The kindergarten follows the principles of an English play school and differs quite a lot from a typical Finnish day care centre, which normally is a more home-like environment. The idea of continuing the English language acquisition in school began developing in my head as soon as my children started their first year at the English kindergarten. I quickly found some other parents who were also interested in the idea, and as the teachers working at the kindergarten at that time were very creative, enthusiastic and above all professional and skilful primary school teachers, the plan for an English immersion school class being founded as part of the normal school network was soon written down and taken to the school administrators. I can only admire how open minded and innovative the head of the education department of that time, Mr. Antero Savela, was, as he not only approved of but also carried out our plan the following year already. I want to express my gratitude to him for making our dream come
1. INTRODUCTION

This study seeks to give as precise a picture as possible of an English immersion experiment running in Kokkola, Finland, by discussing the nature and implementation of that experiment. In this way an attempt is made to respond to the issue raised by the Finnish National Board of Education (1999, Mustaparta & Tella 1999) according to whom Finland is in a situation where an immersion model of our own for our unique conditions should be constructed and where research on the current bilingual education programmes should be conducted. As the Kokkola experiment is based on the Canadian early total immersion model but also includes some adaptations, the suitability of this particular immersion programme as a model for English immersion in the Finnish school system will be discussed in this study.

On the other hand, the present study deals with the question of the effectiveness of this particular English immersion programme, i.e. the learning outcomes of the pupils who have studied in this programme. This will be done by discussing the research, both published and unpublished, both by the present writer and other researchers, conducted around this particular educational programme.
2. BILINGUALISM

The question "What is bilingualism?" has been asked over and over again in the history of linguistics. Numerous researchers have tried to answer the question and give definitions of the concept of bilingualism. The more the issue has been researched, the more multi-dimensional the concept has become.

2.1. What is bilingualism?


Bilingualism is a multi-dimensional concept which can be studied from various perspectives. According to Mackey (1962, reprinted in Wei, 2000), bilingualism is not a phenomenon of language; it is a characteristic of its use. It is not a feature of the code but of the message. The realization that the point at which a speaker of a second language becomes bilingual is either arbitrary or impossible to determine has lead us to study the phenomenon of bilingualism as something entirely relative, as the alternate use of two or more languages by the same individual.

2.1.1. Individual versus societal bilingualism

Bilingualism can be seen both as an individual phenomenon and as a group societal possession, i.e. *individual bilingualism* and *societal bilingualism*. Societal bilingualism concerns groups of people who either live in a particular region or are scattered across communities and form a distinct language group as either a majority or minority. Both Swedish speakers of Finland (minority as the whole group but majority in some regions) and Lappish speakers of Scandinavia (minority in every region) can be given as examples here.
2.1.2. Maximalist versus minimalist bilingualism

Individual bilingualism is much more difficult to define than societal bilingualism. The term 'bilingualism' in itself has not been used in a consistent manner among researchers and theoreticians and an all-inclusive definition of a bilingual person is very difficult to give. The classic definition of bilingualism as native-like control of two or more languages, or as complete mastery of two languages without interference between the two linguistic processes can be labelled as the maximalist definition. The minimalist definition sees bilinguals as people who possess at least one of the language skills (listening, speaking, reading and writing) even to a minimal degree in their second language. According to the minimalist definition, business people knowing a few greetings in a second language are bilinguals. Another broad definition has been given by Williams and Snipper (1990), who define bilingualism as a person's ability to process two languages.

The maximalist definition will exclude most individuals and create a new definitional problem of what native-like control of a language means. Most experts on bilingualism prefer the minimalist definition as the beginning point from which a variety of bilingual skills can develop, including biliteracy. (Hakuta 1990)

2.1.3. Bilingual ability

The definition of the concept of individual bilingualism precisely necessitates a distinction between bilingual ability and bilingual usage. Bilingual ability refers to the four basic language abilities: listening, speaking, reading and writing, which fit into two dimensions: receptive and productive skills; oracy and literacy. Skutnabb-Kangas (1981) adds a fifth dimension to the four; it is thinking, which can be termed inner speech and placed under the ability of speaking. The following table illustrates the relationship between the above mentioned five language skills.
Table 1. Language skills

<table>
<thead>
<tr>
<th></th>
<th>Productive skills</th>
<th>Receptive skills</th>
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<tbody>
<tr>
<td>Oracy</td>
<td>Speaking</td>
<td>Listening</td>
</tr>
<tr>
<td></td>
<td>Thinking</td>
<td></td>
</tr>
<tr>
<td>Literacy</td>
<td>Writing</td>
<td>Reading</td>
</tr>
</tbody>
</table>

According to Sundman (1999: 38), although the productive skills require the corresponding receptive skills, the oral and literate skills are quite independent of each other and so it is possible for a person to be able to read a language without being able to speak it and vice versa. This distinction leads us to the multi-dimensionality of bilingualism again: a person can be characterised as bilingual if he or she for example speaks and writes one language and speaks but is not literate in a second language or if he or she speaks and writes one language and reads but does not speak or write a second language.

Yet another definition of bilingualism could be referred to here: “Bilingualism must be able to account for the presence of at least two languages within one and the same speaker, remembering that ability in these two languages may or may not be equal, and that the way the two or more languages are used plays a highly significant role” (Baetens Beardsmore 1986: 3), which includes all the above mentioned examples of combined language abilities in two languages in bilingualism.

Baker (1995:2) suggests that calling someone a bilingual is an umbrella term. Underneath the umbrella may rest many different skill levels in two languages. There is also difference between ability and use of language. Someone may be quite competent in two languages, yet rarely or never use one of those languages. Such a person has bilingual ability but does not act bilingually. A different case is a person who regularly uses both their languages, even though one language is still developing. Such a distinction between ability in a language and use of a language again shows why the simple label bilingual hides a complex variety beneath its simplicity.
2.1.4. Biliteracy and bilingual identity

According to Williams and Snipper (1990: 34) people are considered bilingual if they can process two languages in listening and speaking and biliterate if they can also read and write in those two languages. The more adept people are at processing the four skills in each of the languages, the greater is their level of bilingualism. Viberg (1997:5) points out that a person who treats her two languages as equal in importance is more bilingual than a person for whom one of her languages is a "helping language" (hjälpspråk).

Since the definition of bilingualism is as complicated as it is, a simple way out could perhaps be self-assessment: if a person with two languages categorises him- or herself as bilingual, this could perhaps be the only categorisation needed? This comes quite close to Sundman's concept of identity (1999:41), according to which a person can be characterised as bilingual if she herself identifies herself as belonging to two different language groups, in other words two groups of people who speak different languages.

2.1.5. Typologies of bilingualism

Bilingualism can also be typologised according to the age when the languages in question have been learnt. Early or ascribed bilingualism refers to the acquisition of more than one language in the pre-adolescent phase of life, while late or achieved bilingualism occurs when the first language is acquired before the age of more or less 11 and further languages are learnt after that age. Bilingualism can also be either simultaneous -the two languages acquired more or less simultaneously, e.g. as an infant - or successive (or consecutive or sequential), which refers to cases where the second language is added at some stage after the first has begun to develop, three years of age being considered as an approximate borderline between these two. Successive bilingualism can be further divided into early or late successive bilingualism depending on the age when the second language acquisition has begun.

Also the concepts of compound versus coordinate bilingualism have been introduced: compound referring to bilingualism where the two languages are learnt in the same context (e.g. a bilingual home) and coordinate to bilingualism where the two languages are learnt in separate environments (e.g. home and school). In addition, Cenoz and Genesee
(1998) speak about bilingual acquisition, which can occur formally (through instruction) or naturally (outside school).

The English immersion education experiment described in this study relates to early successive coordinate formal bilingualism, as the second language is first introduced to the children at kindergarten and the learning of it continues at school. The identity of these pupils is expected to grow into bilingual identity, the languages being Finnish and English.

2.2. Functional bilingualism


Bilingualism can be further divided into sub-groups according to the context and the extent of the use of the two languages in question. Balanced bilinguals or equilinguals or ambilinguals are people who are approximately equally fluent in two languages across various contexts. In other words, these people would be as competent as native speakers of the same age in both languages. A child who can understand the curriculum in school in either language, and operate in classroom activity in either language, would be an example of a balanced bilingual.

Because the concept of a balanced bilingual is an idealised one, more general concepts like functional bilingualism have been created. Baetens Beardsmore (1986: 16) characterises functional bilingualism by saying that “patterns that are completely alien to the monoglot reference group and show signs of interference in phonology, morphology, lexis and syntax do not get in the way of functional bilingualism if they do not impede communication between speaker and listener”. Wei (2000:6) describes a functional bilingual as someone who can operate in two languages with or without full fluency for the task in hand. Maximalist functional bilingualism refers to a speaker who can carry out any activity in a given dual linguistic environment satisfactorily. Balanced bilingualism may sound as a desirable goal for bilingual education, but is in fact a very unrealistic one, the maximalist functional bilingualism being a more feasible goal for bilingual education both in Finland and elsewhere.

In addition, concepts like additive and productive bilingualism are used. Additive bilingualism can be defined as a form of bilingualism in which the second language provides the speaker with abilities which do not negatively affect those acquired in the first
language but instead complement and enrich first language development (Järvinen 1999: 14) and within which the acquisition of a second language is seen as an extra tool for thought and communication. Or in other words (Cummins, 1998) the term additive bilingualism refers to the form of bilingualism that results when students add a second language to their intellectual tool-kit while continuing to develop conceptually and academically in their first language.

In the case of productive bilingualism the people concerned not only understand but also speak and possibly write in two or more languages. This does not necessarily imply that they are capable of both writing and speaking two languages at the same level of proficiency.

Additive bilingualism serves as the intellectual justification of much of the foreign language instruction of the schools today although it can be pointed out that most foreign language teaching programmes of today are designed to lead to productive bilingualism.

The notion of biculturalism is also worth mentioning when talking about functional bilingualism, because, the further one progresses in bilingual ability the more important the bicultural element becomes, since high proficiency in a language goes hand in hand with expected sensitivity towards the cultural implications of language use.

The Hollihaka English immersion experiment can be described as aiming at maximalist functional, additive, productive bilingualism, where the pupils will grow to not only to speak and understand but also to be biliterate in their mother tongue and English. Also a quite high level of biculturalism is expected as an outcome of the programme.

2.3. Bilingual usage

Functional bilingualism goes hand in hand with bilingual usage, people's use of their bilingual ability. It relates to when, where and with whom people use their two languages (Fishman 1965). It is restricted to the personal production and reception of language in various domains, e.g. home, school, friends, work, etc.

This language choice can also be called diglossia, which refers to a situation where a person uses one language in one social context and the other language in another social context (e.g. Sundman 1999, Romaine 1995) both languages co-existing in the society. Codeswitching, a change of language within a piece of conversation, which can involve single words or phrases within sentences or larger blocks of speech between sentences, is a
phenomenon that more often occurs between bilinguals than between a monolingual and bilingual (e.g. Baker & Prys Jones 1998).

When *the functions and uses of language* are studied, the following five actions need to be considered (Baker, 1996: 12, Baker & Prys Jones 1998: 51):

1. Who is the subject? (i.e. who is the speaker?)
2. Who is the language target? (i.e. who is the listener(s)?)
3. What is the situation? (e.g. in the factory, classroom, mosque)
4. What is the topic of conversation? (e.g. sport, work, food)
5. What is the purpose or the expected outcome of the conversation?

Where more than one language is being used by one and the same speaker we must find out what circumstances make him change over from one to the other. This *individual choice* must then be related to the choices that exist in the bilingual setting as a whole. We must examine the domain of language behaviour (e.g. the school, the family), the topic of conversation (e.g. a school subject, a hobby), the role relationships between the interlocutors (e.g. teacher to student, friend to friend), the setting of the interaction and maybe other factors as well (Fishman 1972 as quoted by Baetens Beardsmore 1986). It has often been found (e.g. Romaine 1995) that within the domains of language use there are some inner functions of bilingualism for which people are always prone to use their *dominant language*, such as counting, reckoning, praying, cursing, dreaming, diary writing and note taking, speech to oneself, or thinking aloud.

As regards the immersion pupils of the present study, their English language use, at least at the beginning of the immersion programme, is restricted to the domains of the kindergarten and the school, and to interaction with the teacher only, the mother tongue being the main language of the other social contexts. But the further the immersion education advances and the more the pupils' English language skills develop, the more complex are the language targets of their English language use expected to become: first the interaction with their classmates and friends, pen friends, and other foreign friends, later study and work colleagues; and the social contexts to visual, auditory and printed media, information technology, hobbies, studies, and working life (cf. Baker & Prys Jones 1998:52).
3. BILINGUAL EDUCATION

At its simpliest bilingual education can be described as a situation where two languages are used in a school. But as we have noticed, there are no simple definitions for bilingualism. This implies that also bilingual education is a complex phenomenon with many aspects and forms of implementation. Krashen (1999) points out that it is helpful to distinguish two goals of bilingual education. The first is the development of academic second language and school success, and the second is the development of the first language. Good bilingual education programs achieve both goals.

3.1. Bilingual education as a phenomenon

According to Baker (1996) and Tucker (1998), bilingual education has to be examined as a social, economic, cultural and political phenomenon. In many countries bilingual education has a connection with political movements such as civil-rights, equality of educational opportunity, rise of nationalism as well as linguistic heterogeneity of the country and social or religious attitudes. In addition, innovative language education programmes often promote proficiency in international languages of wider communication together with proficiency in national languages. To be able to understand the consequences of bilingual education these frameworks must also be considered.

Miner (1999) says that there is no commonly accepted vision of bilingual education. Yet those thinking of a new vision tend to emphasize similar themes, such as globalism, multiculturalism, biliteracy, high academic expectations, respect for parents and community, and bilingualism as an opportunity for all.

3.2. A historical point of view

Bilingual education has a long history having existed in one form or another for 5000 years and more. According to Laurén (1999), the Sumerians were the first to use a written form of their language. When the Ackadians took over and started ruling their region c. 3000 B.C.,
they understood the value of a written language, educated people who could read and write the Sumerian language and constructed word lists comparing one language with the other. But not only did they learn how to read and write, they also learnt subjects like theology, zoology, mineralogy, geography and mathematics in Sumerian.

Later Greek and Latin were used as the dominant school languages in many countries. Classic Arabic is still widely used as the medium of instruction in Muslim countries, where many vernaculars are spoken (Swain & Johnson 1997:1). In Finland the language of instruction in secondary schools was Swedish until 1858. Thus bilingual education is not an invention of the twentieth century, although the awareness of its multiple forms and new implementation possibilities has risen, for example in Finland, during the last decades.

3.3. **Principles of bilingual education**

Cummins and Swain (1986:97-98) define three principles for successful bilingual programme planning. The principles are:

(1) *first things first* – which refers to the importance of a pupil’s first language development and its fostering at school,

(2) *bilingualism through monolingualism* – which states that the languages of instruction should be used separately, i.e material which is taught in one language will be fully presented in that language, and

(3) *bilingualism as a bonus* – which emphasises the political, economic, cultural, psychological, linguistic, and cognitive advantages that may be associated with bilingualism.

In bilingual education the second language is used as the medium for the learning of the content of specific courses (such as mathematics, science, art or social sciences), the shifting of the focus from language as course content to *language as the medium of instruction*. The content is defined as material that is generally outside the realm of the traditional course material of language programmes (Met 1998: 35).

Although the focus is shifted from the form to a medium, a bilingual education teacher should always be sensitive to both the subject skills that he or she is teaching and the
language skills that are the communicative medium through which subject knowledge is used or obtained (cf. Marsland 1997). Hellekjaer (1996) emphasizes the fact that a teacher in a bilingual classroom has to find a proper balance between language and subject-matter, with the language aspect being subordinate. To the extent there is language instruction the goal should be to facilitate subject-matter learning. Extensive language learning will occur receptively while pupils are reading their textbooks or listening to subject-matter instruction. In addition, bilingual education will offer ample opportunity to use the target language productively in situations relevant to the subject, in discussions, group work, and tests.

According to Krashen (1991), the principles underlying successful bilingual education are the same as underlie successful language acquisition in general:

1. We acquire a second language by understanding messages, by obtaining comprehensible input
2. background knowledge can help make second language input more comprehensible, and can thus assist in the acquisition of the second language; and
3. the development of literacy occurs in the same way as second language acquisition does.

Canadian style immersion, which is the basis of the Hollihaka immersion, is defined by Krashen (1991, 1999) as being similar, if not identical, to bilingual education. In immersion, children receive comprehensible input in the second language and develop literacy and subject matter knowledge in their first language, both outside of school and in school to make the subject matter taught in the second language comprehensible. Most important, the goal is bilingualism, not the replacement of one language with another.

3.4. Aspects of bilingual education

Baker & Pryz Jones (1998: 464-468) introduce eight aspects of the international structure of bilingual education. They make a difference between

1. monolingual and bilingual schools where bilingual children go. The distinction is based on the outcome of the education: monolingualism with the major language only or full bilingualism. An alternative to those extremes is
immersion, where language majority children learn a second majority or minority language;

(2) schools that teach a second language and schools that teach through the medium of a second language;

(3) public and private bilingual education;

(4) ‘weak’ and ‘strong’ forms of bilingual education, the weak aiming at transferring language minority children to using the majority language solely, whereas the strong aim at full bilingualism and biliteracy;

(5) bilingual education also spans all age groups from the kindergarten to the higher educational levels and adult education;

(6) bilingual education is an umbrella term including trilingual and multilingual education;

(7) the terms bilingual education – referring to formal education for children aged 5-16 – and bilingual schooling, which includes informal aspects present from the cradle to the grave, should be kept apart;

(8) the language background of a child, whether majority or minority, also plays an important role in the analyses of the aims of bilingual education.

According to Baker (1996), the model and framework of bilingual education consists of input variables, process variables, output variables and context variables.

The input variables can be either teacher - the linguistic and cultural knowledge of bilingual teachers, their competency to operate in two languages and transmit two or more cultures - or pupil inputs like their aptitude, attitude, motivation, language skills, and cultural background. The process variables include teacher-pupil interaction, pupil-pupil interaction and use of curriculum materials. The output variables can be short-term (e.g. test attainment) or long-term (e.g. attitude to language learning, self-esteem and achievement through the curriculum as a whole). The context variables refer to the nature of the classroom, school, community, and society in reflection to bilingual education as a whole. (Baker & Pys Jones 1998:473 – 475.)

The Hollihaka school offers an English immersion programme in a school which is public, strong form multilingual (instruction given in Finnish, Swedish, English, Albanian, and other immigrant and refugee languages varying yearly, the teaching of refugee and immigrant background pupils of Kokkola being placed in this school), the school teaching
through the medium of a second language, the span of the programme being from the kindergarten to the 6th grade and, in the wider Kokkola town perspective from the kindergarten to the polytechnic (cf. Laitinen 1998, Strömmer 1997).

In the Hollihaka English immersion programme, the input variables consist of native or near-native speaker teachers who either come from or have spent a longer time in another culture and are thus competent in the immersion language and also transmit the other culture in the everyday life of the school. The pupils are motivated and have positive attitude towards the English language and other cultures. The teacher-pupil interaction in the programme is always conducted in English and the teaching materials used in those lessons are in English. The programme outputs have so far been measured with short-term variables (test attainment) which show good progress. The school itself is an international unit within the Kokkola school network, and the English immersion classes are motivating and rich learning environments for the pupils. The Kokkola city school office also supports the context of immersion education as a special school profile for the Hollihaka school. (Keaveney personal communication 2000, Colburn personal communication 2000).

4. IMMERSION EDUCATION

Language immersion is one of the forms of bilingual education that have been studied the most. The following discussion of this educational phenomenon is based primarily on Baker (1996), Buss & Mård (1999), Genesee (1987), Johnson & Swain (1997), Lambert & Tucker (1972), and Snow (1990).

4.1. Immersion, past and present

Language immersion in the sense as the term is used nowadays, in reference to a form of bilingual education in which students who speak the language of the majority of the population receive part of their instruction through the medium of a second language and part through their first language, has its roots in Canada, where the idea developed in the 1960s. A
group of Canadian parents in Quebec were dissatisfied with their children's French language skills and in particular with the level of communication abilities acquired in formal French language teaching, and they wanted to find an alternative way of introducing the French language to their children. The parents were concerned about political movements being under way to make French the "working language" of the province, which meant that their children would be under strong pressure to learn to master the language during their school years.

By 1965, a French immersion programme had been developed in St. Lambert, Montreal, in which students entered kindergarten and were immersed in a totally French environment. The aims of this original immersion programme were for students

(1) to become competent to speak, read, and write in French;

(2) to reach normal achievement levels throughout the curriculum including the English language; and

(3) to appreciate the traditions and culture of French-speaking Canadians as well as English-speaking Canadians. In short, the aims were for children to become bilingual and bicultural without loss of achievement. (Baker 1996: 180.)

Since then, immersion programmes have spread rapidly both in Canada and round the world. There are currently around 300,000 English-speaking Canadian children in some 2000 French immersion schools. According to a recent survey by Buss & Mård (1999), 1,815 pupils attended Swedish immersion in grades 1-6 in Finland during the school year 1998-1999. According to Sved (2000) there were 10 primary schools who reported themselves giving English immersion education in Finland during the school year 1998-1999. These schools had 57 English immersion classes, which consisted of 1,279 pupils. The average class size was 22 pupils. In the Hollihaka English immersion 107 pupils attended this form of bilingual education during the same school year (Laitinen 1999:7), the number being 123 during the school year 1999-2000, and the average class size 21 pupils. (Hollihaka school work plan 1999-2000).

One of the reasons why immersion education has been such an influential model all over the world is that it has been systematically investigated from the beginning and the multiple research has showed excellent results. According to Johnson and Swain (1997), it can be said that immersion education has been in existence long enough to have acquired a distinct identity and a body of theory and research, but it is still young enough to be evolving in new directions.
Also the switch from the use of the term immersion in intranational contexts only (the immersion language being the minority language of a country) to contexts in which the medium of instruction is a foreign language traditionally taught as a separate subject (as is the case in the Hollihaka English immersion experiment) is a recent phenomenon and seems to be spreading fast. (e.g. Duff, 1997). In these cases we can call the language of instruction a "language of power", which is acquired in communication across, not within social groups.

The representatives of the Finnish Board of Education (Mustaparta & Tella 1999:21), imply that total immersion should only be implemented when a minority language of a country is taught to majority language children. In their opinion immersion education in a language different from the ones spoken in a country can make the development of a pupils' cultural identity more difficult. They say that according to some opinions English immersion should not be called immersion in Finland as English is not an official language in the country. The discussion of the appropriateness of the term immersion in the Hollihaka English immersion case will be made in chapters 4.3. and 4.4.

4.2. Features of immersion education

Immersion education has got its name from the verb 'to immerse'. We usually relate this term to a calm movement associated with a liquid. For instance, we would not throw or drop a child into the swimming pool, but we could gently immerse them in the water until they feel happy and comfortable enough to dive in themselves. With immersion education a student is immersed in the new language within a controlled, caring, and encouraging environment. (Colburn, 1998.)

The most distinctive feature of immersion programmes is, according to Genesee (1987, 1998), their use of the second language to teach regular academic subjects such as mathematics and science, in addition to language arts. Through the integration of second language learning with academic instruction, students were expected to learn the target language in much the same way that children learn their first language – to communicate with others about meaningful and important events in their lives. In immersion programmes pupils are allowed to apply their natural language learning abilities and progress according to their own individual styles and rates.
Buss & Mård (1999:18) point out that in immersion education the subject teaching will be conducted in two languages, so for instance history is taught in the immersion language during school grades 1-6 and in the pupils' mother tongue during school years 7-9. This is based on a theory by Cummins (1984 as quoted by Buss & Mård 1999) according to which the cognitive-theoretical facilities develop regardless of the language of instruction. The language of instruction will be the one used in storing the concepts in a pupil's brain. The teacher should ensure the manifestation of the concepts in the new language of instruction by quickly going through them so that the unawareness of the concepts would not hinder learning.

4.3. Characteristics of immersion education in general and the Hollihaka experiment in particular

Many researchers have outlined sets of core features which are referred to as the defining characteristics of an immersion programme and which are present to a greater or a lesser degree in the actual immersion programmes. The following characteristics have been compiled from the writings of Artigal (1993), Baker (1995), Baker & Pry's Jones (1998), Buss & Mård (1999), Cummins (1984), Swain & Johnson (1997), and Tucker (1998). All the characteristics have implications for programme development, teaching strategies, learning conditions, and learning outcomes of the educational programmes in question. The presence or absence of these characteristics in the Hollihaka English immersion experiment will be discussed when the characteristics are introduced.

4.3.1. The language background

The language background of the pupils should be homogenous as immersion programmes are a form of bilingual education designed for majority language students, that is, students who speak the dominant language of society upon entry to school. They start immersion education with a similar lack of experience of the second language.

In the Hollihaka school, out of the 123 pupils attending the English immersion classes 113 have Finnish as their mother tongue. There is also one child whose mother
tongue is English, one child whose mother tongue is Polish, and 8 children whose mother tongue is Swedish, the official minority language of Finland. English is used as a home language in only the home of the English-speaking child and four Finnish-speaking children (Laitinen 1999, Hollihaka school work plan 1999-2000, see also chapter 9.2.)

The fact that also bilingual and minority language children are accepted in the programme could be seen as an obstacle for the use of the term immersion. The term submersion could be used about the language minority children, because the official language of the Hollihaka school is Finnish and so these children are in a way submersed in Finnish and immersed in English at the same time. It must be pointed out that all these pupils are bilingual (their own mother tongue plus Finnish) and master the four language skills in Finnish to a lesser or greater extent from the infancy. The pupils can be said to have homogeneous skills in English in the beginning of the programme – this meaning total lack of these skills.

4.3.2. L2 the medium of instruction

When the L2 is a medium of instruction, this is seen as a means for maximizing the quantity of comprehensible input and purposeful use of target language in a classroom.

At the English immersion classes in question, English is the language of instruction for c.80% of the school hours in grades 1-2, c.60% in grades 3-4 and c.50% in grades 5-6 (for a more detailed discussion, see chapter 5.4.)

4.3.3. Bilingual teachers

It is a generally accepted view that the teachers who introduce the L2 should be bilingual themselves, that is, they must have a thorough knowledge of the language in which they are to teach, and also be sufficiently proficient in the pupils' home language to be able to understand them when they use it.

The requirement for the teachers to be "sufficiently proficient" in Finnish may have restricted the appropriency of using the usage of the term immersion in Hollihaka earlier because some of the immersion teachers over the years have not been able to speak Finnish at
all or have spoken it at a very basic level when working with these classes. This is due to the fact that most of the English immersion teachers have come from either Great Britain, the United States, or Canada having class teacher training (B.Ed., B.Sc) in their own countries. This is because the Hollihaka school has attempted to find qualified primary school teachers who have either native or near-native competence in English as immersion teachers. These teachers have been seen as not only representatives of their own language and culture but also as teachers of internationalism and tolerance. (Laitinen 1998.)

During the school year 1999-2000 when this study was made, the English immersion classes were taught by the following teachers, who all have either native or near-native speaker competence of English and at least basic language skills in Finnish:

Table 2. Hollihaka school English immersion teachers’ qualifications.

<table>
<thead>
<tr>
<th>Class</th>
<th>Training / Degree</th>
<th>Mother tongue</th>
<th>Skills in L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1E</td>
<td>KM (Master of Education), international programme, University of Oulu</td>
<td>Finnish</td>
<td>Minor studies in English, 35 credits, YKI level 7**</td>
</tr>
<tr>
<td>2E</td>
<td>B.Ed, University of Leeds, England</td>
<td>English</td>
<td>Functional bilingual Finnish – English *</td>
</tr>
<tr>
<td>3E and 4E</td>
<td>B.Ed, University of Edinburgh, Scotland</td>
<td>English</td>
<td>Intermediate Finnish skills *</td>
</tr>
<tr>
<td>5E</td>
<td>B.S, University of Lakehead, Canada</td>
<td>English</td>
<td>Balanced bilingual English-Finnish *</td>
</tr>
<tr>
<td>6E</td>
<td>KM (Master of Education) University of Jyväskylä</td>
<td>Swedish (balanced bilingual Swedish – Finnish *)</td>
<td>YKI level 7</td>
</tr>
</tbody>
</table>

*as assessed by the present writer
** YKI = Yleinen Kielitutkinto = National Foreign Language Certificate

4.3.4. One teacher - one language

According to a commonly shared view, the teachers should only have one linguistic role with the pupils, i.e. they should follow the Grammont principle: one teacher – one language
All the teachers in the Hollihaka English immersion programme have internalised this principle and, according to Colburn (2000, personal communication), not only do the immersion teachers use their immersion language with the pupils in the classroom but also in the corridor, outside during the breaks, meeting the pupils outside the school environment, and so on. The pupils also always approach the English immersion teachers in English, even pupils with very limited language skills.

4.3.5. Trained and devoted teachers

The teachers should have a thorough pedagogical training, be devoted to their work, and capable above all of establishing effective communication with the pupils, despite the use of a language which, at the beginning of the programme, will be new to them. Hence the teachers must be proficient in certain specific techniques which guarantee, at all times, the meaningfulness and effectiveness of interactions conveyed through a language which their pupils do not share initially.

The English immersion teachers fulfil the above cited requirement for the teacher to be trained and devoted to their work. As mentioned earlier (see chapter 4.3.3.), all the immersion teachers have got either a Finnish, British, or Canadian teacher training. The new requirements set by the Finnish National Board of Education (1999) state that an immersion teacher should either have 55 university credits in the English language or have attained the YKI (National Foreign Language Certificate) level 7 (National Board of Education 1995), which the Finnish teachers have completed in spring 2000 (Leimu 2000 personal communication, Liimatta-Åström 2000 personal communication). Thus, the Hollihaka teachers can be considered fully qualified English immersion primary school teachers in Finland.

The devotion to their work is clearly visible in the everyday work of these teachers; they e.g. produce huge amounts of teaching material and develop the curriculum constantly (Liimatta-Åström 2000 personal communication). According to Colburn (Kokkola immersion report 2000), building an effective communication and interaction with the pupils is something that the teachers are concentrating on every day and every lesson. From the first grade, students are encouraged to develop their communication skills in the target language. The teacher’s role is to provide a language model for the students, to create opportunities for
students to use the target language, to be a receptive listener, to ensure a safe and secure environment in which students feel able to try and know that mistakes can be made, and to guide students in their social interactions so that they learn to listen, respond, and solve problems co-operatively.

4.3.6. Immersion curriculum parallel to L1 curriculum

The immersion curriculum parallels the local L1 curriculum and is defined in terms of *L1 speakers' needs, goals and educational norms*, not in terms of those of another speech community. The classroom culture is also that of the local L1 community.

The immersion curriculum parallels the Hollihaka school regular curriculum, the only difference being the English language as the medium of instruction (Hollihaka school English immersion curriculum 1999). All the educational goals and norms are set in the Hollihaka school curriculum and the immersion teaching is being conducted in a way defined by the L1 speakers' educational norms to the extent it is possible. Some teaching material coming from Great Britain leads to some deviations from this requirement, e.g. the money introduced in the books is pounds instead of marks. Additional material has been produced by the teachers to fill in the gaps noticed. (Keaveney personal communication 2000.)

4.3.7. Positive attitude

Immersion principles require that pupils should have a positive attitude and motivation towards the new school language and access to the programme should be a *voluntary option* taken by parents.

The English language has a high status in present Finnish society. It is almost seen as a third language, at least among the younger generation (see chapter 5.1.1.). The attitude of students also in normal language classes to English studies is generally positive (Tuokko 2000:10). The participation in the immersion programme in question is totally voluntary and no entrance testing is arranged.
4.3.8. Mother tongue instruction

Immersion models require that the home language must not be overlooked. *The home language is studied*, for pupils to achieve the same level of competence in it as they do in the non-home language to which priority is given at the outset. Children are allowed to use their home language for classroom communication.

Since the goal of the Hollihaka English immersion programme is additive bilingualism, the role of the mother tongue is very important in the programme. The teaching of the mother tongue begins in the first grade and is carefully designed and guided by the Hollihaka school immersion Finnish curriculum (1999). (For a more detailed discussion, see chapter 5.4.1.) The pupils are never forced, but always encouraged, to use their English language skills from the kindergarten on, and at school from the first grade on they use English only with their teachers, although the language used among the pupils is Finnish (Sheare personal communication 2000).

4.3.9. L1 and L2 proficiency

Immersion programmes aim at additive bilingualism, where the L1 proficiency of the pupils is the same as that of pupils who have studied in their L1, and the L2 proficiency is high, though not native-like.

The aim of the Hollihaka programme is additive bilingualism, where the L1 (Finnish) proficiency of the pupils is the same as of that those who have studied in Finnish and the L2 (English) proficiency is high. (Hollihaka school English immersion curriculum 1999, Hollihaka school immersion Finnish curriculum 1999). The L1 proficiency has been measured with a standardised reading comprehension test (ALLU), the results of which showed better results than those of the norm group (see chapter 6.2.3.). The L2 proficiency of the 5th graders has been measured with a 9th grade national assessment test and found higher and more homogeneous than that of the 9th graders (see chapter 10.).
4.3.10. Parental and community support

Parental and community support and involvement are essential for an immersion programme. The Hollihaka English immersion programme was founded on the initiative of parents, and they have supported it ever since: they have founded an association KIM (Kokkola Immersion), whose role will be discussed below (in chapter 5.2.). The Kokkola city has also been involved in the development of the programme since its start and regards it as part of their internationalisation programme (Laitinen 1998). Finnish society as a whole is also becoming multilingual fast (the role of the English language in Finland today is discussed in chapter 5.1.1.).

4.4. Finnish National Board of Education requirements for immersion programmes

According to Mustaparta and Tellä (1999:21), immersion is a form of education in which (1) at the beginning a totally or partly foreign language for the pupil is used;
(2) the teaching in a foreign language is gradually diminished to concern half of the teaching and the teaching in the pupil’s mother tongue is increased during the comprehensive school (grades 1–9);
(3) other languages than the actual immersion language and the pupil’s mother tongue are taught from early on;
(4) the teacher has only one linguistic role with the pupils;
(5) the pupil group does not master the language of instruction at the beginning stage.

These requirements for a programme to be called an immersion programme are all fulfilled in the Hollihaka English immersion programme since:
• the English language is a foreign language for the pupils, which they do not master at the beginning,
• the amount of time spent in teaching in English diminishes from c. 80% to c. 50% during the comprehensive school,
• the teacher has only one linguistic role with the pupils,
• a second language (Swedish) is introduced to the pupils on grade 2
• an additional 3rd language (German or French) is introduced in grade 5 as an optional subject (Hollihaka school work plan 1999-2000).
The only requirement for immersion that is not fulfilled is the cited requirement that the *immersion language is an official language of a country* and is supported by a community of native speakers of the language. This is due to the fact that English has no official status in Finland. But as Swain & Johnson (1997:6) imply there has been a shift in the use of the term immersion to broader contexts, and they characterise a typical immersion programme by saying that exposure to the immersion language is largely confined to the classroom. This is true in the Hollihaka programme as well. So with all the above mentioned in mind, we can call the Hollihaka English immersion experiment an immersion programme.

4.5. *Models of immersion education*

Language immersion is an umbrella term under which programmes tend to have a wide range of diversity in their organisation and structure. These variations mainly relate to the age at which a child enters the programme and to the amount of teaching time given to the immersion language during the school day.

As far as the age factor is concerned, immersion models can be divided into *early, middle or delayed, and late immersion*. An immersion programme is called early immersion, if the child commences the experience at the kindergarten or infant stage, middle or delayed immersion, if the child is nine to ten years old, and late immersion, if the child is at secondary level. (Baker 1996: 181.)

These three models of immersion vary in terms of the amount of time given to subject instruction in the immersion language and / or the number of years during which the second language is used as a major medium of instruction. According to this factor, immersion programmes can be divided into *total and partial immersion*. Total immersion refers to programmes that offer 100 % of instruction in the immersion language at the onset of the programme. After a few years, this immersion language teaching is reduced to 80%, while mother tongue language instruction increases. By the upper grades, approximately 50% of instruction time is given to both the immersion language and the mother tongue each (Colburn 1998: 11-12). In partial immersion, the amount of L2 instruction is never greater than 50%.

*Early total immersion* is characterized as original immersion, since the first immersion programme established in St. Lambert, Montreal, followed this model. Early total immersion begins with the immersion language being exclusively used during the first two years in kindergarten and school. The use of the immersion language is then gradually
diminished until the ratio of both languages stabilizes at 50% after five or six years into the immersion programme and remains so throughout secondary education (Järvinen 1999: 17). According to Genesee (1983) there are three phases to early immersion: (1) an immersion phase during which all curriculum instruction is taught through the immersion language, (2) a bilingual phase during which both languages are used in varying proportions; and (3) a follow-up phase during which selected courses are available in the immersion language.

According to Swain and Lapkin (1982), the Canadian early total French immersion programme begins at the Kindergarten level, where the entire (half-day) program is conducted in French. The language of instruction throughout grades 1 to 4 is French, with the exception of a daily period of English language arts, which may be introduced in grade 2 or 3. At grade 5, from 60% to 80% of the school day is still allocated to instruction in French, with the percentage of French dropping at grade 6 to between 40% and 50%.

*Early partial immersion* is most commonly implemented by giving 50% of the instruction in the immersion language and 50% in the pupil’s mother tongue throughout the elementary grades. Another significant difference between early total and early partial immersion programmes is the sequencing of literacy instruction. In an early total immersion programme literacy training begins in the immersion language and is administered in the mother tongue after that, while in early partial immersion programmes literacy training tends to occur in both languages simultaneously from grade 1 on (Genesee 1987: 20-21.)

Other models of immersion worth mentioning here are *heritage language immersion*, which is used to revitalize and develop heritage languages, and *double immersion*, which involves two non-native languages as major media of curricular instruction during the elementary grades (for further information, see Genesee 1987: 19-20, 24). Also *submersion*, where children who are members of minority-language groups are placed in schools where the majority language is used as the sole medium of curriculum instruction, can be considered one form of immersion education (see Baker 1996: 174). Figure 1 illustrates the amount of second language instruction within the four main immersion models as found in Canada (Baker 1996: 182-183).
The Hollihaka English immersion model fulfils the characteristics of an early total immersion programme (for second and first language instruction distribution, see chapter 5.4.).

4.6. Other bilingual education models

As this study concentrates on immersion and especially on the early total immersion model, other models of bilingual education are only referred to very briefly here. The terms teaching content through a foreign language, content-based second language teaching, language sensitive content teaching, content-area teaching, language- or content enhanced/enriched teaching, or CLIL (content and language integrated learning) as a general term are used very loosely to refer to the great variety of models employed in various contexts of bilingual learning (Järvinen 1999: 15, Nikula, 1997: 5-7, see also Järvinen, Nikula & Marsh 1999). They can refer to any amount of teaching in a second language in addition to the core
language teaching that stays below 50% of the time available for instruction. Also various foreign language schools like the English, German, Russian and international schools and IB upper secondary schools which work in Finland and operate according to their own curricula and legislation can be mentioned here.

5. THE HOLLIHAKA ENGLISH IMMERSION MODEL

As in Canada in the 1960s, the English immersion programme in Kokkola started on the initiative of a group of parents whose children attended the local English Kindergarten. Today this form of education is an essential part of Kokkola educational policy and implements the development strategy of the town, the goal of which is “a town of international know-how of the new millennium” (Laitinen 1998). To discuss the demand for, and the feasibility of, an English immersion programme in a Finnish context, a few national and local considerations have to be taken up.

5.1. The macrocontext for English immersion in Finland

5.1.1. English in Finland


Finland is a rapidly developing industrialised EU country which is known for its rapidly increasing mobile phone connections, internet accesses, and e-mail addresses per citizen. This also means growing connections with people from other countries and increasing importance of language skills, especially those of English language skills. According to Broughton, Brumfit, Flavell, Hill and Pincas (1994:1), there are 300 million native speakers of English in the world to be found in every continent, and an equally widely distributed body of second language speakers, who use English for their day-to-day needs, totals over 250 million. If we add those areas where decisions affecting life and welfare are made and
announced in English, we cover one-sixth of the world’s population. The rapid spread of technology and networked information has resulted in a rapid spread of English as well. Present workplace culture in various Finnish multinational companies (e.g. Stora-Enso, Nokia) means that English is the corporate language of internal communication (Kankaanranta, 2000). The importance of the English language in world trade is unquestionable.

The Finnish membership of the European Union since 1995 makes it possible for a Finn to study and work abroad more easily than before. This possibility can best be used by people who have advanced foreign language skills. The European Comission considers language learning essential for every citizen to benefit from the right of the free movement of individuals. Language learning is also a key to better understanding between peoples and cultures, and bilingual education is one way to contribute to this.

The Council of Education Ministers decided in 1995 that every European citizen should be given an opportunity to learn at least two community languages in addition to their mother tongue. The same objective is restated in the White Paper on Education and Training – Teaching and Learning: Towards the Learning Society by the European Commission in 1995. A commonly shared view is that bilinguals have linguistic capital, i.e. marketable language skills and intercultural knowledge. All in all the future of employment and social life of a Finn seems more versatile for bilinguals than monolinguals, and especially so for Finnish-English bilinguals.

Youth culture in Finland has also rapidly become bilingual. English is used at least as much as Finnish, maybe even more, in youth music, computer games, radio, TV, and the internet. Satellite channels such as Eurosport and MTV have a noticeable role in a Finnish young person’s life. The fact that TV programmes are not dubbed but have subtitles instead in Finnish television also promotes the use and learning of the English language. Marsh and Westerholm (Marsh, Marsland and Nikula 1997, foreword) call Finland a plurilingual society, which sets great value on both linguistic diversity and the need to understand what those beyond the national borders are thinking and doing.
5.1.2. English in Finnish schools

Finnish school legislation states that every Finnish pupil has to study at least one foreign language in addition to the two official languages Finnish and Swedish (National Board of Education 1994: 17). The foreign language studied by the majority of the pupils is English. In year 1999, 87% of the pupils chose English as their first foreign language (A1-language) (Helsingin Sanomat 31.1.2000). During the school year 1997-1998 English was studied as the only foreign language in 58.8% of the Finnish schools; the corresponding percentage was 56.8 in the school year 1998-1999 (Nyman, 1999.) According to Nyman (1998) A1-English was most often started on the third grade, but some schools offer it already from either second or first grade on.

The amount of English studied in the traditional form of language instruction varies from 2-3 weekly school hours yearly starting either in grade 3 or grade 5. Thus the minimum total amount of weekly school hours varies from 8 to 16 according to the starting grade (National Board of Education, 1994). In other words the number of English language lessons (á 45 minutes) that a pupil has to take during compulsory education varies from approximately 360 to 580. These figures are illustrated in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Starting grade</th>
<th>Lessons per year</th>
<th>years of study</th>
<th>total amount of lessons (á 45 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 English</td>
<td>3</td>
<td>2-3</td>
<td>7</td>
<td>580</td>
</tr>
<tr>
<td>A2 English</td>
<td>5</td>
<td>2-3</td>
<td>4-5</td>
<td>360</td>
</tr>
</tbody>
</table>

The corresponding lesson amounts in the English immersion experiment in question total in 830 during grades 1-6 (see table 5) and 1,260 during grades 1-9 as the immersion language teaching continues as A1-language teaching in the upper grades and an additional oral skills course is organised in grades 8 and 9 (Hollihaka immersion follow-up group meeting 11.1.2001.)

In the late 1980s an increased interest in internationalisation fostered a more critical view of current language programs, and there was an increased demand for communicative-pragmatic second language teaching. In 1989 a committee appointed by the
Finnish Ministry of Education stated that study of a foreign language can be motivated and made more effective by teaching some subjects totally or partly in a foreign language, especially in the pupil’s first foreign language (A1-language).

The experimental bilingual education programmes which were created in many schools could not be very radical, because the use of the second language as a medium of instruction was restricted to 2-3 hours a week, if a special permission had not been given by national school authorities. Since 1991, due to amended Finnish educational legislation, communities and schools have been allowed to freely use a foreign language in the teaching of any subject, provided that it is an optional program that pupils’ parents and teachers wish to implement (cf. Finnish school law, § 10). (Takala, Marsh & Nikula 1998, Björklund, 1997.)

5.2. The microcontext for English immersion in Kokkola

The microcontext for the English immersion in Kokkola consists of a number of factors. The fact that an English Kindergarten had existed in Kokkola since 1972 was a good starting point for the planning of a school immersion programme. The Hollihaka school had already started giving immersion education in 1992, when the first Swedish immersion group had started there. The school was also an international unit within the Kokkola school network, because the refugee and immigrant teaching had been located there. (Laitinen, 1998.)

Soon after the immersion teaching started at Hollihaka, the immersion parents founded an association KIM (Kokkola Immersion), whose most important function is to sponsor an afternoon club for the immersion pupils at Hollihaka school. KIM also supports the immersion teachers with scholarships for continuing education and travel expenses. (Kokkola immersion report, 2000.)

The local Chydenius-Institute, which is part of the University of Jyväskylä, has also been involved in the development of the English immersion education in Kokkola. The present writer worked at the Institute in 1998-2000 as a senior training coordinator with the main responsibility for coordinating research and continuing education courses for immersion teachers. A study programme worth 15 credits (a minor subject) for English immersion teachers (Teaching in English, minor studies) was launched in August 1999 and the first participating teachers graduated in December 2000. The programme is supervised by the Centre for Applied Language Studies, University of Jyväskylä (Professor Kari Sajavaara).
Even before, a 15 credit unit programme of CLIL (10 credits) plus English language skills (5 credits) was implemented, with 30 teachers from all over Finland, out of whom 17 were from Kokkola, participating in the course. These courses were funded by the Finnish National Board of Education.

An international teacher trainee programme was also established in 1997 to support the English immersion programme in collaboration with the Oregon state universities. The Kokkola school office is part of the Global graduates programme (see http://osu.orst.edu/dept/int_ed/global_grads) and hosts two American teacher trainees a year, who participate as assistants in the every day teaching work at the English kindergarten, Hollihaka school, and Länsipuisto school. The Länsipuisto school is the school where the immersion pupils move for their 7-9 grades of the comprehensive school and where the teaching will continue as content and language integrated teaching, with approximately 40-50% of the teaching being given in English. (Kokkola immersion report, 2000.)

From the beginning, the Kokkola school office has been very keen on implementing immersion education and CLIL teaching as well, and one of the future goals is to found an IB school in Kokkola (Kokkola school net report, 1999). The school office has also nominated a coordinator for both English and Swedish immersion since 1997. The coordinators function as contact persons between the immersion kindergartens, the Hollihaka school and the upper comprehensive schools in the planning and implementation of the immersion programme. The present writer worked as the coordinator in the English side in 1997-1999.

The network for the English immersion experiment in Kokkola is summarized and illustrated through the mind map below (c.f Buss & Laurén 1997:18).
Figure 2. The English immersion network in Kokkola

Hollihaka English immersion

- English Kindergarten of Kokkola
- Preschool
- Parents KIM
- CLIL-teaching, grades 7-9
- Länsi-Puisto school
- Global graduates
- Chydenius Institute
  - Coordinator
  - Research
  - Teacher training
- Trained and devoted teachers
- Importance of English in society
- School administration
5.3. *English immersion in Kokkola*

As has been said above, the English immersion experiment in Kokkola is an early total immersion programme which begins at the kindergarten and continues at the Hollihaka school following the official curriculum of the school.

5.3.1. The English kindergarten of Kokkola

The English kindergarten of Kokkola, which is a private kindergarten partly funded by the town of Kokkola, was founded in 1972 by a group of active parents (cf. Laitinen 1998, English Kindergarten News 1994). The staff of the English kindergarten consists of two native speaker kindergarten teachers, who during the school year 1999-2000 were from the United States and England, two Finnish-speaking day-care assistants, and a Finnish-speaking manager. The intake of the kindergarten is 64 children yearly, 32 in the morning group and another 32 in the afternoon one.

The English teachers speak English only with the children and the Finnish assistants Finnish only, to secure the development of the children's mother tongue as well. The children are never forced, but always encouraged, to use the foreign language, but they can always use and be understood when using their own mother tongue. (Kokkola immersion report 2000.) The language use of the teachers and assistants thus follows the one teacher – one language principle since the English speaking teachers do not speak or understand Finnish.

The activities of the kindergarten are guided by a curriculum written in cooperation with the Hollihaka English immersion teachers, kindergarten parents, and kindergarten staff in 1996. According to the curriculum, the main principle of the kindergarten is to give the children good language skills via play and activities and to give pre-school teaching to 6 year olds. (Laitinen 1998.) Routines, repetition, familiarity, and, most importantly, learning through play are the key aspects of language instruction at the kindergarten (Sheare 1998: 14).

The kindergarten has an important role to play in preparing the children for the English class at the Hollihaka school. Every child joins the pre-school group a year prior to going to school. The main function of the pre-school according to Harris (1998) is to equip
children with the basic skills and knowledge necessary for school. This includes introducing the English letter sounds and their formation, introducing new number concepts, and developing social skills such as being able to work as part of a group, being able to think independently, and having the ability to solve problems (Laitinen 1998: 20). The pre-school of the English Kindergarten will become part of the Kokkola town pre-school network from autumn 2000. The kindergarten will organise pre-school teaching according to the same principles as before for 700 hours per year, i.e. 3-4 hours every day. (Indola, personal communication, 2000.)

The co-operation between the English kindergarten and the Hollihaka school has always been active: the kindergarten children have visited the school and they have had lessons together, the school teachers have visited the kindergarten, the pupils and the kindergarten children have had joint reading sessions (bookbuddies), they have made outings and gone to the theatre together, etc. The focus of this co-operation has been to secure a flexible and safe transfer from the kindergarten to the school. The school as an institution has become more tangible for the children and, on the basis of the mutually prepared curriculum the linguistic development of the children has been secured. The special education kindergarten and school teachers also belong to the co-operation net (Kokkola immersion report, 2000).

5.3.2. The Hollihaka school

The Hollihaka school was founded in 1960 as a Finnish speaking primary school. During the school year 1999-2000, the school runs two immersion programmes (Swedish and English) each having classes 1-6, one set of Finnish classes 1-6 and an immigrant preparatory class. The total number of teachers in the Hollihaka school is 26 and that of pupils 367. Out of the pupils, 123 go to the English immersion classes, 130 to the Swedish immersion classes, and 114 to the normal Finnish classes. The 18 immigrant pupils attending the school during the school year 1999-2000 were placed in the Finnish classes, where they are expected to study after the 6-month preparatory teaching in an immigrant class. (Hollihaka school work plan 1999-2000.) The following table illustrates the numbers of pupils in each class during the school year 1999-2000:
Table 4. Number of pupils at Hollihaka school during the school year 1999-2000

<table>
<thead>
<tr>
<th></th>
<th>grade 1</th>
<th>grade 2</th>
<th>grade 3</th>
<th>grade 4</th>
<th>grade 5</th>
<th>grade 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>English immersion</td>
<td>20</td>
<td>21</td>
<td>23</td>
<td>18</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Swedish immersion</td>
<td>19</td>
<td>20</td>
<td>20</td>
<td>26</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Finnish classes</td>
<td>19</td>
<td>20</td>
<td>16</td>
<td>19</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
<td>61</td>
<td>59</td>
<td>63</td>
<td>56</td>
<td>70</td>
</tr>
</tbody>
</table>

A question of whether to test the pupils who seek to enter an immersion programme or not has caused some discussion in Finland lately. Mustaparta and Tella (1999) say that we in Finland at least strive not to choose the pupils in immersion education in any way. Also Jukka Sarjala from the National Board of Education (Keskipohjanmaa 21.11.2000, Kokkola-lehti 22.11.2000, Österbottningen 21.11.2000) holds the same opinion saying that immersion education should be a voluntary option available for all pupils within the Finnish school system. One criterion for being admitted into an immersion class can be that the pupil has attended an immersion kindergarten and has got her pre-school education in the immersion language. Some schools are known to arrange some sort of testing for pre-schoolers, which, according to Laurén (1999: 22), tend to exclude the perhaps most interesting talents and take in pupils who find it easy to learn according to these tests, but no exact knowledge of the tests is available. The survey by Sved (2000:11-12) reports English and other foreign language immersion schools to have many different ways of choosing their pupils, and also at least as many different opinions on the suitability of the choosing procedure. Williams (1998:60) reports that her study school requires children to take a language-aptitude test before they are admitted into the program. The children are not supposed to be of above average intelligence, but in practice they are usually educationally advanced for their age.

The participation in the Hollihaka English immersion programme is totally voluntary. The children who have gone to the English kindergarten of Kokkola and who want to continue their studies in the English immersion programme have all been accepted without any entrance tests. The parents’ wish for their children to go to these classes has been enough to guarantee a place in these classes (Hämäläinen 2000 personal communication). Prior to the beginning of the school, each child goes to normal school maturity tests with a special
kindergarten teacher, who can then, with the kindergarten teachers, suggest that the parents should choose a normal class for their child, if e.g. the child's speech development or the social skills are delayed. (Indola, 2000 personal communication.) Almost all pupils who attend the Hollihaka immersion classes have attended the English kindergarten of Kokkola for at least a year, or they have gained the basis for their English language some other way, e.g. by living in an English speaking country. (Laitinen 1999.)

5.4. The implementation of the immersion programme at Hollihaka school

The early total immersion, the model which the Hollihaka English immersion programme follows, starts at the kindergarten at either the ages of 4, 5 or 6. In Hollihaka, the percentage of English instruction is 85% in grade 1, 80% in grade 2, 60% in grade 3, 52% in grade 4, 50% in grade 5 and 48% in grade 6 (Hollihaka school work plan 1999-2000).

The English immersion teaching in the Hollihaka school follows the general curriculum of the school. The weekly number of lessons and subjects taught in English may vary yearly from the third grade on depending on the teachers' major subjects. The reasons for the subjects chosen to be taught in the two languages also depend on the school's financial resources, e.g. in handicraft and physical education, the immersion pupils have to be in joint teaching groups with pupils from the Finnish classes and these subjects are taught using Finnish. It may also be difficult, for instance for American teachers, to teach skiing or skating or knitting mittens if such skills have not been part of their studies and culture from early years. (Hämäläinen 2000, personal communication.)

The instruction given in the different languages can be seen in the following table (Hollihaka school work plan 1999-2000):
Table 5. Lessons given in English, Finnish and other languages in Hollihaka school English immersion classes during the school year 1999-2000

<table>
<thead>
<tr>
<th>Grade</th>
<th>English Lessons</th>
<th>Finnish Lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st grade</td>
<td>In English: 17 h: English (reading and writing) 6h, Math 3h, environmental studies 1.5h, religion 0.5h, music 1h, art 1h, handicraft 2h, P.E. 2h</td>
<td>In Finnish: 3h: the Finnish cultural tradition = mother tongue, environmental studies*, religion</td>
</tr>
<tr>
<td>2nd grade</td>
<td>In English: 16 h: English (reading and writing) 5h, Math 3h, environmental studies 2h, religion 0.5h, music 0.5h, art 1h, handicraft 2h, P.E. 2h</td>
<td>In Finnish 3h: the Finnish cultural tradition: mother tongue, religion, music; in addition 1h Swedish</td>
</tr>
<tr>
<td>3rd grade</td>
<td>In English: 15 h: English (reading and writing) 3h, Math 4h, environmental studies 1h, religion 1h, music 1h, art 2h, P.E. 3h</td>
<td>In Finnish: 6h: mother tongue (reading and writing) 2h, environmental studies 1h, religion 1h, handicraft 2h; in addition 3h Swedish</td>
</tr>
<tr>
<td>4th grade</td>
<td>In English: 13h: English (reading and writing) 3h, Math 4h, environmental studies 2h, religion 1h, music 1h, art 2h</td>
<td>In Finnish: 9h: mother tongue (reading and writing) 2h, environmental studies 1h, religion 1h, handicraft 2h, P.E. 3h; in addition 3h Swedish</td>
</tr>
<tr>
<td>5th grade</td>
<td>In English: 12h: English (reading and writing) 3h, Math 3h, environmental studies 2.5h, history 0.5h, music 1h, art 2h</td>
<td>In Finnish: 10h: mother tongue (reading and writing) 2h, math 1h, environmental studies 0.5h, religion 1h, history 0.5h, handicraft 2h, P.E. 3h; in addition 2h Swedish and 2h voluntary German or French</td>
</tr>
<tr>
<td>6th grade</td>
<td>In English: 12h: English (reading and writing) 3h, Math 3h, environmental studies 2h, history 1h, music 1h, art 2h</td>
<td>In Finnish: 11h: mother tongue (reading and writing) 2h, math 1h, environmental studies 1h, religion 1h, history 1h, handicraft 2h, P.E. 3h; in addition 2h Swedish and 2h voluntary German or French</td>
</tr>
</tbody>
</table>

* Environmental studies: biology, geography and social studies (ympäristöoppi in Finnish).
The distribution of the instruction given in the different languages is illustrated in the figure below.

Figure 3. Percentual distribution of lessons given in English, Finnish and Swedish in Hollihaka school English immersion classes during the school year 1999-2000

5.4.1. Teaching of the mother tongue within the Hollihaka experiment

The fact that the immersion children are Finns, come from Finnish homes, and their identity and heritage are Finnish is very important and must be taken into consideration when mother tongue teaching is planned for them. The mother tongue lessons start from the first grade in the Hollihaka school; they are called "Finnish cultural heritage" lessons. During the first and the second grade the teachers concentrate on teaching music, religion, and environmental studies. The lessons are used to transfer cultural areas included in the curriculum of the first and second grades in the normal Finnish classes to the immersion pupils: songs, games, poems, hymns, and prayers (Laitinen, 1998.) Reading and writing instruction in the Hollihaka English immersion is conducted in English during the first two grades, but as Meriläinen
(1998: 65) points out, it is important to encourage the children to read in Finnish as well, as soon as they have learnt to read in general.

Before the third grade, all the teaching of reading and writing has been conducted in the immersion language; formal Finnish language teaching begins from the third grade. During the third and fourth grades, the main focus is on reading skills, spelling, and grammatical correctness plus ability to produce texts in Finnish. The main goal is to make Finnish reading skills develop from mechanical skills into understanding reading skills. It is also very important to keep up the pleasure found in reading. During the fifth and sixth grades, the focus is on vocabulary size development. Reading skills are necessary for finding information as well. The pupils produce large numbers of texts of their own and the focus is on sentence awareness and enrichment of contents. (Meriläinen 1998).

According to Meriläinen (1998), an important aspect of mother tongue teaching at each grade is teaching of concepts. The immersion teacher and the mother tongue teacher have to work together in close contact, because the mother tongue teacher is supposed to strengthen the concepts taught in the immersion language e.g. in biology, religion and mathematics as indicated by the immersion teacher. From 1998, the Hollihaka school has followed a “period model” (the school year consists of shorter periods or units, each lasting a few weeks) where the immersion teacher and the mother tongue teacher have taught subjects like history, biology and geography in three-week periods, switching the instruction language each period. This has been done to ensure the learning of both the concepts in English and Finnish in these subjects. The contents of the lessons have of course been different, e.g. the Discovery of America in English and the Reformation in Finnish (Liimatta-Åström, personal communication 2000)

The mother tongue teaching for the Swedish speaking pupils attending the English immersion is organised in Swedish. The lessons are given by the Swedish immersion teachers first during the cultural heritage lessons in grades 1 and 2 and later during the Swedish language lessons in grades 3-6. (Hämäläinen, personal communication, 2000.)
5.4.2. Second language learning aims and their implementation within the Hollihaka experiment

In the Framework Curriculum for the Comprehensive School, the National Board of Education (1994) writes: "The general aims of mother tongue learning are that the student's self-esteem, desire to express himself and courage are reinforced, and he becomes a skillful communicator" (Section 3.4.1, Mother Tongue) and "Foreign languages are learned so they can be tools in interaction, creative activities and thinking, and in gleaning information" (Section 3.4.3, Foreign Languages). In the Hollihaka school these principles of language teaching are the foundation of the immersion teaching programme (Kokkola immersion report 2000).

According to Colburn (Kokkola immersion report, 2000), the learning environment should be a welcoming, attractive, and informative place to be in. Clear organisation of class resources and learning materials allows students to develop independent working skills. This then gives the teacher valuable time to interact with individual students and small groups. The teacher needs to create a balance between direct curriculum teaching and the development of language skills. Within the immersion classes, an opportunity is provided for all students to share and discuss their news, views, and opinions with the teacher and other members of the class. This builds up positive relationships within the class and creates an environment in which students feel safe and able to contribute. They become receptive listeners and will be able to respond appropriately. The development of a student's self-esteem is an integral part of the Hollihaka immersion programme. This is particularly important as students begin school when they may not understand everything in the target language.

The English immersion teachers have created a detailed English language writing skills curriculum, which is divided into sub-categories such as spelling, punctuation and structure, handwriting and presentation, knowledge about language, information writing, and personal and imaginative writing. The reading and speaking curriculum documents are currently being established (Kokkola immersion report 2000). So in a way the Hollihaka English immersion teachers are already implementing the suggestion by Cummins (1999) of making language and discourse a focus of study within the immersion programmes as well. Cummins (1999:5) suggests potential content areas such as riddles, jokes, code-switching, translation, language conventions of popular music and poetry, accents, dialects, language of
persuasion in advertisements and politics, sign language, etc. He suggests that this could be done by having students carry out individual and group projects focusing on structural, sociolinguistic, and sociopolitical aspects of language.

5.5. The sufficiency of the mother tongue teaching

The Hollihaka English immersion pupil's school hours during the first 6 years of comprehensive school amount to the total of 138 hours, the minimum set by the National Board of Education being 124 (National Board of Education 1994). The teaching conducted in the mother tongue amounts to the total of 42 hours, that in English to 85 hours, and that in Swedish to 11 hours (Hollihaka school work plan 1999-2000).

The minimum for the mother tongue hours during the first 6 years of school set by the National Board of Education is 32. In the Hollihaka English immersion model the number of hours for the pure mother tongue teaching during those six years is only 12 hours, and this has been the reason why there have been worries expressed that the immersion pupils cannot attain the required level in the mother tongue skills. The Finnish National Board of Education (1999: 13) has pointed out that there is not much research on teaching in foreign languages in Finland. In other countries such research has given mostly positive results, but some studies have also implied that pupils' mother tongue and concept formation may suffer.

From the accounts of the contents and aims of the mother tongue instruction and the English language instruction in the Hollihaka English immersion programme given above, we can see that the mother tongue curriculum is partly covered in the English language lessons (mainly goals related to read and write). Thus, the number of the mother tongue hours (12) can to a certain amount be combined with the number of the English language hours (23) as in this programme some aspects of language are taught as universal features belonging to both English and Finnish, i.e. sentence structure (sentences begin with a capital letter and end in a full stop, exclamation mark or question mark, etc.), sentence constituents (subject, predicate, object, etc.), parts of speech (noun, verb, adjective, numeral, etc.) (Hollihaka school English immersion curriculum 1999, Hollihaka school immersion Finnish curriculum 1999). This results in the English immersion curriculum consisting of 35 language skills hours which concentrate on both English and Finnish language skills.
This question of mother tongue instruction and mother tongue skills in general is crucial and should not be overlooked. For the Hollihaka programme, research to be carried out will tell us whether the mother tongue skills set for the first six grades of the comprehensive school are reached or not. One study has already been conducted on this issue and will be discussed below in chapter 6.2.3.

6. IMMERSION RESEARCH

There is a wealth of research on immersion education which has accumulated since the 1960s. The results of the research on academic performance are nearly always one and same: for majority language children immersion education gives positive results whereas for minority language children immersion education can result in negative results (Williams & Snipper, 1990, Cummins & Swain, 1986).

Krashen (1991) points out that Canadian immersion is not solely another successful language teaching programme but it may be the most successful programme ever recorded in professional language-teaching literature. According to Geva and Clifton (1994), parents, educators and researchers both inside and outside Canada consider immersion programs to be very successful models of second language learning in the classroom setting. Cummins (1999:5) says that within immersion education the development of additive bilingual and biliteracy skills entails no negative consequences for children's academic, linguistic, or intellectual development. On the contrary, although not conclusively, the evidence points in the direction of subtle metalinguistic, academic, and intellectual benefits for bilingual children.

According to Cenoz & Genesee (1998: 12) as well as Cummins and Swain (1986: 34), in many settings there is a tendency to review positive research findings from a particular local situation and to conclude that the educational model per se can be imported wholesale into a new and very different sociolinguistic context. In fact, what can and should be imported is a cycle of discovery, the continual process of evaluation, theory building, generation of hypotheses, experimentation, and further evaluation. Commentators and policymakers have failed to realize that data or facts from bilingual programmes become
interpretable only in the context of a coherent theory from which predictions about programme outcomes under different conditions can be generated. Bearing this in mind, the following account for immersion research findings in general will give a picture of the outcomes of immersion programmes implemented in Canada and Finland. Later, the outcomes of the Hollihaka English immersion programme are discussed in more detail. A discussion of the suitability of the Canadian immersion model to the Finnish school system will be given in the conclusion part of the present study.

6.1. Early total immersion research findings in general

Since this study concentrates on the early total form of immersion education, the research findings of this type of immersion only are discussed here. (For a detailed discussion on the research findings of the first Canadian early total immersion experiment in St. Lambert, see Lambert & Tucker 1972.)

6.1.1. Second language achievement

Cummins and Swain (1986:44) say that every study that has compared the second language performance of students in early total immersion programmes with that of students in core foreign language teaching programmes has revealed a significant difference in favour of the immersion student. According to Genesee (1987), this superiority is not unexpected in view of the immersion pupils' much greater exposure to the immersion language. This is also the case in the Hollihaka English immersion programme, as discussed below (chapter 9.), where the English language skills of the 5th grade English immersion pupils are compared to those of 9th grade core English language teaching pupils using a national 9th grade English language assessment test created by the National Board of Education as a testing device.

Comparison with native speakers of the immersion language indicates that immersion pupils seem to measure up to them in receptive skills but lag behind in productive skills, especially in the grammatical accuracy of speech (Järvinen, 1999). According to Genesee (1983, 1987), especially early immersion pupils are most likely to perform as well as native speakers on tests of comprehension, including both reading and listening, when tested in school-type language. Their performance on productive language skills or knowledge of
discrete linguistic rules has been found to be less than native-like, although very good. Cummins and Swain (1986:45) point out that immersion students operate with simpler and grammatically less redundant verb systems. They tend to lack forms for which grammatically less complex alternative means of conveying appropriate meanings exists. According to Björklund et al. (1998: 182), immersion pupils speak and write eagerly in their immersion language but they make linguistic mistakes which the native speaker of the language in question would not make. The difference is due to the fact that understanding and producing require different types of knowledge. To understand a linguistic message a pupil has to know the meaning of the message (semantic knowledge is required) but to make a message comprehensible for the listener or reader syntactic knowledge is required.

Peter Foley, a French immersion pupil, grade 7, characterised his French language skills as follows: “I think my French is good enough to use with French-speaking people in not too, too complicated a conversation, to follow a French television show or movie, and to understand most French books.” (Lapkin, Swain and Argue 1983: 11.)

6.1.2. Mother tongue achievement

Studies of mother tongue achievement within immersion programmes both in Canada and Finland (Vaasa) show that delayed mother tongue instruction does not harm immersion pupils’ mother tongue development. According to Takala (1992), the mother tongue skills have developed also without any mother tongue instruction when immersion pupils have come from majority language backgrounds. This implies that there is no real fear of loss or weakening of language identity or mother tongue skills because of immersion education.

Swain and Lapkin (1982) say that a clear pattern of results has emerged from standardised mother tongue testing. In kindergarten through grade 3, immersion students lag behind their peers in the regular program in some aspects of mother tongue skills but by the end of grade 5 they perform as well, or better than, their mother tongue-educated peers on all aspects of mother tongue (in this case English) language skills measured by standardised tests. According to Elomaa (1996, Monikielisyysuutiset 2/2000), who has studied the Finnish speaking Swedish immersion pupils in Vaasa, control group (normal Finnish class) pupils were better in some aspects of the Finnish language but immersion pupils outperform their achievements in e.g. compound word spelling and use of subordinate clauses. Immersion
pupils’ language awareness is better developed in general and they understand things well in their mother tongue as well, because they have access to contrastive considerations because of the two languages they master. Baker and Prys Jones (1998: 498) point out that these findings are linked with bilingualism permitting increased linguistic awareness, more flexibility in thought, and more internal inspection of language, and thus such cognitive advantages may help to explain the favourable progress in English of early immersion students.

6.1.3. Learning to read

One of the most important goals of any school during the first years of education is to teach pupils how to read. This is also the case with immersion education.

Within early total immersion, teaching of reading is conducted in the immersion language. According to Laurén (1999), children should not be taught to read in two languages simultaneously. This is because the relationship between phonology and orthography is never the same in two different languages. Recent findings from Canada show that learning to read in the immersion language may be a little slower than it would be in the pupil’s mother tongue, but after the pupils have attained a certain level, their results are as good, independent of the language with which the learning has occurred. All the studies indicated that for the development of the immersion language it was better to learn to read in it. Also Finnish studies on this question have given the same kinds of results. (Buss & Mård, 1999.)

According to Baker (1995), the Canadian immersion usually results in fully biliterate children. Learning to read in French first will not impede later progress in learning to read English. Geva and Clifton (1994) refer to numerous studies which have shown that children’s academic performance in general, and reading achievement in particular, is not hampered by the fact that pupils were first taught to read in French within the French immersion educational context. Noonan, Colleaux and Yackulic (1997) report a study where French immersion students who learnt to read in English were compared to French immersion students who learnt to read in French. The results showed no significant differences in English or French reading between the two groups at the end of grade three.

Björklund et al (1998) emphasize that learning how to read in a second language is not necessarily any harder or easier than in the first language, but it is important to be aware of the fact that a pupil’s restricted knowledge of the second language affects the processes
seems to be whether immersion pupils' language skills have evolved sufficiently in order to work in the curriculum in their second language.

6.1.5. Background factors and satisfaction with immersion

According to Vesterbacka (1991) the education level of Swedish immersion parents in Vaasa is somewhat higher than that of the average population of Finland. Genesee (1983) says that the majority of immersion programs in Canada are populated by children from middle or upper middle class families although research indicates that children from working class families can benefit from participation in an early immersion program without apparent risk to native language development or academic achievement.

Strong evidence is reported to exist that the differences between boys and girls regarding their school results tend to diminish within an immersion programme (Laurén 1999:184), and that boys benefit more than girls from immersion education when the development of the mother tongue skills is concerned (Helsingin Sanomat, 13.12.2000). According to Genesee (1983) majority-language students with characteristics that customarily limit their achievement in conventional school programs have been shown to attain the same levels of achievement in basic academic subjects in immersion programs as do comparable students in regular native-language school programs. At the same time, these students achieve much higher levels of second-language proficiency than they would have done in core second-language instruction. Thus this evidence indicates the suitability of immersion for all kinds of students.

Research findings from Canada, Finland and Spain suggest that the majority of parents have enrolled their children in immersion programs for instrumental rather than integrative reasons and that the pupils come from families where education is regarded important. The role of the parents in the development of the immersion programs in different countries has been found very important. The parents, as well as the immersion pupils, are satisfied with immersion as a form of education, and find it an effective way of learning a language, and the parents expect their children to be able to speak the immersion language fluently when the immersion programme ends. The pupils think that their immersion language skills are good and that immersion education has given them better job opportunities. They would also choose immersion as a school form for their children if possible. The stimulation

Genesee (1983:32-33) reports studies conducted in Canada and the United States concerning immersion in nonofficial languages and in communities where there is no large population of target-language speakers. The results from these studies state that there has been no evidence of long-term deficits in native-language development or academic achievement, and at the same time the participating students achieve noteworthy competence in the second language that is significantly superior to that of control students following the core program. Comparisons by Swain (1981 as quoted in Genesee 1983) show that French immersion students living in bilingual communities (eg. Montreal) did not score higher than French immersion students living in monolingual English communities such as Vancouver in French language proficiency tests. Thus students in communities or settings that do not have large number of target-language speakers and/or that do not officially recognize the target language can benefit from participation in an immersion program, perhaps even to the same extent as immersion students living in bilingual communities.

6.1.6. Other research fields

Bamford and Mizokawa (1991) report a study of a Spanish immersion where non-verbal problem-solving ability was measured. The immersion children demonstrated superior growth in non-verbal problem-solving over the course of one school year compared to a standard programme control group. Genesee, Tucker and Lambert conducted a study of sensitivity in communication where they found that the total immersion pupils were more sensitive to the needs of listeners than the monolingual education control group. The research consisted of explaining a board and dice game to two listeners, one of whom was blindfolded, who were then asked to play the game on the basis of the instructions given. (Baker & Pryis Jones, 1998.) Positive results have been found in effects on students’ motivation, attitude, study skills, and personal and social behaviour (Baker 1996: 206). According to Conover (1997), successful programs cite evidence that suggests immersion students fare better in creative and higher-order thinking exercises.
6.2. Immersion research concerning the Hollihaka early total English immersion experiment

A fair amount of research has been conducted round the Hollihaka English immersion programme during the last six years. Three Master’s theses have been produced, two on the English immersion programme only and one on both the English and Swedish immersion (running since 1992 in the Hollihaka school) programmes. Research on the immersion pupils’ mother tongue development and English language skills has been conducted, but not yet published.

6.2.1. English language achievement

In her Master’s thesis Sari Hämälä (1997) sought an answer to the question whether English immersion is possible within a Finnish school context or not, because English is not an official language in Finland, and thus it is not seen as having enough linguistic backup in Finland. The thesis introduces and assesses the Kokkola English immersion model. The thesis also tries to assess the reading and listening comprehension stage of the second grade immersion pupils. The initiative to this study came from the parents who were uncertain whether their children really understood the English texts they were reading.

The conclusion was that the Kokkola English immersion experiment had a good start. Linguistically the development of the pupils’ skills was at the level targeted in the second grade: most of the pupils understand most of the English that they read or hear. Hämälä wants to stress that she finds English immersion more difficult than Swedish immersion in Finland, because it is more difficult to find qualified teachers and suitable teaching material for this kind of teaching. She also emphasises the new linguistic needs of the immersion pupils: the school has to work hard to guarantee the constant development of their English language skills. The involvement of the immersion parents is seen as desirable, but the role of the parents should not grow to be too extensive because of their lack of theoretical knowledge of immersion and teaching in general. Hämälä also emphasised the long-term commitment of both parents, teachers and local authorities to immersion and its continuity. (Hämälä 1997.)
Teija Kuorikoski and Hanna Laakkonen (1999), studied the gender differences in the written production of the Hollihaka English immersion pupils in their Master's thesis. They asked 3rd, 4th and 5th grade pupils to write stories on the basis of a set of pictures. They studied the stories written by boys and girls and compared especially the quantitative and qualitative differences of nouns, adjectives and verbs used.

They found out that on an average girls wrote longer stories than boys. The pupils seemed to be quite productive as compared with subjects of other studies of the same kind. Boys seemed to vary their vocabulary slightly more than girls. Nouns were the biggest word class used by the pupils, and adjectives the smallest. Concerning the use of verbs, it was discovered that the boys used fewer verbs than girls and the variety of verbs used by the girls was larger than that of the boys'. The girls' stories concerned friendship and feelings whereas the boys' objective was to scare the reader. Kuorikoski and Laakkonen conclude that English immersion in Finland gives as good results as Swedish immersion as concerns the written production of the children at the age around 10-12. (Kuorikoski and Laakkonen 1999.)

6.2.2. Attitudes towards immersion education

Satu Paasila and Tiina Rissanen (1997) studied both the English and the Swedish immersion classes at Hollihaka school for their Master's thesis. Their intention was to see how the immersion method works in practice. They conducted a case study to find out how the immersion teachers, pupils, and their parents experienced immersion. Immersion was felt to be a good way to learn a language. The pupils liked being in immersion and found this type of language learning meaningful and motivating. The parents wanted to put their children in immersion classes because they found immersion an efficient way to learn a foreign language. Their expectations for their children's language skills and motivation to learn other languages were fulfilled. The authors found the English immersion pupils' language skills to be good as early as in the lowest grades. Their communication was fluent and easy, and they did not have to think about the words or sentence forms in advance. The teachers found immersion an efficient and challenging work form, although the work load was considered big. The teachers' opinion was that immersion should not be extended too rapidly and without careful thought in Finland, but it should be developed further. Paasila and Rissanen see immersion as a suitable educational system in Finnish school life when well organised and led by professional people. (Paasila & Rissanen 1997.)
6.2.3. Mother tongue development

The English immersion pupil’s Finnish language reading comprehension skills were measured using a Finnish standardised reading comprehension test ALLU – ala-asteen lukutesti (lower comprehensive school reading comprehension test) which was constructed by Johanna Lindeman (1998). The test is designed to measure the sub-skills of language awareness, technical reading skills, and reading comprehension skills. The test reveals a 7-13 year old child’s level of reading skills. (Lindeman 1998.)

Merja Meriläinen administered the reading comprehension test to English immersion classes 3-5 in spring 1999, and the results have been discussed in an unpublished paper (Meriläinen, 1999). In all the immersion classes tested, the immersion pupils’ Finnish reading comprehension skills were not only as good as but better than the norms given by the test for their age groups. According to Meriläinen (1999:28), the test results suggest that the teaching methods used in immersion support the elements needed for learning to read.

7. METHOD

The present writer uses different methods in presenting the data. First of all, this study is a case study, describing one particular educational model. In the discussion part of the empirical data the present writer uses mostly quantitative methods, but some questionnaire answers by the immersion parents have been analysed qualitatively. Also comparisons between the background factors and the test results as well as the test results gained by the immersion pupils and the mainstream 9th grade English language pupils are made.

The present study focuses on the English language achievement of the 5th grade English immersion pupils in a national 9th grade English assessment test designed by the National Board of Education. The results are discussed in comparison with the national 9th grade results, which have been analysed and reported by Eeva Tuokko (2000). The results from a receptive English vocabulary test created by Rolf Palmberg (Test your Word Power
1990) for the highest English immersion class in spring 2000 (6E) are also discussed. The present study also discusses the social and linguistic background of the immersion pupils, and the parents' opinions on immersion as a school form. In addition, comparisons between the years spent in the English kindergarten prior to the beginning of the school, as well as the relationships of the sex and mother tongue of the pupils as well as the mothers' and fathers' education and English language skills on the national 9th grade test results will be discussed.

7.1. Research questions

The empirical part of the present study seeks answers to the following questions:

A. Survey of contextual aspects
   1. What is the social and linguistic background of an English immersion pupil in the Hollihaka English immersion programme?
   2. What are the parents' reasons for placing their child in the Hollihaka English immersion programme and their satisfaction level with the programme?

B. Assessment of performance
   3. What is the English immersion students' level of English language skills in grade 5 compared to the mainstream English language students in grade 9?
      - Do the test results differ concerning the different language skills (listening comprehension, reading comprehension, grammar, writing and oral skills)
   4. How large is the grade 6 immersion pupils' receptive English vocabulary?

C. Exploring relationships
   5. How is the social and linguistic background and the sex of the English immersion pupils related to the test results?
7.2. The background information questionnaire

The background information data concerning the English immersion pupils attending the Hollihaka programme was gathered in two parts. First in November 1998 from classes 1-5 which were taking part in the experiment at that time, and a year after that, in January 2000, from the present grade 1 pupils as well. The answers to the first questionnaires were discussed in more detail in the Basic Survey on the Hollihaka school English classes (1999) by the present writer, whereas the results introduced below consist of the answers gathered from all the six classes taking part in the programme in the school year 1999-2000. The Basic Survey (1999) also discussed, among other things, the effect of the language in which the pupils had learnt to read and the age when they had learned to read on the 4th and 5th grade pupils' reading and writing skills of both English and Finnish. (Laitinen, 1999.)

The questionnaire used in gathering the data was put together by the present writer on the basis of the questionnaires used by Buss (1994), Haldin and Mäenpää-Lahti (1995) and Vesterbacka (1991) for their theses. A number of questions were designed by the present writer to get all the information regarded necessary. (See Laitinen 1999, appendix 1.)

7.3. The national 9th grade English language assessment test

The command of English among 9th grade comprehensive school students was evaluated nationwide in spring 1999 through a variety of tests designed to cover the aims and content laid down in the 1994 national core curriculum as extensively as possible (Tuokko, 2000:9.) This basic skills test differs from national examinations in being an assessment performed by randomly taken samples and not by all 9th graders as is the case with the ordinary final examinations (National Board of Education, 19.5.1999.) The 5th English immersion classes in spring 1999 and spring 2000 were given special permission by the competent authorities from the Finnish National Board of Education to use the same test in measuring the immersion pupils' achievement in English.

The test itself, the composition of which is discussed in more detail by Tuokko (2000), consists of the following parts: listening comprehension test, reading comprehension test, grammar test, essay writing test and oral skills test.
The reason why this particular test was chosen to be used in the English immersion class was the fact that English immersion being as young and as non-researched in Finland as it is, no suitable English language achievement tests for this particular group have yet been constructed. This testing was also chosen because of the quality and reliability of the test being guaranteed, it being a National Board of Education test. Also the possibility of getting the 9th grade results as comparison results affected the choice.

7.4. The Test Your Word Power test

The Test Your Word Power test was designed by Rolf Palmberg (1990) on the basis of Hunter Diack's series of vocabulary tests (Diack, 1975). The test is a computer aided test, where the testees are asked to answer "yes" or "no" according to whether they think a word shown on the computer screen is English or not. The English words in the test come from Diack's word lists, and the non-English words have been created by Palmberg himself (Palmberg, e-mail messages, 2000).

8. RESULTS

The answers to the questionnaires, the results in the 9th grade national English language assessment test and the receptive vocabulary test are presented and discussed in relation to the research questions and above all in relation to the general question put forward in the introduction of the present study: what is the feasibility of the Hollihaka English immersion programme, in other words, can English immersion be seen as a feasible alternative within the Finnish educational system?
8.1. Method of analysis

8.1.1. The questionnaires

The questionnaires were analysed mostly manually by the present writer. The SPSS-statistical programme was used in making comparisons between the questionnaire answers and the language skills test results. In reporting the results, the different information gathering dates can be seen from the naming of the classes: the classes from which the data was gathered in year 1998 are referred to as 1E-5E/99, whereas the last class, with data gathered in year 2000, is referred to as 1E/00.

8.1.2. The 9th grade tests

The tests were given to the 5th English immersion classes at the Hollihaka school in years 1999 and 2000. The first testing was arranged on 30.-31.3.1999, 18 pupils taking part, the latter on 12. and 19. 4. 2000, 21 pupils taking part, the total number of English immersion grade 5 pupils being tested thus being 39.

The test was given following the National Board of Education instructions as precisely as possible. In the first year, only 6 pupils were chosen for the oral examination, as the instructions specified, but in the second testing, all the pupils attending were tested, this time following the suggestion of the supervisor of the present study, research professor Sauli Takala from the University of Jyväskylä. This was done in order to get a more comprehensive picture of the pupils' oral skills level.

The tests were graded following the instructions by the National Board of Education. The listening comprehension, reading comprehension and grammar tests were graded by the present writer alone. The oral skills tests were at both times given by the present writer as a background observer and the teacher of the 5th grade year 1999, M.Ed Dana Fagerholm as the actual tester, who also listened to the tapes and graded the pupils' performances together with the present writer. The essays were read and also graded by Sauli Takala, who had read and graded a number of the 9th grade essays as well. This was done in order to ensure a similar grading for the immersion pupils as well.
The fact that the English immersion pupils were only 11 or 12 years old at the time of the testing whereas the test was designed for 15-16 year old students, or the fact that the immersion pupils had never been tested using this type of test formats, which the 9th graders are used to and have practised quite a lot, has not been taken into account in the grading procedure in any of the tested skills, thus the results are completely comparable with each other.

The analyses of the results are based on the points scored in the different tests. The grade 5E results have been handled using Excel and SPSS -computer programmes. The main attention is given to the comparison between the grade 5E and grade 9 results and after that to the correlations between some of the background factors of grade 5E pupils and the test results.

8.1.3. The test your word power test

The receptive vocabulary test was given to the 6th English immersion grade in April 2000 by the present writer. The test was taken by 19 pupils. The results were seen on the computer screen right after the testing had finished.

9. THE SOCIAL AND LINGUISTIC BACKGROUND OF THE ENGLISH IMMERSION PUPILS

The Hollihaka English immersion programme consisted of 6 classes in the school year 1999-2000. The classes vary in size, the smallest having 18 pupils and the biggest 23. The total number of pupils was 123, out of which 53 were boys (43%) and 70 girls (57%). The following table illustrates the class sizes and the sex distribution in each class.
Table 6. English immersion class sizes in Hollihaka school during the school year 1999-2000

<table>
<thead>
<tr>
<th>Class</th>
<th>boys</th>
<th>girls</th>
<th>Altogether</th>
</tr>
</thead>
<tbody>
<tr>
<td>1E</td>
<td>8</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>2E</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>3E</td>
<td>13</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>4E</td>
<td>6</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>5E</td>
<td>9</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>6E</td>
<td>7</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Altogether</td>
<td>53</td>
<td>70</td>
<td>123</td>
</tr>
</tbody>
</table>

9.1. Questionnaire data

The questionnaires were sent to all the 123 pupils’ parents and 120 were returned. The rate of return was thus 97.5. The background information about the missing pupils’ sex and mother tongue was taken from the Hollihaka school archives.

9.2. The pupils’ mother tongue distribution

Out of the 123 pupils attending the English immersion programme at Hollihaka school in the school year 1999-2000, 113 (92%) had Finnish as their mother tongue, 8 (6%) had Swedish, one (1%) had English and one (1%) had Polish. The following table illustrates the mother tongue distributions in each class.

Table 7. Mother tongue distributions in the English immersion classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Finnish</th>
<th>Swedish</th>
<th>English/Polish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1E</td>
<td>19</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2E</td>
<td>20</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3E</td>
<td>20</td>
<td>2</td>
<td>1 Polish</td>
</tr>
<tr>
<td>4E</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5E</td>
<td>17</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6E</td>
<td>19</td>
<td></td>
<td>1 English</td>
</tr>
<tr>
<td>Altogether</td>
<td>113</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>
9.3. The pupils’ language use

9.3.1. Languages used at home

The languages spoken with the pupils at home varied from Finnish only to the use of both Finnish, Swedish and English. At the homes of the Finnish-speaking children Finnish only was used in 93% of the homes, Finnish and Swedish in 2% of the homes, Finnish and English in 3% of the homes and Finnish and some other language in 2% of the homes. At the homes of the Swedish-speaking pupils, Swedish only was used in 57% of the homes and both Swedish and Finnish in 43% of the homes. The language used in the home of the Polish-speaking was Polish only and in the home of the English-speaking pupil, both English, Swedish and Finnish were used. The following table illustrates the immersion pupils’ language use at home.

Table 8. English immersion pupils’ home language use

<table>
<thead>
<tr>
<th>Mother tongue</th>
<th>Language used at Home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Finnish only</td>
</tr>
<tr>
<td>Finnish</td>
<td>103</td>
</tr>
<tr>
<td>Swedish</td>
<td>4</td>
</tr>
<tr>
<td>Altogether</td>
<td>103</td>
</tr>
</tbody>
</table>

In the immersion group taken as a whole, 86% came from monolingual Finnish-speaking homes, 3% from monolingual Swedish-speaking homes, 10% from either bi- or trilingual homes, Finnish being one of the languages used, and 1% from a monolingual non-Finnish-speaking home.

9.3.2. Language use with friends

The languages used with friends varied from Finnish only, Finnish and Swedish, Finnish and English, to Finnish, Swedish and English in all the mother tongue groups. The biggest group
of pupils used Finnish only with their friends (81%), the second biggest group being Finnish and English (11%). Finnish and Swedish were used in 3% of the cases and Finnish, Swedish and English in 5% of the cases. None of the pupils was reported to use Swedish only with their friends. The following table illustrates the immersion pupils’ language use with their friends.

Table 9. English immersion pupils’ language use with friends

<table>
<thead>
<tr>
<th>Language used with</th>
<th>Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI only</td>
<td>SW only</td>
</tr>
<tr>
<td>Pupils</td>
<td>97</td>
</tr>
</tbody>
</table>

Altogether 16% of the pupils were reported to use English with their friends as well as their mother tongue and some other language.

9.3.3. Reading habits

All the English immersion pupils were reported to either read children’s (or youth) books (or magazines) themselves or being read to. The reading habits varied form reading every day (83 pupils) to reading seldom (one pupil). The languages the pupils read in, varied from mother tongue texts only (40 pupils) to both Finnish, Swedish and English texts (9 pupils), the biggest group being both mother tongue and English texts (70 pupils). The following table illustrates the reading habits and the languages used in reading.

Table 10. English immersion pupils’ reading habits

<table>
<thead>
<tr>
<th>Reading frequency</th>
<th>Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day</td>
<td>83</td>
</tr>
<tr>
<td>Twice a week</td>
<td>33</td>
</tr>
<tr>
<td>Twice a month</td>
<td>3</td>
</tr>
<tr>
<td>Seldom</td>
<td>1</td>
</tr>
<tr>
<td>Altogether</td>
<td>120</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language of reading</th>
<th>Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother tongue</td>
<td>40</td>
</tr>
<tr>
<td>MT + English</td>
<td>70</td>
</tr>
<tr>
<td>FI +SW +EN</td>
<td>9</td>
</tr>
<tr>
<td>English only</td>
<td>1</td>
</tr>
<tr>
<td>Altogether</td>
<td>120</td>
</tr>
</tbody>
</table>
It can be said that the immersion pupils read quite a lot in their free time, as 97% of the pupils read either twice a week or more often. They also seem to read English texts quite a lot, 67% were reported to read English texts either alone or in addition to mother tongue and other texts.

9.3.4. The language of music, television and computers

The youth culture, including the world of music, TV, and computers, was well represented in the lives of the English immersion pupils as well. They were all reported to listen to music in their free time, all except 5 had a TV in their homes, and all except 23 had a computer they used in playing games at home. The biggest language groups within each media were mother tongue and English combined. The following table illustrates the choice of the language of music, TV-programs and computer games played by the English immersion pupils attending the Hollihaka school in their free time.

<table>
<thead>
<tr>
<th>Language</th>
<th>Media</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Music</td>
<td>Tv</td>
<td>Computer</td>
<td></td>
</tr>
<tr>
<td>Mother tongue</td>
<td>12</td>
<td>9</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>MT + EN</td>
<td>81</td>
<td>65</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>FI + SW + EN</td>
<td>14</td>
<td>40</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FI + SW</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>EN</td>
<td>13</td>
<td>0</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>No TV / Computer</td>
<td>0</td>
<td>5</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Altogether</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from the table, English was well represented in the pupils' free time, 84% of the pupils either listened to, watched or played English-speaking music, programmes or games solely or with mother tongue and other language equivalents. Especially the world of computers seems to be an English-speaking one, altogether 92% of the pupils who had access to computer games, were reported to play either English-speaking games solely, or together with mother tongue and other language games.
9.3.5. Years spent in the English kindergarten

Out of the 120 pupils, for whom information was available, attending the English immersion classes at the Hollihaka school, 5% had spent 4 years in the English kindergarten of Kokkola prior to the beginning of school, 40% had spent 3 years, 29% had spent 2 years, 19% 1 year, and 7% no time there. Out of the pupils (N= 8) who had not been in the English kindergarten, 5 had come to the Hollihaka English immersion classes form the English “language shower” kindergarten (Tulliharju) in Kokkola, 1 had gone to school for 2 years in the USA, 1 had been in a kindergarten in England for one year and 1 pupil had moved to Kokkola from Vantaa, where she had gone to an English immersion class. The following table illustrates the number of years spent in the English kindergarten of Kokkola prior to the beginning of school.

<table>
<thead>
<tr>
<th>Years in EK</th>
<th>Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>35</td>
</tr>
<tr>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td><strong>Altogether</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

9.3.6. The parents’ English language skills

The parents were asked to assess their English language skills according to the following criteria:

(1) No English language skills
(2) Understands English a little
(3) Understands and speaks English a little
(4) Has satisfactory English language skills
(5) Is fluent in English
(6) English is the mother tongue
Out of the 93 mothers and 91 fathers (representing the parents of 121 pupils), the biggest group belonged to criterion (4) having satisfactory English language skills. The next biggest group were parents who were fluent in English and the third biggest parents who understand and speak some English. Only a small minority belonged to the criteria (1) or (2) with no or very minimal English language skills. Two fathers and no mothers reported themselves having English as a mother tongue. The following table illustrates the percentual distribution of parents into the different groups.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mothers</th>
<th>Fathers</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>4%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>(2)</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>(3)</td>
<td>17%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>(4)</td>
<td>48%</td>
<td>42%</td>
<td>45%</td>
</tr>
<tr>
<td>(5)</td>
<td>27%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>(6)</td>
<td>0%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

9.3.7. Summary of the language background and language use

What comes to the linguistic background of the Hollihaka English immersion pupils, the requirements set for an educational programme to be called an immersion programme in that respect - pupils coming from monolingual majority language homes with similar skills (none) in the immersion language before entering the programme - can be said to be fulfilled to such an extent, that the use of the term immersion is justifiable. The great majority (92%) of the English immersion pupils have a homogeneous majority language (Finnish) background, Finnish being their official mother tongue. If the use of Finnish only at home was the requirement used here, only 86% of the pupils would fulfil that requirement. But as we do not know how much the other languages than Finnish are used in the bi- or trilingual families, we can include the pupils from those families as having a Finnish-speaking background as well, and in that case the percentage is 96, and the requirement can be taken to be fulfilled. All the pupils have had at least one year of English language immersion in one form another before entering the school, in most cases (93%) through the English kindergarten of Kokkola, prior
to which all except one (the English-speaking pupil) have had no skills in the immersion language at all.

When talking about the requirement for the presence of a living immersion language community in support of the immersion programme, the pupils’ free time use of the English language can be studied as a relevant feature. 16% of the pupils were reported to use English with their friends as well as their mother tongue and some other language. 67% were reported to read English texts either alone or in addition to mother tongue and other texts. Also the youth culture and media today support the English immersion programme. 84% of the pupils either listen to, watch or play English-speaking music, programs or games, and 92% of the pupils who have access to computer games, were reported to play either English-speaking games solely, or together with mother tongue and other language games. The parents’ quite good English language skills also help in establishing an English language enriched environment in the home when they so wish.

So, even if there is no true English-speaking community in the Kokkola region, the pupils get in touch with the immersion language in their every day life outside the school as well. It must also be remembered, that Swain and Johnson (1997) describe a prototypical immersion program as a program, where the exposure to the immersion language is largely confined to the classroom. When assessing these two contradictory scenarios, the conclusion is that the use of the term immersion can in the Hollihaka case be justified.

9.4. **The pupils’ social background**

9.4.1. The parents’ education

The parents were asked to indicate their educational level by choosing the highest training they had of the following list:

1. Primary school, senior primary school, middle school, comprehensive school
2. Vocational school, business school or equivalent
3. Matriculation examination, technical school or equivalent
4. Technical college, business college or equivalent
5. University or polytechnic degree
92 mothers and 90 fathers answered this question, representing 119 pupils' parents. The results show, that the English immersion parents are highly educated. As many as 32% of the parents altogether (both mothers and fathers had the same percentage) belong to the highest education group, the equivalent percentage of adult inhabitants in Kokkola region being 21 (Väestön koulutusrakenne kunnittain 1998). The following table illustrates the distribution of the parents’ educational level.

Table 14. Immersion parents’ educational level

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Mother %</th>
<th>Father %</th>
<th>Both %</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>4</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>(2)</td>
<td>23</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>(3)</td>
<td>13</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>(4)</td>
<td>28</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>(5)</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

The fact that such a big number of the Hollihaka English immersion parents belong to the highest educational levels, may be due to the role of the English kindergarten of Kokkola in the immersion program. The kindergarten is a private half-day kindergarten, and although it is not any more expensive than a public kindergarten, the half-day program forces the parents to get for their children another day-care place for the rest of the day and be able to move their children from one place to another during the work day, if neither parent can stay at home. This means high commitment from the parents’ side, and thus presumably also a strong belief in education and seeing language skills as a valuable capital.

9.4.2. Motivations for placing a child in the Hollihaka English immersion programme

The parents were also asked to give three freely written reasons for placing their child in the immersion programme in question. Altogether 317 answers were given. The answers can be classified into the following groups.
Table 15. English immersion parents’ motivations for placing their child in the immersion programme

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>To learn English</td>
<td>74</td>
</tr>
<tr>
<td>Opportunities in the internationalising world: studies, work</td>
<td>59</td>
</tr>
<tr>
<td>Learning the language in a natural effortless way</td>
<td>29</td>
</tr>
<tr>
<td>Internationalisation, tolerance</td>
<td>28</td>
</tr>
<tr>
<td>Meaningful teaching methods</td>
<td>25</td>
</tr>
<tr>
<td>Natural continuation for the English kindergarten</td>
<td>16</td>
</tr>
<tr>
<td>Language skills in general seen as a life-enrichening capital</td>
<td>14</td>
</tr>
<tr>
<td>Big sister / brother in the same programme</td>
<td>11</td>
</tr>
<tr>
<td>Same group continued from the kindergarten to the school</td>
<td>10</td>
</tr>
<tr>
<td>Child motivated, interested in languages</td>
<td>9</td>
</tr>
<tr>
<td>Family had a foreign background or had stayed abroad</td>
<td>7</td>
</tr>
<tr>
<td>Coincidence</td>
<td>7</td>
</tr>
<tr>
<td>Learning of other languages easy will be as well</td>
<td>7</td>
</tr>
<tr>
<td>The convenient location of the kindergarten and the school</td>
<td>4</td>
</tr>
<tr>
<td>Good group size</td>
<td>4</td>
</tr>
<tr>
<td>Keeping up and utilizing the parents’ own language skills</td>
<td>3</td>
</tr>
<tr>
<td>More challenge for the child</td>
<td>3</td>
</tr>
<tr>
<td>Parents’ or sisters’ and brothers’ language learning difficult</td>
<td>2</td>
</tr>
<tr>
<td>A priviledge to get in a programme like this in one’s own town</td>
<td>2</td>
</tr>
<tr>
<td>Children can act as interpreters on holiday trips</td>
<td>1</td>
</tr>
<tr>
<td>The school takes the bilingual (Finnish – Swedish) background into account in some way</td>
<td>1</td>
</tr>
<tr>
<td>Good results from the immersion programme</td>
<td>1</td>
</tr>
</tbody>
</table>

The learning of English or other foreign languages as such were the biggest motivational category mentioned. 40% of the answers included this point of view. The second biggest category included the consequences of having good language skills such as better opportunities in the future world (19%). The immersion itself, the teaching methods, group dynamics and challenges for the child motivated 18% of the parents. Family and location reasons formed the next biggest motivational group (9%). The idea of a child growing to be an international and tolerant person attracted 9% of the parents and 3% of the parents had the
child's own interest in languages in mind when deciding about placing their child in the immersion programme. For 2% of the parents, the immersion had been a coincidental choice for their child. So here, as well as in studies conducted elsewhere in the world, the instrumental motivations have influenced the parents' choice the most.

9.4.3. The parents’ satisfaction / disappointment with the programme

The parents were asked to evaluate their satisfaction with the Hollihaka English immersion programme on the scale of: satisfied, satisfied with reservations, or disappointed. Out of all the parents, none reported themselves being disappointed with the programme. 16 out of 120 reported themselves being satisfied with reservations, 5 had ticked both satisfied and satisfied with reservations, and the rest, 99 parents reported themselves being satisfied with the programme. The results is in accordance with the results form international immersion research. The following table illustrates the satisfaction levels in each class.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>89%</td>
<td>90%</td>
<td>75%</td>
<td>61%</td>
<td>85%</td>
<td>85%</td>
<td>81%</td>
</tr>
<tr>
<td>Satisfied with reservations</td>
<td>11%</td>
<td>5%</td>
<td>25%</td>
<td>33%</td>
<td>10%</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>Both satisf. and satisf. With reservations</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
<td>6%</td>
<td>5%</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>Disappointed</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

It can be seen that the satisfaction levels were lowest in classes 2E/99 and 3E/99. This can be understood by the fact that the 2nd and 3rd grades are the grades where the question of the reading skills is strongly occupying the parents' minds. The reading skills development has not perhaps been as fast as the parents had expected it to be, or the increasing number of subjects in 3rd grade has perhaps caused difficulties and raised the pupils' work load. The insecurity and thus the disappointment level seems to fall when getting past that critical stage.
The reasons for being satisfied with reservations (23 altogether) with the immersion programme, can be categorised as follows:

(1) Mother tongue skills

- Will the pupils get the same skills as the pupils in normal Finnish classes?
- The development of the mother tongue skills are delayed, how will that affect the learning of other subjects?
- Learning to read.
- Is it the homes’ responsibility to take care of the teaching of Finnish culture and traditions?

(2) The teachers

- The teachers change often.
- Will there always be competent teachers who know enough of the Finnish school system?

(3) Parents’ role

- It is difficult to follow the learning progress, partly because not many books are used in teaching.
- Parents’ English language skills not always good enough to help with the pupils’ homework.
- Requires a lot from the parents.

From the parents’ answers we can see that the learning of the mother tongue and its possible effects on learning other subjects worry the parents the most. This is an understandable worry which came up in the first immersion programmes in Canada as well. Other worries typical of an immersion programme are the parents’ role in the child’s education and the question of the home’s responsibility as a co-teacher of culture and traditions came up as well. These issues must be internalised and discussed among the teachers at school and with the parents in order to build up a fruitful co-operation between the home and the school. The fear for the effect of teachers changing often on a child’s school success is a fear shared by normal class parents, too.

All in all we can say that the parents of the Hollihaka English immersion pupils are satisfied with the immersion programme and that the worries and doubts they have are well understandable and world wide considerations of immersion parents.
9.5. *A typical English immersion pupil at Hollihaka school*

As a conclusion from the answers to the questionnaires, a profile of a typical English immersion pupil attending the Hollihaka school can be drawn. He or she comes from a Finnish speaking, highly educated family, where both parents have at least satisfactory English language skills, who have placed their child in the immersion programme for the sake of the English language and who are satisfied with the programme. The child has spent approximately 2½ years at the English kindergarten prior to school start, uses Finnish only at home and with friends, reads books or magazines every week in both Finnish and English, and uses both Finnish and English speaking media in his or her free time.

**10.5TH ENGLISH IMMERSION CLASS RESULTS IN THE 9TH GRADE NATIONAL ENGLISH LANGUAGE TEST**

As has been stated earlier, the English language skills development of the English immersion class 5 pupils (years 1999 and 2000, N=39) was measured by using a National Board of Education 9th grade English language skills assessment. The national 9th grade results (Tuokko 2000) have been used as comparison results.

The test consisted of 5 different parts, which had several alternative test series each. The oral skills test had 6 different series, out of which test series 3 was chosen to be used in the immersion classes. The reading comprehension and writing skills test had three alternative series, out of which test series 3 was used in the immersion classes. The listening comprehension and grammar test also had 3 different alternatives, out of which test series 1 was used in the immersion classes. All the tests used in the immersion group were chosen randomly out of the test series sent to the present writer from the National Board of Education.

Altogether 5027 Finnish speaking and 614 Swedish speaking 9th grade pupils took the test. They represent 8% of the Finnish speaking and 17% of the Swedish speaking 9th graders in Finland in school year 1998-1999 (Tuokko 2000:25).
10.1. *Grammar test results*

According to Tuokko (2000:58-59), the 9th grade results show that in the grammar test about ¼ of the population stayed under 50% average score level. In test series 1, which was used by grade 5E, the 9th grade score mean was 31.5 (test maximum 47), which equals the average percentage-correct of 67. To make the interpretation of the results easier across skills, the means have been converted to percentages by computing what per cent the mean is from the maximum score. Thus the index is a kind of facility (or difficulty) indicator. In the test, the results reported in this way are referred to as the "mean or average percentage-correct". In grade 5E, the corresponding score mean was 35.7 and the average percentage-correct 76. It is also worth noticing that only two immersion pupils stayed under the 50% level, both their scores being 21 points (=45% correct). In other words, the 9th grade pupils knowledge level was 88% of that of the English immersion grade 5 pupils. The following figure illustrates the distribution of the grammar test results gained (test series 1) by grade 5E and grade 9 pupils. The score means were 31.5 points for grade 9 and 35.7 for grade 5E, the respective standard deviations being 10.1 and 6.49.

Figure 4. Grammar test results
In the grammar test out of all 9th graders 21% of the pupils scored 85% or more of the points, 46% scored 50-80% correct and 22% scored less than half of the points (Tuokko, 2000:33). The corresponding figures for grade 5E pupils were 33% over 85% correct, 62% between 50-80% correct and 5% less than half of the points. In the grammar test grade 5E pupils' performance can thus be characterised as outperforming the 9th grade results and as being quite homogeneous compared with the 9th grade results (standard deviation 6.49 vs the 9th grade 10.13) their points clustering at the higher end of the percentual score scale.

Figure 5. Grammar test percentual score distribution

What comes to the individual test items, the multiple choice questions in English proved to be quite easy for the immersion pupils, their mean was 23.72 (out of max 30, equals to 79 means percentage-correct) and standard deviation 4.08. In the items, where the pupils were asked to fill in the missing part of a sentence according to mother tongue hints, the 9th grade results were reported to be relatively weak (Tuokko, 2000:59.) The grade 5E pupils' results were of the same nature, the average percentage-correct being only 49. The last item, which consisted of 5 Finnish sentences to be translated in to English, gave relatively speaking a lot higher results for the grade 5E pupils, their average percentage-correct being 77. The corresponding 9th grade scores were not available.

Of the separately measured grammatical items in the multiple choice format, the most difficult for the 9th grade pupils in test series 1 were the following (Tuokko, 2000:59):
<table>
<thead>
<tr>
<th>Grammatical item</th>
<th>Average percentage-correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past tense in a question</td>
<td>54.2</td>
</tr>
<tr>
<td>1st conditional in if-clause</td>
<td>44.5</td>
</tr>
<tr>
<td>Future tense in if-clause</td>
<td>55.4</td>
</tr>
<tr>
<td>Indefinite article ‘an’ with an adjective</td>
<td>51.5</td>
</tr>
</tbody>
</table>

For grade 5E pupils, the most difficult structures were:

<table>
<thead>
<tr>
<th>Grammatical item</th>
<th>Average percentage-correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st conditional in if-clause</td>
<td>30.8</td>
</tr>
<tr>
<td>The use of “anyone” in a question</td>
<td>51.3</td>
</tr>
</tbody>
</table>

For both groups, the 1st conditional if-clauses caused considerable problems.

10.1.1. Grammar test results by boys and girls

According to Tuokko (2000:61-62), girls' superiority over boys is very clear in the grammar test results. In test series 1, the difference between the average percentage-corrects is 7.3 percentage points (girls' 70.8% respective boys' 63.5%). This equals almost a difference of one school grade and is statistically very significant. The girls' average score in points was 33.3 and the boys' 29.8, and their standard deviations 9.32 and 10.62 respectively. In grade 5E the girls' average score was 38.0 (80.8%) and standard deviation 4.78, whereas the boys' corresponding figures were average score 32.0 (68.1%) and standard deviation 7.35. In the grammar test the English immersion 5th grade boys' knowledge level was 84% of the girls' level. In grade 5E the boys' results were a bit more heterogeneous than the girls' results, but compared to the 9th graders they both seem very homogeneous, the grade 5E girls extremely so (standard deviation 4.78 respective to 9.32 for grade 9 girls).
Table 17. Grammar test results by boys and girls

<table>
<thead>
<tr>
<th>Grammar test, test series 1</th>
<th>Average score</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>girls</td>
</tr>
<tr>
<td>Grade 5E</td>
<td>32.0</td>
<td>38.0</td>
</tr>
<tr>
<td>Grade 9</td>
<td>29.8</td>
<td>33.3</td>
</tr>
</tbody>
</table>

10.1.2. Grammar test results in different mother tongue groups

Even though the English immersion classes in question have 4 pupils whose mother tongue is Swedish and one pupil whose mother tongue is English, all pupils took the test in Finnish. The parents of the different mother tongue group pupils were asked to decide whether the pupil was to take the test or not. When comparing the results gained by different mother tongue groups, only the Finnish speaking grade 5E pupils' (N=34) results can thus be compared with the Finnish speaking 9th grade pupils' results.

According to Tuokko (2000:63), the grammar test series 1 average scores for the Swedish speaking 9th graders was 37.6 points, and for the Finnish speakers 30.8 points, the standard deviations being 7.01 for the Swedish speakers and 10.23 for the Finnish speakers. In grade 5E the corresponding figures for the Finnish speaking pupils were 35.6 and 6.19. When compared with the Finnish speaking 9th graders the English immersion grade 5E Finnish speaking pupils seem to have succeeded better and with noticeably more homogeneous results.

10.2. Reading comprehension test results

According to Tuokko (2000:53), the 9th grade test results show that reading comprehension has not caused great difficulties for the pupils. The average percentage-correct for test series 3 (which was used by grade 5E) was 72. What comes to grade 5E pupils, the reading comprehension test was the one where they scored the lowest points, the average percentage-correct being only 63. The reason for such a low percentage for these pupils compared to the
other test units can be in the layout of one of the texts in test series 3 and in misunderstanding the instructions in some other points.

Test item one (multiple choice questions in Finnish) was not too complicated for the immersion pupils; the average percentage-correct for exercise one was 77 - grade 9 equivalent being 81 (Tuokko, 2000:75). For test item two (multiple choice questions in English) the immersion pupils’ percentage-correct was only 61 whereas according to Tuokko (2000:54) 2/3 of the 9th graders gave correct answers to these questions. In test item two 4 immersion pupils misunderstood the instructions and chose two instead of one correct answer to the questions and were thus coded to have given wrong answers to the questions even if one of the alternatives they chose was the correct one. In test item three where English words were to be translated into Finnish, the immersion pupils’ average percentage-correct for the three first words was 69-80 (9th grade 66-75), and for the last word 56 for grade 5E and less than 50 for grade 9 pupils (Tuokko, 2000:55). The last test item, where information was to be looked for from a table format text, gave grade 5E pupils an average percentage-correct of only 55, with 38% of the pupils not even trying to answer the questions. No information on the 9th grade results in this exercise was available. So, all in all, the reading comprehension test can be said to have been too demanding for pupils of this age (11-12 years) in what comes to the structure and layout of the test itself. The following figure illustrates the distribution of the reading comprehension test results gained (test series 3) by grade 5E and grade 9 pupils. The score means were 20.1 points (out of maximum 28) for grade 9 and 17.6 for grade 5E. The standard deviation for the 9th grade pupils was 6.1 and for grade 5E pupils 5.5.
Figure 6. Reading comprehension test results.

In the reading comprehension test, out of all 9th graders, 29% of the pupils scored 85% or more of the points, 42% scored 50-80% correct and 15% scored less than 45% of the points (Tuokko, 2000:32). The corresponding figures for grade 5E pupils were 18% over 85% correct, 72% between 50-80% correct and 10% less than 45% of the points as illustrated in the figure below.

Figure 7. Reading comprehension test percentual score distribution
10.2.1. Reading comprehension test results by boys and girls

According to Tuokko (2000:61-62), 9th grade girls gained significantly higher scores in reading comprehension than boys. In test series 3, the girls' average score was 21.5 points compared to boys' 18.7 points. Also the boys' standard deviation was higher than that of the girls' (6.42 versus 5.46). The boys' average percentage-correct was 66.6 versus the girls' 76.8, in other words, the boys' knowledge level was 87% of the girls' level. In grade 5E the girls' average score was 19.2 (equalling 68.6 average percentage-correct) and standard deviation 4.59, whereas the boys' corresponding figures were 15.0 (53.6 average percentage-correct) and 6.04. It seems that in the reading comprehension part the English immersion grade 5 boys got a significantly worse result than the girls, their knowledge level being only 78% of that of the girls. The difference between the 9th grade and class 5E girls' averages was only 2.3 points, whereas the same difference between the boys was 3.7 points. The immersion girls' performance was more homogeneous than the grade 9 equivalent result, whereas the immersion boys' result was almost as heterogeneous as the 9th grade boys' result.

<table>
<thead>
<tr>
<th>RC, test series 3</th>
<th>Average score</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>girls</td>
</tr>
<tr>
<td>Grade 5E</td>
<td>15.0</td>
<td>19.2</td>
</tr>
<tr>
<td>Grade 9</td>
<td>18.7</td>
<td>21.5</td>
</tr>
</tbody>
</table>

10.2.2. Reading comprehension test results in different mother tongue groups

Tuokko (2000:62-64) says that differences between the Finnish speaking and Swedish speaking 9th grade students are significant both statistically and practically and in favour of the Swedish speakers in all the tested English language skills. When reading comprehension, test series 3, is considered, the average percentage-correct for the Swedish speaking 9th graders was 79.1, and for the Finnish speakers 71.0. The Swedish speaking 9th graders seem
to be a more homogeneous group compared to the Finnish speaking one, the standard deviation being 4.76 versus the Finnish speakers' 6.21. In grade 5E, the corresponding figures for the Finnish speaking pupils were 63% and standard deviation 5.2. When compared with the Finnish speaking 9th graders, the English immersion grade 5E Finnish speaking pupils seem to have gained 89% knowledge level of the Finnish speaking 9th graders, whereas the whole class 5E’s knowledge level was 87.5% of that of all the 9th graders. Here it seems that the instruction language being Finnish may have affected the performance of the Swedish speaking immersion pupils’ results and thus also the whole class result to some extent.

10.3. Listening comprehension test results

According to Tuokko (2000:32,56), the 9th grade results show that the listening comprehension test was clearly more demanding than the reading comprehension for the pupils. The 9th grade average percentage-correct for test series 1 (which was used by grade 5E) was 61. The fact that the test recordings were on normal tempo speech is said to partly explain the weaker results. What comes to grade 5E pupils, the listening comprehension test caused no great difficulties, their average percentage-correct being 66. The normal tempo of speech does not explain the errors made in this case, because the immersion pupils are accustomed to hearing native speaker English, and even different accents (their teachers coming from Great Britain, Canada and the USA).

The following figure illustrates the distribution of the listening comprehension test results gained (test series 1) by grade 5E and grade 9 pupils. The score means were 18.4 points for grade 9 and 19.9 for grade 5E.
Tuokko (2000:56) also points out that the listening comprehension test (series 1) was especially demanding for the better pupils, as the percentages for the highest points (27-30) was only 6 whereas for the next highest group (23-26) it was as high as 21%. The same tendency can be seen in grade 5E results, the highest points were scored by 5% of the pupils and the next highest by 21% of the pupils as in grade 9. In grade 5E it is noteworthy that very low points (7-14) were scored by three pupils (= 8%) only, their scores being 10, 13 and 14 points, whereas c. 26% of the 9th graders belonged to this group.

In the listening comprehension test, out of all 9th graders 11% of the pupils scored 85% or more of the points, 52% scored 50-80% correct and 29% scored less than 45% of the points (Tuokko, 2000:32). The corresponding figures for grade 5E pupils were 18% over 85% correct, 77% between 50-80% correct and 5% less than 45% of the points. So it can be said that the grade 5E pupils did very well as a group in the listening comprehension test, not because their mean was that much higher than the 9th grade mean (difference 1.45 points) but because their performance as a group was more homogeneous (standard deviation for
grade 9 being 5.7 and for grade 5E 4.11) and their scores were placed on the higher end of the percentual score scale as can be seen in the figure below.

Figure 9. Listening comprehension test, percentual score distribution

When the individual item items are considered, task one (multiple choice questions in English), where the point maximum was 18, the mean and standard deviation for grade 5E were 12.3 and 2.92 and for grade 9 they were 10.9 and 4.0. In task two in one of the English yes/no questions the correct answer was given by under half of the 9th graders (Tuokko, 2000:57) and by only 33% of grade 5E pupils. The third task, where mother tongue questions were to be answered with short sentences, gave a very varying result in grade 5E. The average percentage-correct for the questions varied from 35.9 -100. One of the questions dealt with numbers, and as many as 36% of the pupils mixed the endings "-teen" and "-ty" (as in sixteen and sixty) and gave a wrong answer to that question in that respect. Tuokko (2000:57) comments this task by saying that ¾ of the questions gave a satisfactory result whereas one question was too difficult for almost half the 9th grade pupils. Which one she is referring to, is not clear from the text. Anyhow it seems that the mistakes made by both the 9th grade and the immersion pupils were of the same kind or at least were located in the same tasks.
10.3.1. Listening comprehension test results by boys and girls

Though according to Tuokko (2000:61-62), 9th grade girls and boys did approximately as well in listening comprehension, the girls' average score was a little higher in all the different test series than the boys' score (18.7 respectively 18.0 points in test series 1). The standard deviations were almost the same as well (5.33 vs 5.95). In grade 5E the girls' average score was 20.5 and standard deviation 4.90, whereas the boys' corresponding figures were 18.7 and 4.32. It seems that in the listening comprehension part the English immersion 5th grade girls did a little better than the boys, the boys' knowledge level being 92% of that of the girls.

Table 19. Listening comprehension test results by boys and girls.

<table>
<thead>
<tr>
<th>LC, test series 1</th>
<th>Average score</th>
<th></th>
<th>Standard deviation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>girls</td>
<td>all</td>
<td>boys</td>
</tr>
<tr>
<td>Grade 5E</td>
<td>18.7</td>
<td>20.5</td>
<td>19.9</td>
<td>4.32</td>
</tr>
<tr>
<td>Grade 9</td>
<td>18.0</td>
<td>18.7</td>
<td>18.4</td>
<td>5.95</td>
</tr>
</tbody>
</table>

10.3.2. Listening comprehension results in different mother tongue groups

According to Tuokko (2000:63), the listening comprehension test series 1 average percentage-correct for the Swedish speaking 9th graders was 71.4, and for the Finnish speakers 60.0, the standard deviations for the means being 4.87 for the Swedish speakers and 5.63 for the Finnish speakers. In grade 5E the corresponding figures for the Finnish speaking pupils were 66% and 4.27 (sd). When compared with the Finnish speaking 9th graders, the English immersion grade 5E Finnish speaking pupils seem to have gained better results than the 9th grade Finnish speakers, the difference in the average percentage-correct being 6 percentage points in favour of the immersion pupils.
10.4. Writing skills test results

In the writing skills test the pupils could choose from three essay titles. Two of the titles had some further instructions attached to them, one consisted of the title only. The titles represented different writing styles: description, persuasion and argumentation. In the grading of the essays, attention was to be paid to the (1) contents, (2) grammatical structures, and (3) vocabulary. Each criterion was to be graded with a point scale from 0 to 5 (Tuokko 2000:28).

As has been pointed out, the immersion pupils’ essays were graded by research professor Sauli Takala.

According to Tuokko (2000:33), the 9th grade pupils performed the least well in the writing skills test, the percentage-correct being 61.3. For class 5E pupils the respective percentage was 78.6. Out of the 9th graders 14% of the pupils gained 85% or more of the maximum points, 45% gained 50-80% of the points, 14% gained 20-40% of the points and 8% less than 20% of the points. Out of the immersion pupils, 28% gained 85% or more of the maximum points and the rest, 72% gained 60-85% of the points, as the lowest points given for the immersion pupils’ essays were 9 out of 15 (4 pupils). These results show a very clear difference between the 9th grade and 5E results, in favour of the immersion pupils, who have clearly outperformed the 9th graders in the writing skills assignment.
Figure 10. Writing skills test, percentual score distribution

The means in the three assessed criteria for the essays for the 9th graders were: 3.3 for the contents, 2.9 for the structures and 3.0 for the vocabulary. The respective figures for the immersion pupils were: 3.9 for the contents, 4.1 for the structures and 3.6 for the vocabulary. The largest difference can be seen in the structures, where the difference is 1.2 points, which equals 24% difference in favour of the immersion pupils. In the other two criteria the difference is 0.6 points, in other words 12%, again in favour of the immersion pupils. So the immersion pupils' good command of grammar (very good results in the grammar test) show in their free writing as well.

Table 20. Writing skills test, average percentage-correct in different assessment criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Grade 5E</th>
<th>Grade 9</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>78%</td>
<td>66%</td>
<td>+12%</td>
</tr>
<tr>
<td>Structures</td>
<td>82%</td>
<td>58%</td>
<td>+24%</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>72%</td>
<td>60%</td>
<td>+12%</td>
</tr>
</tbody>
</table>
10.4.1. Writing skills test results by boys and girls

According to Tuokko (2000:36), girls did a lot better than boys in the writing skills test, the girls' average percentage-correct being 66.4 and that of the boys' 55.9. The result shows, that the boys' writing skills are noticeably weaker than those of the girls', the boys' knowledge level being 85% of that of the girls'. The mean for the 9th grade girls was 10.0 and standard deviation 3.34; the boys' point mean being 8.4 and standard deviation 3.85. The corresponding figures for the immersion pupils were 11.9 for the girls and 11.6 for the boys, the standard deviations were 1.8 for the girls and 1.2 for the boys. The results clearly show that the immersion pupils' sex was not related to the writing skills test result and that both boys and girls were very homogeneous as groups. The average percentage-correct for the immersion girls was 79 and for the boys 77. When compared with the 9th grade results, we find out that the 9th grade girls' knowledge level was 84% of that of the immersion girls', and the 9th grade boys' knowledge level was 72% of that of the immersion boys'. The superiority of the immersion pupils' writing skills is thus very clear in both sexes.

Table 21. Writing skills test results by boys and girls.

<table>
<thead>
<tr>
<th>Writing skills</th>
<th>Average score</th>
<th>standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>girls</td>
</tr>
<tr>
<td>grade 5E</td>
<td>11.6</td>
<td>11.9</td>
</tr>
<tr>
<td>grade 9</td>
<td>8.4</td>
<td>10.0</td>
</tr>
</tbody>
</table>

10.4.2. Writing skills test results in different mother tongue groups

According to Tuokko (2000:40-41), the writing skills test mean for the Swedish speaking 9th graders was 10.4, and for the Finnish speakers 9.1, the standard deviations for the means being 3.09 for the Swedish speakers and 3.73 for the Finnish speakers. In grade 5E, the corresponding figures for the Finnish speaking pupils were 11.7 (mean) and 1.6 (sd). When compared with the Finnish speaking 9th graders the English immersion grade 5E Finnish speaking pupils seem to have outperformed the 9th grade Finnish speakers, the difference
between the means being 2.6 points, in other words 17% in favour of the immersion pupils. The difference in the standard deviations (9th grade 3.73 respectively 1.6 class 5E) again shows the homogeneity of the immersion group.

10.5. Oral skills test results

The oral skills test included three different types of tasks: dialogues, reading aloud a text and either a discussion or a debate. The different test parts were tied together by a story line about an exchange student visit. The pupils had Finnish language hints for their parts and the discussion/debate task had also further instructions. The teachers evaluated the pupils' performances with three criteria: (1) fluency, (2) grammar and vocabulary, and (3) pronunciation, the scale being 0-5 points for each criterion, 0 referring to no performance at all and 5 to excellent performance (Tuokko 2000:26.) The grade 5E test was graded using the exactly same criteria and scale. The test that was used in grade 5E, was test series 2, in which the grade 9 pupils ended up with a mean of 9.61 points, which equals to 64.1 average percentage-correct, the corresponding grade 5E results being 13.15 points equaling to 88 average percentage-correct. This result shows that the grade 9 knowledge level in oral skills is only 73% of that of grade 5E.

In this test again, the grade 5E pupils proved to be a homogeneous group, the standard deviation being 1.76 versus 3.38 in grade 9 (all tests). The means for the different evaluation criteria proved to be 4.23 for fluency (standard deviation 0.86), 4.23 for grammar and vocabulary (standard deviation 0.76) and as high as 4.69 for pronunciation (standard deviation 0.55). The corresponding 9th grade scores for test series 2 were not available but the National Board of Education preliminary results from 19.5.1999 presented the following means for the oral skills tests performed by pupils attending test series one and three in all the other language skills: 3.3 and 3.4 for fluency, 3.2 and 3.0 for grammar and vocabulary, plus 3.4. and 3.3. for pronunciation. Whichever means being valid for the particular test series 2 used in grade 5E, the difference between the means is statistically significantly in favour of grade 5E.
Table 22. Oral skills test results

<table>
<thead>
<tr>
<th>Oral skills test</th>
<th>Average score</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>grade 5E</td>
<td>grade 9</td>
<td></td>
</tr>
<tr>
<td>Fluency</td>
<td>4.23</td>
<td>3.3 / 3.4</td>
<td></td>
</tr>
<tr>
<td>Gramm+vocab</td>
<td>4.23</td>
<td>3.2 / 3.0</td>
<td></td>
</tr>
<tr>
<td>Pronunciation</td>
<td>4.69</td>
<td>3.4 / 3.3</td>
<td></td>
</tr>
</tbody>
</table>

The following figure illustrates the distribution of the oral skills test results gained (test series 2) by grade 5E pupils.

Figure 11. Oral skills test results

As we can see from the figure, the points scored in the pronunciation criteria are very high, 73% of the pupils scoring the highest possible points. In fluency 42% scored the highest, and 46% the next highest points, and in the criterion “grammar and vocabulary”, 42% scored the highest and 38% the next highest points. All in all it can be said that the immersion pupils’ oral skills are very homogeneous and good.
According to Tuokko (2000:33-34), 16% of the 9th graders scored 85% or more of the points, 48% stayed at 50-80% level and 25% knew less than required for 25% level. Out of the 25% as many as 5% did very poorly, their average percentage-correct being less than 20%. In grade 5E, 50% of the pupils scored more than 85% of the points, the lowest points scored being 10 (by 3 pupils, all of them boys), which corresponds to 67% knowledge level and thus shows a very high command of spoken English language among the group.

10.5.1. Oral skills test results by boys and girls

The 9th grade results show that again the girls gained better results than the boys. The average percentage-correct for girls was 68.9 and for boys 60.6. This means that the boys knowledge level was 88% of that of the girls' (Tuokko, 2000:36.) In grade 5E, the girls' mean was 14.13 points, which equals to 94% average percentage-correct versus boys' mean 11.82, i.e. 79% average percentage-correct. In the oral skills test both the English immersion grade 5 girls and boys were superior when compared to the 9th grade pupils, the knowledge levels for the 9th grade girls being only 69 and for boys 77 of the grade 5E level. This time the knowledge level difference among the grade 5E pupils was quite high, the boys scored only 84% of the girls' level. The grade 5E girls' standard deviation was 1.06 and that of the boys’ 1.66, which shows that both the girls and the boys constitutes homogeneous groups.

10.5.2. Oral skills results in different mother tongue groups

According to Tuokko (2000:41), the difference between the results of the Finnish and Swedish speaking pupils is approximately 7% which equals to half a school grade, in favour of the Swedish speaking pupils. The means scored were 9.6 in the Finnish speaking schools and 10.7 in the Swedish speaking ones. In grade 5E the purely Finnish speaking pupils' means was 13.0. When compared with the Finnish speaking 9th graders the English immersion grade 5E Finnish speaking pupils seem superior to the them in this respect.
10.6. The whole test results

The whole test (which consist of the reading comprehensive, listening comprehension, grammar and writing tests) average percentage-correct for the 9th graders was 64. According to Tuokko (2000:32), the result is an expected one for a basic skills assessment test. Even if no pupils scored full points in the test, 14% of the 9th graders gained 85% or higher result in the test. On the other hand c. 19% of the pupils gained too weak results, less than 45% correct, which can be considered the borderline for failing the test. The corresponding average percentage-correct for the immersion pupils was 71, and thus 7 percentage points higher than the 9th graders’ percentage. 12% of the immersion 5th grade pupils scored 85% or more correct in the whole test, and only one pupil (2%) scored less than 45% in the test, his percentage being 44. The next lowest percentage scored was 51. 46% of the immersion pupils scored 65-85% of the points in the whole test. The following figure shows the distribution of the immersion pupils’ whole test result in points.

Figure 12. The whole test results.
The average percentage-correct for the 9th grade pupils was highest in the listening comprehension and lowest in the reading comprehension parts of the test, whereas for the immersion pupils the highest average percentage-correct was gained in the oral skills test, and lowest in the reading comprehension test.

Table 23. Average percentage-corrects in different language skills tests

<table>
<thead>
<tr>
<th>Language skill</th>
<th>Average %-correct</th>
<th>Average %-correct</th>
<th>Difference in percentage points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading compre.</td>
<td>63</td>
<td>69.7</td>
<td>- 6.7</td>
</tr>
<tr>
<td>Listening compre.</td>
<td>66</td>
<td>58.3</td>
<td>+ 7.7</td>
</tr>
<tr>
<td>Grammar</td>
<td>76</td>
<td>64.6</td>
<td>+ 11.4</td>
</tr>
<tr>
<td>Writing</td>
<td>78.6</td>
<td>61.3</td>
<td>+ 17.3</td>
</tr>
<tr>
<td>Whole test</td>
<td>71</td>
<td>64</td>
<td>+ 7.0</td>
</tr>
<tr>
<td>Oral skills</td>
<td>88</td>
<td>65.1</td>
<td>+ 24.9</td>
</tr>
</tbody>
</table>

It is noteworthy that the immersion pupils obtained clearly better results in the productive parts of the test (oral skills, writing and grammar) than in the receptive skills parts (listening and reading comprehension). This may indicate the inappropriateness of the test itself in measuring the skills of these pupils, the listening and reading comprehension texts being designed for 15 to 16 year olds, whereas in the productive skills assignments the age difference is less important. The tasks allow the test takers freedom to express their ideas without being confined by the test format. Thus open-ended production tasks are in principle less sensitive to certain background factors, eg. age. The performance truly reflects the skills level of the participating pupils.

10.6.1. The whole test results by boys and girls

According to Tuokko (2000:35-36), the 9th grade girls know approximately 67% and the boys 61% of the English language material taught during the comprehensive school grades 3-9 (measured with the test in question). The respective percentages for the immersion grade 5 girls was 75% and for boys 65%. Of the 9th graders c. 25% of the boys and 13% of the girls got less than 45% correct in the whole test, whereas in the immersion group the corresponding
percentages were 0 for girls and 6.7 for boys (one boy out of 15). In the 9th grade, 7% of the girls and 4% of the boys got more than 90% correct in the whole test. In the immersion group there was one girl who scored more than 90% correct in the whole test, representing 4% of the girls (N=24).

In the different language skills tests the 9th grade girls’ and boys’ average percentage-corrects differed in favour of the girls in all areas. For the immersion pupils the relationship between the boys and the girls was the same in all the other language skills than writing skills, where there was no noticeable difference between the sexes.

Table 24. Average percentage-corrects in the different language skills tests by boys and girls.

<table>
<thead>
<tr>
<th>Language skill</th>
<th>Av. %-correct immersion 5E</th>
<th>Av. %-correct grade 9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>girls</td>
<td>boys</td>
</tr>
<tr>
<td>Reading comprehs.</td>
<td>68.6</td>
<td>53.6</td>
</tr>
<tr>
<td>Listening comprehs.</td>
<td>68.3</td>
<td>62.3</td>
</tr>
<tr>
<td>Grammar</td>
<td>80.8</td>
<td>68.1</td>
</tr>
<tr>
<td>Writing</td>
<td>79.0</td>
<td>77.0</td>
</tr>
<tr>
<td>Whole test</td>
<td>75.0</td>
<td>65.0</td>
</tr>
<tr>
<td>Oral skills</td>
<td>94.0</td>
<td>79.0</td>
</tr>
</tbody>
</table>

The biggest differences for the 9th grade girls and boys can be found in the writing skills and the grammar skills. According to Tuokko (2000:36), the 9th grade boys’ written production is clearly weaker than that of the girls’. The difference is the smallest in the listening comprehension test. The immersion pupils’ results reveal that the biggest difference between the results gained by boys and girls was in the reading comprehension, where the boys’ knowledge level was 78% of that of the girls’. The difference is the smallest in the writing skills test, the boys’ knowledge level being 97% of that of the girls’.

10.7. Vocabulary size

The immersion pupils’ receptive vocabulary size in English was measured using the Test Your Word Power test in May 2000. The testees were class 6E pupils (N=19), who had taken the national 9th grade test a year before. The results show, that the 6th grade English
immersion pupils' receptive English language vocabulary equals to the vocabulary size of a "well-read British 9-12 year old" which, according to Hunter Diack (1975), is said to be between 6000 and 12000 words. The test results of the 6th immersion class range from 4800 to 13860, the mean being 8034 words.

The same test was also given to a 9th grade mainstream English group in Länsipuisto school (N=20) as a comparison, as also the other test results used in this study have been compared to 9th grade results. The results from this test show again that the immersion pupils' command of the English language is higher that of those completing their comprehensive school. The range for the 9th grade results was 2200 to 10080, the mean being 6020, which equals to 75% knowledge level compared to that of the immersion 6th grade pupils. The following figure shows the distribution of the results in class 6E (immersion class).

Figure 13. Receptive vocabulary size in class 6E.

This time the immersion boys scored higher results than the girls. The boys' vocabulary ranged from 6420 to 13860, their mean being 8664, whereas the girls' scores ranged from 4800 to 10260, their mean being 7840. So the girls' knowledge level was 90.4% of that of the boys'.
10.8. Correlation analyses

The SPSS-programme was used in calculating correlations between the grade 5E national 9th grade English language test results, and the receptive vocabulary size test results, and the following background factors: pupils' sex, mother tongue, kindergarten years, mother's education, father's education, mother's English language skills and father's English language skills.

Table 25. Correlations

<table>
<thead>
<tr>
<th></th>
<th>Sex</th>
<th>Mother tongue</th>
<th>K years</th>
<th>Mother Education</th>
<th>Father education</th>
<th>Mother English</th>
<th>Father English</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC Pearson</td>
<td>-.372</td>
<td>.062</td>
<td>.148</td>
<td>.148</td>
<td>.169</td>
<td>-.028</td>
<td>.115</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.020</td>
<td>.707</td>
<td>.367</td>
<td>.367</td>
<td>.303</td>
<td>.866</td>
<td>.488</td>
</tr>
<tr>
<td>LC Pearson</td>
<td>-.217</td>
<td>.073</td>
<td>-.193</td>
<td>.170</td>
<td>.196</td>
<td>-.026</td>
<td>.235</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.185</td>
<td>.658</td>
<td>.240</td>
<td>.302</td>
<td>.233</td>
<td>.875</td>
<td>.150</td>
</tr>
<tr>
<td>G Pearson</td>
<td>-.447 **</td>
<td>.121</td>
<td>.182</td>
<td>.275</td>
<td>.313</td>
<td>.137</td>
<td>.273</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.004</td>
<td>.464</td>
<td>.267</td>
<td>.090</td>
<td>.053</td>
<td>.407</td>
<td>.093</td>
</tr>
<tr>
<td>WR Pearson</td>
<td>-.094</td>
<td>.044</td>
<td>.045</td>
<td>.259</td>
<td>.195</td>
<td>.191</td>
<td>.037</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.569</td>
<td>.792</td>
<td>.786</td>
<td>.111</td>
<td>.234</td>
<td>.245</td>
<td>.822</td>
</tr>
<tr>
<td>WT Pearson</td>
<td>-.416 **</td>
<td>.104</td>
<td>.089</td>
<td>.258</td>
<td>.283</td>
<td>.064</td>
<td>.238</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.008</td>
<td>.530</td>
<td>.591</td>
<td>.113</td>
<td>.081</td>
<td>.697</td>
<td>.145</td>
</tr>
<tr>
<td>OS Pearson</td>
<td>-.663 **</td>
<td>.147</td>
<td>.157</td>
<td>.032</td>
<td>.119</td>
<td>.009</td>
<td>-.075</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.473</td>
<td>.444</td>
<td>.877</td>
<td>.561</td>
<td>.966</td>
<td>.716</td>
</tr>
<tr>
<td>VOC Pearson</td>
<td>.180</td>
<td>.a</td>
<td>-.180</td>
<td>.119</td>
<td>.079</td>
<td>.119</td>
<td>.392</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.489</td>
<td>.490</td>
<td>.648</td>
<td>.764</td>
<td>.650</td>
<td>.120</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed)
* Correlation is significant at the .05 level (2-tailed)
.a = could not be counted because at least one of the variables is constant
RC= reading comprehension test, LC = listening comprehension test, G= grammar test, WR= writing skills test, WT= whole test, OS= oral skills test, VOC= receptive vocabulary test
The only statistically significant correlations proved to be between the pupils' sex and their results in the oral skills and grammar tests. The girls scored significantly higher results than the boys in these language skills tests, as well as in the test as a whole. None of the other background factors seemed to have a statistically significant effect on the test results.

**11. CONCLUSIONS**

At the methods part of this thesis, the present writer has named five research questions which she seeks to answer on the basis of the empirical data discussed in this study. The research questions concerning the contextual aspects of the described English immersion programme have been dealt with in chapter 9. The linguistic background of an English immersion pupil attending the Hollihaka English immersion programme proved to be quite homogeneous: the majority of the pupils (86%) came from monolingual Finnish-speaking homes, where Finnish was the only language used. All in all 92% of the pupils had Finnish as their mother tongue. All except one of the pupils had had no contact with the English language prior to their years in the English kindergarten of Kokkola, where 93% of the pupils had received their pre-school education. The pupils used mostly Finnish only with their friends, but they took advantage of their English language skills when reading books or magazines, when watching TV, listening to music or playing computer games.

The immersion pupils' parents usually (72% of them) had good or at least satisfactory English language skills and could thus help their child in their school work and keep contact with the native English speaking teachers. The social background of the pupils proved to be quite homogeneous as well, as many as 55% per cent of the parents belonged to the two highest educational levels, having either college or university degrees. The parents' motivations for placing their child in the English immersion programme proved to focus on the importance of the English language and the opportunities good language skills bring with them for their children in their future, both in their studies and working life. The parents were very satisfied with the programme as a school form for their child, no parents (out of the
parents of 120 children who answered the questionnaire) reported themselves being disappointed with the programme, and as many as 81% of the parents were satisfied without any reservations. 19% of the parents reported themselves having some reservations, which mostly concerned the development of the child’s mother tongue skills.

The research questions concerning the assessment of performance concentrate on the results from the National Board of Education 9th grade English language skills test, as well as the Test your Word Power receptive vocabulary test, the results of which have been discussed in chapter 10. The results from the language skills test show, that when all the different language skills subtests are considered, it can be noted, that the English immersion pupils at Hollihaka English immersion 5th grades during school years 1998-1999 and 1999-2000 gained a little lower results in the reading comprehension test, a little higher results in the listening comprehension test, quite a lot higher results in the grammar test, and very much higher results in both the writing skills and oral skills tests than a representation sample of the 9th grade pupils in the National Board of Education English language assessment test.

The overall view from the test is that the English immersion pupils at Hollihaka school have surpassed the knowledge level of the 9th grade mainstream English language teaching pupils by the spring of their 5th school year in the immersion programme. This can most clearly be seen in the results gained in the productive parts of the test, namely the writing and oral skills tests, as well as the grammar test. These probably show the pupils’ actual language skills level more accurately than the receptive language skills tests (listening and reading comprehension), where the result is more dependent on the construction of the texts and the understanding of the items and instructions. The fact that the reading and listening comprehensive texts were planned to be used for assessing the language skills of 15-16 year-old pupils who have practised answering reading comprehension and listening comprehension multiple choice questions for a number of years can be assumed to have had an impact on the results. The immersion pupils were c.4 years younger (11-12 at the time of the testing) than the group who the test was designed for and had no previous experience with the test types. The immersion pupils’ good results in the grammar test show their high command of the English language again, as correct answers to the multiple choice questions in the grammar test part were unambiguous and the translation exercises demanded precise knowledge of the language structures in question.

The difference between the results gained by the 9th grade pupils and the 5th grade English immersion pupils (N=39), was the biggest in the oral skills subtest, where it was as many as 24.9 percentage points in favour of the immersion pupils. This clearly
indicates the superiority of the immersion method in giving the pupils high oral English language skills and also confidence to use these skills in oral interaction with their classmates and teachers. The almost as big a difference, 17.3 percentage points in favour of the immersion pupils in the writing skills test, again shows the superiority of the immersion as a language teaching method, as not only were the immersion pupils’ performances in this subtest better than the respective 9th grade pupils’ performances in all the assessed criteria (contents, structures and vocabulary), but also noticeably more homogeneous (sd 1.58 respective 3.68 for grade 9 pupils) highlighting the fact that no poor performances existed in the immersion group at all. In the grammar test, the 9th grade pupils gained 88% knowledge level of that of the 5th grade immersion pupils, the result again showing a better and more precise command of the English language by the immersion pupils.

The standard deviations in the different language skills tests show that the immersion pupils were more homogeneous than the 9th grade pupils. This was true of all the skills tested. This can be taken as a proof of the suitability of immersion as a teaching method for all kinds of pupils, as the results gained were high and quite homogeneous in all the tests. Especially the high and very homogeneous results in the writing skills test show that all the pupils have gained a very high command of the English language.

In the immersion group, as well as in the 9th grade group, girls gained better results than boys in all the tested language skills. The difference was largest in the oral skills test, where the immersion girls’ average percentage-correct was 15% higher than that of the immersion boys’. This is not a very surprising result, as in our culture as a whole girls tend to be more talkative and verbally more active than the boys. The result gained in the writing skills test, on the contrary, seems quite interesting, the immersion girls’ average percentage-correct being only 2% higher than that of the immersion boys’. This may point out the boys’ overall high productive language skills which are not visible in the accuracy-demanding detailed tasks, which eg. the grammar test consisted of (although the boys’ result in that test was very high, but as much as 12 percentage points lower than that of the girls’). The boys’ higher results in the receptive vocabulary test may also be seen as an indicator of high level of language skills, which reveal themselves in the free writing more than in a very restricted “one correct answer only” type of reading and listening comprehension items.

As could be seen from the 9th grade pupils’ results, the Swedish speaking 9th grade pupils gained higher results in all the different language skills tests than their Finnish speaking peers. When the 5th immersion grade Finnish speaking pupils’ results were compared with those of the 9th grade Finnish speaking pupils’ results, the results showed the
immersion pupils’ better mastery of all the tested language skills except for the reading comprehension test. The biggest difference was in the oral skills test, where the average percentage-correct difference was as large as 24.7 percentage points in favour of the immersion pupils. This indicates that the threshold for using one’s foreign language skills in real life, which for some reason has always been very high for us Finns, has been passed in immersion and the use of English language in expressing one’s thoughts in speaking has become natural for the pupils. The very high difference in the writing skills average percentage-correct as well (18.7 percentage points) also indicates the capability of actually using the language skills acquired, and that also the weaker pupils’ language skills in immersion are a lot higher than the weaker Finnish speaking pupils’ skills in the mainstream language teaching.

The result from the receptive vocabulary test show that the English immersion programme in question has given the tested pupils a large vocabulary already by the end of the 6th grade. The test itself is, according to Rolf Palmberg (Palmberg 1999 personal communication), more suitable in assessing the vocabulary size of adults than children, as the concentration level of the children is often lower than that of the adults, and the urge to guess is higher with children. Bearing all that in mind, the result gained in the test can be regarded very high and corresponded the vocabulary size of a “well-read 12-year-old British child”.

When exploring the relationships between the social and linguistic background as well as the sex of the English immersion pupils and their performance in the 9th grade English language test as well as in the receptive vocabulary test, the only statistically significant correlations were found between the sex of the pupil and the oral skills, grammar test and the whole test results in favour of the girls. The mother tongue, years spent in the English kindergarten of Kokkola, mother’s or father’s educational level or their English language skills did not have any statistically significant relationship with the language skills tested. The individual development of a child and his or her personal talents were of more importance than the social background in respect to school success.

All in all, it can be claimed that English immersion as a language teaching form as implemented in the Hollihaka English immersion programme gives very good English language learning outcomes and suits all kinds of pupils, both boys and girls, both brighter and weaker pupils as the results are high and homogeneous in all the tested areas: reading comprehension, listening comprehension, grammar, writing, oral skills and receptive vocabulary. The immersion programme in question seems to be very effective in teaching the
pupils the productive use of the language, as the results in the writing and oral skills tests are very good and no poor results exist. All these results, both concerning the social and linguistic background of the immersion pupils and the immersion language achievement, are of similar nature than the results from international immersion research and thus speak for this of kind of an educational programme in our country as well using a non-official language of the country as the immersion language.

As this thesis has only concentrated on the numerical results from the tests used, further research on the linguistic features including the nature of the errors made by the immersion pupils and the possible reasons for them in this kind of testing would be interesting. Also the construction of suitable testing instruments for the immersion pupils on different age levels could interest some linguists. Research on the immersion method itself and especially the teaching methods used and the pedagogical and didactic aspects chosen for the teaching of the English language are of great interest to the present writer as well as many other language teachers, and could lead to interesting and valuable findings for the mainstream language teaching as well.

12. DISCUSSION ON THE SUITABILITY OF ENGLISH IMMERSION IN THE FINNISH BASIC EDUCATION

In addition to the above discussed research questions, the present writer seeks to answer the general question of the feasibility of English immersion as an alternative within the Finnish educational system. The discussion whether immersion education as a whole and English immersion in particular should and could be arranged in Finnish schools as an alternative within the basic education system, was raised by the National Board of Education in year 1999. The schools that had been giving immersion education in either Swedish or English were asked to reapply for the special permission in organising this kind of education, which the Hollihaka school was granted 27th July 1999 (Ministry of Education 27.7.1999). The reason for this was the worry for the insufficiency of the mother tongue teaching in the immersion programmes. Also the fact that the immersion programmes running in our country had not been researched enough and knowledge about the learning outcomes was not
available caused hesitation in the National Board of Education. Development of an immersion form of our own for our own educational system was called for. The fact that English does not have an official status in our country was also seen as a problem for the implementation of English immersion in our schools.

The Hollihaka English immersion model was originally based on the Canadian early total immersion model, and to a great extent follows that model even today. But during the years, quite a few adaptations to better suit the Finnish school system have been made. This is also in line with the advice of internationally recognised immersion experts. The principles generally seen as musts for an educational programme to be called an immersion programme are fulfilled in the Hollihaka programme to such an extent that the use of the term immersion when referring to this particular educational model is justifiable. The principles of homogeneous language background for the pupils, using L2 as the medium of instruction, the immersion curriculum paralleling the local curriculum used in teaching conducted in L1, the immersion programme being a voluntary option taken by the parents, as well as the existence of parental and community support for the programme have been essential parts of the building up and development of the programme. Also the principle of hiring professional and devoted teachers with suitable training, i.e. either foreign or Finnish teacher training, and with high English language skills (either native or near-native) who use the Grammont principle of one-teacher-one-language in their work, has been considered very important by the school administrators. The demand set by the National Board of Education for a Finnish teacher to teach an immersion class to have achieved level 7 in the National Foreign Language Test (YKI) was also fulfilled in school year 1999-2000 which this thesis describes. The teachers have also received in-service training concerning the immersion principles and teaching methods by both their senior colleagues and in conferences and continuing education courses arranged in Finland. The Finnish teachers and the immersion teachers have always worked in close contact and for example a “period system” for some of the subjects (history, religion etc.) has been created in order to ensure learning of the concepts in both languages.

The teaching of the mother tongue and the immersion language have been carefully planned and follow curricula especially designed for them. These curricula ensure that overlapping in teaching the common features for both languages does not occur but that the features particular for each language will be covered thoroughly. The learning outcomes in both the mother tongue and the English language have been very good and thus speak for the success of this system.
The status of the English language in our society is rapidly growing to be more and more important and the demand for a community of native speakers surrounding the pupils attending an immersion programme can be claimed to be increasingly fulfilled by the large-scale use of the English language in media, working life and IT-enhanced way of life. The English language is seen and heard everywhere in Finland nowadays, and more and more so in the lives of the younger generation, in particular.

The Hollihaka immersion programme can be justified as an alternative within the mainstream school system also because the costs for the programme to the Kokkola school office have not been any higher than for ordinary type of education (Kokkola immersion report 2000). This is due to the fact that teaching in a foreign language does not mean higher wages for the teachers, i.e. no extra compensation is paid to any teacher for this kind of teaching.

Having studied the principles, structure, ways of implementation, and learning outcomes of the Hollihaka English immersion programme, I conclude that this early total immersion model can be taken to provide one answer to the National Board of Education demand for an immersion model to be developed for our own unique conditions, honouring both the importance of the mother tongue and cultural values in the lives of the pupils, and the significance of the English language and the opportunities a truly Finnish-English and Swedish-English bilingual person will have in the future world. The point of view emphasized by Cenoz and Genesee (1998) as well as Cummins and Swain (1986) to the effect that an educational model cannot be imported as such from one particular local situation into a new and very different sociolinguistic context, but a cycle of discovery, the continual process of evaluation, theory building, generation of hypotheses, experimentation and further evaluation are the proper elements to be imported, has been and still is the leading idea of the development work of the Hollihaka English immersion programme. The development work is still very much in progress and the model can be seen as a validated model for other English immersion models to be built in Finland with any adaptations needed to fit the local conditions. The very good results in the English language skills testing gained by the 5th grade pupils from the Hollihaka English immersion programme are a clear proof of the justification for this type of educational model within the Finnish basic education system, which is implemented by professional teachers and constantly evaluated and developed further.
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