Exploring the Language Learning Landscape:
Learner Characteristics, Context Variables and the effect of Bilingual Education

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## Contents

0. Abstract ........................................................................................................... 2

1. Introduction ........................................................................................................ 3

2. Background ........................................................................................................ 5
   - *Bilingual education in the Netherlands* ....................................................... 5
   - Proficiency testing ......................................................................................... 9
   - Learner characteristics .............................................................................. 11
   - *The influence of the context* ..................................................................... 14
   - Research questions ...................................................................................... 16

3. Method .............................................................................................................. 17
   - Subjects ........................................................................................................ 17
   - Materials & Procedures ................................................................................ 18
   - Design & Analyses ...................................................................................... 24

4. Results & Discussion ...................................................................................... 25
   - The effects of bilingual education ................................................................. 25
   - Learner characteristics: differences between groups ................................... 30
   - Learner characteristics and proficiency scores ......................................... 34
   - *The influence of the context* ..................................................................... 36
   - Background variables and proficiency scores: correlations ...................... 45
   - Overview ...................................................................................................... 47

5. Conclusion ....................................................................................................... 51

References .......................................................................................................... 53

Appendices ........................................................................................................ 56
0. Abstract

Over the last two decades, bilingual (English-Dutch) secondary education has been one of the fastest growing developments in education in the Netherlands. Previous studies of bilingual education (Huibregtse 2001, Admiraal, Westhoff & De Bot 2005) have shown that students of this school type do indeed learn English faster and better. There are however indications that differences in learner characteristics such as scholastic aptitude, motivation/attitude and self-evaluation of proficiency could also partly account for the differences in development between bilingual and regular students. Furthermore, as researchers (Berns, De Bot & Hasebrink 2007, Verspoor, De Bot & Van der Heiden 2008) have found evidence for the influence of out-of-school contact with English, especially through media, on the development of children’s English proficiency, this factor also has to be taken into account.

This thesis therefore investigates the influence of education, learner characteristics and the context in which the language is learned on the development of English writing ability and receptive vocabulary.

Examination of data gathered from a large number of students of different types of education show that bilingual students do indeed perform better, but that they are also different in terms of learner characteristics. As there also seems to be a relation between these learner characteristics and proficiency, it can be assumed that type of education is not the only influence on the development of English proficiency.
1. Introduction

“I chose to have bilingual education, because my sisters did. They told me about the exchanges they got, like Denmark. I think English is a very important language; almost all people on earth speak, read and write it. And later, when you get an important international job and work abroad, it's handy to speak English well. [...] I'm in the third grade now, and we are told we're going to England for two weeks. That's why I think you also should choose bilingual education. It's fantastic!” (Mark, 14 years old)

Such positive words might be exactly what one would expect to find in a pamphlet advertising bilingual education. This student is however not alone in his enthusiasm about bilingual education: it is one of the fastest rising phenomena in the Dutch educational system. This new type of education offers a programme where courses are not only taught in the students’ native language, but also in a second language, English. The programme serves two main purposes; it provides an opportunity for talented students to receive a more challenging education, but it also prepares students for the ever increasing internationalization of Europe and the associated growth of English as an intra-European language of communication.

Studies in and outside of the Netherlands have confirmed that students of bilingual education learn English faster and end up at a more advanced level of proficiency than students that are in regular education programs. Many of these studies, however, have only concerned themselves with the effects of education. Even if the researchers took differences in learner characteristics between bilingual and regular students into account, the effect of education often was the real focus of the study and other factors were considered less important. There may however be ample reason for taking a second look at the characteristics of the students and the context in which they learn the language.

First of all, bilingual students may be different from non-bilingual students because of the selection process. Students are selected by committees on the basis of factors such as scholastic aptitude and motivation, but also self-select when they opt for a certain programme, as in the case of our very motivated student in the above quote. Especially within schools that offer both a bilingual and a regular programme, selection criteria may account for a large part of the differences in development of language proficiency between groups.

The inclusion of another background variable, the context, generates a broader view of the language learning landscape of young students. Modern-day youth, especially in the Netherlands, do not only learn English in the school environment, but are also confronted with a lot of English input outside of school, in public places (billboards, stores) as well as in their own homes (mainly through the media). The influence of out-of-school contact with English may thus very well be as important to the development of English proficiency as education itself.
This thesis therefore has a different starting point when it comes to examining language proficiency development in bilingual educational programmes. The most important aim of the study is to provide a more extensive insight into the system of influences that play a role in the progress of language proficiency. We have to bear in mind that the environment that students learn English in is a complex and ever-changing environment, a dynamic system in which many variables may play a role. Even if we want to focus on learning English through education, we cannot ignore all these other factors that make up the language learning environment, nor the features of the students themselves.

On the other hand, it is impossible to take every single variable into account that may play a role in the development of the students’ acquisition of English; there simply are too many factors and the patterns are too complex to be combined into one single model. The most important aim of this study is thus to find a middle road between these two extremes. It is not the goal of this thesis to find a definitive answer to the questions of effects of education and learner characteristics; we just want to provide some insights into this complex phenomenon. This means we have to decide which pieces of the language learning landscape we want to study and which aspects will not be investigated.

As a first step of this decision process, chapter 2 will provide a theoretical background and an overview of research relevant to the present study, leading to the formulation of a number of research questions. Chapter 3 gives a description of the methods used to search for the answer to these research questions. The results of the analyses, accompanied by a discussion of the results can be found in chapter 4 and in chapter 5, a cautious attempt at drawing conclusions from the results will be made.
2. Background

The aim of the background chapter is to establish a theoretical foundation for this study. Theoretical notions of bilingual education, proficiency testing, learner characteristics and the effect of the context will all be reviewed. The chapter ends with the postulation of a number of research questions that follow from these theoretical insights.

_Bilingual education in the Netherlands_

Bilingual education is a relatively new form of education in the Netherlands. Starting in the nineties with only a few select schools, nowadays almost a hundred secondary schools in the Netherlands offer a bilingual (in almost all cases Dutch-English) educational program, and even more schools are in the process of implementing such a program. The rise of bilingual education can be seen as a bottom-up process, a result of the endeavors of schools to keep developing their programs and wanting to distinguish themselves from other schools in a positive way. On the other hand it also fits very well within the global development of internationalization and the rise of English as 'lingua franca' for communication within Europe as well as for international communication and as such can also be seen as a result of top-down influences.

Bilingual education is based on the widely accepted notion that in order to acquire a second language, a large amount of input in this second language is crucial (Krashen, 1985). But bombarding learners with input is not sufficient to lead students to acquiring the language. This input also needs to be comprehensible in order to be processed and to lead to acquisition (Swain, 1985). By providing students with a much larger amount of meaningful English input than in regular education, bilingual programs thus aim to promote the acquisition of English.

Bilingual education, however, does not only differ from regular education in that students are provided with more meaningful English input. Cross-European discussions have led to a type of immersion education commonly referred to as Content and Language Integrated Learning (CLIL). In her 2007 article on CLIL, Dalton-Puffer explains that CLIL refers to an educational program where the second language is used as a medium of instruction and where the second language is specifically used to transfer content, in contrast to traditional language education where foreign languages are taught as a separate subject. The idea of CLIL is that by learning content through a second language, the students will acquire the language by actively using it and having meaningful L2 interactions. Expert formulations of CLIL goals have specified a number of language-specific goals such as accessing subject-specific target language terminology, improving overall target language
competence, developing oral communication skills, increasing learner motivation and preparing for internationalization and providing opportunities to study content through different perspectives (Dalton-Puffer, 2007). An important aspect of CLIL is the fact that students are forced to produce English output and to actively use the language for communication. Studies (Swain 1985 and 1993, Swain & Lapkin 1998) have shown that conversational interaction and producing 'comprehensible output' is an important part of second language acquisition.

In contrast to, for example, early Canadian immersion programs (Swain & Lapkin, 1982), Content and Language Integrated Learning is accompanied by some instruction of formal aspects of the language. Norris & Ortega's (2000) meta-analysis of studies on explicit vs. implicit instruction shows that explicit instruction of L2 rules and structures seemed to lead to better results than implicit instruction (where students have to discover the rules themselves). In Dutch bilingual education, instruction in the second language is therefore combined with instruction on the second language. In the lessons where English is taught as a subject, there is room for explicit focus on form.

In the Netherlands, bilingual education has its roots in the international schools, where classes had been taught in English, and often by English native speakers, for a long time. Other schools that wanted to offer something extra to students, especially to their more talented students, adopted these practices and started implementing bilingual programs alongside their regular programs. In most schools the program is offered only at VWO (the highest) level, but in some schools also at HAVO (intermediate) level. Almost all bilingual Dutch schools are Dutch-English. In the bilingual program, about 50 percent of the classes are taught in English. The subjects taught in English vary from biology to history and to physical education.

Obviously, the development of bilingual education has called for a change in government policy regarding bilingual schools. In the European context, quality control is a task of the European Platform, a coordinating institution for the network of schools. The European Platform has decided on a set of specific demands and rules for what a bilingual educational program needs to entail. For the Dutch educational system, the following norms apply:

- At least 50 % of classes are taught in English
- The position of Dutch is equivalent to that of English
- At least one course from each of the following clusters is offered in English
  A. Humanities
  B. Exact sciences
  C. Arts/PE
- At least two subject matters are taught by native speakers of English.
Form aspects of English are most important in those classes where English is taught as a subject.

- All teachers have a level of proficiency of at least B2 (CEFR) for all linguistic sub-skills.
- In the educational programme, enough attention is given to form-focused language education.
- Only authentic English materials are used.
- At the end of the third year, students attain a level of proficiency equivalent to level B2 as described by the Common European Framework of reference.
- At the end of the sixth year, students attain the Language A2 certificate of the International Baccalaureate.
- Neither knowledge of the L1 (Dutch) nor results in subject matters taught through English should deviate from the national norm.

De Bot & Maljers (2009) state in their overview of foreign language education in the Netherlands that CLIL is the only recent innovation in Dutch language education that has been successful. They describe a few of the observations concerning CLIL’s positive outcomes as made by schools themselves as well as by policy observers. Most noteworthy in the context of this thesis is the observation that teachers promote students’ L2 output and that there is corrective feedback as well as focus on form. This is true for English courses as well as for other subjects taught through English.

Other researchers that looked into the effects of bilingual education in the Netherlands compared students in bilingual programs to students in regular education. The main focus of early studies was the effect of bilingual education on proficiency in the first and second language, as well as the effect of BE on results in those classes taught in the L2. One of the earliest studies of Dutch bilingual education is Huibregtse’s 2001 study of the effects of bilingual education. Huibregtse collected data over the 1991-1995 period. In this period, bilingual education had just started to develop. Huibregtse's study was one of the first attempts to examine the results of BE. (See further, Admiraal & De Bot 2005)

In her study, effects of bilingual education were measured by comparing bilingual and regular education. The results of education were measured in terms of the proficiency in the second language, to see if students of bilingual education were indeed more proficient and developed quicker and to a more advanced stage than students that did not receive bilingual education. The proficiency was measured in several ways: Huibregtse tested the students’ receptive vocabulary, reading comprehension and oral production. Her study also tested the proficiency in the students L1 (Dutch), to see if the first language proficiency was not
threatened by the development of the second language. The last part of the study examined the grades on a number of subjects that were taught in English, to see if there were differences between bilingual and regular students in terms of the amount of knowledge they were able to obtain from the lessons of these courses. Huibregtse also included a number of learner characteristics such as language background, gender, language contact and motivation to see what the effects of these learner characteristics would be on the development of second language proficiency. Last of all, Huibregtse examined the role of the teacher. This last factor is, however, beyond the scope of the present study and will thus not be treated here.

Huibregtse found that bilingual education indeed led to better results in the proficiency of the second language, in receptive vocabulary as well as in reading and speaking. For some of these skills, a part of the difference between the bilingual and regular students could be explained by the learner characteristics, but in general, education was the most important predictor of the results.

In a similar study using the same learner data, Admiraal, Westhoff & De Bot (2005) examined the results of bilingual education and found that students of bilingual education scored higher than regular students on English language proficiency in terms of oral proficiency and reading comprehension. There were no significant differences in receptive word knowledge. They also reported no negative effects for results on school leaving exams for either Dutch or subject matters taught through English. When learner characteristics were controlled for, students of BE still had significantly higher scores than regular students.

Meant as a follow-up on Huibregtse’s study, the OTTO-project is a research project studying the effects of bilingual education. The OTTO project is a semi-longitudinal study that examines the English proficiency of students at schools that offer both bilingual and regular programs as well as at schools that offer only regular education. This set-up makes it somewhat different from Huibregtse’s study, where only bilingual and regular groups were compared. The reason for the specific design of the OTTO-project is that bilingual students are selected on the basis of their scholastic aptitude and motivation. Bilingual students therefore are often more gifted learners compared to regular students at the same school. The inclusion of control schools, where there is no selection on the basis of learner characteristics, offers an opportunity to get better insight into the effect of education, as well as the influence of other learners' features. Some of the data gathered in the context of the OTTO-project were used in this present study.

Some studies have already used the data gathered by this project. Verspoor and Edelenbos (2008) investigated the differences in development of bilingual, regular and control students in terms of their general writing proficiency scores. They also took a closer look at the authenticity of the learned English, focusing on the acquisition of language
‘chunks’. The idea behind this study was that by being exposed to more input, and more
authentic “native speaker” input, the bilingual students would not only learn English faster,
but they would also acquire more chunks, thereby making their produced language more like
that of a native speaker. Analysis of writing products of bilingual and regular students
showed that the bilingual students did indeed produce more authentic language and that they
used more ‘chunks’ than regular students. The researchers concluded that there is no doubt
that bilingual education is effective.

**Proficiency testing**

If researchers want to compare the development of proficiency of bilingual and non-bilingual
students, the first decision that must be made is how these proficiencies are tested.
Proficiency in a second language can be measured in many different ways. The first decision
one needs to make is whether proficiency should be tested holistically, as a general test of
how well the students masters the language, or whether proficiency should be divided into
different sub-skills. Proficiency in a second language can, for example, be divided into
receptive and productive proficiency, or into different sub-skills such as writing, listening,
speaking and reading proficiency.

Perhaps the best way to test proficiency is to combine holistic and specific proficiency
tests. Holistic tests for proficiency are for example spontaneous writing tests. In writing, Fayol
(1999) argues, “learners have to manage several subcomponent skills, such as graphic
transcription, lexical access and syntactic frame construction, as well as higher-level
processes such as elaborating ideas and conceptual relations, thematic processing,
maintaining coherence and cohesion and respecting text-type constraint processes.”. Writing
is thus a linguistic act in which many different aspects of language proficiency (grammar,
vocabulary, syntax, pragmatics) play a role, and as such is a great way to measure overall
language proficiency. Fayol also explains that writing places high demands on cognitive
capacity. The higher a learner's proficiency of the language, the easier it is to give attention to
aspects of both form and content and thus produce a more 'fluent' or native-like text.

Spontaneous writing tests have the benefit of more closely resembling 'naturalistic'
language use, as opposed to writing tasks where the assignment is more restricted. A test
of this type gives insight into what a student can really do with the language and how well he
or she can use it. When writing tests are used as holistic measures of proficiency, the way in
which they are scored is important, as the disadvantage of tests of this type is that scoring
them objectively is difficult. Scoring needs to be done holistically in order to maintain the
test’s 'naturalistic' character.

Even though a test of this type seems to be a good indicator of the real, active
proficiency of students, including a non-holistic test and/or a test of receptive knowledge of a second language also has its benefits. The reason for this inclusion is that especially for children who enter secondary school at a really low level of proficiency, receptive knowledge needs to be acquired before a change in active production of the language can be seen. (The so-called ‘silent period’ as first coined by Krashen, 1985) This means that a change in receptive knowledge will occur before this change can be observed in active production. To be able to see if anything happens in the first stage of learning a second language, the combination of the two types of tests may give the best insight into the development of proficiency.

A non-holistic way of testing proficiency that has been used by many researchers is vocabulary testing. Read & Chapelle (2001) give an overview of different approaches to vocabulary testing. There are researchers who treat vocabulary as a ‘separate component of language knowledge’ (Read & Chapelle, 2001). The second group of researchers regard the boundaries between lexical knowledge and general proficiency as less strictly defined. The last group of theorists view vocabulary knowledge as a good indicator of general proficiency in a second language. They propose that lexical knowledge plays a large role in both early stages of learner’s production of the second language, as well as in the development of native-like fluency in more advanced stages of second language acquisition, a point of view that is adopted in this thesis.

To assess the students’ receptive knowledge of English vocabulary, various measurements can be used. Many studies, including Huibregtse's 2001 study, use Meara's English as a Foreign Language Vocabulary Test to this end. The EFL-test is a so called yes/no test that measures the receptive vocabulary of learners of English as a foreign language.

The EFL-test is made up of two types of words: real English words and pseudo-words. The pseudo words are words that don’t exist in the English vocabulary, but are made according to English phonological rules. The EFL-test comes in different versions, each of a different level of difficulty; the real words are taken from a frequency list, with the easier EFL version containing more frequent words than the more difficult versions. The test-taker has to indicate for each test item whether or not he is familiar with the meaning of this word.

There are four different stimulus-response possibilities for the EFL-test (see table 1). Two of the possibilities are correct responses (yes to a real word (hit) and no to a pseudo word (correct rejection)) and two are incorrect responses (no to a real word (miss) and yes to a pseudo-word (false alarm)).
Table 1: The item-response table for the EFL-test

<table>
<thead>
<tr>
<th>Item alternative</th>
<th>Response alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Hit</td>
</tr>
<tr>
<td>Pseudo-word</td>
<td>False alarm</td>
</tr>
<tr>
<td></td>
<td>Correct rejection</td>
</tr>
</tbody>
</table>

The score on the EFL-test can be calculated by taking into account the number of ‘hits’ and ‘false alarms’. Furthermore, Huibregtse, Admiraal & Meara (2001) came up with a scoring method that also takes into account response style, using Signal Detection Theory. The underlying principle of this theory is that correcting for response style or guessing behavior should be an integral part of scoring a multiple choice test. A very conservative response style for example, increases the probability of 'no' as a response, while risk-takers may answer 'yes' more often, and even small differences in response patterns may result in very different scores. When Signal Detection is incorporated into the scoring method for the EFL-test, the score reflects not only the ratio of hits to false alarms, but also the response style of the test-taker, thereby providing a score that is more valid. (For a more detailed and technical description of the scoring procedure for the EFL-test, including the correction for response style, see Huibregtse, Admiraal & Meara, 2001). Huibregtse, Admiraal and Meara propose that such a yes-no test is maybe not a perfect, but nevertheless one of the most practical tests to get an indication of the learner’s actual vocabulary size.

In a previous study using data from the OTTO-project, Kops-Hagedoorn (2006) found that there are some correlations between the scores on the EFL-test and the writing scores, but this correlation is not high at all levels of the writing test. Apparently, the two tests do not measure the same underlying construct. This is not surprising, as one test measures receptive knowledge and the other active knowledge and one is holistic while the other is sub-skill specific.

Learner characteristics

Type of education may not be the only factor that is of influence on the development of English in students. Studies (for an overview, see De Bot, Lowie & Verspoor 2005) have shown that the characteristics of a student may also have an influence on how his/her proficiency will develop. Since students in bilingual programmes are selected on the basis of their learner characteristics, this might lead to a bias in the results of bilingual education. If individual differences account for a large part of the development of proficiency, the positive results of bilingual education would mainly prove that ‘better learners learn better,’ rather than
proving the effectiveness of the programme itself. In this thesis, a number of learner characteristics that previous studies have indicated as playing a role in the development of English proficiency of students are therefore investigated. These learner characteristics are scholastic aptitude, self-evaluation of proficiency and the motivation to learn English/attitude towards learning English.

The first learner characteristic that is included in the design is scholastic aptitude as measured by the Cito score. The Cito test, widely used in the Netherlands, is a test that is administered at the end of primary education. The score on this test is used (alongside the teacher’s judgment) to place the child at an appropriate level of secondary education. The test is administered during three mornings and consists of questions about language, mathematics and arithmetic, and study skills. There is also an optional section of World orientation. The reason this Cito test is widely used is that it is thought to be an adequate measure of school performance; it measures what a child has learned from primary school, in order to predict what the child will be able to learn in secondary school, and at which level of secondary school the student will function the best. Children at the highest level of secondary school, the VWO classes that were investigated in this thesis, typically have a score between 545 and 550.

Bartels, Van Beijsterveldt & Boomsma (2009) have found moderate to high correlations between Cito score and IQ, and found evidence for a high heritability of scholastic aptitude. This seems to indicate that Cito score is not a result of environmental factors, such as the type of school or the quality of the teacher or the learning materials, but of an innate ability. This makes the Cito score an excellent measure to be used in this thesis, as it can be fairly used to compare the scholastic aptitude of the various groups of students.
As table 2 shows, there are high internal correlations between the separate parts of the Cito test. Moreover, all parts of the Cito test correlate highly with the language items. This means that the Cito score for a large part reflects language aptitude, which makes it an ideal aptitude measure for a study of language learning.

Motivation/attitude is the second learner characteristic that many researchers consider a major factor in learning in general. Motivation may be integrative (related to the desire to be a part of the L2 language community) or instrumental (based on the perceived advantages of knowing the L2). In learning a language, Gardner & Lambert (1972) state that the motivation to learn this language as well as the attitude towards the language play a role in both the process of learning a second language and the final proficiency that is reached by the student. Studies have found significant correlations between both measures of integrative and instrumental motivation and language learning results (Gardner, 1985, Engin 2009). Motivation is however not only a factor that influences language learning, it is also a factor that can be influenced by language learning experiences. One therefore always has to be cautious in drawing conclusions when relations between motivation measures and other variables are found.

In this thesis, motivation/attitude refers specifically to the motivation to learn English and the attitude towards learning English. Berns, De Bot and Hasebrink (2006) defined motivation/attitude as a combination of three different aspects, covering both integrative and instrumental aspects of motivation: likeability of English, importance of knowing English and advantages of knowing English.

Another learner characteristic that comes into play is the way students evaluate their own proficiency of English. Students' own perception of how well they think they can perform in a certain language may play a role in their learning process. Clément, Dörnyei and Noels (1994) describe the role of (linguistic) self-confidence on the development of L2 proficiency.

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1 *KR20 is a measurement of the reliability of tests. The Cito test is thus very reliable
2 Stichting Cito, *Terugblik en Resultaten Eindtoets 2009*
Self-confidence, they say, is made up of two components: affective (anxiety to perform the language) and cognitive (self-evaluation of proficiency). Clément’s study has shown significant relations between learners’ self-evaluation and self confidence and various proficiency measures, such as teacher’s rating of the students’ communicative and passive skills and the students’ last grade. Furthermore, perceived proficiency may also influence a students’ decision to opt for bilingual education. Again, as for motivation, one has to be cautious when interpreting relations between self-evaluation and proficiency scores, as the two factors may influence each other.

Self-evaluation is usually measured by means of a Can-Do test. These Can-Do tests consist of a series of descriptions of tasks in language-related situations, for each of which students have to rate their ability to perform that task in the given situation. The tests are based on the criteria of the Common European Framework of Reference and every task-description is related to a certain CEFR skill-level (e.a. A1, B2, C2). Scores on Can-Do tests are thus often used to assess a learners’ level of language competence. In this thesis, however, the average score on the Can-Do items is used as a general measure of self-evaluation of proficiency, rather than a specific indication of communicative ability. It is presumed that the average Can-Do score reflects the learner’s confidence in his/her communicative skills.

The influence of the context

A study that lies at the basis of the inclusion of context as a variable in this thesis, is the Berns, et al.’s 2007 investigation of the relation between language contact and proficiency in English across several European countries. This study shows that the development of students’ proficiency is not only related to the English education they receive in their schools but also to a number of context variables. In their study, relations were found between proficiency and various factors such as parental language proficiency, parental education, contact with English through personal network and vacations and media environment.

The first context variable included in the present study is out-of-school contact. This variable was included for two reasons. The first reason is that the Berns et al. study found that Dutch children indicate that they have learned over 40 percent of their knowledge of English outside of school. This is in large part due to the abundance of English media in the Netherlands. Obviously, students do not only get their English input from education, but they are also confronted with a lot of meaningful English input from other sources. Treating the school as the only source of (meaningful) input would be a misrepresentation of the Dutch context of learning English.

The second reason for including out-of-school contact is that Verspoor, De Bot & Van
der Heiden (2007) found significant relations between amount of media contact and English listening skills. In these studies, students in reformational (very strict religious) schools were compared to students of non-religious schools. The reformational students turned out to have a lot less contact with English media and they also on average scored lower on measures of English listening skills. This seems to indicate that the amount of English input a student is confronted with outside of school does in fact have an influence on the development of English proficiency.

Related to the result of this last study is the fact that one of the reasons for reformational schools to start providing bilingual education in the first place, was that the students from these schools scored much lower on their English tests and exams than their non-reformational counterparts. One of the important reasons underlying this difference is the fact that in reformational families, using modern media is often discouraged. As a result of their religious backgrounds, these children thus have much less exposure to English through the media. Therefore their knowledge of English is less developed than that of their non-religious counterparts, who often know a lot of English even before getting it as a school subject. The question is whether bilingual education can help these students catch up with the non-religious students.

The second context variable is the school itself. The schools that participated in the study were located in different parts of the Netherlands, which may play a part in the amount of English input the students are exposed to in their everyday life. Students in urban areas may for example have more contact with English in their everyday life (tourists, signs, etc) than students in rural areas. Moreover, different schools will also have different teachers, different methods, different teaching styles and maybe also a different socio-economic setting. One of the schools, for example, is located in a city that is known for its high socio-economic status. These kinds of contextual aspects may also influence the development of proficiency.

All these factors will be treated separately, but of course it is important to realize that all factors influence each other and work together in the complex system of language development.
Research questions

The following research questions were formed on the basis of the theoretical insights:

1. Are there differences between bilingual, regular and control students in terms of the development of English writing proficiency?
2. Are there differences between bilingual, regular and control students in terms of the development of English receptive vocabulary?
3. Are there differences between bilingual, regular and control students in background variables (learner characteristics and context variables)?
   a. How are learner characteristics related to the development of the English proficiency scores?
   b. How are context variables related to the development of English proficiency scores?

Based on the literature reviewed in the previous sections, there are a number of predictions to be made about the expected answers to the research questions. It is likely that the English proficiency of the bilingual students, due to a larger amount of input and output, will develop the quickest and that these students will reach a higher level than the other groups. The regular group will probably develop slower and will not reach as high a proficiency as the bilingual students. The control group, where students have not been preselected on basis of their Cito score and motivation to learn English, will likely show a pattern that lies in the middle of the bilingual and the regular group. It is to be expected that the children who develop the quickest are children who have a higher Cito score, are highly motivated and have a positive attitude towards English. Furthermore, students that have a lot of contact with English outside of the educational settings, either through English media or otherwise, will probably also develop quicker.
3. Method

This section will provide descriptions of the participants, the materials and the procedures. The method section will be concluded with a description of the design of the study and the analyses that were used in order to answer the research questions.

Subjects

Six secondary schools in total participated in the study. In all of these schools, only students of first (12-13 years old) and third (15-16 years old) year of VWO are investigated. VWO (voortgezet wetenschappelijk onderwijs or pre-university education), is the highest level of secondary education in the Netherlands.

Four of the schools that took part in the project offer both a regular and a bilingual programme, while two schools did not offer this choice. The four schools that offer a bilingual programme are all part of the national network of bilingual education.

Three conditions are compared in this study. The first condition, bilingual education, consists of the first and third year bilingual classes of the four choice-schools. The second category, regular education, consists of the first and third year regular classes of three of the choice-schools. In the last category, the control group, the first and third year classes of the two non-choice schools are combined with the first and third year regular class of one of the choice schools, school A.

The inclusion of these regular classes from school A is done because in one of the choice schools, the regular group is a so-called gymnasium class. Gymnasium is a special type of school programme for the most talented students; besides the regular VWO curriculum, these students also take courses in Latin and ancient Greek. The gymnasium programmes, like the bilingual programmes, select their students on basis of their Cito scores and their willingness to put in extra effort at school. The students that are in these programmes will thus probably have a higher average Cito score and general motivation than the regular VWO students in the choice schools. Moreover, they are interested in studying other languages. This thesis, like previous studies, therefore considers these students a control group and not a regular group, based on the criterion that for the gymnasium group, there is not a negative selection effect based on Cito score or general lack of motivation. They are therefore more similar to groups in schools that do not offer a choice for a bilingual programme.

The six schools that provided the participants for this study were all located in different parts of the Netherlands. Two of the investigated schools, one bilingual and one control school, are schools based on reformational principles. These schools have been
included because of the assumed difference in media contact compared to the non-religious schools. In table 3 an overview of the classes can be found.

<table>
<thead>
<tr>
<th>School</th>
<th>Type</th>
<th>Conditions</th>
<th>Number of students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Class 1</td>
<td>Class 3</td>
</tr>
<tr>
<td>A</td>
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<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>B</td>
<td>Public</td>
<td>Bilingual</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
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<td>18</td>
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<td>C</td>
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<td></td>
<td>Regular</td>
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<td>50</td>
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<tr>
<td>D</td>
<td>Reformational</td>
<td>Bilingual</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>E</td>
<td>Reformational</td>
<td>Control</td>
<td>22</td>
<td>17</td>
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<td>F</td>
<td>Public</td>
<td>Control</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>291</td>
<td>258</td>
</tr>
</tbody>
</table>

Table 3: Overview of groups within the participating schools

A number of students were excluded from the study because they had lived abroad and/or attended an international school in another country. For these students, English is not a foreign language, but rather a second or even first language. One of the students, for example, lived in Kuwait for 7 years and attended an international school. On the first year writing tests, this student scored on proficiency level 5, 6 and 6 on the writing assignments, while the other students had an average score of 1.18, 2.42 and 2.49, respectively. Clearly, it would not be correct to include this student in the design, as this student’s level cannot be fairly compared to the other students in the study. In total, 7 students were excluded on the basis of their history of living in English-speaking countries or attending an international school in a non-English-speaking foreign country for more than two years. Almost all the excluded students were in school B.

Materials & Procedures

Two types of materials were used in this study; to investigate proficiency, two different proficiency tests were administered. Background variables were obtained by means of a questionnaire. All measures were administered through an online computer program designed especially for this study.

The researchers were not present at the moment of test-taking and therefore the
students’ own teacher led them to a computer room. Here, they could fill in the test at the computer, without any time constraints. All participants took the tests in approximately the same months and all the schools participated in all tests, with the exception of school F; this school did not administer the third test in the year 3 cohort and therefore none of the students of this group have a proficiency score on the last test.

The proficiency of the students was determined by means of a writing test and a test of receptive vocabulary. The writing assignments are the first measurement of proficiency level. In each year, the writing test was administered three times: at the start of the year, in the middle of the year and at the end of the year.

For the writing assignments, the students were instructed to write a short story (in English) of about 150 words. The assignments given were designed specifically by the researchers in order to elicit enough material so that the writing proficiency could be judged. The assignments were also created in such a way that they would be appropriate for the age of the learners and the range of proficiencies expected. In table 4, some examples of the instructions for the writing assignments can be found.

<table>
<thead>
<tr>
<th>Time</th>
<th>Year</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2007</td>
<td>First</td>
<td>Write a short story (± 150 words) about your new school, friends and teachers.</td>
</tr>
<tr>
<td></td>
<td>Third</td>
<td>Write a short story (± 150 words) about the most awful (or best) thing that happened to you during summer vacation. It does not have to be truthful.</td>
</tr>
<tr>
<td>February 2008</td>
<td>First</td>
<td>Pretend you have a foreign pen-pal. Tell him/her about your favorite holiday and explain what you find so special about it (± 150 words)</td>
</tr>
<tr>
<td></td>
<td>Third</td>
<td>Pretend you have just won 1000 euro’s. Write a short story (± 150 words) about what you would do with the money.</td>
</tr>
<tr>
<td>June 2008</td>
<td>First</td>
<td>Write about the most awful (or best) thing that happened to you at school so far. It does not have to be truthful (± 150 words)</td>
</tr>
<tr>
<td></td>
<td>Third</td>
<td>Pretend your school principal has stated that from now on anyone should wear a school uniform. Write him/her a short letter (± 150 words) to explain why you agree/do not agree with this new rule.</td>
</tr>
</tbody>
</table>

Table 4: Writing assignments

The writing assignments were holistically scored by a team of evaluators. This team of evaluators consisted of eight experienced teachers of English, three of which were native speakers of English. Of the other evaluators, two were native speakers of Dutch and the rest
had Chinese, Portuguese or Spanish as their native language.

The evaluation of the texts started with each evaluator assessing a group of six tests at a time. They assessed the texts by giving scores between 0 and 8, where 0 was given to the weakest texts and 8 to the strongest. These assessments were then discussed among the teachers in order to find consensus on the underlying reasons for assessing a text as strong or weak. These discussions led to a list of descriptions for each level of proficiency of a written text, based on aspects such as the vocabulary that was used, tense use, use of authentic expressions and syntactic complexity. This list of descriptions can be found in the appendix.

After creating this model for scoring the texts, the raters began the assessment by all giving scores to the same texts. When more than half of the raters came to the same score, this score was accepted. If not, the raters discussed the text and together decided on the score. After a 'training' period, texts were only judged by half of the raters and only discussed by the entire team when consensus could not be reached in the smaller groups. These procedures were repeated until all texts had received a score.

The receptive vocabulary test used was the “English as a Foreign Language Vocabulary test” (EFL Vocabulary test), developed by Meara (1992), for estimation of the receptive English word knowledge of foreign language learners. As the EFL-test has been extensively described in the background section, the content of this test will not be discussed in detail here.

The EFL-test was administered three times in each year, at the same time as the writing test. For the first year students, the EFL-test used was an easier version than for the third year students; the first year students took the 1000-2000 word level version of the test, while the third year students took the 3000-4000 word level version. In each case, the EFL-test consisted of 120 words. The scores on the EFL-test were calculated by way of the Isdt scoring method, based on the Signal Detection theory as described in the background section on proficiency testing. The following formula was used:

\[
I_{sd} = 1 - \frac{4h(1-h) - 2(h-f)(1+h-f)}{4h(1-f) - (h-f)(1+h-f)}
\]

In this formula, \(h\) stands for hit, \(f\) for false alarm and \(I_{sd}\) is the EFL-score. The final EFL-scores ranged from 0 to 1, with 0 indicating a very low vocabulary score and 1 indicating a very high vocabulary score. As EFL-scores in the third year turned out to have a 'drop' in the middle of the year, probably due to that test containing more difficult items than the first test, an additional recoding of the scores was applied. EFL-scores were rearranged based on
their rank in comparison to other scores. Only students that had a score on all three EFL tests were included in the recoding. The lowest scoring student then received a rank score of 1, the next student a rank score of 2, and so on. Students that had the same EFL-score also received the same rank score, but the number of ranks was equal to the number of students. The procedure was repeated for the second and third test. The rank scores could then be used for graphs that represent how the three conditions relate to each other.

After measuring the students’ proficiency, assessing learner characteristics was the next step. To determine the learner characteristics, all students were asked to fill in a questionnaire at the start of the study. This questionnaire (which can be found in its entirety in the appendix) is divided in a number of sections. The first section deals with media use and contact with English. The next section deals with attitude towards learning English and motivation to learn English. In the last section, students indicate how they rate themselves on different English skills, and they filled in a Can-Do list. In this Can-Do list, students have to rate how well they can handle a number of situations in which they would have to use English. There is no information on social background, gender and home language, unlike in previous studies. In the questionnaire, there were also questions on parental knowledge of English, more detailed questions on the use of English media in classes and so forth, but these questions have not been included in the design of this thesis.

After all tests were administered, the variables motivation/attitude, self-evaluation and out-of-school contact were first constructed out of the items on the questionnaire. The first variable, motivation to learn English/attitude towards English, consists of 10 items concerning likeability of English, importance of English and advantages of knowing English, all ranging on a 1-4 scale. These are the same items that were used in the Berns, De Bot & Hasebrink study. Motivation/attitude is constructed from the following items from the questionnaire:

Likeability: (scores ranging from do not like it at all to like it very much)

-Do you like the English language?

Importance: (scores ranging from not at all important to very important)

-How important is it to know English?

Advantages of knowing English: (scores ranging from do not agree at all to agree entirely)

-Knowing English makes it easier to communicate abroad.
-Knowing English makes it easier to understand lyrics.
-Knowing English makes it easier to learn how to use computers and other equipment.
-Knowing English makes communication with other people easier.
-Many things sound better in English.
-Many things can’t really be expressed in Dutch.
Knowing English is necessary for further education.
Knowing English increases your chance at finding a good job.

A reliability analysis showed that the Cronbach alpha for motivation/attitude is .72. As this is a moderate Cronbach alpha, the indicators themselves were also used to investigate the differences in likeability and importance between conditions. The variable advantages of knowing English has a Cronbach Alpha of .70.

The second learner characteristic that had to be construed from the items in the questionnaire is self-evaluation of proficiency. This part of the questionnaire consisted of 33 items that each described a L2 language situation. Students then had to indicate to what extent they thought they would be able to manage the described situation. Response possibilities ranged from 1-4, designating the answers Easily-Somewhat easily-Hardly-Probably not at all.

The descriptions of language situations concerned different linguistic sub-skills. Most of the items described situations in which speaking and listening were most important, but there were also three items concerning writing and one concerning reading. For most of the sub-skills, the situations varied in difficulty. Some examples of statements are:

**Listening:**
- In a personal conversation with an English speaker, understanding simple questions such as “Hello”, “How are you?” or “Where do you live?”
- Understanding the lyrics to a pop song on the radio, even though I’ve never heard the song before

**Speaking:**
- Getting information in English about a ticket to a concert
- In a personal conversation with an English speaker, giving my opinion on current subjects such as the unification of Europe or the environment.

**Writing:**
- Making a written complaint in English
- Writing a poem or song in English

**Reading:**
- Reading an English newspaper article about sports or music

For each student, the raw scores were mirrored in order to get scores with a similar set-up as the other measures. The final self-evaluation of proficiency score is the average score on all Can-Do items. These scores ranged from 1-4, 1 indicating a very low self-evaluation and 4 a very high self-evaluation. A reliability analysis shows that the Cronbach's alpha of this
variable is .963. This is a very high Cronbach’s alpha, meaning that all items measure almost the exact same underlying construct, which supports the decision to treat the average score on the Can-Do items as a general measure of self-evaluation.

Another variable that had to be composed from the items in the questionnaire is the context variable *out-of-school contact with English*. The part of the questionnaire that concerned contact with English was a combination of Huibregtse’s questionnaire and the Berns et al. one. It contained questions on media-use in general and a number of questions on possibilities to come into contact with English. Because of the nature of the questionnaire, there were several ways to construct the variable *out-of school contact with English*. For this study, however, only the part of the questionnaire that concerned possibilities to come into contact with English was used; the rationale behind this decision was that there was a lot of overlap between the two lists and the items concerning use of Dutch media or in-school contact with English were irrelevant to the research questions posed here. Furthermore, using only those items made the variable more simple and elegant.

The 12 items that together form the variable *out-of-school contact with English* all concern students’ opportunities to come into contact with English. Students indicate to which extent they have the possibility to come into contact with English through different sources: parents/caretakers, siblings, friends, music on the radio, speech on the radio, television, cd’s/mp3’s, cinema, newspapers, magazines, books, computers. All items were scored on a 1-4 scale, designating the response possibilities never-sometimes-often-very often. The final *out-of-school contact* score is the average score on all 12 items.

Reliability analysis showed that the Cronbach’s alpha for out-of-school contact is .770, which indicates moderate to high reliability. Furthermore, a factor analysis was used to investigate the possible existence of clusters of variables. The outcome of this factor analysis will be discussed in the results section.

Two other variables, the learner characteristic *Cito score* and the context variable *school* were not constructed from the items on the questionnaire. Cito scores were provided by the schools themselves, who keep track of these data. The variable *school* was already part of the design.

To summarize, five independent variables were used in total: three of those variables were learner characteristics (Cito score, motivation/attitude and self-evaluation of proficiency) and two were context variables (out-of-school contact and school). Unlike the proficiency measures, these variables were only measured once, at the start of the year.
Design & Analyses

The project that this study gets its data from, the OTTO project, is a cross-sectional and semi-longitudinal study. Two cohorts of students are followed during the course of one school year. It is an observational study, as it studies already existing groups that were formed by both self-selection and selection by others, but not randomly assigned.

The main set up of the study is the comparison of the three conditions: bilingual, regular and control groups. These conditions are compared on measures of proficiency as well as on learner characteristics and context variables. In the second part of the study, four new conditions are formed on the basis of educational condition (bilingual or monolingual) and religious group. These new conditions are also compared on measures of proficiency as well as on learner characteristics and context variables. In the last part of the design, the focus lies on the relation between the background variables and the proficiency measures.

The scores on the proficiency tests are analyzed using one-way ANOVA's. When a one-way ANOVA produces a significant difference between conditions, post-hoc tests are used to further examine differences between groups. Because the sample sizes are somewhat different, Gabriel's post-hoc test is used when population variances are equal. When a Levene's test shows that population variances differ, the Games-Howell post-hoc procedure is applied. Repeated measurements tests are applied in order to assess the interaction effect between school type and the proficiency test, to see whether groups develop differently over the course of the school year.

Analyses of background variables consists of a number of steps; first, Cronbach's coefficient alpha is used to assess the reliability of the background variables in those cases where variables were composed of two or more items. Factor analyses are done for measures that contained many items, in order to find possible smaller categories. Next, differences between groups are examined using one-way ANOVA's or t-tests (in cases where only two groups are compared). As with the proficiency measures, post-hoc tests are used to further investigate intergroup differences.

Various analyses are applied in order to assess the relation between the proficiency measures and the background variables. First, proficiency scores of groups that were similar in type of education, but different on either learner characteristics or context variables, are compared using one-way ANOVA's. Secondly, correlations between learner characteristics, context variables and proficiency tests are calculated to assess the relations between the learner characteristics and the proficiency scores.
4. Results & Discussion

In this section, each of the research questions will be dealt with. The section is divided into subsections dealing with the effect of bilingual education, the influence of learner characteristics and the influence of context. In each of these subsections, both the scores on the writing test and the scores on the EFL-tests will be examined. To keep this chapter readable, some interpretation and discussion of results will be included at the end of each subsection.

The effects of bilingual education

To examine the effect of bilingual education, the scores of the bilingual groups are compared to those of both the control and regular groups.

![Writing scores Year 1](image)

Figure 1: Average group scores on year 1 writing tests

Figure 1 shows the development of the writing scores of all three student groups. Bilingual students score higher than the two other groups on all three tests. This difference is the smallest at the start of the year and gets larger as the year progresses. Regular students consistently score lower than the other groups. All groups develop quickly in the first half of the year and more slowly at the last half of the year, even showing decline in the case of the regular group.

A repeated-measurements test shows that there is an interaction effect between the test and the school type \( F(3.79, 348.448)=10.218, p<.001 \), indicating that students of different school types develop differently. Post-tests show that this is true when regulars are
compared to bilinguals ($p<.001$), but also when controls are compared to bilingual groups ($p<.001$).

A one-way ANOVA reveals that on the first test, there is a significant difference between groups ($F(2, 238)=12,769$, $p<.001$). Post-hoc tests show that bilingual students only score significantly higher ($p<.001$) than the regular group. Groups also differ significantly on the second test ($F(2, 237)=28,530$, $p<.001$). Bilinguals score significantly higher than both control and regular groups ($p<.001$ in both cases). They also score significantly higher than both other groups ($p<.001$ in both cases) on the third test ($F(2, 220)=59,862$, $p<.001$).

Figure 2 shows the writing scores of the groups in the third year cohort. All groups go through a steep development in the first half of the year but stop progressing in the second half of the year. A possible explanation for this effect is the fact that the third year students seemed not to take the last test very seriously anymore. They had already taken two of these tests and may have lacked motivation to perform to the best of their capability on the last test of the series.

Repeated measurement tests show no interactions between school type and the proficiency tests, indicating that groups develop in a similar way.

On the first writing test, groups differ significantly ($F(2, 225)=34,442$, $p<.001$). Post-hoc tests show that bilinguals score significantly higher than controls ($p<.05$) and regular students ($p<.001$). Groups also differ significantly on the second test ($F(2, 230)=39,079$, $p<.001$), with bilinguals outscoring control and regular students ($p<.001$ in both cases). On the third test, groups again were significantly different ($F(2, 193)=35,618$, $p<.001$), with bilinguals scoring higher than the control and regular groups ($p<.001$ in both cases).
All in all, analysis of the writing tests demonstrate that bilingual students do not only outscore regular, but also control students. This seems to indicate that bilingual education indeed leads students to have a higher writing proficiency. In the following paragraph, we will see if this also holds true for receptive vocabulary.

Figure 3 depicts the scores on the EFL-test for the first year cohort. Control groups have a slightly higher starting score than the bilinguals but the bilingual students develop more quickly than the control group and score higher on the second and third test. The bilinguals develop more or less linearly, while the control students develop slowly in the beginning of the year and only start scoring better on the vocabulary test at the end of the first year. Regular students score lower than the two other groups on all three tests, but there is nevertheless a positive development in their EFL-test scores.

Repeated measurement tests show a significant interaction effect of test and school type \((F(4, 356)=8.370, p<.001)\), indicating that groups develop in different ways. This is true when regulars are compared to bilinguals \((p<.001)\) as well as when controls are compared to bilingual groups \((p<.001)\).

When all measurement moments are considered separately, there is a significant difference \((F(2, 237)=8.155, p<.001)\) between groups on the first EFL-test. Post-hoc tests show that the bilinguals score significantly higher \((p<.05)\) than the regular students. Groups also differ significantly on the second test \((F(2, 235)=8.034, p<.001)\), with bilinguals again scoring significantly higher \((p<.001)\) than the regular students. On the last test of the first year, there still is a significant difference between groups \((F(2, 214)=18.571, p<.001)\) and the
bilinguals score significantly higher (p<.05 and p<.001, respectively) than both control and regular students.

The rank scores, calculated as described in the method section, are depicted in figure 4. From this graph it is clear that even though the control students start out better than the bilingual students, bilingual students rank higher than both other groups from the middle of the year.

In the third year, as can be seen in figure 5, bilinguals consistently score higher than control and regular groups, and control groups outscore regulars. The dip in the middle of the third
year, which is present in both the bilingual and control students’ developmental curve, is probably due to the fact that the second EFL-test contained more difficult real words than the first test. This effect is however countered by ranking the scores (figure 6). Noteworthy is the fact that the vocabulary score of the regular students declines over the course of the third year.

Repeated measurement tests show a significant interaction effect of test and school type \((F(4, 304)= 3.081, p<.05)\), indicating that groups develop in different ways. This is true both when regular and bilinguals groups are compared \((p<.001)\) as well as when controls are compared to bilinguals \((p<.001)\).

As for the separate test moments, the bilingual students score significantly higher on the EFL-test than the control and regular group at all three test moments. On the first test, groups differ significantly \((F(2, 224)=51,307, p<.001)\). Post-hoc tests show that bilingual students score significantly higher \((p<.001\) in both cases) than both control and regular students. On the second \((F(2, 228)=30,229, p<.001)\) and third test \((F(2, 191)=55,309, p<.001)\), bilinguals still score significantly higher than both other groups \((p<.001\) in all cases).

Figure 6 shows that bilingual students rank consistently high throughout the entire third year. Controls rank higher than regulars, even though their average ranking scores approach each other in the middle of the year.

Bilingual students thus outscore other groups on all vocabulary tests starting at the end of the first year. This again seems to prove that bilingual education does indeed have an effect on the development of proficiency, and that this can be seen in measures of active as well as of receptive proficiency.
Learner characteristics: differences between groups

To see whether learner characteristics influence the development of English proficiency, the first step is to take a look at the differences in learner characteristics between the three groups. Secondly, differences in learner characteristics between religious and non-religious groups will be examined; these differences will return in the section on context influence.

The first learner characteristic to be examined is the Cito score. One-way ANOVA's were applied to see if there was a significant effect of condition and post-hoc comparisons were included to examine the differences between conditions.

<table>
<thead>
<tr>
<th>Cito</th>
<th>Average Cito score</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilingual</td>
<td>546,90</td>
<td>3,13</td>
</tr>
<tr>
<td>Regular</td>
<td>543,89</td>
<td>3,70</td>
</tr>
<tr>
<td>Control</td>
<td>547,17</td>
<td>2,86</td>
</tr>
</tbody>
</table>

Table 5: Average Cito scores per condition

The control students have the highest average Cito score, followed by the bilingual groups. Regular students have the lowest average Cito score. There is a significant difference between groups ($F(2, 460)=48,794, p<.001$). Post-hoc tests show that the difference between bilingual and regular students is significant ($p<.001$), as is the difference between the control and the regular students ($p<.001$). The difference between the bilingual and the control group is not significant.

<table>
<thead>
<tr>
<th>Cito</th>
<th>Average Cito score</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilingual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-religious religious</td>
<td>546,76</td>
<td>3,33</td>
</tr>
<tr>
<td></td>
<td>547,24</td>
<td>2,54</td>
</tr>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-religious religious</td>
<td>544,47</td>
<td>3,68</td>
</tr>
<tr>
<td></td>
<td>546,09</td>
<td>3,78</td>
</tr>
</tbody>
</table>

Table 6: Average Cito scores per condition and religious group

There is a significant difference ($F(3, 459)=15,925, p<.001$) between groups when religion is a factor. The non-religious monolingual group has a significantly lower Cito score than all other groups.

The second learner characteristic, motivation to learn English/attitude towards English, has been tested separately for the first and the third year cohort, as years of education in a certain type of programme may in itself influence motivation and attitude.
**Table 7: Average motivation scores per condition**

In the first year, there are significant differences between the three conditions ($F(2, 259)=8,269, p<.001$). Post-hoc tests show a significant difference between the bilingual and both the control and the regular group ($p<.01$ in both cases). The bilingual group has the highest average score on all motivation measures, with regular and control groups scoring rather similarly on all measures.

When the separate elements of the motivation measurement are examined, there turns out to be a significant difference between groups in likeability of English ($F(2, 271)=20,123, p<.001$), importance of English ($F(2)=3,120, p<.05$) and on advantages of knowing English ($F(2)=4,577, p<.05$). Bilinguals score significantly higher on likeability of English than both the regular and control group ($p<.01$ in both cases) Bilinguals also score significantly higher than controls on importance of English ($p<.05$) and significantly higher ($p<.05$) than regulars on advantages of knowing English. If the advantages are examined more closely, it seems that the most important items that cause this difference are the ability to communicate with other people and the increase of the chance to get a good job.

In the third year, there is no significant difference between groups on the general motivation measure. There is however a significant difference between groups on likeability of English ($F(2, 247)=8,660, p<.001$). Bilinguals score significantly higher than regulars on this measure ($p<.001$)

Besides differences between conditions, there also exist significant differences in motivation between religious and non-religious groups. Differences were again compared for
monolingual and bilingual groups separately.

### Table 8: Average motivation scores for bilingual religious/non-religious groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>Year 1</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Motivation</td>
<td>3.18</td>
<td>0.33</td>
</tr>
<tr>
<td>religious</td>
<td>3.12</td>
<td>0.40</td>
</tr>
<tr>
<td>Likeability of English</td>
<td>3.65</td>
<td>0.56</td>
</tr>
<tr>
<td>religious</td>
<td>3.70</td>
<td>0.47</td>
</tr>
<tr>
<td>Importance of English</td>
<td>3.81</td>
<td>0.40</td>
</tr>
<tr>
<td>religious</td>
<td>3.65</td>
<td>0.49</td>
</tr>
<tr>
<td>Advantages of English</td>
<td>3.04</td>
<td>0.38</td>
</tr>
<tr>
<td>religious</td>
<td>2.98</td>
<td>0.48</td>
</tr>
</tbody>
</table>

For the bilingual groups, there are no significant differences on any of the measures in the first year. In the third year, however, religious and non-religious groups differ significantly on the general measure of motivation (t(93)=4.415, p<.001). Religious students also score lower on importance of English (t(28,607)=2.35, p<.05) and on advantages of knowing English (t(94)=4.217, p<.001).

### Table 9: Average motivation scores for monolingual religious/non-religious groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Year 1</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Motivation</td>
<td>3.00</td>
<td>0.45</td>
</tr>
<tr>
<td>religious</td>
<td>2.83</td>
<td>0.35</td>
</tr>
<tr>
<td>Likeability of English</td>
<td>3.25</td>
<td>0.61</td>
</tr>
<tr>
<td>religious</td>
<td>3.00</td>
<td>0.68</td>
</tr>
<tr>
<td>Importance of English</td>
<td>3.67</td>
<td>0.47</td>
</tr>
<tr>
<td>religious</td>
<td>3.54</td>
<td>0.62</td>
</tr>
<tr>
<td>Advantages of English</td>
<td>2.90</td>
<td>0.52</td>
</tr>
<tr>
<td>religious</td>
<td>2.72</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Monolingual groups differ significantly on the general motivation measure in year 1, \( t(162)=2.409, \ p<.01 \). There are also significant differences in likeability of English \( t(160)=2.338, \ p<.05 \) and advantages of knowing English \( t(118,584)=2.517, \ p<.05 \). There are no significant differences for the third year students.
The last learner characteristic is self-evaluation of proficiency. Like the motivation variable, self-evaluation has also been examined separately in the first and third year cohort.

<table>
<thead>
<tr>
<th>Self-Evaluation</th>
<th>Year 1</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td>Bilingual</td>
<td>3.11</td>
<td>0.47</td>
</tr>
<tr>
<td>Regular</td>
<td>2.79</td>
<td>0.50</td>
</tr>
<tr>
<td>Control</td>
<td>3.05</td>
<td>0.54</td>
</tr>
</tbody>
</table>

*Table 10: Average self-evaluation scores per condition.*

In the first year, there is a significant difference between groups in average score on the Can-do items. \(F(2)=8.938, p<.01\). Post-hoc tests show that both bilingual and control groups rate themselves significantly higher than regular groups \(p<.01\) in both cases. In the third year, there is again a significant difference between groups in average score on the Can-do items. \(F(2)=12.346, p<.01\). Post-hoc tests show that both bilingual and control groups rate themselves significantly higher than regular groups \(p<.01\) in both cases.

<table>
<thead>
<tr>
<th>Self-Evaluation</th>
<th>Year 1</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev</td>
</tr>
<tr>
<td>Bilingual</td>
<td>3.19</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>2.77</td>
<td>0.49</td>
</tr>
<tr>
<td>Monolingual</td>
<td>2.99</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td>2.72</td>
<td>0.53</td>
</tr>
</tbody>
</table>

*Table 11: Average self-evaluation scores per condition and religious group*

The religious and non-religious bilinguals differ significantly on their self-evaluation measure in the first year \(t(90)=3.556, p<.001\) as well as the third year \(t(82)=4.805, p<.001\). The religious and non-religious monolinguals also differ significantly on their self-evaluation measures in the first year \(t(135)=2.661, p<.01\), as well as the third year \(t(134)=4.207, p<.001\).
Learner characteristics and proficiency scores

To examine the influence of the learner characteristics discussed above, the control group can be compared to the regular group: both groups get a similar number of hours of English in school, but as shown in the previous section, they are significantly different on a number of learner characteristics. The most notable difference is the Cito score, but self-evaluation of proficiency is also significantly different in both the first and the third year. The regular and control group are however not significantly different on measures of motivation to learn English/attitude towards learning English but as has been stated before, there may nevertheless be differences in general motivation to learn. The control students from school A for example, are admitted to a gymnasium programme based on their scholastic aptitude and motivation. Moreover, these students have chosen to do a program with extra language lessons, in this case ancient Greek and Latin, which seems to point to a high motivation to learn languages. So even though our data do not necessarily indicate that these students are more motivated than regular students to learn English, there are reasons to assume that they are motivated to learn languages, or to put in effort at school in general.

As the results of the intergroup comparison have already been graphed in the first section of this chapter, this will not be repeated here. The average scores of the control and regular groups are however repeated in tables 12 and 13.

<table>
<thead>
<tr>
<th>Writing</th>
<th>Year 1</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.63</td>
<td>2.32</td>
<td>2.54</td>
</tr>
<tr>
<td>Regular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.11</td>
<td>2.01</td>
<td>2.00</td>
</tr>
</tbody>
</table>

*Table 12: Writing scores control and regular groups*

Regular students score lower than control students on all three writing tests. T-tests indicate that this difference is significant at all three test moments. On the first test, groups differ significantly at $t(100,791)=3.668$, $p<.001$. On the second test, groups show a difference at the $p<.05$ level, with $t(139)=2.150$. At the third test moment, controls outscore regulars at $t(130)=3.440$, $p<.001$.

Regular groups also score lower than the control group on all writing tests in the third year. T-tests indicate that this difference is significant at all three test moments ($p<.001$ in all cases). T-values are $t(148)=5.018$, $t(143)=3.486$ and $t(104)=3.523$, respectively.
<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Year 1</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td>Control</td>
<td>0.48</td>
<td>0.49</td>
</tr>
<tr>
<td>Regular</td>
<td>0.40</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Table 13: Vocabulary scores control and regular groups

Regular groups score lower than the control groups on all three EFL-tests in the first year. T-tests indicate that this difference was significant at the first (t(145)=3.743, p<.001) and third test (t(126)=3.952, p<.01). Regular students also consistently scored lower than control students on all three EFL-tests in the third year. T-tests indicate that this difference is significant at the first (t(147)=2.239, p<.05) and third test (t(104)=3.182, p<.01).

It thus seems that the difference in learner characteristics between the control and regular students is in some way related to the development of English proficiency. This effect is especially strong on writing scores, but is also evident when receptive vocabulary is considered.
The influence of the context

The first context variable that will be treated is the variable *out-of-school contact with English*. A factor analysis on the items that make up the out-of-school contact variable reveals a set of distinct groups of correlating items that correspond to the factors found in the Berns, De Bot et Hasebrink's study. The loadings on the factors can be found in table 14. Loadings higher than .4 have been set in bold type.

<table>
<thead>
<tr>
<th></th>
<th>Factor 1 Popular media</th>
<th>Factor 2 Non-popular media</th>
<th>Factor 3 Personal contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents/caretakers</td>
<td>-.074</td>
<td>.120</td>
<td>.750</td>
</tr>
<tr>
<td>Siblings</td>
<td>.008</td>
<td>.198</td>
<td>.725</td>
</tr>
<tr>
<td>Friends</td>
<td>.200</td>
<td>.249</td>
<td>.620</td>
</tr>
<tr>
<td>Music on the radio</td>
<td>.737</td>
<td>.106</td>
<td>.035</td>
</tr>
<tr>
<td>Speech on the radio</td>
<td>.235</td>
<td>.620</td>
<td>.192</td>
</tr>
<tr>
<td>Television</td>
<td>.813</td>
<td>-.036</td>
<td>.121</td>
</tr>
<tr>
<td>Cd's/mp3's</td>
<td>.817</td>
<td>.050</td>
<td>.027</td>
</tr>
<tr>
<td>Cinema</td>
<td>.798</td>
<td>.075</td>
<td>-.045</td>
</tr>
<tr>
<td>Newspapers</td>
<td>-.210</td>
<td>.788</td>
<td>.141</td>
</tr>
<tr>
<td>Magazines</td>
<td>.203</td>
<td>.782</td>
<td>.120</td>
</tr>
<tr>
<td>Books</td>
<td>.132</td>
<td>.520</td>
<td>.266</td>
</tr>
<tr>
<td>PC</td>
<td>.420</td>
<td>.218</td>
<td>.289</td>
</tr>
<tr>
<td>Total variance explained</td>
<td>24,163</td>
<td>18,245</td>
<td>14,496</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>3,465</td>
<td>2,259</td>
<td>1,104</td>
</tr>
</tbody>
</table>

Table 14: Factors in out-of-school contact items

Three different factors could be distinguished; the first factor has high loadings on the items *music on the radio, television, cd's/mp3's, cinema* and *pc*. This factor thus seems to cluster items that have to do with *popular media*. The new factor has a Cronbach's alpha of .796.

The second factor has high loadings on the items *speech on the radio, newspapers, magazines* and *books*. This sub-set of items can be described as a measure of *non-popular media*. The Cronbach's alpha of this factor is .680. The third factor consists of the items *parents/caretakers, siblings* and *friends*. This last factor thus seems to combine items that measure *personal contact with English*. The Cronbach's alpha of this factor is .623. These three factors were recalculated into variables and subsequently used as indicators for
different types of out-of-school contact with English.

When group scores on out-of-school contact with English are compared using one-way ANOVA's, there are no significant differences between groups. This is true for both the first and the third year cohort and for the general measure as well as for the indicators. In table 15, average scores on out-of-school contact and the three indicators are given for all three conditions.

<table>
<thead>
<tr>
<th>Group</th>
<th>Out-of-school contact</th>
<th>Popular media</th>
<th>Non-popular media</th>
<th>Personal contact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 3</td>
<td>Year 1</td>
<td>Year 3</td>
</tr>
<tr>
<td>Bilingual</td>
<td>Mean</td>
<td>2.33</td>
<td>2.38</td>
<td>2.91</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.42</td>
<td>0.47</td>
<td>0.73</td>
</tr>
<tr>
<td>Regular</td>
<td>Mean</td>
<td>2.27</td>
<td>2.41</td>
<td>2.83</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.50</td>
<td>0.55</td>
<td>0.75</td>
</tr>
<tr>
<td>Control</td>
<td>Mean</td>
<td>2.29</td>
<td>2.42</td>
<td>2.92</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.45</td>
<td>0.47</td>
<td>0.78</td>
</tr>
</tbody>
</table>

*Table 15: Average out-of-school contact scores per condition.*

There are however, as expected, significant differences in out-of-school contact between religious and non-religious groups. Average scores for bilingual and monolingual religious and non religious groups can be found in table 16.

<table>
<thead>
<tr>
<th>Group</th>
<th>Out-of-school contact</th>
<th>Popular media</th>
<th>Non-popular media</th>
<th>Personal contact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 3</td>
<td>Year 1</td>
<td>Year 3</td>
</tr>
<tr>
<td>Bilingual</td>
<td>non-religious</td>
<td>2.42</td>
<td>2.52</td>
<td>3.17</td>
</tr>
<tr>
<td></td>
<td>religious</td>
<td>2.02</td>
<td>1.96</td>
<td>2.00</td>
</tr>
<tr>
<td>Monolingual</td>
<td>non-religious</td>
<td>2.35</td>
<td>2.54</td>
<td>3.06</td>
</tr>
<tr>
<td></td>
<td>religious</td>
<td>2.08</td>
<td>2.14</td>
<td>2.35</td>
</tr>
</tbody>
</table>

*Table 16: Average out-of-school contact scores per religion and condition.*

In the first year cohort, religious bilingual students score significantly lower than non-religious counterparts (*t*(25,266)=4,253, *p*<.01) on the variable out-of-school contact. They also score significantly lower on the factor popular media (*t*(26,424)=7,003, *p*<.001), but not on the other
factors. Religious monolingual students score significantly lower than non-religious monolinguals on out-of-school contact (t(159)=3,300, p<.001), as well as on the factor *popular media* (t(164)=5,909, p<.001).

In the third year cohort, religious bilingual students again score significantly lower than non-religious bilingual students (t(91)=5,799, p<.001) on the variable out-of-school contact with English. They also score significantly lower on the factor *popular media* (t(28,343)=7,148, p<.001). Religious monolinguals also score significantly lower than their non-religious counterparts on out-of-school contact (t(66,427)=4,091, p<.001), as well as on the factors *popular media* (t(57,887)=5,417, p<.001) and *non-popular media* (t(151)=2,090, p<.05).

To see whether out-of-school contact with English has an impact on the development of English proficiency, the scores of the religious and non-religious groups are compared using one-way ANOVA's with post-hoc comparisons. In each of the following analyses, religious and non-religious students are divided into groups from bilingual and monolingual education. Groups are compared in three pairs; the religious groups are compared to their non-religious counterparts (RB-NRB, RM-NRM), in order to examine the difference possibly caused by media contact. Last, the religious bilingual group is compared to the non-religious monolingual group (RB-NRM), in order to see if bilingual education can make up for lack of media exposure.

As figure 7 shows, non-religious bilinguals score the highest on the writing tests in the first year. The religious bilinguals have the lowest average writing score at the beginning of the first year, but overtake both monolingual groups on the second and third test. The religious
monolinguals again have the lowest score through the largest part of the year. There is a significant difference between groups on all three writing tests (Wr1_1: \( F(3, 237)=11,167, p<.001 \), Wr1_2: \( F(3, 236)=20,327, p<.001 \) Wr1_3: \( F(3, 219)=42,432, p<.001 \)).

On the first writing test, post-hoc tests only show a significant difference between both bilingual groups (\( p<.001 \)). On the second test, there is no significant difference between the religious groups and their non-religious counterparts, nor between the non-religious monolinguals and the religious bilinguals. On the third test, religious monolinguals score significantly lower than non-religious monolinguals (\( p<.001 \)). The non-religious monolinguals and religious bilingual group also differ significantly (\( p<.001 \)).

![Figure 8: Average group scores year 3 writing tests.](image)

In the third year cohort, non-religious groups again score higher than their religious counterparts and religious bilinguals score higher than non-religious monolinguals (see figure 8). All groups progress the most in the first half of the year and show less progression or even decline in the second half.

When all test moments are considered separately, groups show significant differences on all three writing tests (Wr3_1: \( F(3, 224)=21,824, p<.001 \), Wr3_2: \( F(3, 229)=36,118, p<.001 \) Wr3_3: \( F(3, 192)=27,909, p<.001 \)). On the first writing test, only the monolingual groups differ significantly, with non-religious students outs coring religious groups(\( p<.001 \)). On the second test, there is a significant difference between the bilingual (\( p<.001 \)) and between the monolingual groups (\( p<.001 \)). There also is a significant difference between non-religious bilinguals and religious bilinguals (\( p<.01 \)) and between non-religious monolinguals and religious monolinguals (\( p<.05 \)) on the third writing test.

For writing the bilingual groups thus outscore the monolingual groups starting at the
middle of the first year. Non-religious groups also score better than their religious counterparts on all tests. There are no real differences between non-religious monolinguals and religious bilinguals, except for the last test of the first year. All in all, it seems that for writing, type of education and religion both have an influence on writing proficiency, but that bilingual education can make up for the disadvantage of being from a background with little media contact.

In the first year cohort, the non-religious bilingual groups score higher than all other groups on all three EFL-tests. The religious monolingual group shows the least progression over the course of the first year (see figure 9).

When the three measurement moments are considered separately, there is no significant difference between groups on the first EFL-test. On the second test, there is a significant difference between groups ($F(3, 234)=5.364, p<.001$). Post-hoc tests, however, show no significant difference between both bilingual or between both monolingual groups, nor between non-religious monolinguals and religious bilinguals. Groups also differ significantly on the third EFL-test ($F(3, 213)=12.126, p<.001$). Non-religious bilinguals score significantly higher than religious bilinguals($p<.01$).
Figure 10 shows that in the third year cohort, the non-religious groups consistently score higher than their religious counterparts, and the bilingual groups outscore both monolingual groups. The groups differ significantly on all three EFL-tests (EFL3_1: $F(3, 223)=37.172$, $p<.001$, EFL3_2: $F(3, 227)=28.250$, $p<.001$, EFL3_3: $F(3, 190)=40.188$, $p<.001$). Post-hoc tests show that on the first test, there is a significant difference between religious monolinguals and non-religious monolinguals ($p<.01$). The religious bilingual group also scores significantly higher than the non-religious monolinguals ($p<.001$). On the second test, the religious bilinguals score significantly lower than the non-religious bilinguals ($p<.05$) and the religious monolinguals score significantly lower than non-religious monolinguals ($p<.001$). On the third EFL-test, there is a significant difference between religious and non-religious bilinguals ($p<.01$) and between religious and non-religious monolinguals ($p<.05$).

For the EFL-tests, bilingual groups thus score better than monolingual groups starting at the middle of the first year. Non-religious groups also score better than their religious counterparts on all tests starting at the middle of the first year. There are no differences between non-religious monolinguals and religious bilinguals, except for the first test of the third year. Like the results for writing, it seems that for receptive vocabulary, type of education and religion both have an influence, but that bilingual education can make up for the disadvantage of being from a background with little media contact.
The second context variable that may influence development of English proficiency is the school itself. Bilingual and monolingual groups from different schools have been compared.

In order to keep this section readable, only the first (1_1) and last (1_3) test of year 1 and the last (3_3) test of year 3 were compared. Test 1_1 provides a good starting point to see if differences between schools exist at the start of education. The two other tests measure proficiency at two points of development, thereby providing an opportunity to examine the development of proficiency and possible differences between schools over the course of time. In the analysis of the school data, one-way ANOVA’s were applied to assess the differences between schools. When there proved to be a significant differences, post-hoc tests were used to further assess the data. These post-hoc tests revealed clusters of scores, so-called ‘homogeneous subsets’. For each test, these clusters of scores are reported to give an indication of how school scores are related. The religious schools are designated by (R). As school F did not administer test 3_3, data for this school on the last test are missing.

The bilingual schools (figure 11) differ significantly on all three writing tests (Wr1_1: $F(3, 90)=9.909, \ p<.001$), Wr1_3: $F(3, 87)=11.954, \ p<.001$, Wr3_3: $F(3, 86)=22.743, \ p<.001$). Post-hoc tests reveal the following homogeneous subsets: for Wr1_1, there are two clusters: schools D-B and schools A-C. For Wr1_3, three clusters can be found: schools B-D, C-D and A-C, respectively. On the last writing test, school C is the only school that is significantly different from all other schools.

![Figure 11: Average group scores writing tests](image-url)
Monolingual groups (figure 12) also differ significantly on all three writing tests. ($ Wr1_1: F(5, 141)=3,969, \ p<.01, \ Wr1_3: F(5, 126)=12,393, \ p<.001, \ Wr3_3: F(4, 101)=9,074, \ p<.001 $).

Post-hoc tests reveal that two group scores form two clusters for Writing 1_1: one cluster contains all schools except school F, the other consists of schools C, E, A and F. For Wr1_3, all schools form one homogeneous cluster, except for school D. On Writing 3_3, one cluster consists of schools D, B and C, and the other of all schools with the exception of school D.

Bilingual schools (figure 13) differ significantly on EFL-tests 1_3 ($ F(3, 85)=4,390, \ p<.01 $) and 3_3 ($ F(3, 84)=6,855, \ p<.001 $). Post-hoc tests reveal the following subsets: for EFL 1_3, schools B, C and D have similar scores, as well as schools A and C. For EFL 3_3, clusters
consist of schools B and D and of schools A, B and C.

Figure 14: Average group scores vocabulary tests

Monolingual schools (figure 14) differ significantly on all three EFL-tests. On EFL1_1, the difference between groups is significant at $F(5, 141)=6.216, p<.001$. Clusters consists of schools B and C, and the other of all schools with the exception of school B. On EFL1_3 ($F(5, 122)=6.216, p<.001$), there are three clusters (B-D-E-C) (D-E-C-F) and (C-F-A). The last vocabulary test, EFL3_3 ($F(4, 101)=8.319, p<.001$), shows three clusters; (B- D), (D- E- C) and (E-C-A).

In conclusion, for the bilingual groups there seem to be differences between the schools for both writing and EFL-tests. These differences cannot be explained by religion alone. For the monolingual groups, there seem to be differences between schools for both writing and EFL-tests. Clusters are not defined solely by religion or educational type (control vs. regular).

These results seem to point to the influence of the school as a variable. Factors such as the quality of the teachers and teaching method, location in urban or rural area or socio-economic background of students may play a role. However, students of different schools may also have a different learner characteristics’ profile. Some schools may for example use stricter rules for admission of students than others. Teachers and teaching methods may also in their turn influence learner characteristics such as motivation or self-evaluation. Obviously, all these factors cannot be unraveled into simple variables that either do or don’t influence proficiency development. Learning a second language, as has been stated in this thesis before, is a complex and dynamic system that shows variation and changes over time and in which many factors play a role.
The last step in examining the results of this study, is looking at the correlations between the various background variables and the scores on the proficiency tests. This last step gives more insight into the amount of influence each learner characteristic or context variable actually has on the development of the English proficiency of the Dutch students. In this last section, regular and control groups have been taken together. This new group will from here on be referred to as 'monolinguals'. By separating the students into monolingual and bilingual groups, the effect of the learner and context variables can be examined separately from the influence of type of education. Putting regular and control students into one, monolingual, group ensures that groups are large enough to show meaningful correlations.

<table>
<thead>
<tr>
<th>Year 1 Monolinguals</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cito</td>
<td>0.401(**)</td>
<td>0.175(*)</td>
<td>0.262(**)</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.005</td>
<td>0.265(**)</td>
<td>0.218(*)</td>
</tr>
<tr>
<td>Self-evaluation</td>
<td>-0.061</td>
<td>0.403(**)</td>
<td>0.052</td>
</tr>
<tr>
<td>Out-of-school contact</td>
<td>-0.081</td>
<td>0.224(**)</td>
<td>0.082</td>
</tr>
<tr>
<td>PopMedia</td>
<td>-0.002</td>
<td>0.275(**)</td>
<td>0.067</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1 Bilinguals</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cito</td>
<td>-0.065</td>
<td>0.123</td>
<td>-0.124</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.165</td>
<td>-0.109</td>
<td>0.120</td>
</tr>
<tr>
<td>Self-evaluation</td>
<td>0.305(**)</td>
<td>0.297(**)</td>
<td>0.307(**)</td>
</tr>
<tr>
<td>Out-of-school contact</td>
<td>0.186</td>
<td>0.212(*)</td>
<td>0.226(*)</td>
</tr>
<tr>
<td>PopMedia</td>
<td>0.110</td>
<td>0.347(**)</td>
<td>0.201</td>
</tr>
</tbody>
</table>

Table 17: Correlations learner characteristics and proficiency measures for monolingual groups

The influence of the background variables on the first year cohort seems to be stronger for the monolinguals than it is for the bilinguals. For the monolinguals, Cito scores are related to all vocabulary tests and self-evaluation and out-of-school contact (specifically contact with popular media) to all writing tests. Relations for bilingual groups are less consistent; self-

---

*Correlation is significant at the 0.05 level
**Correlation is significant at the 0.01 level
The relation between proficiency measures and background variables seems to be stronger in the third year than it is in the first year. Especially for monolinguals, almost all background variables are related to both proficiency measures. For the bilingual groups, most variables are also related to proficiency measures, with the exception of the Cito score, which is only correlated significantly on the first vocabulary test. Out-of-school contact is especially strongly related to proficiency, with correlations even reaching .5 at the middle of the year.

All these results point to an influence of background variables that mainly shows itself in later stages of development. These influences exist for both bilingual and monolingual groups.

---

**Table 18: Correlations background variables and proficiency measures for bilingual groups**

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolinguals</td>
<td>Voc</td>
<td>Wr</td>
<td>Voc</td>
</tr>
<tr>
<td>Cito</td>
<td>0.305(**)</td>
<td>0.253(**)</td>
<td>0.060</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.240(**)</td>
<td>0.243(**)</td>
<td>0.272(**)</td>
</tr>
<tr>
<td>Self-evaluation</td>
<td>0.316(**)</td>
<td>0.303(**)</td>
<td>0.437(**)</td>
</tr>
<tr>
<td>Out-of-school contact</td>
<td>0.170(*)</td>
<td>0.269(**)</td>
<td>0.330(**)</td>
</tr>
<tr>
<td>PopMedia</td>
<td>0.197(*)</td>
<td>0.231(**)</td>
<td>0.324(**)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilinguals</td>
<td>Voc</td>
<td>Wr</td>
<td>Voc</td>
</tr>
<tr>
<td>Cito</td>
<td>0.297(*)</td>
<td>0.013</td>
<td>0.099</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.200</td>
<td>0.255(*)</td>
<td>0.224(*)</td>
</tr>
<tr>
<td>Self-evaluation</td>
<td>0.346(**)</td>
<td>0.294(*)</td>
<td>0.080</td>
</tr>
<tr>
<td>Out-of-school contact</td>
<td>0.320(**)</td>
<td>0.238(*)</td>
<td>0.222(*)</td>
</tr>
<tr>
<td>PopMedia</td>
<td>0.348(**)</td>
<td>0.184</td>
<td>0.335(**)</td>
</tr>
</tbody>
</table>

---

*Correlation is significant at the 0.05 level
**Correlation is significant at the 0.01 level

4
Overview

To conclude this result section, an overview of all examined variables can be found in tables 19 and 20. All significant differences are set in bold type. The difference is always in the favor of the bilingual groups, and in favor of the control group when controls and regulars are compared.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Bilingual-Control</th>
<th>Bilingual-Regular</th>
<th>Control-Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficiency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFL1</td>
<td>Wr1</td>
<td>EFL1</td>
<td>Wr1</td>
</tr>
<tr>
<td>EFL2</td>
<td>Wr2</td>
<td>EFL2</td>
<td>Wr2</td>
</tr>
<tr>
<td>EFL3</td>
<td>Wr3</td>
<td>EFL3</td>
<td>Wr3</td>
</tr>
<tr>
<td>Learner characteristics</td>
<td>Cito</td>
<td>Cito</td>
<td>Cito</td>
</tr>
<tr>
<td>Motivation</td>
<td>-Likeability</td>
<td>-Likeability</td>
<td>Motivation</td>
</tr>
<tr>
<td>-Importance</td>
<td>-Advantages</td>
<td>-Importance</td>
<td>-Advantages</td>
</tr>
<tr>
<td>Self-evaluation</td>
<td></td>
<td>Self-evaluation</td>
<td>Self-evaluation</td>
</tr>
<tr>
<td>Context</td>
<td>Out-of-school contact</td>
<td>Out-of-school contact</td>
<td>Out-of-school contact</td>
</tr>
</tbody>
</table>

Table 19: Overview results of analyses for type of education

From table 19, a number of observations can be made. The first observation is that, even though bilingual and control groups are similar on most background variables, bilinguals perform better on both proficiency measures at the end of the first year. This seems to speak for a positive effect of bilingual education. On the other hand, control and regular groups, who get an equal amount of English in school, also differ significantly on a number of proficiency measures. Seeing that these groups are only different in their learner characteristics-profile, education cannot be the only factor.

Perhaps the best explanation is the interaction between type of education and learner characteristics-profile; when bilingual groups are compared to regular students, who not only receive less English input, but also score lower on all learner characteristics, the differences in proficiency are most constant, starting even at the beginning of the first year.
Table 20: Overview results of analyses for type of education

For the third year cohort, the observations are somewhat different. Bilingual and control students now only differ on the background variable self-evaluation, but the bilinguals outperform the control groups on all proficiency measures. Control and regular groups, who only differ in Cito score, also score significantly different on almost all proficiency measures, providing evidence for the influence of scholastic aptitude on development of proficiency. Bilingual groups still score significantly better on all proficiency measures when compared to regular groups, but differences in motivation have become less pronounced.

A summary of the analyses for the religious and non-religious groups, including a comparison of background variables, can be found in tables 21, 22 and 23. All significantly different measures are set in bold type. The differences in tables 21 and 22 are in favor of the non-religious groups, except when the variable is underlined. In table 23 the difference is in favor of the religious bilinguals, except when the variable is underlined.
The first year monolingual groups differ on all background variables. Nevertheless, they score almost similarly on the proficiency measures except for the last writing test.

The third year monolingual groups differ only on the background characteristics self-evaluation and out-of-school contact, but the non-religious monolinguals score significantly higher on all proficiency measures. This may be an indication that lack of out-of-school contact with English does not influence students until later stages of development.

<table>
<thead>
<tr>
<th>BILINGUAL</th>
<th>Background</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R versus NR</td>
<td>Cito</td>
<td>Vocabulary</td>
<td>Vocabulary</td>
<td>*Vocabulary</td>
</tr>
<tr>
<td></td>
<td>*Self-Evaluation</td>
<td>*Writing</td>
<td>*Writing</td>
<td>Writing</td>
</tr>
<tr>
<td></td>
<td>*Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Out-of-school contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R versus NR</td>
<td>Cito</td>
<td>Vocabulary</td>
<td>*Vocabulary</td>
<td>*Vocabulary</td>
</tr>
<tr>
<td></td>
<td>*Self-Evaluation</td>
<td></td>
<td>*Writing</td>
<td>Writing</td>
</tr>
<tr>
<td></td>
<td>*Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Out-of-school contact</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 22: Religious versus non-religious bilingual groups

The first year bilingual groups only differ on self-evaluation and out-of-school contact. They score mostly similar, except for the first writing and the last vocabulary test. The third year bilinguals on the other hand differ in all background variables except their Cito score and the non-religious students outperform the religious bilinguals on all proficiency tests starting at the middle of the year. This again may point to the influence of media contact in later stages of development.

<table>
<thead>
<tr>
<th>Education vs. Media Contact</th>
<th>Background</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 RB versus NRM</td>
<td>*Cito</td>
<td>Vocabulary</td>
<td>Vocabulary</td>
<td>Vocabulary</td>
</tr>
<tr>
<td></td>
<td>Self Evaluation</td>
<td>Writing</td>
<td>Writing</td>
<td>*Writing</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Out-of-school contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 3 RB versus NRM</td>
<td>*Cito</td>
<td>*Vocabulary</td>
<td>Vocabulary</td>
<td>Vocabulary</td>
</tr>
<tr>
<td></td>
<td>Self Evaluation</td>
<td>Writing</td>
<td>Writing</td>
<td>Writing</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Out-of-school contact</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 23: Religious bilinguals versus non-religious monolinguals

The religious bilingual and the non-religious monolingual score almost similarly on all proficiency tests, except for the last writing test of year 1 and the first vocabulary test of the third year. In both years, they only differ in Cito score and amount of out-of-school contact with English.
The results of the comparison of religious groups is twofold; the first is that, when students from the same type of educational programme are compared, religious students often score lower than non-religious students. It is unclear whether this difference is caused by lack of out-of-school contact only, as all groups also differ on self-evaluation and some groups also differ on Cito score or motivation. The measures motivation and self-evaluation may also be lower in non-religious students as a result of their lack of media contact and their lower proficiency.

The other conclusion that can be drawn is that on almost all tests, religious bilinguals score similarly to non-religious monolinguals. This speaks for the positive effect of bilingual education; it may indicate that bilingual education can help religious students overcome the disadvantage they have from having little exposure to English media. One needs to be aware, however, that bilinguals also have higher average Cito scores, which in itself might also influence the development of proficiency.
5. Conclusion

First of all, the conclusion of this thesis is that learning a second language is a complex phenomenon to study. This study has included a number of factors that are considered to have an influence on learning English as a second language, such as education, self-evaluation, scholastic aptitude and motivation and context variables such as out-of-school contact and the school itself. But even when this relatively small number of factors is considered, it is not easy to discern the influence of these factors. Besides, there is no way of telling if there are any other factors that influence the development of proficiency, such as the role of the teacher, learning methods or environmental factors such as the socio-economic status of the learners or the influence of parental attitudes on language learning. It is always difficult to find the balance between including too many factors, thereby rendering it impossible to draw any conclusions, and including too few factors, thereby overstepping important influences.

Furthermore, it is difficult to isolate the influence of bilingual education on the development of the English proficiency. Bilingual students do indeed score better than other groups on almost all measures of proficiency, but they are also in many ways different from their counterparts in other school types, especially from students of the regular group. Bilingual children have higher scholastic aptitude scores, and score higher on motivation measures. However, when most of those differences are controlled for by including a control group with a similar aptitude and self-evaluation score such as in this study, bilingual students still score significantly better. One of the conclusions of this study therefore has to be that type of education strongly influences the development of L2 proficiency.

As for the role of the background variables, all learner characteristics also seem to have at least some kind of relation with the proficiency scores. An important indication that learner characteristics play a role is the fact that regular and control students, who receive the same type of education and differ only in their learner characteristics-profile, score significantly different on most of the proficiency measures. Students with higher Cito scores tend to have higher proficiency scores, as do students with higher motivation scores and higher self-evaluation scores. While the relation between Cito and proficiency may be one-way (as Cito scores were obtained before admittance to secondary education), the cause and effect pattern for motivation and self-evaluation may not be as clear-cut. Students that do well in school may in turn get more motivated and more self-confident, thereby rating themselves higher.

Another important outcome of this study is that for both bilingual and monolingual students, out-of school contact with English, and especially contact through English popular media, plays an important role in the development of proficiency.
Considering the reformational schools, bilingual education does indeed have a positive influence on the development of proficiency on students of reformational education. These students however consistently have a lower average proficiency than the bilingual students that attend non-religious schools. It seems thus that the fact that religious students have less out-of-school contact influences proficiency on both bilingual and non-bilingual schools, thereby confirming the hypothesis that out-of-school contact is an important factor when it comes to the development of English proficiency in both understanding and producing the language.

All the factors that have been investigated in this study thus seem to be related to the development of English proficiency. This study confirms the findings of previous studies that students of Bilingual Education, when compared to students of regular education, learn English more quickly and end up on a higher level of proficiency. The study however also shows that the role of learner characteristics and context variables should not be underestimated, as the influence of these background variables seems to be quite important as well.
References


# Appendices

Appendix A: Description of writing levels

<table>
<thead>
<tr>
<th>Writing Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The 0 stands for the very beginning level where English is only barely emerging. There is usually very little text, and if there is text, it is mainly Dutch. Very simple sentence structure with many Dutch words and some English words thrown in, often misspelled.</td>
</tr>
<tr>
<td>1</td>
<td>The 1 stands for English that has emerged to some degree. The language used is almost all English, with only a few Dutch words, but the language is simple, with mainly simple sentences, present tenses, often Dutch word order and Dutch expression literally translated. Full of little errors.</td>
</tr>
<tr>
<td>2</td>
<td>The 2 stands for English that has emerged. The English is still quite simple, simple sentence structure, simple tenses, an attempt at some creativity in vocabulary and syntax; the English may contain a Dutchism here and there, but it is mainly English. There are still many errors.</td>
</tr>
<tr>
<td>3</td>
<td>The 3 stands for English that has emerged. The English is still quite simple with simple and compound sentences, but one or two dependent clauses may appear. There are mainly simple present and past tense, but an occasional progressives or passive may appear. There is an attempt at some creativity in the vocabulary and syntax; even though the English still contains a few standard Dutchisms, there are also some authentic English collocations and expression. There are still some errors.</td>
</tr>
<tr>
<td>4</td>
<td>The 4 stands for English that has more variety in sentence structures (a few dependent clauses), some variety in tenses (past, future, progressive, passive and use of modals). There are some authentic English collocations and expressions even though the English still contains a few standard Dutchisms. Some longer sentences, less choppy. There are still some errors, but mainly in mechanism and spelling.</td>
</tr>
<tr>
<td>5</td>
<td>The 5 stands for English that has more variety in sentence structures (dependent clauses and non finite structures), variety in tenses (past, future, progressive, passive and use of modals) where needed. There are several authentic English collocations and expression, but there may also be a few standard Dutchisms. There are still some errors, but mainly in mechanics and spelling. The language flows.</td>
</tr>
<tr>
<td>6</td>
<td>The 6 stands for English that has native-like variety in sentence structure with dependent clauses and non finite structures, shows native-like flexibility in time/tense/mood/voice. It contains many authentic English collocations and expressions, but there are still one or two Dutchisms here and there. There are still some errors, but mainly in mechanics and spelling.</td>
</tr>
<tr>
<td>7</td>
<td>The 7 stands for English that has native-like variety in sentence structure with dependent clauses and non finite structures, shows native-like flexibility in time/tense/mood/voice. It contains many authentic English collocations and expressions, but there still be a Dutchism here and there. There are still some errors, but mainly in mechanics and spelling.</td>
</tr>
<tr>
<td>8</td>
<td>The 8 stand for English that has a native-like variety in sentence structure with dependent clauses and non finite structures, shows native-like flexibility in time/tense/mood/voice. It contains only authentic English collocations and expressions and no Dutchisms. There are hardly any errors in mechanics and spelling.</td>
</tr>
</tbody>
</table>
Appendix B; Questionnaire

Vragenlijst en Can-do OTTO

De vragen hieronder gaan over de Engelse taal. We willen graag weten hoe vaak je met deze taal in aanmerking komt en wat je ervan vindt.


1. Heb je Engels gehad op de basisschool? Ja/Nee
2. Zo ja; hoeveel jaar heb je Engels gehad op de basisschool? □ 1-2 jaar □ 3-4 jaar □ 5-6 jaar □ weet ik niet
3. Heb je verder nog een cursus Engels gehad in Nederlands? Ja/Nee
4. Zo ja; hoeveel uur in totaal ongeveer? _____
5. Volg je op dit moment een cursus Engels buiten school? Ja/Nee
6. Heb je wel eens een cursus Engels gevolgd in het buitenland? Ja/Nee
7. Zo ja; hoeveel uur in totaal ongeveer? _____
8. Heb je wel eens bijles Engels gehad? Ja/Nee
9. Zo ja; hoeveel uur in totaal ongeveer? _____
10. Heb je op dit moment bijles Engels? Ja/Nee
11. Ben je wel eens op vakantie geweest in een land waar je Engels moest gebruiken om jezelf verstaanbaar te maken? Ja/Nee
12. Zo ja; in welke landen ben je geweest en hoeveel weken in totaal ongeveer?

Deze vragen gaan over hoe goed je naaste familieleden het Engels beheersen

1=heel goed; 2=goed; 3=redelijk; 4=matig; 5=slecht; 6=heel slecht; 7=niet; 8= niet van toepassing

13. Mijn vader/verzorger beheerst het Engels… 1 2 3 4 5 6 7 8
14. Mijn moeder/verzorgster beheerst het Engels… 1 2 3 4 5 6 7 8
15. Mijn broer/zus (nr. 1) beheerst het Engels… 1 2 3 4 5 6 7 8
16. Mijn broer/zus (nr. 2) beheerst het Engels… 1 2 3 4 5 6 7 8
17. Mijn broer/zus (nr. 3) beheerst het Engels… 1 2 3 4 5 6 7 8
18. Mijn broer/zus (nr. 4) beheerst het Engels… 1 2 3 4 5 6 7 8

Hoe oud zijn je broers en zussen (als je geen broers en zussen hebt, ga dan door naar vraag 23)
19. De leeftijd van broer/zus nr. 1 is…
20. De leeftijd van broer/zus nr. 2 is…
21. De leeftijd van broer/zus nr. 3 is…
22. De leeftijd van broer/zus nr. 4 is…
De volgende vragen gaan over welke media je thuis ter beschikking hebt, welke je zelf gebruikt en hoe vaak.

23. Ik heb thuis beschikking over...
   (meer antwoorden mogelijk)
   □ dvd-speler
   □ cd’s
   □ mp3-speler/discman
   □ computer

24. Ik maak zelf gebruik van..
   (ook als je ze thuis niet ter beschikking hebt)
   (meer antwoorden mogelijk)
   □ dvd-speler
   □ cd’s
   □ mp3-speler/discman
   □ computer

25. Hoeveel uur per week gebruik je (ongeveer) de dvd-speler (om bijvoorbeeld naar films te kijken of muziek te luisteren)?
26. Hoeveel uur per week luister je (ongeveer) naar cd’s?
27. Hoeveel uur per week gebruik je (ongeveer) een mp3speler/discman?
28. Hoeveel uur per week gebruik je (ongeveer) een computer?

Nu willen we je vragen of er op school in de Engelse les wel eens gebruik wordt gemaakt van cd’s met Engelse radio-opnamen en/of Engels lesmateriaal.

29. Gebruikt je leraar/lerares wel eens opnamen van Engelse radioprogramma’s?
   Ja/Nee

30. Zo ja; hoe vaak?
   □ minder dan 1 keer per maand
   □ 1-3 keer per maand
   □ 1 keer per week
   □ meer dan 1 keer per week

31. Gebruikt je leraar/lerares wel eens cd’s met Engels lesmateriaal in de klas?
   Ja/Nee

32. Zo ja; hoe vaak?
   □ minder dan 1 keer per maand
   □ 1-3 keer per maand
   □ 1 keer per week
   □ meer dan 1 keer per week

33. Luister je buiten schooltijd wel eens naar radio-uitzendingen in het Engels?
   Ja/Nee

34. Zo ja; hoe vaak luister je dan naar Engelse radio-uitzendingen?
   □ minder dan 1 keer per maand
   □ 1-3 keer per maand
   □ 1 keer per week
   □ meer dan 1 keer per week
35. Kijken jullie wel eens naar opnamen van gewone Engelse TV programma's in de les? Ja/Nee

36. Zo ja; hoe vaak is dat?
   □ minder dan 1 keer per maand
   □ 1-3 keer per maand
   □ 1 keer per week
   □ meer dan 1 keer per week

37. Wordt er wel eens Engels onderwijsmateriaal op video/dvd gebruikt in de Engelse les? Ja/Nee

38. Als dat zo is; hoe vaak?
   □ minder dan 1 keer per maand
   □ 1-3 keer per maand
   □ 1 keer per week
   □ meer dan 1 keer per week

39. Kijk je buiten schooltijd wel eens naar TV-uitzendingen in het Engels? Ja/Nee

40. Hoe vaak kijk je naar die uitzendingen?
   □ minder dan 1 keer per maand
   □ 1-3 keer per maand
   □ 1 keer per week
   □ meer dan 1 keer per week

41. Hoeveel uur per week luister je ongeveer naar muziek?
   □ 1-3 uur per week
   □ 4-8 uur per week
   □ 9-12 uur per week
   □ 13 uur per week of meer
   □ ik luister niet naar muziek

42. Luister je meer naar Engelstalige muziek of meer naar Nederlandstalige muziek?
   □ Alleen Engels
   □ Meestal Engels
   □ Iets meer Engels
   □ Ongeveer evenveel
   □ Iets meer Nederlands
   □ Meestal Nederlands
   □ Alleen Nederlands
   □ Niet van toepassing
43. Hoe belangrijk is de tekst van NEDERLANDSTALIGE liedjes voor je?
- □ Heel belangrijk
- □ Belangrijk
- □ Niet zo belangrijk
- □ Helemaal niet belangrijk
- □ Niet van toepassing

44. Hoe belangrijk is de tekst van ENGELSTALIGE liedjes voor je?
- □ Heel belangrijk
- □ Belangrijk
- □ Niet zo belangrijk
- □ Helemaal niet belangrijk
- □ Niet van toepassing

Welke mogelijkheden heb je om in contact te komen met het Engels?

Hieronder staat een lijst (vraag 45 t/m 57) met mogelijkheden. Vul bij iedere mogelijkheid in welke omschrijving jouw situatie het beste weergeeft; 1=heel vaak; 2=vaak; 3=soms; 4=nooit

45. Leraar Engels
46. Ouders/verzorgers
47. Broers/zussen
48. Vrienden
49. Muziek op de radio
50. Spraak op de radio
51. TV
52. Cd's/mp3's
53. Bioscoop
54. Kranten
55. Tijdschriften
56. Boeken
57. Computer

58. Vind je de Engelse taal leuk?
- □ Heel erg leuk
- □ Gaat wel
- □ Niet zo leuk
- □ Helemaal niet leuk

59. Hoe belangrijk is het om de Engelse taal te beheersen?
- □ Erg belangrijk
- □ Nogal belangrijk
- □ Niet zo belangrijk
- □ Helemaal niet belangrijk
Welke voordelen zijn er om Engels te kennen?

Hieronder (vraag 60 t/m 67) staat een lijst met stellingen. Geef aan in hoeverre je het daar wel of niet mee eens bent. 1 = helemaal mee eens; 2 = wel mee eens; 3 = niet helemaal mee eens; 4 = helemaal niet mee eens

60. Met Engels kan je je in het buitenland beter verstaanbaar maken
61. Met Engels kan je muziekteksten beter verstaan
62. Met Engels is het makkelijk om de pc en andere apparaten te leren gebruiken
63. Met Engels kan je makkelijker met andere mensen praten
64. Veel dingen klinken beter in het Engels
65. Veel dingen kan je in het Nederlands niet goed uitdrukken
66. Je hebt Engels nodig als je wilt doorleren
67. Als je Engels kent heb je meer kans op een goede baan
68. Welke andere voordelen zie je zelf nog van het leren van de Engelse taal?

Hoe goed vind je zelf dat je Engels kan...

69. Spreken
   □ Goed
   □ Redelijk goed
   □ Tamelijk slecht
   □ Slecht

70. Luisteren
    □ Goed
    □ Redelijk goed
    □ Tamelijk slecht
    □ Slecht

71. Schrijven
    □ Goed
    □ Redelijk goed
    □ Tamelijk slecht
    □ Slecht

72. Lezen
    □ Goed
    □ Redelijk goed
    □ Tamelijk slecht
    □ Slecht
73. Geef een schatting van welk deel van jouw kennis je op school hebt geleerd en welk deel je buiten school hebt geleerd.

□ 100% school; 0% buiten school
□ 90% school; 10% buiten school
□ 80% school; 20% buiten school
□ 70% school; 30% buiten school
□ 60% school; 40% buiten school
□ 50% school; 50% buiten school
□ 40% school; 60% buiten school
□ 30% school; 70% buiten school
□ 20% school; 80% buiten school
□ 10% school; 90% buiten school
□ 0% school; 100% buiten school

Hoe goed kan jij je in het Engels redden in de volgende situaties?

Geef voor elke situatie (vraag 74 t/m 106) aan of je je erin kunt redden in het Engels. De mogelijken zijn; 1=Zonder moeite; 2=Met enige moeite; 3=Met heel veel moeite; 4= Waarschijnlijk helemaal niet.

74. Iemand de weg wijzen in het Engels

75. Met een vriend Engels praten terwijl je in de rij staat voor een film

76. Informatie krijgen in het Engels over een kaartje voor een concert

77. Een krantenartikel lezen in het Engels over sport of muziek

78. De Engels tekst van een popsong begrijpen

79. Een schriftelijke klacht indienen in het Engels

80. Een kort verhaal in het Engels schrijven over een bekend onderwerp

81. Een telefonische boodschap in het Engels aannemen

82. Een Engels tv-interview over een natuuronderwerp volgen

83. Tijdens de geschiedenisles deelnemen aan een discussie in het Engels

84. Een sollicitatiegesprek voeren in het Engels

85. Nederlandse liedjes en gedichten in het Engels vertalen

86. Een gedicht of liedje in het Engels schrijven

87. Eenvoudige maaltijd bestellen in een restaurant

88. Op straat de weg vragen

89. In een winkel vertellen wat ik nodig heb

90. Mijzelf voorstellen in een gezelschap en op correcte wijze mensen begroeten en afscheid nemen

91. In een persoonlijk gesprek met een Engelsman informatie over mijzelf geven, bijv. woonplaats, leeftijd, hobby’s, opleiding

92. In een persoonlijk gesprek met een Engelsman uitleg geven over alledaagse onderwerpen, bijv. over het openbaar vervoer of de openingstijden van winkels

93. In een rechtstreeks gesprek met een Engelsman inlichtingen vragen over alledaagse onderwerpen, bijv. over vertrektijden van de trein, prijzen van hotelaccommodatie, toeristische attracties
94. In een rechtstreeks gesprek met een Engelsman spreken over gebeurtenissen in het verleden, heden of de toekomst, met gebruik van de juiste werkwoordsvormen

95. Een telefoongesprek voeren met een Engelsman

96. In een persoonlijk gesprek met een Engelsman mijn mening geven over actuele onderwerpen zoals de eenwording van Europa of het milieu

97. In een persoonlijk gesprek met een Engelsman eenvoudige zinnetjes als “Dag”, “Hoe heet je?” of “Waar woon je?” begrijpen

98. In een persoonlijk gesprek, het begrijpen van een Engelsman die langzaam en zorgvuldig spreekt, d.w.z. die zijn taalgebruik opzettelijk aanpast

99. In een telefoongesprek, het begrijpen van een Engelsman die langzaam en zorgvuldig spreekt, d.w.z. die zijn taalgebruik opzettelijk aanpast

100. In een telefoongesprek, het begrijpen van een Engelsman die qua snelheid en woordgebruik net zo praat als hij tegen een andere Engelsman zou doen

101. In een rechtstreeks gesprek met een Engelsman die langzaam en duidelijk tegen me spreekt, aangeven of hij het heeft over gebeurtenissen in het verleden, heden of de toekomst

102. Begrijpen van films zonder ondertiteling

103. Begrijpen van nieuwsberichten op de radio

104. Begrijpen van een tekst van een populair liedje op de radio dat ik niet eerder gehoord heb

105. Begrijpen van sportverslagen (bijv. van een voetbalwedstrijd) op de radio

106. Begrijpen van twee Engelsen als ze snel met elkaar praten

107. Inlognummer