

**Teaching L2 English at a very early age:
a study of Dutch schools**

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L2 teaching at a very early age: a study of Dutch schools

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List of abbreviations

ANOVA	Analysis of Variance
BPVS	British Picture Vocabulary Scale
CEFR	Common European Framework of Reference for Language
CBI	Content Based Instruction
CITO	Centraal Instituut voor Toetsontwikkeling (National Institute for Educational Measurement)
CLIL	Content Language Integrated Learning
CPH	Critical Period Hypothesis
EAL	English as an Additional Language
EIBO	Engels in het Basisonderwijs (English in primary education)
ELAN	European Linguistics Annotator
ELIAS	Early Language and Intercultural Acquisition Studies
ELLiE	Early Language Learning in Europe
EU	European Union
EC	European Commission
EPVT	English Picture Vocabulary Test
FLiPP	The Foreign Languages in Primary Schools Project
HAVO	Hoger Algemeen Voortgezet Onderwijs (senior general certificate of education)
LINQ	A project aimed at strengthening German and French language education in primary and secondary education in The Netherlands
LoE	Length of Exposure
LoR	Length of Residence
L1	First language
L2	Second language or foreign language
L3	Third language
MBO	Middelbaar Beroepsonderwijs (further vocational education)
NS	Native speaker
NNS	Nonnative speaker
PABO	Pedagogische Academie voor het Basisonderwijs (teacher training for primary education)
PPVT	Peabody Picture Vocabulary Test
PRAAT	A computer programme which allows the user to do phonetics

VMBO	Vorbereidend Middelbaar Beroepsonderwijs (pre-vocational secondary education)
VMBO BB	Vorbereidend Middelbaar Beroepsonderwijs Basis Beroeps (basic vocational secondary education)
VMBO K	Vorbereidend Middelbaar Beroepsonderwijs Kader (middle-management vocational secondary education)
VMBO GL	Vorbereidend Middelbaar Beroepsonderwijs Gemengde Leerweg (combined vocational secondary education)
VMBO GT	Vorbereidend Middelbaar Beroepsonderwijs Gemengd Theoretisch (theoretical vocational secondary education)
VVTO	Vroeg vreemdetalenonderwijs (early foreign language learning)
VWO	Vorbereidend Wetenschappelijk onderwijs (university preparatory education)

Chapter 1

Introduction

§ 1.0 Can the Dutch early bird catch the worm?

The case for an early start to foreign language learning (often called early bird teaching, learning or education) has often rested on the deep-seated belief that young children have a natural propensity for learning languages. Indeed, this belief is supported by substantial anecdotal evidence that demonstrates how easily young children seem able to pick up foreign language words and phrases spontaneously, even after relatively short bouts of exposure.¹ Such bouts of exposure may come from watching television programmes, playing computer games, or spending holidays abroad. In addition to taking advantage of innate learning capacities, starting earlier is also assumed to guarantee a better if not superior language learning outcome in the long term. Certainly, most adult second language learners will agree that starting later in life requires considerable time and effort, if a high level of proficiency is to be achieved.

It is also a universal given that not all young children will grow up in environments that can offer them significant naturalistic exposure to languages other than their mother tongue. In cases like these, accessibility to foreign language learning in the shape of formal education is frequently considered a reasonable and realistic route into language learning. Of late the inclusion of early foreign language learning in pre-primary and primary education in The Netherlands has become a manifestation of some of these ideas; the first espousing the belief *the earlier, the better*; the second that earlier *is* better, and the third that starting in lower primary education, and particularly in grade 1 is best. Recent statements made by the Dutch Onderwijsraad (Education Council) and the Ministry of Education epitomize some of these ideas:

¹ In the present study, no distinction is made between a second language and a foreign language or between language acquisition and language learning. These terms are used interchangeably throughout this dissertation. The following definition is helpful:

“the term foreign language can be used to describe a language not commonly used in the student’s country of residence [...] The term second language can be used to describe a language more widely spoken in the student’s country of residence”. Baker and Prys Jones (1998, p. 667)

Further, it is assumed that the research subjects in the present study, children aged four and six, have very low levels of English language proficiency if any, and for this reason will acquire English as a foreign language rather than learn it as a second language.

“ [...] what all children have in common is that they learn a language quite easily in comparison to adults. Moreover, learning several languages has a positive influence on their cognitive development and language comprehension. No negative consequences are known with regard to the acquisition of Dutch. In short: a young child is the ideal language learner; reason enough to start learning earlier in primary education”.²

(Onderwijsraad, 2008, p. 45)

“Currently, English has been a compulsory subject in primary school since 1986. The government has not stipulated starting age and in principle, schools can or could start English in grade 1, or for example German at the border with Germany. In practice many schools actually began in grade 7. Nevertheless, one can say that language is like ballet or gymnastics: the more you move, the suppler you are. The earlier you start learning a foreign language, the more skilled you become ... In other words: if we offer children a foreign language earlier, they will advance in their control of the language. Someone who has had six years of English is going to be more advanced than someone who has only had 3 years of English ... If research shows that VVTO has a positive influence on broad language performance, and therefore also indirect influence on performance in other subjects, then there is a strongly founded rationale to extend the current early foreign language policy.³ On the basis of this, schools can plan their VVTO education effectively and direct (learning) on the basis of results”

(van Bijsterveld, 2011)⁴

² Original quotation:

“[...] wat alle kinderen gemeen hebben is dat ze een taal vrij makkelijk leren, zeker in vergelijking tot volwassenen. Het leren van meerdere talen leren heeft bovendien een positieve invloed op hun cognitieve ontwikkeling en taalbegrip. Er zijn geen negatieve gevolgen voor de verwerving van het Nederlands bekend. Kortom: een jong kind is de ideale taalleerder; reden genoeg om in het basisonderwijs al vroeg te beginnen.”

³ VVTO is an abbreviation for *Vroeg Vreemde Talenonderwijs*, denoting early foreign language provision in pre-primary and primary education.

⁴ Original quotation:

“Nu is Engels al sinds 1986 een verplicht vak op de basisschool. Vanuit de overheid hebben we daar geen verplichte startleeftijd aangegeven en in principe kunnen of konden scholen al in groep 1 starten met Engels, of bijvoorbeeld in grensregio's – met Duits. In de praktijk begonnen veel scholen daar toch meestal pas in groep 7 mee. Toch zou je kunnen zeggen dat het met taal is zoals met ballet, of turnen: hoe meer je beweegt, hoe leniger je wordt. Hoe eerder je begint met het leren van een vreemde taal, hoe taliger je wordt ... Met andere woorden: als we kinderen *vroeg* een vreemde taal aanbieden, komen ze *verder* in hun beheersing van die taal. Iemand die zes jaar

The points of view expressed by the Dutch Onderwijsraad and the Ministry of Education are not wholly supported by researchers concerned with child second language acquisition in classroom settings (Nikolov & Curtain, 2000; Philp, Mackey & Oliver, 2008). They argue that unlike naturalistic contexts, where exposure can be rich and substantial, the same level and type of exposure cannot be replicated in the classroom (Blondin et al., Muñoz, 2008). Further, other variables such as teacher proficiency and individual learner characteristics also affect language learning outcome, and therefore also need to be considered in addition to the age factor.

It is my contention that decisions relating to mass implementation of early foreign language provision in pre-primary and primary education should be drawn from study that is specific, comprehensive and based on evidence collected in the classroom. For the Dutch context, this means that instruction must take place within the confines of a fairly heavily prescribed primary school timetable, and that learning a foreign language is limited to a modest number of hours per week. Alongside investigating linguistic outcome other areas should be examined, too. For instance, researching children's language behaviour in interactions with the foreign language teacher can provide insights into early foreign language production, strategies, and successful approaches to learning in the classroom itself. And, it would be at least equally important to consider the views and experiences of those affected by such programmes, and this would justify including the impressions of parents, teachers and children in such an undertaking. The present study seeks to address these points in particular.

§ 1.1 The Critical Period Hypothesis

The early start argument has often been associated with the Critical Period Hypothesis (Lenneberg, 1967; Penfield & Roberts, 1959), which draws on neurological arguments to explain success in first language acquisition. The basic principle governing the Critical Period Hypothesis for first language acquisition is that successful language development is dependent on sufficient exposure during a specific and limited window of opportunity. It is also hypothesized that maturational constraints in the human brain render it impossible for post-pubescent learners to gain native mastery of their first language after this putative period.

The Critical Period Hypothesis (Penfield & Roberts, 1959) has had a profound and long-lasting effect on age-related research in *second* language acquisition, and numerous studies have sought to investigate the extent to which the hypothesis can be used to explain performance differences among learners. However, using the Critical Period Hypothesis to justify an early start to foreign language learning in primary education is problematic. For example, most researchers agree that with the

Engels heeft gehad is nou eenmaal verder gevorderd dan iemand die maar drie jaar Engels heeft gehad ... Als uit dit onderzoek zou blijken dat vvto inderdaad een positieve invloed heeft op de taalprestaties van leerlingen in den brede - en daardoor indirect ook nog eens op de prestaties bij andere vakken - dán ligt er een stevig gefundeerd verhaal om het huidige vroeg vreemdetalenbeleid verder uit te bouwen. Op dat fundament kunnen scholen hun vvto onderwijs dan effectief inrichten en gericht sturen op resultaten.”

exception of mastering a native-like accent there is an absence of strong evidence, which supports the claim of a single critical period for second language acquisition. Another problem with using the Critical Period Hypothesis to support early foreign language learning in classroom settings is that much research has been conducted in naturalistic settings where input is much more substantial. Further, issues of transferability must also be considered even if data from classroom-based studies in other European contexts are available because the diverse nature of the European Union's education systems makes crude comparisons of outcomes undesirable:

“... the L2 learning context has not been included as an important factor in the discussion of the Critical Period Hypothesis, and findings from second language learning in naturalistic contexts have been generalized to foreign language learning in instructed contexts”.
(Muñoz, 2006a, p. 6)

“Too often these only serve, in repetitious fashion, to make claims that have not in fact been grounded in genuine research or to describe situations that are too specific to permit any generalization or conclusions”.
(Blondin et al., 1998, p. 2)

Recently, appeals have been made for a general retreat from focusing on maturational constraints to explain varying levels of attainment among second language learners (Muñoz & Singleton, 2011). Nowadays, the notion of multiple sensitive periods or multiple critical periods for the attainment of different linguistic features has become an acceptable way of explaining the gradual and continuous decline in attainment levels in some though not all second language learners (Birdsong, 2006; Bongaerts, 2005; Long, 2005; Long, 1990; Singleton, 2005; van Boxtel, 2005). Nevertheless such evidence and appeals do not appear to have diminished the strength and pervasiveness of the belief *the earlier, the better*.

§ 1.2 Conceiving the research idea

When the present study was conceived in November 2006, interest and research in early foreign language learning in primary education in The Netherlands was substantially less widespread than it is today. Relatively little was known about the relationship between linguistic outcome and starting grade or linguistic outcome and teaching approach. At that time, research on an early start was concerned with the effect of a second (in this case English), or in some cases a third language (as in the province of Friesland) would have on the development of children's first language development of Dutch (Goorhuis-Brouwer, 2004; Goorhuis-Brouwer & de Bot, 2005). Other small-scale and observation-based research was carried out, which dealt with small group interaction (Arts & Ronde, 2006); literature surveys were made to provide an overview of recent (international) activities (Herder & de Bot, 2005; Herder & de Bot, 2007) and a conference bundle that included examples of

good practice, teaching strategies and approaches was also published (Aarts, Broeder & Maljers, 2004).⁵

Since then, there has been a flurry of activity in The Netherlands. Dutch government-funded research has helped launch two longitudinal research projects, which will have results to publish at the end of 2012 and in the middle of 2013 (Europees Platform, May 2011; Persson, 2012; Persson & Prins, 2012).⁶ In Dutch Parliament, the issues surrounding teacher training, testing and assessment of the English language in the final two years of primary education as well as the provision of the English language earlier in primary education have also been debated (Ministerie van Onderwijs, Cultuur en Wetenschappen, 2011).⁷

The present study aims to provide a method with which early foreign language learning *may* be introduced in Dutch lower primary grades. This method is based on a content language integrated learning approach that is usually adopted in bilingual secondary education in The Netherlands. Its implementation in the present study is therefore experimental as well as innovative because it breaks from current teaching methodologies where English is taught as a language subject in its own right. In the present study existing school subjects – art and crafts and physical education – are taught using English as the medium of instruction. In addition, the study is conducted within the confines of (1) a limited school timetable, (2) the prescribed national curriculum, and (3) the current legislative framework, which does not specifically prescribe foreign language provision starting in grade 1 (Thijs, Tuin & Trimbos, 2011). I compare starting grades (grade 1 versus grade 3), subject content (art and crafts versus physical education) and lesson frequency (once or twice a week), and therefore address some of the practical issues relating to how and when an early foreign language might be taught. Linguistic outcome is examined alongside second language classroom interaction, currently a relatively under-researched area. By extending the present study beyond the child and classroom domains, I also consider the experiences and views of children, classroom teachers and parents. What is the child's first foreign language learning experience like? How do L1 teachers rate the teaching method? What concerns do parents have? It is, of course, beyond the scope of the present study to answer all the questions relating to the early start debate. For example, I do not investigate the relationship between the L2 teacher's language proficiency and the child's learning outcome. Neither do I investigate whether the L2 lessons have a (negative or positive) effect on first language development or examine the role of gestures in aiding second language acquisition. These are not the foci of my enquiry. Nevertheless the aim of my research is to provide a comprehensive picture about foreign language learning in lower primary education, and fill the paucity of data available for the Dutch context.

⁵ Such developments have also been met with considerable resistance, which centers around the introduction of a foreign language earlier in the primary education curriculum, and how this might affect the development of Dutch language and arithmetic skills. See Stichting Taalverdediging for details (<http://www.taalverdediging.nl/>).

⁶ Details of the FliPP project is available at <http://www.project-flipp.com>, and the Pilot Project 15% VVTO available at <http://www.europeesplatform.nl/vvto>.

⁷ The debate took place on 23 June 2011. The transcript can be found at www.tweedekamer.nl.

With this in mind, evidence is collected at three levels:

1. Evidence at the child level

At the child level, linguistic outcome is examined in terms of lexical development and L2 pronunciation using a curriculum-independent vocabulary test to test for receptive vocabulary development (Dunn & Schlichting, 2005), and a specially-designed experimental imitation task. In addition, sub-analyses on age (grade 1 versus grade 3), the effect of lesson type (physical education or art and crafts), and lesson frequency (once or twice a week) are carried out. The aim of these sub-analyses is to investigate whether these variables, relevant for educational practice, affect language outcome.

2. Evidence at the classroom level

How do young children respond to an L2 teacher who pretends not to understand the Dutch language when she is teaching subject matter in English? What can be said about children's language behaviour? What types of English-intended words and sentences emerge? Can developmental changes be observed between grades and over time? These points are analyzed at the classroom level by using a selected number of lesson transcriptions of the first hour (lessons 1 and 2) and the final hour (lessons 19 and 20), video material of the corresponding lessons and a research journal.

3. Evidence at the school level

At the school level, the opinions and experiences of the children, the classroom teachers and parents are presented. One-to-one child interviews provide data about children's (first) foreign language classroom experience. In particular, children are asked about what they thought of the lessons; their likes and dislikes; whether they thought they could understand and speak English, and if they wanted to continue learning English. The in-depth interviews with the teachers give insights into their opinions about English as a foreign language in the lower primary school classroom; their impressions of learning outcome; using a content language integrated learning approach; their perceived ability to teach in this way, and general questions about the positioning of early English in lower primary education. Finally, a self-administered parental questionnaire is used to explore parents' attitudes towards early English in primary education, and to find out about their perceptions of their child's learning experience.

§ 1.2.1 The research questions

The evidence that is collected at the child, the classroom and the school level addresses the following research questions about the initial stages of L2 exposure in the second language acquisition process. When children in grade 1 and grade 3 are taught ten hours of art and crafts or physical education in the English language,

1. is there an improvement in L2 vocabulary?
2. is there an improvement in L2 pronunciation?
3. how does the L1 child behave towards and interact with the L2 teacher and do these patterns of interaction change over time?
4. what are the children's, teachers' and parents' opinions of children's learning experience and L2 learning in primary education?

§ 1.2.2 Content language integrated learning (CLIL) for Dutch primary education

At the time of conducting the present study, no teaching methodology for early English in pre-primary and primary education was available in The Netherlands. This was in spite of a general consensus among researchers about the five basic methodological principles for teaching young learners modern languages in international contexts (see also Edelenbos, Johnstone, & Kubanek, 2006; Nikolov & Djiginovi, 2006 for reviews): (1) the importance of focusing on meaning; (2) the integration of language instruction with the mainstream curriculum; (3) a task-based and content-based approach; (4) the need for fun and success in the classrooms, and, (5) a learning-to-learn element which leads to the autonomy of learners in early language programmes (Nikolov & Curtain, 2000, p. 7). The reasons for experimenting with a content language integrated learning (CLIL) approach were that it had been applied successfully in bilingual secondary education in The Netherlands, and by teaching school subjects using English, the core curriculum could be delivered without disruption to school timetables.

There are a wide variety of ways to define content language integrated learning in relation to bilingual education. In a recent review of the most recent international developments on content language integrated learning, Dalton-Puffer (2011) states that cultural and political references (i.e. a grassroots intervention or a policy-making initiative) affect whether a second language programme can be described as content language integrated learning or immersion. García (2009) states that although the learning approach might be different, both content language integrated learning (where the language is taught as a school subject) and bilingual education (where language is used as the vehicle of instruction to teach content) develop bilingual competence to different degrees, and can therefore be considered a variety of bilingual education in so far as outcome. Coyle (2007, p. 545) states that content language integrated learning distinguishes itself from existing bilingual models because of “an integrated approach, where both language and contents are conceptualized on a continuum without implied preference for either”. Navés (2009, p. 27-33) describes the important roles of multilingual and bilingual teachers with regard to delivery as well as the importance of collaborative effort between teachers, parents and the local authorities in addition to the link between curriculum and outcome. Dalton-Puffer’s definition is useful for the current study:

“a dual focus on language and content ... where the classroom provides the only site for learners’ interaction in the target language”.

(Dalton-Puffer, 2011, p. 182)

Content language integrated learning can be applied to any age group and non-compulsory learning such as pre-primary, vocational and professional education. Dalton-Puffer (2011) characterizes content language integrated learning as follows:

1. a foreign language or lingua franca, not a second language used as the language of instruction which is mainly encountered in the classroom but not used widely in society;

2. teachers are typically non-native speakers and content specialists;
3. CLIL lessons are content lessons (history, geography etc.), and the target language is taught as a foreign language by language specialists;
4. less than 50% of the curriculum is taught in the target language, and
5. CLIL is normally introduced in secondary rather than primary education. This is linked to the developed and acquisition of literacy skills learners' first language.

In the present study, I account for the basic methodological principles for teaching young learners modern languages in international contexts, and adopt a content language integrated learning approach for the lower primary school classroom. I describe the nature and content of these lessons in more detail in chapter 4, the research design and method. Note also that I will use the term content language integrated learning or CLIL and not content-based instruction for the remainder of this thesis. Zarobe and Catalán (2009) state that content based instruction and content language integrated learning are synonyms, with the former term used more in North America and Canada while the latter is used in Europe.

§ 1.3 The Dutch education system in relation to the European Union

A case for the use of international standards when referring to (Dutch) education systems is now made. This is because a comparison based on age fails to account for the specific (educational) characteristics of European Union pupil populations.

International standards

Eurydice and Eurystat, statistical networks providing information on education systems and policies in Europe, use the 2011 International Standard Classification of Education for their classifications (ISCED) (UNESCO, 2011). The ISCED serves as a benchmark and is designed to assist countries to make comparisons of country indicators and statistics with respect to education and training. The classification criteria applied here are derived from the UNESCO International Standard Classification of Education (ISCED) (UNESCO, 2011). Table 1.1 illustrates the general differences between pre-primary and primary education.

Table 1.1: ISCED pre-primary and primary education classification, adapted from UNESCO (2011).

ISCED 0 Pre-primary or early childhood education	ISCED 1 Primary education
Main criteria <ul style="list-style-type: none"> ○ Educational properties of the programme ○ Institutional context ○ Typical target age of children ○ Programme intensity / duration 	Main criteria <ul style="list-style-type: none"> ○ Systematic instruction in fundamental knowledge, skills and competences ○ Typical entrance age and duration ○ Instruction organized typically by one main class teacher
Subsidiary criteria <ul style="list-style-type: none"> ○ Staff qualifications ○ Existence of a regulatory framework 	Subsidiary criteria <ul style="list-style-type: none"> ○ Part of compulsory education
Typically not part of compulsory education	

Pre-primary and primary education can also be distinguished using the status of reading, writing and mathematics in the primary school curriculum:

“The boundary between ISCED 0 and ISCED 1 coincides with the transition point in an education system where systematic teaching and learning in reading, writing and mathematics begins. Although some ISCED level 0 programmes may already provide some introduction in reading, writing and mathematics, these programmes do not yet give children sound basic skills in these areas [...] the transition from pre-primary to primary education is typically marked by the entry into the nationally designated primary, elementary or basic educational institutions or programmes”.
(UNESCO, 2011, p. 26)

These definitions give rise to the following classification for Dutch primary schools:

- grade 1 (age 4) and grade 2 (age 5) are ISCED 0, and fall under pre-primary education, and
- grade 3 (age 6) is ISCED 1, and describes primary education.

I am aware that the subsidiary criterion for ISCED 1 in table 1.1 makes grade 2 in Dutch primary education a potential candidate for ISCED 1 rather than ISCED 0. However, the position of literacy and numeracy skills development in The Netherlands supports a pre-primary classification for the reason that formal instruction of these subjects and skills begin in grade 3. Table 1.2 summarizes the classification of education from pre-primary up to secondary education and presents the study’s research context within the wider context of secondary education.

Table 1.2: ISCED categories for the Dutch education system from pre-primary through to upper secondary (taken from ISCED Mappings).⁸

Category	Short description	Dutch description	English description
ISCED 0	Early childhood Pre-primary education	Basisonderwijs en special onderwijs; leerlingen 3-5 jaar oud	Primary education and primary special needs education; pupils 3-5 years of age
ISCED 1	Primary	Basisonderwijs en special onderwijs; leerlingen van 6 jaar en ouder	Primary education and primary special needs education; pupils 6 years of age and older
ISCED 1	Lower secondary	Klas 1-2 voorbereidend middelbaar beroepsonderwijs (VMBO) plus klas 1-2 algemeen voortgezet onderwijs (HAVO/VWO)	Years 1-2 pre-vocational secondary education (programmes with general content) and class 1-2 general secondary education
ISCED 2	Upper secondary	Klas 3-4 voorbereidend middelbaar beroepsonderwijs (VMBO) Klas 3-4-5 HAVO en klas 3-6 VWO	Years 3-6 senior general secondary education ⁹

§ 1.3.1 Terminology for pre-primary education, primary education and grades

Table 1.3 illustrates the various terminologies used to describe pre-primary education, primary education and classes found in the literature, and includes the Dutch equivalents for orientation purposes.

⁸ Adapted from ISCED Mappings available at <http://www.uis.unesco.org/Education/ISCEDMappings/Pages/default.aspx> retrieved on 15 November 2011.

⁹ The ISCED Mappings for The Netherlands has no record of Year 3 in secondary education at the HAVO/VWO level. I assume this is a minor error and I have added it in this table.

Table 1.3: Terminology found to describe various education provision in the early years.

Pre-primary education	Primary education	Class description
foundation stage	elementary school	grade
early years	junior school	class
play group	primary school	standard
pre-school	nursery	group
kindergarten	kindergarten	form
nursery	junior high	level
infants		key stage
day care		
child care		
play school		
crèche		
day nursery		
kindergarten		
Specific to The Netherlands	Specific to The Netherlands	Specific to The Netherlands
peuteronderwijs	lager onderwijs	klas
peuterspeelzaal	de lagere school	groep
kleuters	het basisonderwijs	
kleuteronderwijs	de onderbouw	
de onderbouw van het basisonderwijs	de middenbouw	
	de bovenbouw	

In the present study the ISCED categories are used in conjunction with primary school grades so that the present study can be interpreted in the correct context:

- primary education and primary school denote compulsory primary school-based programmes;
- pre-primary education denotes optional school-based or centre-based provision, and,
- grade describes the group which children belong to when they are in school.

§ 1.3.1 Starting age in primary education and length of participation in compulsory education

A review (Eurydice, 2009a, Eurydice, 2009b) of the European Union's optional and compulsory education systems education shows considerable variation, not only in terms of starting and ending ages, but also in relation to the duration of full-time and part-time compulsory education. Table 1.4 summarizes the starting and ending ages of compulsory education in the European Union. Children in Northern-Ireland, Luxembourg and Cyprus start compulsory schooling at four years old with the oldest starters (seven years old) in Bulgaria, Estonia, Finland, Lithuania and Sweden. The majority of children begin compulsory schooling at six years old. In The Netherlands, compulsory school begins at five years old.

Table 1.4: Starting and ending ages of compulsory education in the European Union (Eurydice, 2010a).¹⁰

Ages	Member State
4 – 15	Luxembourg, Cyprus. ¹¹
4 – 16	Northern Ireland (UK).
5 – 15	Greece.
5 – 16	Scotland (UK), England (UK), Wales (UK), Malta, Latvia.
5 – 18	The Netherlands, Hungary.
6 – 15	Belgium, Czech Republic, Germany (majority of the Länder), Austria, Portugal, Slovenia.
6 – 16	Denmark, Germany (few of the Länder), Ireland, Spain, France, Italy, Poland, Romania, Slovakia.
7 – 15	Bulgaria, Estonia.
7 – 16	Finland, Lithuania, Sweden.

In the European Union differences also exist in relation to the length of time spent in compulsory education. Table 1.5 shows that the total period of time children spend in full-time compulsory education in the European Union varies from 9 years to 13 years with the substantial majority spending 9 or 10 years in compulsory schooling.¹² The duration of compulsory education is the longest at 13 years in Hungary and The Netherlands. In Belgium, Germany and Poland, children are obliged to attend part-time compulsory education. In Belgium, Germany (majority of the Länder) and Poland, this increases the duration of participation in compulsory attendance to 12 years; this is 13 years in Germany (a few of the Länder).

Table 1.5: Duration of full-time compulsory education in years (Eurydice, 2009b).

Duration (years)	Member State
9	Belgium, Bulgaria, Czech Republic, Germany (majority of the Länder), Estonia, Lithuania, Austria, Portugal, Slovenia, Finland, Sweden.
10	Denmark, Germany (few of the Länder), Ireland, Greece, Spain, France, Italy, Cyprus ¹³ , Poland, Romania, Slovakia.
11	Latvia, Luxembourg, Malta, Scotland (UK), England (UK), Wales (UK),
12	Northern Ireland (UK).
13	Hungary, The Netherlands

Table 1.3 exemplifies the heterogenic nature of the terminology used to describe pre-primary and primary education. Tables 1.4 and 1.5 show the variation in starting ages and duration of full-time compulsory education in the European Union. These data underline the potential problems that result from crude comparisons based on age, grade or participation in (primary) education. I return to this matter in chapter 3, where attention is also drawn to the overgeneralization of age-related studies in learning (in naturalistic) contexts that are not comparable to the Dutch situation.

¹⁰ Data excludes doctoral studies and special education.

¹¹ 4 years and 8 months for Cyprus only.

¹² 8 years if Turkey is included as a candidate country for ascension into the European Union.

¹³ 10 years and 4 months.

§ 1.4 Foreign language provision in Dutch primary education: a brief sketch

The English language has been taught as a compulsory primary school subject in The Netherlands since 1986.¹⁴ Traditionally, this has been in the final two years (grade 7 and grade 8) of primary school, although legislation does not stipulate a specific starting age. In the past decade, there has been a slow but gradual shift towards offering foreign languages earlier in primary education, linked to the Barcelona Agreement (European Council, 2002), which specifies the learning of two foreign languages alongside the mother tongue. This is to promote linguistic diversity, enhance social cohesion and maintain economic competitiveness. The responsibility of implementing the mandate lies with individual member states. In The Netherlands, the Dutch branch of the European Platform is responsible for supporting implementation.¹⁵

Foreign language learning in Dutch primary education has seen a shift in the type of provision available, from offering English language provision in the final two years to lower and middle grades or even other foreign languages. Today, foreign language provision in Dutch primary education can be categorized into (1) Standard EIBO (taught in grades 7 and 8 only); (2) Early EIBO (starting in grade 5 or 6), and (3) VVTO (from grade 1) (Thijs et al., 2011).¹⁶

The present study is concerned with the area of VVTO. Both EIBO and VVTO are commonly used terms in primary education and merit further explanation. EIBO describes English language provision. Standard EIBO refers to English-language provision in grades 7 and 8 only. The vast majority of primary schools provide EIBO (Heesters, Feddema, van der Schoot, & Hemker, 2008). Early EIBO concerns earlier English language provision that starts in grade 5 or 6. Early EIBO is also considered a form of VVTO because English language instruction begins earlier. VVTO is a term that is used by the European Platform to denote an earlier start to modern foreign language learning. VVTO refers to the provision of any other modern foreign language in primary school, excluding the provision of the English language before grades 7 and 8.

§ 1.5 Terminology for bilingualism

An important feature of the early start debate is the simple link that is made to becoming bilingual and bilingualism, although defining either is a complex matter. I presume a lack of consensus is due to political, educational and research (project)

¹⁴ The provision of minority and regional languages is excluded from the discussion here.

¹⁵ The European Platform is the Dutch agency for the Lifelong Learning Programme from the European Commission. It is a government institution that is mainly concerned with internationalizing education. The European Platform acts under orders from the European Commission, and the Ministry of Education, Culture and Science. It is in charge of granting subsidies for various projects, which contribute towards internationalizing education in primary education, secondary education, adult education, and teacher training. It also functions as a knowledge centre: one segment is dedicated to promoting early foreign language learning. For further information concerning the European Platform's vision, mission statement and ambitions, see also www.europeesplatform.nl.

¹⁶ EIBO is an acronym for Engels In het Basis Onderwijs, which means English in primary education. Note that no starting grade is prescribed for EIBO in the school curriculum. Historically speaking, English has always been taught in the final two grades of upper primary education. This was inherited from initial work done by Carpay (1972).

groups operating in detached domains or publishing work for different target audiences. For the present study, it is essential to define both terms so that correct comparisons between countries can be made, and expectations relating to language outcome within the context in which provision is offered can be placed.

§ 1.5.1 Bilingualism

The basic foundation of bilingualism relates to developing linguistic competence in order to facilitate communication between peoples. Skutnabb-Kangas (1981, p. 81) defines bilingualism as “a characteristic of an individual or a phenomenon in a society”. Baker (2006, p. 2) draws a similar distinction:

“bilingualism (and multilingualism) as an individual possession and as a group possession [...] usually termed individual bilingualism and societal bilingualism”.

Baker (2006, p. 3-4) adds ability, use and balance of two languages, age, development, culture, contexts and elective bilingualism as additional dimensions to bilingualism that overlap and interact.¹⁷ Skutnabb-Kangas (1981) further defines bilingualism on the basis of (1) origin (bilingual acquisition within the native-speaking family or usage as a communicative tool from infancy); (2) identification (by the learner or by others culturally or through fluency); (3) competence (equal or native-like mastery of two languages, declarative and procedural knowledge of the other language or has been in contact with another language), and (4) function: pragmatic usage of language functions. Another way of describing bilingual competence relates to the onset and offset periods. Bloomfield’s (1933) concept of native-like control in two languages has often been used in the literature as a benchmark for the offset period. The other end of the scale (Haugen, 1953) proposes a minimal competence which requires that a speaker is able to produce complete utterances that are meaningful. However, if the language development of a bilingual is viewed as a continuous, indiscrete process, then Haugen’s minimal qualification of bilingual ability fails to account for receptive knowledge in the earliest phases of the acquisition process. This would lead to the loss of unique and valuable information about learners in the initial phases of acquisition, relevant for the current study. This onset of bilingualism has been coined “incipient bilingualism” by Diebold (1961, p. 99), which symbolizes the onset of bilingualism and captures linguistic development among a group of foreign language learners engaging in a first experience during the very earliest phases of second language acquisition, such as in the present study.

¹⁷ Bilinguals also exhibit different levels of competence, which can be measured in terms of listening, speaking, reading and writing skills and in terms of sub-skills, which encompass vocabulary development, pronunciation, grammar accuracy, pragmatics and style.

§ 1.5.2 Bilingual education and bilingual schooling

In the present study, the Dutch term *tweetalig onderwijs* (bilingual education) was often used to describe foreign language provision in Dutch primary education. By the same token, children were said to be *tweetalig* or bilingual. Current education legislation prohibits bilingual education practice in mainstream primary education with the exception of the province of Friesland. Baker and Prys Jones (1998) make a general distinction between bilingual education and bilingual schooling. According to Baker and Prys Jones, bilingual education denotes teaching and learning in informal and formal contexts. Mackey's (1970) typology of bilingual education epitomizes the complexity of bilingual education models and considers the language or languages used in the home, the community and the school curriculum as well as the status of international and regional languages in its descriptions of bilingual schooling.

Baker's (2006, p. 213) broad distinction between maintenance bilingual education (or a strong form where formal instruction fosters bilingualism), and transitional bilingual education (or a weak form where bilingual children are present, but bilingualism is not fostered in the curriculum) is useful. Both forms can be broken down into (1) types of programmes; (2) typical type of child; (3) societal aim; (4) educational aim, and, (5) the aim in language outcome. One of the hallmarks of strong forms of bilingual education is that input is rich and substantial, and an equal amount of time is spent delivering the curriculum in both languages in order to develop high levels of communicative and academic competence:

“the aim ... is generally to make children bilingual and biliterate but also maintain a language minority and to create cultural pluralism and multiculturalism within the child and the child's society”.
(Baker, 1998, p. 469)

Policy and practice for strong forms of bilingual education are further embedded in overarching government legislation where two or more languages may be given full official status in the country. In contrast, weak forms of education for bilingualism have a different aim:

“the aim is to assimilate language minority children within the language majority society”.
(Baker, 1998, p. 469)

In school settings, Baker clearly emphasizes that bilingual education is not simply about language or education. Rather, its provision is shaped and intrinsically linked to other agendas of an economic, political and socio-cultural nature. Based on these definitions, the Dutch primary education context does not support the use of the term bilingual education. In this study, if I use the term bilingual education, I use in the way that Baker describes: strong (maintenance) and weak (transitional) forms to mean formal learning settings and not the home setting.

§ 1.5.3 Immersion education

In the present study, I also found the Dutch term *onderdompeling* equated to mean immersion education. Immersion bilingual education is a unique and well-known pedagogical concept borne from a Canadian experiment in the sixties (Lambert & Tucker, 1972). It was instigated by English-speaking parents living in the Montreal suburb of St. Lambert, who wanted their English-speaking children to become French/English bilinguals and bicultural. Although immersion bilingual education started out as an experiment in Canada in the 1960s, it is now offered in many parts of the world: Australia, the Basque Country, Catalonia, Finland, Hungary, Hong Kong, Ireland, New Zealand, Sweden, Singapore, South Africa and Wales (Johnstone, 2002).¹⁸ Canadian immersion bilingual education owes its success to a number of situational and operational variables (Baker 2006, p. 246-247):

- High status majority languages which result in an additive bilingual situation;
- Participation in French Immersion schools is optional; parental and teacher support pupils' motivation;
- Home language use in the formative period of classroom learning is allowed
- Teachers are competent bilinguals;
- Language communication is meaning-focused and suitable for the age and needs of the children; emphasis is on receptive skills (understanding and comprehension) rather than on production (speaking);
- Language level on entry into immersion classes is by and large monolingual, denoting a homogeneous group of learners in terms of ability;
- The school curriculum is the same for immersion and non-immersion pupils, and,
- There are underlying socio-cultural and often political and economic agendas at play which make immersion education much more than an educational initiative.

Johnson and Swain (1997, p. 6-12) differentiate between core features (medium of instruction, curriculum, support for first language development, bilingual teachers, second language exposure confined to the classroom and additive bilingualism) and variable features (entry grade, ration between first and second language teaching, curriculum continuity from primary to secondary, resources, commitment and second language status etc.) of immersion programmes. The characteristics of immersion bilingual education differ significantly to that of bilingual education. Johnson and Swain caution against inappropriate overgeneralization of settings which differ from contexts related to that of the Canadian point of view (1997, p. 12):

¹⁸ Immersion was first employed by the armed forces in the United States during the Second World War. It is frequently used to describe a situation in which language is intensively learned or it is used to describe situations in which language learners learn and study the target language. This precipitates the notion that language learners are *immersing* themselves in a language and the culture. This is *not* immersion education.

“A good example of inappropriate over-extension is the labelling of English-only programmes for Spanish-speaking minorities in the United States as ‘immersion education’. Such English-only education leads to replacive (or subtractive) bilingualism in the academic domain, while the wide use of the L2 in the public domain leads to the development of interpersonal and social proficiency that immersion students do not have the opportunity to acquire [...] Other bilingual education programmes, such as those designed specifically for L1 maintenance and development, share with immersion education the goal of additive bilingualism, but differ from immersion in that the means essential to achieving that end is the use of L1 as a medium of instruction rather than L2”.

In the present study, it is essential not to confuse the Canadian concept of *immersion* bilingual education with the idea of immersing children in a foreign language in a classroom. I understand immersing someone in a foreign language to equate to fully exposing them to a language. Fully exposing children to the target language for a few hours a week is not immersion. As I have demonstrated in this section, this is not to be confused with the principles of immersion education for bilingual education. I propose using the “doel taal = voer taal” (target language = language of instruction) term as a more accurate and appropriate way of describing the language approach in the classroom. In this study I use the term “full exposure” not immersion to denote the type of foreign language contact in the classroom with children.

§ 1.5.4 Second and/or foreign language learning in mainstream education

Table 1.6 describes the main differences between traditional second or foreign language programmes and forms of bilingual education.

Table 1.6: Differences between Bilingual Education and Foreign Language Education (García 2009, p. 7).

	Bilingual Education	Foreign or Second-Language Education
Overarching goal	Educate meaningfully and some type of bilingualism	Competence in additional language
Academic Goal	Education bilingually and be able to function across cultures	Learn an additional language and become familiar with an additional culture
Language Use	Languages used as media of instruction	Additional language taught as subject
Instructional Use of Language	Uses some form of two or more languages	Uses target language mostly
Pedagogical Emphasis	Integration of language and content	Explicit language instruction

Table 1.6 shows that bilingual education and foreign language learning do not denote the same meaning yet might be used interchangeably. Foreign language

learning in formal contexts is dissimilar in that the language of instruction in the school environment may not necessarily be linked to the language spoken outside the school community although there may be some form of legislation involved in the provision of the foreign language in the curriculum. This is the case in the present study. The Dutch primary education system is essentially monolingual, with the exception of the province of Friesland where a bilingual curriculum is permitted. Preserving and promoting the teaching and learning of Frisian in Friesland is instilled in the core curriculum, and would fall under a strong form of bilingualism. Further, Frisian is spoken in the province. This is different from other provinces in The Netherlands.

As previously mentioned the provision of English as a foreign language (EIBO) is compulsory in the upper two years of primary education, and is normally delivered for a very small proportion of the school timetable amounting to between 80-100 hours (Heesters et al., 2008). This is foreign language learning and not bilingual education. In addition, the substantial difference in time spent teaching and learning the language, which for formal foreign language learning might be limited to just a few hours a week is also a defining factor. Clearly if a large part of curriculum time is spent instructing children in the host language, the concept of bilingual education or a bilingual curriculum is misleading.

§ 1.6 The outline of this dissertation

The current chapter has provided an introduction to the present study. I discussed the pervasiveness of the belief *the earlier, the better*, and the frequent links made between the role of age and second language acquisition. Then, the research questions were described, and placed within the context of early foreign language learning in Dutch primary schools. I described the diverse nature of education systems in the European Union to highlight the issues of making direct comparisons of research outcomes based on age. This chapter also appealed for the correct use of related terminology, and provided the definitions that will be used throughout this dissertation. Chapter 2 deals with the Dutch context in relation to the present study. Relevant background information about key foreign language learning policy developments in the European Union, and in The Netherlands is reported. The Dutch response to (early) foreign language learning is presented in more detail, and the most recent activities and initiatives are described. Particular attention is paid to the changes of the past 10 years where substantial growth in early foreign language provision in Dutch primary schools can be observed. In addition, recent government-funded research projects are described. Chapter 3 is a review of the most relevant literature on the age factor in second language acquisition. The principles of the Critical Period Hypothesis and relevant research on the age effect in naturalistic and instructed settings are described. Subsequently, the research design and method are described in chapter 4. It describes the project's practical considerations, obstacles and solutions as well as the instruction context used in the classroom. Chapter 4 also details the data collection process and the test instruments used.

Chapters 5, 6 and 7 present the results of the study. In chapter 5, I present the outcomes of the testing at the child level. First, the results of the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) used to measure children's receptive knowledge of English is presented. In addition to reporting overall vocabulary development, the effect of age (grade 1 versus grade 3), frequency of instruction (once a week versus twice a week) and for grade 1 children only, subject matter (art and crafts versus physical education) are presented. Then, the results of the specially-designed 11-word imitation task, used to measure L2 pronunciation are presented. Chapter 6 presents the results at the classroom level, and is concerned with classroom observations at the dialogic and group level derived from orthographic data of the first (lessons 1 and 2) and last hour (lessons 19 and 20) of the study. This is supplemented by a research journal used to record important and unusual events, and video material. Chapter 7 describes the results of the testing that took place at the school level. The results comprise data from the one-to-one child interviews, in-depth teacher interviews and self-administered parental questionnaires.

A summary of the main findings emerging from the current study are presented in chapter 8. I then discuss the implications of the study in relation to the wider context of early foreign language learning in The Netherlands, and propose recommendations to the research community, educational practitioners and policy-makers. Finally, I come full circle at the end of this dissertation by returning to the opening question in chapter 1: can the Dutch early bird really catch the worm?

Chapter 2

Dutch primary education

§ 2.0 Introduction

This chapter is concerned with the Dutch primary education system, and the role of modern foreign languages in primary schools in relation to the present study. Section 2.1 outlines the Dutch education system and contextualizes the present study.¹⁹ Then, section 2.2 describes the characteristics of modern foreign language provision in Dutch primary education, and places the Dutch response within the wider context of recent European Union policy on early foreign language learning. This is achieved by presenting the Dutch response before and after what has now come to be known as the Barcelona Agreement (European Council, 2002). In the concluding section I explain how the present study relates to the projects and research that have been conducted so far in The Netherlands and what this project could contribute.

§ 2.1 The Dutch education system

In The Netherlands, the overall responsibility for public and private education lies with the State. Education policy development is centralized, and is the responsibility of the Ministry of Education, Culture and Science. The Ministry of Education, Culture and Science is headed by a Minister who is, in turn, supported by a State Secretary. An important advisory body to the Minister is the Onderwijsraad (Education Council).²⁰ The quality of Dutch education is monitored by the Dutch Education Inspectorate, which carries out periodical audits in schools. The outcomes of these audits are available to the general public for consultation. The administration and management of individual schools is, however, decentralized. This allows primary schools to exercise a high degree of autonomy in the way they interpret and organize the curriculum stipulated by the government.

§ 2.1.1 Primary education

Admission and ages

Article 8 of the Primary Education Act stipulates that children are required to attend primary school continuously for a period of eight years. In practice, this is essentially seven years of compulsory education because participation in grade 1 is

¹⁹ A detailed description of the Dutch education system can be accessed via the Ministry of Education, Science and Culture website: www.rijksoverheid.nl or the Eurydice network www.eurydice.org. An English version of The Dutch Primary Education act can be accessed via Eurypedia at http://eacea.ec.europa.eu/education/eurydice/eurybase_en.php.

²⁰ See www.onderwijsraad.nl for a description of the Council's activities, and access to its documentation.

voluntary. There is a slight discrepancy between government legislation and education practice. To all intents and purposes, this implies that continuous attendance lasts for seven years and not the assumed eight years. The general belief that children attend primary school for eight years in The Netherlands is due to very high participation rates of close to 100% in grade 1 of pre-primary education (Eurymdice, 2009a), demonstrating that the vast majority of parents decide to exercise the right to send their four-year-olds to school even if participation is not obligatory.

Ages of pupils, grades and the organization of the school year

The school year comprises 40 weeks and starts in August or early September. It is broken down into five teaching blocks of seven to nine weeks, and each teaching block normally coincides with a half-term or end-of-term holiday. Some regional differences in holiday periods exist.

Dutch primary education does not recognize a streaming system and children are grouped by age rather than ability. In schools with low pupil populations, it is often necessary to blend grades together. Grades 1 and 2 are normally combined grades that often grow in size during the school year because four-year-olds are permitted to enter school in the month they turn four. Table 2.1 summarizes how Dutch primary school grades are grouped:

Table 2.1: Description of school grades in Dutch and English.

Grade	Dutch terms	English equivalent	ISCED standard
1 and 2	Kleuterklassen	Pre-primary	0
3 and 4	Onderbouw	Lower primary	1
5 and 6	Middenbouw	Middle primary	1
7 and 8	Bovenbouw	Upper primary	1

Automatic progression from one school grade to the next is customary. However, underachievers, children with a handicap or children who have been absent for long periods due to illness, may be allowed to re-do a school year.

The school timetable and number of teaching hours

During the eight years of primary education, the minimum number of hours of education that must be delivered is 7520. However, schools are permitted to spread these hours as long as at least 3520 hours are taught by the end of lower primary education (four years) and 3760 hours in the subsequent four years. The remaining 240 hours can be distributed across the whole eight-year period. Schools are permitted to exert a high level of autonomy with respect to how the school week and the school timetable are organized. At the moment, there are no minimums and maximums for the school day, but activities are required to be balanced on a daily basis. Children in grades 3 to 8 normally have a five-day week, and this is not compulsory in grades one and two. It is tradition for all children attending primary education to have Wednesday afternoons off.

Curriculum, subjects and attainment targets

Primary education is aimed at:

- supporting children's emotional, intellectual and physical development;
- developing their creativity and independence, and,
- contributing to active citizenship and social integration.

These aims are transformed into a range of subject-specific and cross-curricular targets (Ministerie van Onderwijs Cultuur en Wetenschap, 2006):

- Dutch (12 attainment targets);
- English (4 attainment targets);
- Frisian (6 attainment targets);²¹
- arithmetic and mathematics (11 attainment targets);
- orientation of self and the world, for example history, geography, living healthily and life skills (road safety and citizenship) (20 attainment targets);
- creative orientation, for example music and art and crafts (3 attainment targets), and,
- sports and movement (2 attainment targets).²²

The Primary Education Act stipulates subject-specific and cross-curricular targets as well as teaching content but gives schools the freedom to decide how to organize and deliver the national curriculum as long as the schools operate within the prescribed framework. In order to help schools with sequencing subject content, the National Association for Curriculum Development offers schools support with regard to curriculum planning. Schools are free to select and use course books and supplementary teaching materials to deliver the curriculum. The use of information technology has become a key feature in curriculum delivery.

For the first time in the history of Dutch primary education, attainment targets were introduced into the curriculum in 1993. The last revision in 2006 comprised 58 attainment targets, and shifted emphasis from subject areas to learning areas to address:

- the smooth transition from primary into secondary education;
- the role of benchmarks as a basis for developing testing and learning standards, and
- facilitate increased school autonomy.

The last revision to the national curriculum merits further elaboration because of the initial proposal to remove English (and Frisian) from the core curriculum. The proposal to change the curriculum was formulated by the Wijnen Committee. It suggested a repositioning of English and Frisian from the core to the differential part of the curriculum, citing variations in learning outcome and practical issues as the main reasons (Wijnen et al., 2002, p. 1):

²¹ Only in the province of Friesland

²² Physical education can only be taught to children in grades 3-8 by specialist teachers.

“[...] The committee recommends transferring education for the English language to the differential part [...] With this transfer to the differential part, the committee is showing that it wants the school to take responsibility for the subject and determine the objectives it wants to achieve for the English language [...] The committee believes that establishing nationwide targets for the English language is undesirable. The most important argument for this is the limited time available for the English language and the large differences in learner ability at the end of primary school. For this reason, a basic level cannot be achieved at the end of school which can continue into secondary education [...] The committee’s recommendation suggests that each school should decide how much time is to be spent on the English language and which targets the pupils should meet. Moreover, a school may also choose to offer education in another modern foreign language. The choice of modern foreign language is not a free choice but one that is embedded in the general responsibility of time devoted to the differential part [...]”²³

The Committee’s recommendation to exclude Frisian and English from the core curriculum was later rejected by the Onderwijsraad (2002, p. 27-28).

²³ Original quotation:

“[...] De commissie stelt voor onderwijs in Engelse taal tot het differentieel deel te rekenen. [...] Met de plaatsing van Engelse taal in het differentieel deel geeft ze aan, dat ze het tot de verantwoordelijkheid van de school wil laten behoren om te bepalen welke doelen deze bij Engelse taal wil nastreven [...] Het op landelijk niveau vastleggen van de (kern)doelen van Engelse taal acht de commissie niet gewenst. Het belangrijkste argument hiervoor is dat de beschikbare tijd voor Engelse taal dermate beperkt is en de verschillen in leerlingniveau aan het einde van de basisschool dermate groot zijn, dat er niet gesproken kan worden van een op school bereikt ‘basisniveau’ waarop aan het begin van de basisvorming kan worden aangesloten. [...] In het voorstel van de commissie bepaalt elke school hoeveel tijd men aan Engelse taal besteedt en welk doel men wil dat de leerlingen daarin bereiken. Overigens kan een school er ook voor kiezen om onderwijs in een andere moderne vreemde taal aan te bieden. Die keuze inzake het vreemde talenonderwijs is geen losse keuze, maar is ingebed in de algehele verantwoording van de tijdsbesteding in het differentieel deel [...]”.

“[...] the council is of the opinion that English should be part of the core curriculum. The council stresses the importance of English as an international language in society. It is also important for international trade involvement and English is the mode of communication on the internet. The council thinks that introducing the acquisition of English early on is therefore very important. It is important for children to know how to learn a foreign language in primary school if they are to be successful in subsequent education. This is why the European Council decided to implement and sharpen a number of measures within the Work Programme for 2010 for education and training at the Barcelona Summit in March 2002. This involves the improvement and development of basic skills and in particular, the learning of at least two foreign languages from a very early age as well as an indication for language skills in 2003 [...]”²⁴

The reasons for incorporating English into the core curriculum were threefold: (1) account for the social and economic importance of learning it as an international language; (2) support successful foreign language learning in secondary education, and (3) align The Netherlands with the European Council’s “mother tongue plus two policy” central to the Barcelona Agreement (European Council, 2002). The Minister of Education, Science and Culture approved the Onderwijsraad’s recommendation, and English remained a compulsory school subject in the primary school curriculum.

²⁴ Original quotation:

“[...] de raad is van oordeel dat Engels tot het kerndeel gerekend moet worden. Hij wijst hierbij op het belang van Engels als internationale voertaal op tal van maatschappelijke terreinen. Ook voor de internationale handelsbetrekkingen is de beheersing van het Engels van wezenlijk belang en is het Engels op het internet de voertaal. Introductie tot en verwerving van deze taal in een vroegtijdig stadium vindt de raad daarom van groot belang. Voor succes in het vervolgonderwijs is het voorts belangrijk dat kinderen al in het basisonderwijs leren hoe je een vreemde taal leert. Daarom heeft de Europese Raad in maart 2002 in Barcelona het besluit genomen een aantal maatregelen in het kader van het Werkprogrammema voor 2010 voor onderwijs- en opleidingsstelsels aan te scherpen. Dit betreft onder meer de verbetering van de beheersing van basisvaardigheden, met name door het onderwijs aan ten minste twee vreemde talen vanaf zeer jonge leeftijd en de vaststelling van een indicator voor de taalvaardigheid in 2003 [...]”

Home and foreign language instruction

The Dutch primary school system is essentially monolingual, but exceptions permitting instruction in other languages exist.²⁵ These concern instruction in minority languages, and instruction in other modern foreign languages (Eurymice, 2011):

- schools in the province of Friesland are permitted to teach the Frisian language and may deliver other school subjects in Frisian;
- children who do not have Dutch as a first language may be taught in their own language in order to help them acclimatize to the new learning environment, and,
- the Romany, Yiddish, Lower Saxon and Limburg languages may be used as languages of instruction alongside the Dutch language.

With respect to instruction of other modern foreign languages, the following can be noted:

- The English language is a compulsory part of the national curriculum. A starting age for instruction has never been specified by law although traditionally the English language has been delivered in the final two years of primary education (grades 7 and 8). The absence of a specified starting age therefore allows for a generous interpretation of legislation. The provision of early EIBO and VVTO therefore operates within the current primary education framework.²⁶
- French and German are allowed to be taught in primary education although permission must be sought from the Inspector of Education beforehand. French and German are not compulsory school subjects in the national curriculum and do not have attainment targets. However, the attainment targets for English serve as a point of reference. The provision of French and German fall under the category of VVTO provision even if they are taught in grade 8 of primary education. This is because they are not compulsory primary school subjects, and are normally introduced in lower secondary education for the first time.

Assessment

Pupils' progress is monitored throughout the school year using various formats such as homework, course book related tests, extracurricular activities etc.. There is also a pupil monitoring system, which schools are obliged to use to record assessment data.²⁷ This is communicated to parents in the form of reports and teacher/parent discussions. When pupils complete primary school, the school performs an advisory role, which aims to place pupils in the most appropriate educational route in secondary school. The school report frequently, though not always, includes an educational attainment test. The vast majority of schools use the National Institute for Educational Measurement (CITO) for this purpose. In addition to the outcome of the CITO examination, schools also base their decision on their overall impression

²⁵ See <http://www.rijksoverheid.nl/onderwerpen/onderwijs-en-internationalisering/talenonderwijs>.

²⁶ See section 1.4 for an explanation of these abbreviations.

²⁷ I have translated the Dutch term *leerlingvolgsysteem* as pupil monitoring system.

of a pupil who has been assessed continuously over the child's eight-year primary school career.

§ 2.1.2 Secondary education

This section describes Dutch secondary education briefly, and also focuses on the role of modern foreign languages after primary education. As mentioned in chapter 1, all children in The Netherlands are obliged to attend full-time education until they are 16 years old. After 16 years old, pupils are obliged to continue some form of learning until they reach eighteen years of age and until they have obtained a basic qualification (MBO, HAVO or VWO). There are three forms of secondary education subsequent to primary education (Eurydice, 2009b):

- *Pre-vocational secondary education (VMBO) lasting four years*

VMBO is an abbreviation for *Voorbereidend Middelbaar Beroepsonderwijs*. After receiving a VMBO diploma, children can go on to further vocational training (Middelbaar Beroepsonderwijs, MBO) or HAVO (Hoger Algemeen Voortgezet Onderwijs), which is a diploma for senior general secondary education. There is also practical training (*praktijk onderwijs*) for children aged 12-16.

- *Senior general secondary education (HAVO) lasting for five years*

HAVO is an abbreviation for *Hoger Algemeen Voortgezet Onderwijs*, and refers to senior general secondary education. Children with a HAVO diploma can continue learning and obtain their VWO diploma in two years. However, they can also go on to tertiary education aimed at professional education. This is not the same as a university education.

- *Preparatory university education (VWO) lasting for six years*

VWO is an abbreviation for *Voorbereidend Wetenschappelijk Onderwijs*, which refers to pre-university education. It is divided into Gymnasium (where Latin and Greek are taught) and Athenaeum.

The basisvorming

Common to all forms of lower secondary education is the *basisvorming* period (foundation education in lower secondary education) for children between 12 and 14 years old.²⁸ During this period all children follow a common curriculum. After the *basisvorming*, preparation commences for the respective state examinations.

Foreign languages in the basisvorming

The core targets for the English language during the *basisvorming* in secondary education are aimed at continuing to build on the first contact with English in primary education. The individual attainment targets are as follows (Trimbos 2007, p. 6-7):

²⁸ In some VWO/HAVO schools, the *basisvorming* lasts 3 years at the discretion of the individual school.

- The student learns to get more familiar with the sound of the English language by frequent listening to English spoken texts and songs.
- The pupil learns to use strategies for the expansion of his/her English vocabulary.
- The pupil learns to use strategies to extract information from spoken and written texts.
- The pupil learns to use strategies to search for information in written or digital sources, to order this information and to judge it on its value for him- or herself and for others
- The pupil learns how to give a picture of his or her everyday life in spoken language.
- The pupil learns to have standard conversations, in order to buy something, and to ask for information or help.
- The pupil learns to maintain informal contacts in English via e-mail, writing a letter or chatting.
- The pupil learns about the importance of English in different kinds of international contexts.

German, French and Spanish may also be offered in the *basisvorming* period in lower secondary education although provision may vary from school to school. Table 2.2 shows the expected language outcomes for various secondary education routes on completion of the *basisvorming*, expressed in terms of the Common European Framework of Reference for Language or CEFR (Council of Europe, 2001).²⁹

*Table 2.2: CEFR levels for English in the basisvorming (Trimbos 2007, p. 5).*³⁰

	VMBO BB	VMBO KB	VMBO GL/TL	HAVO	VWO
Listening	A1	A1/A2	A1/A2	A2	A2/B1
Conversation	A1	A1/A2	A1/A2	A2	A2/B1
Speaking	A1	A1/A2	A1/A2	A2	A2
Writing	A1	A1/A2	A1/A2	A2	A2
Reading	A1	A1/A2	A1/A2	A2	A2

After the *basisvorming*, secondary education pupils are expected to be basic users (breakthrough or A1 and waystage or A2), with the exception of students following

²⁹ The self-assessment grid of Can-Do statements for the Common European Framework of Reference for languages comprises six levels for listening, reading, spoken interaction, spoken production and writing skills. The six levels, in increasing order of competence, are A1 (Breakthrough), A2 (Waystage), B1 (Threshold), B2 (Vantage), C1 (Effective Operational proficiency), and C2 (Mastery).

³⁰ VMBO BB: Voorbereidend Middelbaar Beroeps Onderwijs Basisberoeps (basic vocational secondary education); VMBO KB: Voorbereidend Middelbaar Beroepsonderwijs Kaderberoeps (middle-management vocational secondary education), and VMBO GL/TL: Voorbereidend Middelbaar Beroepsonderwijs Gemengd Theoretisch (combined vocational secondary education) / Theoretische Leerweg (theoretical vocational secondary education). In the upper two years of VMBO, pupils decide on a particular learning sector: engineering and technology, care and welfare, business, and agriculture. These are preparatory programmes for further vocational education (MBO)

university preparatory education, who are expected to be independent users (threshold or B1) for listening and conversational skills. For German and French, the CEFR levels are identical except for conversation skills, speaking skills and writing skills, which are generally one level lower (Canton, Fasoglio, Meijer, & Trimbos, 2006).

Foreign language provision after the basisvorming

In terms of foreign language provision, some differences can be observed in the different secondary education routes after the *basisvorming*. The English language is a compulsory school subject for the upper secondary grades. All children in secondary education must also pass an English language exam to obtain a secondary school diploma. Furthermore, since 2011/2012 obtaining a diploma requires at least one minimum pass for mathematics, Dutch and English. Learning other modern foreign languages is optional in secondary education. This is with the exception of preparatory university education (VWO), where a second modern foreign language is obligatory.

The secondary education examination programmes for modern foreign languages have been placed within the Common European Framework of Reference of Language (Council of Europe, 2001) since 2007.³¹ Table 2.3 presents the standards for the English language.

Table 2.3: Final attainment targets for the English language split by examination module in secondary education (Beeker, Canton, Fasoglio, & Trimbos, 2009).

	VMBO BB	VMBO KB	VMBO GL/TL	HAVO	VWO
Listening	A2	A2	A2	B1	B2
Conversation	A2	A2	A2	B1 ⁺	B2
Speaking	A2	A2	A2	B1 ⁺	B2
Writing	A1	A2	A2 / B1	B1	B2
Reading	A2 (90%) B1 (10%)	A2 (50%) B1 (50%)	A2 (10%) B1 (75%) B2 (15%)	B1 (30%) B2 (70%)	B2 (85%) C1 (15%)

Table 2.3 shows that at the end of secondary education, language proficiency remains in the same categories of basic user and independent user when compared to pupils completing the *basisvorming*. However, there is significantly more variation in proficiency within and across education routes. This is especially noticeable in the non-vocational education route where users are expected to vary in proficiency from threshold to vantage, and for some skills effective operational proficiency. This could be explained by the number of years of education following the *basisvorming* which is two years for VMBO, three years for HAVO and four years for VWO. Proficiency levels for the English language are higher than for the other modern foreign languages.

³¹ A digital overview is available at Europees Referentiekader talen www.erk.nl.

§ 2.2 The Dutch response to the European Union's foreign language policy

The European Union's commitment to promoting linguistic diversity and language learning in education is historically embedded within the framework of the European Cultural Convention (Council of Europe, 1954). Article 2b of the Convention states that:

“... each contracting party will [...] endeavour to promote the study of its language or languages, history and civilization in the territory of the other Contracting Parties and grant facilities to the nationals of those Parties to pursue such studies in its territory ...”

Since then, myriad initiatives in the Community have demonstrated its commitment to teaching and learning foreign languages in education. For example, the European Commission's White Paper “Teaching and Learning: Towards the Learning Society” states:

“Proficiency in several community languages has become a precondition if citizens of the European Union are to benefit from occupational and personal opportunities open to them in the border-free Single Market [...] Multilingualism is part and parcel of both European identity/citizenship and the learning society [...] In order to make for proficiency in three Community languages, it is desirable for foreign language learning to start at pre-school level. It seems essential for such teaching to be placed on a systematic footing in primary education, with the learning of a second Community foreign language starting in secondary school [...]”
(European Commission, 1995, p. 47)

With regard to early foreign language learning, the most commonly referred to policy has now come to be known as the Barcelona Agreement (European Council, 2002). In 2002, the Heads of State and Government highlighted the need to develop a plan to promote language learning and linguistic diversity, in particular “to improve the mastery of basic skills ... by teaching at least two foreign languages to all from a very early age” (European Commission 2003, p. 4). Consequently, the European Commission (2003) set about putting together an Action Plan in response to this request. An important objective emerging from the Action Plan is its response to the “mother tongue plus two other languages” (European Commission 2003, p. 7), stating that:

“[...] Member States should consider whether adjustments are necessary to primary school curricula, and whether provision for the training and deployment of additional specialist teaching staff and other teaching and learning resources in primary and pre-primary schools is adequate”
(European Commission, 2003, p. 15)

Language policy development is therefore promoted by the Council of Europe and the European Commission or “supra-national institutions” (Baetens Beardsmore 2009, p. 197). Baetens Beardsmore also suggests that transformation from language policy to language practice is largely based on “consensual persuasion” (2009, p. 198). In other words, the interpretation of how and when the “mother tongue plus two” policy is implemented is the responsibility of the individual member state.

§ 2.2.1 Mother tongue plus one versus mother tongue plus two

“The Netherlands is lagging behind: most countries start two years before The Netherlands and offer a minimum of twice as many hours”.

(Edelenbos, de Jong, & Westhoff, 2004, p.19).³²

The Netherlands is often perceived to be inferior to her European counterparts with respect to the implementation of the *mother tongue plus two* mandate (ELLiE, 2009; Engel, Trimbois, Drew, & Groot-Wilken, 2007; Onderwijsraad, 2008). Is this supposition correct? I now explore the strength of this claim by describing foreign language practice, past and present.

An early subscriber?

A benchmark adjustment to a *mother tongue plus one* standard would mean that The Netherlands is one of the earlier subscribers in comparison to its European neighbours. Table 2.4 presents an overview of the status of basic compulsory foreign language teaching at primary level before the Barcelona Agreement (Eurydice, 2001):

Table 2.4: Compulsory foreign language learning at primary level before the Barcelona Agreement.

The 1970s or earlier	The 1980s	The 1990s
Denmark (1958)	Austria (1983)	Spain (1990)
Finland (1970)	The Netherlands (1985)	Greece (1992)
Sweden (1962)	Portugal (1989)	Italy (1992)
Iceland (1973)		France (gradually from '92)
Norway (1969)		Scotland (1993)
		Liechtenstein (1996)
		The French Community of Belgium (1998)

Note that German and French have been taught in Luxembourg since 1912, and in the German-speaking Community of Belgium since the 1940s.³³ Germany remains

³²Original quotation

“Nederland is hekkensluiter: de meeste landen beginnen twee jaar eerder dan in Nederland en bieden minimaal tweemaal zoveel uren aan”.

³³ Moreover, Russian was taught in the pre-accession countries to the European Union as the first compulsory foreign language at primary level. Foreign language teaching in Cyprus started in 1965-66 and in 1951 in Slovenia (Eurydice 2001).

an unusual case because of the position of the individual Bundesländer. An examination of the historical positioning of modern foreign languages in primary education in The Netherlands confirms a long period of commitment to provision (Boekholt & de Booy, 1987; Wilhelm, 2005).³⁴ The 1857 Education Act facilitated education access to the mass population, permitted the teaching of modern foreign languages in general primary education under special circumstances, either at the discretion of the school or as a response to the needs of the local population (Bassecour-Caan, 1859, p. 19):

“The early knowledge of modern foreign languages has been included for populations whose geographical location requires the need for education in the modern foreign languages [...]”³⁵

The term “modern foreign language” was also defined broadly:

“Modern foreign languages mean French, High German and English; however, nothing should obstruct the provision of others such as Danish, Swedish and Italian if this is desired or needed”.³⁶

§ 2.2.2 Mother tongue plus one: the standard EIBO initiative

The inclusion of the English language as a compulsory school subject in 1986 was a home-grown initiative that can be traced back to a proposal from the Ministry of Education, Culture and Science in the early seventies:

“It is desirable for every Dutch person to become accustomed to at least one foreign language given our geographical location, the modest presence of the Dutch language and the gradual integration with Western Europe”.
(1970, p. 7)

³⁴ The 1806 Education Act uses the term “primary education” to describe all forms of education excluding education offered in Latin schools and universities. French schools (which were fee-paying) offered education at the primary and secondary level and they also taught modern foreign languages. French schools were not open to the general population.

³⁵ Original quotation

“De beginselen der kennis van de levende talen zijn opgenomen, opdat, waar zich eene bevolking bevindt, die voor hare kinderen in genoegzaam aantal behoefte heeft aan onderwijs in de levende talen [...]”.

³⁶ Original quotation:

“Onder levende talen worden de Fransche, Hoogduitsche en Engelsche verstaan; maar niets verhindert om waar behoefte of verlangen daarnaar bestaat, ook andere, b.v. Deensch, Zweedsch, Italiaansch, enz. te nemen”.

The reasons for selecting English as the preferred foreign language were threefold:

- English is a world language and it is therefore of practical use;
- English is also offered in the first year of secondary education so beginning earlier would support continuity in the curriculum, and,
- English is the preferred first foreign language in neighbouring countries.³⁷

The concept behind EIBO originates from early experimental work carried out in Utrecht by researchers from Utrecht University between 1968 and 1971 (Carpay, 1972). It was a direct response to anticipated changes in the primary school curriculum. Carpay's experimental work formed part of a two-step project that began with a small-scale study in a number of schools to develop material for teachers and pupils. This was in anticipation of mass implementation of English into primary education. The second experimental phase was to include a broader audience of regional pedagogic centers, universities and institutes. In the second phase, experimental work sought to address the pedagogy and didactics of English language provision in primary education before mass implementation in schools (Carpay & de Bol, 1974, p. 2):

“experiences [...] show that making a responsible decision to introduce English in the whole of primary education is only possible if a sound policy decision can be based upon an available depth of scientific knowledge and enough practical experience. This means that every attempt at the mass implementation of English is bound to fail if we do not develop a programme that is based on scientific methodology”.³⁹

The trajectory adopted by The Netherlands was longwinded, and mass implementation in primary education was delayed until much later in 1986.

Underlying teaching principles for EIBO

Van Toorenburg and Bodde-Alderlieste (2003, p. 11) describe a communicative approach in EIBO where communicative skills in the real world are more important than knowledge:

³⁷ An additional note was made to allow the instruction of German and French at the borders outside school hours.

³⁹ Original quotation:

“ervaringen [...] tonen aan, dat een verantwoorde beslissing tot invoering van het Engels in het gehele basisonderwijs alleen mogelijk is, indien een deugdelijke beleidsbeslissing gebaseerd kan worden op een beschikbare brede wetenschappelijke kennis en op voldoende praktische ervaring. Dit betekent dat elke poging tot massale invoering van het Engels al bij voorbaat gedoemd is te mislukken als we niet beschikken over een op wetenschappelijke methoden ontwikkeld actieprogrammema”.

“listening and speaking skills are central ... shifts from knowledge to skills occurred, from grammatical accuracy to communicative competence, from being taught to active learning, from ‘first learning and then applying’ to ‘learning by doing’”.⁴⁰

In addition, effort has been made to foster learning in combination with other subjects.

EIBO attainment targets and delivering EIBO

The core attainment targets for EIBO are based on a communicative approach, and are divided into three domains: oral, aural and written (Ministerie van Onderwijs Cultuur en Wetenschap, 2006):

- Pupils learn how to acquire information from simple oral and written English texts.
- Pupils learn how to ask or provide information about simple subjects and develop the ability to express herself in the language.
- Pupils learn how to write simple words about everyday topics.
- Pupils learn how to use a dictionary to look up the meanings of words.

Traditionally, EIBO has been delivered in the final two grades of primary education (grade 7 and grade 8). It is normally taught once a week by a generalist primary school teacher who largely relies on course books designed and developed by publishers of education materials (see also Herder & de Bot, 2007 for a review of the teaching materials available for EIBO; Oskam, 2005). This frequency of instruction would result in 80-100 hours of instruction time over the two-year period. The main outcomes of the most recent periodic assessment (Heesters et al., 2008) regarding EIBO delivery can be summarized as follows:

- *Frequency and duration*

English is timetabled in upper primary grades. Most children have one 45-minute lesson a week. 90 % of teachers keep to this frequency.

- *Materials*

75% of teachers use textbooks to deliver a communicative curriculum. This is often complemented with additional materials.

- *Delivery and teacher evaluation*

More than 9 in 10 teachers deliver EIBO. One third of teachers have had no formal training to teach English in upper primary. More teachers (57%) in this third periodic assessment attended some form of training which is more than the 1991 (0%) and 1996 (8%) periodic measurements. Two-thirds of teachers are content with

⁴⁰ Original quotation

“Luister- en gespreksvaardigheid staan centraal ... Er vonden verschuivingen plaats van kennis naar vaardigheden, van grammaticale correctheid (‘accuracy’) maar communicatieve vaardigheid (‘fluency’), van les krijgen naar actief leren, van ‘eerst leren en dan toepassen’ naar ‘aldoende leren’”

EIBO. One in five teachers asserts that more attention could be paid to the English language. Almost no one reported that the subject was irrelevant.

A recent report (Thijs et al., 2011) confirms these findings with the exception of supplemental training, which does not appear to have followed the steady trend reported.

Teacher training for EIBO and continuity with secondary education

EIBO has been plagued with organisational problems since its inception.

“It can be said without exaggeration that the whole English in Primary Education (EIBO) project has become a fiasco. It was doomed to fail from the very beginning: there was and is no attention for English training or modern foreign language instruction in initial teacher training, there was no good material, and teachers and management saw it as more of a burden than a desire. The pressure in primary education to teach all sorts of things is great and English (and previously French) were resigned to participate in this power play”
(De Bot & Maljers 2009, p.137).⁴¹

With regard to teacher training, primary school teachers must obtain their primary teacher status from a recognized PABO institution.⁴² While PABO institutions are obliged to prepare their students for delivering EIBO in primary education, significant variation exists with regard to the approach and quality of teachers' language skills. 16000 teachers received extra training to equip them with teaching English in primary education at the beginning of its introduction between 1984 and 1987 (van Toorenborg & Bodde-Alderlieste, 2003). However the quality of the EIBO teacher training modules has been deemed substandard, and it has been criticised for emphasizing the teaching approach rather than language acquisition and improvement of individual language skills (Bodde, van der Meij, Oskam, & Rijpstra, 1999; de Boer, 2003; Edelenbos, et al., 2004; Oostdam & van Toorenborg, 2002; Thijs, et al., 2011).

By the same token, transition to secondary education remains a persistent weakness. A few years after the introduction of EIBO, Edelenbos (1993) discussed continuity issues with regard to didactics and subject content, but the issues of continuity remain current (Bodde-Alderlieste, 2005; Oostdam, 2010). In a survey

⁴¹ Original quotation

“Er kan zonder overdrijven gezegd worden dat het hele project Engels in het Basisonderwijs (EIBO) een fiasco is geworden. Vanaf het begin was het gedoemd te mislukken: er was en is in de initiële opleiding geen aandacht voor scholing Engels of vreemde talendidactiek voor jonge kinderen, er was geen goed materiaal, en leerkrachten en schoolleiding zagen het meer als een last dan een lust. De druk op het basisonderwijs om allerlei dingen te onderwijzen is groot en in dat krachtenspel is het Engels (en daarvoor het Frans) opgegeven”

⁴² PABO is an abbreviation for Pedagogische Academie voor het Basisonderwijs (teacher training for primary education).

among primary and secondary schools, Oostdam and van Toorenborg (2002) highlighted that although schools have contact with each other with regard to the transition, this contact concerns assessment, choice of education routes, learning strategies and didactics rather than contact relating to EIBO. Furthermore, a large majority of the schools in the survey (62% for primary education and 77% in secondary education) stated that no attention was given to the problems of continuity in any school policy document.

Pupil assessment

Up to now, the English language has not been assessed in the end-of-primary-school CITO examination that takes place in grade 8.⁴³ A recent proposal from the Ministry of Education, Culture and Science was made to amend the current Primary Education Act with regard to basic numeracy, literacy and world orientation.⁴⁴ A recommendation from the Dutch Education Council (2011) put forward the inclusion of assessing the English language in the end-of-primary-school CITO examination

Three periodic measurements conducted in 1991, 1996 and 2006 have assessed EIBO outcomes (CITO, 2000; Heesters et al. 2008):

- exposure time, the nature of classroom learning and the type of teaching materials;
- children's vocabulary knowledge and their reading, listening and speaking skills;
- children's attitudes towards their language learning ability;
- the teachers' English language ability and training, and;
- the teachers' attitude towards EIBO.

EIBO – an underachieving problem child?

Even though the English language has been taught as a compulsory school subject since 1986, it has not reaped the benefits it had set out to achieve. The most recent periodic measurement (Heesters et al., 2008) reports that results have been stable but substandard, with a disappointing proportion of children performing below the minimum and satisfactory standard set for achieving the attainment targets.⁴⁵ Table

⁴³ The CITO test is often but not always used as an advisory instrument for teachers and parents. If used, it is used in combination with the pupil monitoring system.

⁴⁴ Sources:

<http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2011/03/01/kamerbrief-toetsing-in-het-primair-onderwijs.html> and <http://www.internetconsultatie.nl/eindtoetspo>.

⁴⁵ Heesters et al. (2008) note that only the first attainment targets (see section 2.2.2) were assessed, because the focus was put on language situations and communicative ability:

- Pupils learn how to acquire information from simple oral and written English texts.

- Pupils learn how to ask or provide information about simple subjects and develop the ability to express herself in the language.

The first target assessed reading and listening skills, while the second target assessed speaking skills, reading behaviour and reading attitude. As a result vocabulary knowledge was also assessed although this is not mentioned specifically in the attainment targets. The tests were designed in themes and subthemes which included greetings, everyday situations, travelling, free time, communication and entertainment, the weather and a selection of grammatical structures. Prior to testing, three standards were defined: the

2.5 summarizes the outcomes of the two most recent assessment periods from 1996 and 2006 as reported in Heesters et al. (2008).

Table 2.5: Percentage of children achieving the standard minimum and satisfactory standard for vocabulary development, reading skills and listening skills (adapted from Heesters et al. 2008).

Year	vocabulary		listening		reading	
	minimum standard	satisfactory standard	minimum standard	satisfactory standard	minimum standard	satisfactory standard
1996	86	54	92	49	95	68
2006	84	50	92	50	95	65
Secondary education stream						
Basic vocational training	58	17	68	10	78	23
Middle management vocational training	70	27	81	19	92	46
Mixed or theoretical vocational training	82	40	90	33	96	59
Senior certificate of general education	93	63	99	66	98	74
Preparatory university education	98	82	100	88	100	97

Table 2.5 also demonstrates the great deal of variation between pupils based on which secondary education route they follow. For example, almost all pupils who are advised to do preparatory university education (VWO) achieve a minimum pass for all skills, while this is substantially less for pupils who are advised to follow basic vocational training. Heesters et al. (2008) present the following points:

minimum standard, the satisfactory standard and the advanced standard. A consensus session was organized by CITO to ensure that there was agreement among the 18 expert judges with regard to the manner with which they evaluated the results. The researcher was one of the expert judges who took part in the consensus session and the assessment. The minimum standard refers to the expected achievement of attainment targets by 95% of all children while the satisfactory standard refers to the expected achievement of attainment targets by 70-75% of children.

Pupil evaluation

- The majority of the pupils were positive about their oral abilities. They were less positive about their written skills. Pupils perceived the subject to be important as well as easy and fun. Boys are more positive in terms of attitude than girls.

Skills assessment

- Listening tests and imitation tasks of spoken English feature frequently in English lessons. About 50% of teachers spend time on vocabulary development. Reading skills are poorly attended to.
- With regard to vocabulary development, 84% of children achieve the minimum standard. However, the actual target should be 90-95%. Only half of the pupils achieve a satisfactory standard. Girls achieve lower than boys on this measure.
- With regard to listening development, children performed lower (66%) than the satisfactory standard (70-75%). However, the minimum standard set (90-95%) was achieved by 94% of children.
- With regard to oral skills (language use, vocabulary, grammatical accuracy and pronunciation), there was a variation in outcomes. The good and the average pupil scored well on language use in social settings and asking and responding to simulated situations. Pupils in the bottom tenth percentile could not achieve this skill or were unable to describe pictures in a story. Pupils in the ninetieth percentile could do this well. Grammatical accuracy improved with percentile ranges. Pronunciation was judged satisfactory.

§ 2.2.3 Mother tongue plus one and two: VVTO and early EIBO

The preceding section briefly outlined how the Dutch response to early foreign language learning is embedded within the wider framework of foreign language learning policy in the European Union. In terms of education practice, current legislation permitting experimental forms of teaching and learning in primary education have permitted schools to experiment with different forms of VVTO or early EIBO. A very broad distinction can be made between such forms emerging before and after the Barcelona Agreement in 2002. In this section, the Dutch response to VVTO and early EIBO are presented, using this distinction, beginning with recent VVTO figures from the European Platform.

Recent figures from the European Platform

Figures from the Dutch branch of the European Platform suggest a dramatic increase in the provision of VVTO since it began registering schools for subsidies and other foreign language support tools in 2001.⁴⁶ A large proportion of schools start as early

⁴⁶ Edelenbos (2004) reports regional initiatives where languages other than English are taught at primary level. For example, German is taught in a limited number of primary schools (Enschede) and French is taught near the Belgian border in Mesch (grades 3 to 8 for 30 minutes a week). I appreciate that there may be a wide variety of local initiatives organized by individual schools, which do not make use of subsidies or other forms of support from the European Platform. From this point of view, the figures quoted in this

as grade 1.⁴⁷ Latest figures (Europees Platform, 2011a) show 642 primary schools implementing some form of foreign language provision.⁴⁸ Figure 2.1 shows that out of these schools, 93% offer only one foreign language before grades 7 and 8, and only 1 in 10 offer more than one foreign language.⁴⁹

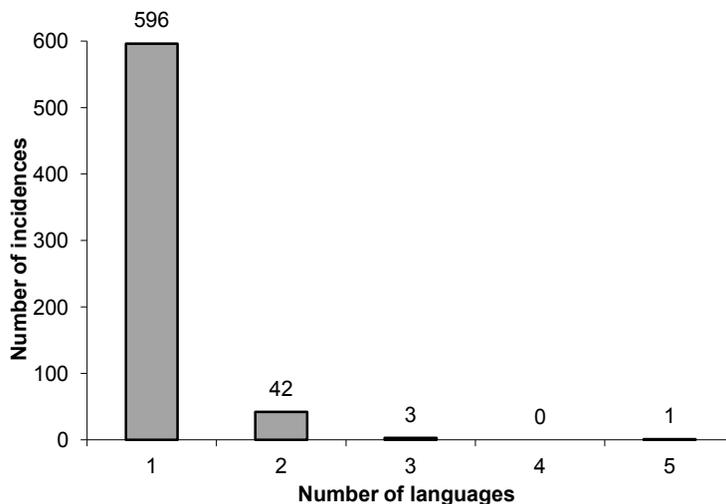


Figure 2.1: The number of foreign languages taught in Dutch primary schools in 2011 (n=642).

In terms of foreign language provision, English is by far the most popular language, followed by Spanish, French and German. Figure 2.1 shows that 46 primary schools offer two or more foreign languages. English is the common language in 40 of these schools. The remaining subjects offered are Spanish, French and German. One school offers English, French, Spanish, Italian and Portuguese although nothing is reported about the frequency of delivery. Figure 2.2 shows that 75% of primary schools choose to begin in grade 1, the non-compulsory school grade, with early foreign language provision. This is in stark contrast to the middle primary grades

section might be modest. However, figures from the European Platform are the most reliable given that registrations and (financial) support are officially filed and monitored.

⁴⁷ Accessed from the European Platform website for early foreign language learning <http://www.europeesplatform.nl/vvto> accessed on 21st September 2011.

⁴⁸ The European Platform (2011b, p. 9) report a 30% increase in subsidies (BIOS regulation) granted for VVTO in 2010. Further, partnerships, language training and eTwinning programmes have been supported through the European Union's Comenius programme. The Platform has also established a number of VVTO support centers with primary education teacher training colleges. Pilot projects for VVTO Spanish were continued in 2011. There have also been several VVTO conferences organized by the Platform.

⁴⁹ 42 schools out of 642 did not specify in which grade the foreign language(s) was or were offered. Of the remaining 600 schools who did specify which grade, four schools introduced French in grade 7 and one in grade 8.

(grades 5 and 6) which only comprises 14%. Very few schools choose to introduce foreign language learning in grade 3. I contend that this is related to the introduction of Dutch reading and writing skills, and a general belief that children are more helped and less burdened by focusing on one language rather than two in grade 3.

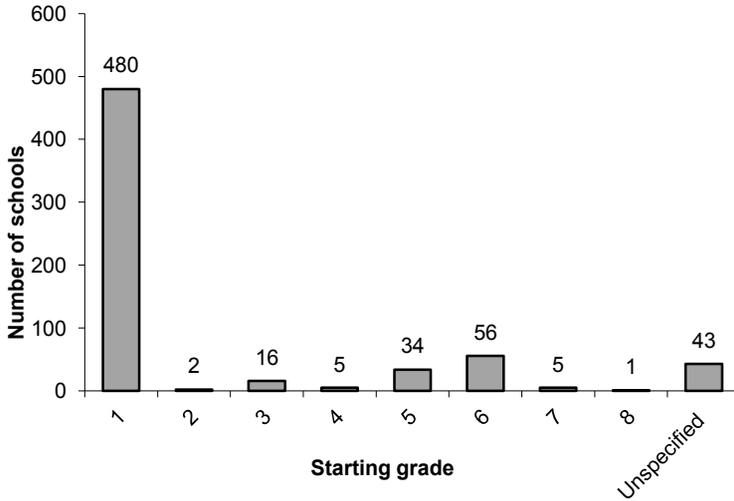


Figure 2.2: Starting grades for foreign language provision in Dutch primary schools in 2011.

Table 2.6 shows the latest figures with regard to the number of Dutch primary education institutions and total pupil populations from the Dutch Central Bureau for Statistics (Centraal Bureau voor de Statistiek 2011, p. 174).

Table 2.6: The number of Dutch primary education institutions and pupil populations between 2000 and 2010.

	2000/01	2005/06	2008/09	2009/10
Primary education institutions	7059	6970	6910	6895
Primary education (x 1000)	1547	1549	1533	1548

According to this data, approximately 1.5 million children attended 6895 primary schools in The Netherlands in 2009/2010. The figures from the European Platform (2011a) would therefore suggest that some form of early foreign language provision was present in 9.3 % (642 out of 6895) of mainstream primary schools.

The Dutch response before the “mother tongue plus two” mandate

Edelenbos (2004) states that before the European “mother tongue plus two” mandate in 2001, very few primary schools engaged in early foreign language learning programmes within the context of the school timetable. An often-quoted example is the Prinsesschool in Enschede, which has had a long history of foreign language provision across its primary school grades, dating back to 1994 when it began

offering English lessons from grade 1 for 1.5 – 2 hours a week *outside* the school's regular timetable (Groot, 2004).⁵⁰ The school has grown to become one of the eleven Dutch primary schools with an international department that offers the International Primary Curriculum (IPC), catering for children aged 4-12.⁵¹ Other examples include OBS Mesch situated near the Belgian/Dutch border in Mesch-Eijsden, which offers French in its curriculum in grades 3 – 8 for 30 minutes a week.⁵² Another primary school near the German/Dutch border in Enschede has taught German from grade 1 once a week for 45 minutes since 2000.⁵³

The Dutch response after the “mother tongue plus two” mandate

It is beyond the scope of this study to describe all early foreign language learning projects. For this reason, the discussion is limited to presenting the most relevant projects to the current study:

1. The 15% Pilot Project
2. The Foreign Languages in Primary Schools Project (FLiPP)
3. The LinQ Project
4. The ELLiE project
5. Early Bird

1. The 15% Pilot Project (Europees Platform, May 2011)

Following a parliamentary debate on early foreign language learning in primary education in April 2009, plans were made to launch a pilot project relating to the effect of using 15 per cent of curriculum time (225 minutes per week) for the delivery of CLIL in grades 1 through to 8 in 13 pre-selected primary schools (12 for English and 1 for German) in The Netherlands. The 15% Pilot Project is financed by the Ministry of Education, Culture and Science and the European Platform (the Dutch branch of the Lifelong Learning Programme agencies from the European Commission). The aim of the project is to gather information using an interview format on the experiences of teachers, school management, parents and a small number of pupils.⁵⁴ The project started on 1st January 2010 and is scheduled to conclude in December 2012. A report on the outcome and a recommendation for a possible change in the Primary Education Act is expected in June 2013.

⁵⁰ See www.prinssesschool.nl for more details.

⁵¹ Note that special admission procedures exist for this school.

⁵² See <http://www.obsmesch.nl> for more details.

⁵³ See <http://www.obsglanerbrugzuid.nl/school/>.

⁵⁴ With thanks to Ms. Elly Deelder from the European Platform for the additional information she provided during a personal telephone exchange on 5 December 2011. Elly Deelder expressed difficulty in recruiting schools to participate. The European Platform offer participating schools a CLIL course, meetings twice a year to exchange experiences and a subsidy of Euro 1000. Given the absence of existing CLIL materials for the Dutch target group, the teaching approach varies from school to school. While the focus is clearly on content, materials are taken from a wide variety of sources including course materials from British publishers (Oxford University Press, Cambridge University Press and Pearson) or materials that are used to deliver the International Primary Curriculum. Some materials are also put together by the schools themselves and project work also formed part of the learning approach.

2. *The Foreign Languages in Primary School Project (FLiPP)*⁵⁵

Following the same parliamentary debate on early foreign language learning in primary education in April 2009, the University of Groningen and the University of Utrecht submitted a research proposal to the Ministry of Education, Culture and Science to finance a research project to investigate the effect of early English in primary education. 14 experimental schools (who have had at least two years of experience with early foreign language provision) and three control schools participated in this two-year project. Some schools have parallel classes while others have only one class. The project is scheduled to conclude in the summer of 2012. The main research questions are:

- What is the effect of starting in grade 1 with English lessons versus starting in grade 7 with regard to the development of the child?
- What effect does the quality (near-native versus average level of teacher's English skills) and quantity (as a frequency measure of 3 hours versus 1 hour per week) of the input have on English language skills?

The level of Dutch is gauged using the pupil monitoring system from CITO (for literacy and numeracy skills). The level of English is assessed using the Peabody Picture Vocabulary Test-4 (Dunn & Dunn, 2007) for receptive vocabulary and the Test for Reception of Grammar 2 (Bishop, 2003), in addition to several other tests that gauge cognitive intelligence.

3. *The LinQ project*⁵⁶

The LinQ project for primary education is a programme which stimulates the provision of early foreign language learning (VVTO) in The Netherlands. The overarching objective of the LinQ project is the introduction or strengthening of German and French in the school curriculum with the aim of getting more out of language education in formal contexts within the limitations of a school timetable. In primary education, the main aim is to use French or German as a language for meeting people. In secondary education, the project is aimed at strengthening French and German language education. In both primary and secondary education, the intensification of foreign language learning is meant to lead to higher results, and a higher level of motivation among pupils.

The project is carried out by the European Platform by order of the Ministry of Education, Culture and Science. It began as an experimental three-year pilot in 2005 and is currently in its third round of recruitment. During the three-year pilot, primary school teachers received subsidized specialist teacher training for early foreign language learning, courses for improving foreign language skills and exchange programmes. The pilot project resulted in the construction of a LinQ Briefcase (*LinQ-koffer*) containing models and teaching materials for learning French and

⁵⁵ With thanks to Ms. Liv Persson and dr. Sharon Unsworth for the supplementary information provided to me during a telephone call on 6 December 2011. For further information, see <http://www.project-flipp.nl>.

⁵⁶ With thanks to Synke Hotje from the European Platform, who provided supplementary information for the purpose of this dissertation on 12 December 2011. For further information, see www.europeesplatform.nl/linq.

German in primary education, as well as a portrait book describing the activities of the participating schools (Europees Platform, 2009). In addition a small network, which serves as an information exchange platform for the schools involved in the project, was established. The starting grade for the project was left up to the discretion of the individual school although implementation is possible from grade 1.

A total of 17 primary schools participated in the 2005 pilot (Tanner & de Graaf, 2007). The distribution of foreign language programmes in these 17 primary schools were 8 primary schools for French; 7 primary schools for German, and 2 primary schools for French and German. In 2007, a report (Tanner & de Graaf, 2007) was published about the outcomes of the LinQ project and concerned the experiences of the pupils and teachers, who had participated in the LinQ project and in particular their opinions with regard to perceived learning outcome, teaching and organization. The methodology was electronic questionnaires for the teachers and interviews for the pupils. The findings are based on 16 primary schools (26 teachers) and nine pupils. The findings show teachers taught in a wide variety of classes ranging from grade 1 to grade 8 and spent between 15 minutes and one hour a week on the language. Teachers used the target language to varying degrees with 42% about half the time and 19% almost all the time and 8% none of the time. When asked about pupils' usage of the target language, half of the teachers stated that the children used it at least a quarter of the time. An interesting finding is that teachers were motivated and found the project a challenge as a language teacher.

Findings from the LinQ project are positive. An important outcome is that teachers perceive their own and their pupils level of motivation to learning a foreign language to be higher. Less emphasis however should be given to the findings reported on pupils' foreign language development given that these are based on teachers' perceptions rather than on quantitative testing. Currently, the project lasts for two years although there are plans to reduce this to one year in the near future. This shift is due to the fact that the project is no longer in an experimental phase. The creation of the LinQ Briefcase and the formation of the LinQ Network make the project easier to disseminate across primary schools. The European Platform remains the primary facilitator and contact institution for the project.

According to the European Platform, the distribution of participating schools across The Netherlands is diverse, and participation is very much linked to a school's individual interests. In very broad terms, the Montessori schools and the Free Schools (*Vrije Scholen*) have participated in the project. There is also a general trend for German to be offered near the German border, and French to be offered in schools with high immigrant populations (the so-called "*zwarte*" *scholen*). While there has been considerable interest in the LinQ project, relatively low numbers of schools, at least in comparison to early English programmes, end up participating in the programme. This is partly due to the investment required by schools and teachers to launch the project successfully, and partly due to the popularity and positioning of English in primary education. The project was continued in 2011. Currently 5 primary schools have introduced French and 7 primary schools have

introduced German. There are plans to introduce a fourth round of recruitment in 2013.

4. *The ELLiE Project*

The ELLiE project is an evidence-based study funded by the European Union's Lifelong Learning programme (ELLiE, 2009). The project compares the learning outcomes of early language learning in Europe within the context of a limited school timetable. Data collection is spread over Croatia, England, Italy, Netherlands, Poland, Spain and Sweden, and took place over a three-year period. The project seeks to address questions on policy implementation, factors contributing to learning outcome and the linguistic and non-linguistic outcomes of early language learning. Data is collected using interviews, questionnaires and observation at the child, teacher, school and parental level. In addition, the significance of the teacher's role in early language learning, and the effect of using digital media for language learning are also examined.

5. *Early Bird schools in Rotterdam*

Early Bird Rotterdam is a relatively recent initiative (2003-2004) launched by the Board for Public Education in Rotterdam to offer a form of (improved) early English foreign language learning in several state primary schools in Rotterdam (Werdekker, 2004). At the beginning of the project, only two primary schools were involved, however this has now grown to include in excess of 150 schools including, those served by its partner organizations.⁵⁷

Schools participating in this initiative form part of the Early Bird Network, and are served by the Early Bird organization either directly or via its partner organizations around The Netherlands. Early Bird can provide primary schools with programmes tailoring to the individual needs of the schools. It is a commercial organization for which schools have to pay for services. During the initial phase of the Early Bird initiative, concern was expressed with regard to the effect that its methodology (3 hours a week of English). Findings from a small-scale research project (Goorhuis-Brouwer & Bot, 2005) commissioned by Early Bird concluded that the Early Bird project did not negatively affect first language development in children from grades 1 and 2 (Goorhuis-Brouwer & Bot, 2005).⁵⁸

§ 2.3 Conclusions

I have focused on the outcomes of standard EIBO, and the recent activities related to early EIBO and VVTO to analyse the positioning of modern foreign languages in Dutch primary and secondary education in this chapter. What can be concluded?

⁵⁷ See www.earlybirdie.nl for more details. Unfortunately requests to visit some of the Early Bird schools in the spring of 2006 were not approved by Early Bird management.

⁵⁸ It is my contention that the study's outcome is overstated, and the results should be treated with caution. The sample sizes used to draw this conclusion vary from 33 to 36 and are very low for the purposes of statistical analyses. Moreover, only children from two schools were used in the study. The reference is made to a literature study conducted by Herder and De Bot (2005). As I will demonstrate in chapter 3, reference to the outcomes of studies conducted in settings dissimilar to the Dutch context should be treated as informative rather than conclusive.

The standard EIBO programme in primary education has been unsuccessful owing to a number of situational and operational variables including the limited number of teachers, the inadequate provision of the EIBO module in teacher training colleges, and the unresolved issues relating to the transition from primary to secondary education. The mediocrity of the outcomes of periodic measurements is also cause for concern, though this may have been due to the ambitious nature of the attainment targets, and heterogenic learner populations at the end of primary education (Heesters et al., 2008; Oostdam, 2010). Incongruent to the historical importance of modern foreign languages in the Dutch primary school curriculum, astonishingly little attention appears to have been devoted to addressing these problems.

The Barcelona Agreement (European Council, 2002) has had a profound impact on the provision of modern foreign language learning in Dutch primary education. The growth of early EIBO, and in particular VVTO, has been explosive in recent years. A recent estimate from the European Platform forecasts growth from the 642 schools reported on 2010 to over 1000 in 2012 (Europees Platform, 2011b). This development is occurring at a faster pace than legislation or research has been able to keep up with. This growth explosion shows a trend towards a mother tongue plus one situation rather than a mother tongue plus two scenario, and a general inclination towards offering English rather than any other modern foreign language in primary education, which does not reflect the aims of the “mother tongue plus two” policy.

Discussions with the FLiPP project research team and the European Platform confirm my impression that there is very little consensus with regard to pedagogical principles and didactic approaches (Herder & de Bot, 2005; Herder & de Bot, 2007; Persson, 2012). There appears to be a general belief that young children will employ implicit first language learning mechanisms to pick up the foreign language. This means that assessing and comparing learning outcomes are almost impossible. I have also illustrated examples of good practice in some organizations and questioned the transferability of these models into mass implementation. Issues relating to suitable teacher training, teacher proficiency and feasibility in the long-run after government funding ceases make schools vulnerable in the long term, and exasperates the problem of curriculum continuity and transition into secondary education.

To my knowledge, there are currently very few studies which investigate linguistic outcomes in lower primary grades in Dutch primary education. Yet, the need for such evidence-based research is paramount given the momentum that VVTO has accumulated and will probably continue to accumulate. In the absence of evidence-based research, it will remain difficult to make definitive statements about the linguistic benefits of an early start to second language learning in lower primary education.

The present study sets itself apart from previous studies because it is evidence-based and specifically targets the Dutch lower primary classroom. It also investigates the effect of a content language integrated approach in mainstream primary education, which is currently an experimental form of provision. Two new

dimensions are the study of classroom interaction and the inclusion of parents' and teachers' experiences and opinions towards early foreign language learning in primary education. This study will contribute to the current body of data on child second language acquisition in schooled contexts, and provide data on (early) lexical development, L2 pronunciation, classroom interaction, learning experience and attitudes towards early L2 learning in The Netherlands.

Chapter 3

The Age Factor

§ 3.0 Introduction

The age factor has often been used to validate early implementation of foreign language learning in the Dutch primary education context.⁵⁹ This chapter discusses the strength of the claim *the earlier, the better* in relation to classroom foreign language learning, explored by reviewing the evidence that has emerged from age-related research. In section 3.1, the basic principles of the Critical Period Hypothesis (Lenneberg, 1967; Penfield & Roberts, 1959) for first language acquisition are presented briefly. Subsequently, the outcomes of age-related research are presented in section 3.2. This chapter concludes in section 3.3 by explaining how the present study may contribute to the research that has been conducted to date, and responds to the questions about starting grade for English foreign language provision.

§ 3.1 The Critical Period Hypothesis for language acquisition

Age-related research in applied linguistics was greatly influenced by the notion of a critical period for first language acquisition. In first language acquisition, neurological arguments propose a putative critical period for first language mastery. The Critical Period Hypothesis (Lenneberg, 1967; Penfield & Roberts, 1959) posits that successful first language development is dependent on sufficient exposure during a specific and limited window of time in human development. This period ends somewhere around or before puberty, after which time maturational constraints render it impossible for post-pubescent learners to gain native mastery of their first language.⁶⁰ Penfield and Roberts (1959) argue that it is the loss of plasticity in the human brain which leads to incomplete mastery of a first language, while Lenneberg (1967) underlines the effects of brain lateralization to support the existence of a putative critical period for language learning. Evidence for the existence of a critical period is derived from studies which show how first language acquisition is regulated by maturational processes in the brain. There are three main categories of research: (1) support from studies of acquired aphasia where recovery was better among children than adults; (2) support from studies which demonstrate that deaf children are unable to acquire language normally after puberty, and (3) support from studies of feral children and children who have suffered extreme childhood trauma

⁵⁹ Exchanges with primary school teachers and indirect contact with the research subjects' parents in the present study confirm the pervasiveness of the belief *the earlier, the better*.

⁶⁰ I use the term *pubescent* rather than *adolescent* to denote the physiological and anatomical changes which children go through. The latter term is used to refer to the behavioural and social changes (see Scovel 1988, p. 48).

and years of gross neglect in which deprivation of normal language input made it impossible for them to acquire language normally.⁶¹ Since this study only deals with second language acquisition, I will not discuss the Critical Period Hypothesis for first language acquisition further, and refer the reader to Scovel (1988), Long (1990) and Singleton (2005).

§ 3.2 The Critical Period Hypothesis for second language acquisition

Lenneberg explains how restricted access to the language learning faculty in adults might explain partial success in second language acquisition:

“Most individuals of average intelligence are able to learn a second language after the beginning of their second decade, although incidence of ‘language-learning blocks’ rapidly increases after puberty. Also automatic acquisition from mere exposure to a given language seems to disappear after this age, and foreign languages have to be taught and learned through conscious and laboured effort” (Lenneberg, 1967, p. 176).

One interpretation of Lenneberg’s statement is that the implicit learning mechanisms governing first language acquisition operate less effectively for mature second language learners, who will require more effort and practice to reach high levels of attainment. Research on the critical period enquiry for second language acquisition is based on this basic premise.

Studies relating to the critical period enquiry for second language acquisition can be divided into short term (how fast a second language is learned) and long term (how well a language is learned) studies. The former usually measures and compares the rate of acquisition in children and adults, while the latter measures attainment levels in adults after various levels of exposure to the second language. Common to both studies is the effect that age of onset; length of exposure (LoE), and length of residence (LoR) or a combination of some or all of these variables have on second language outcome.⁶² Measuring outcome can be sub-divided into general language proficiency and specific linguistic measures relating to syntax, morphology and phonology. Some studies have also investigated the existence of a critical period with regard to lexical and collocation skills (Hellman, 2008; Hyltenstam, 1988; Spadaro, 1996). An early and important review of research into the Critical Period Hypothesis for second language acquisition is Krashen, Long and Scarcella’s (1979) seminal paper *Age, Rate and Eventual Attainment in Second Language Acquisition*. Their findings, which are based on twenty-two critical period studies spanning the period 1962 - 1978, can be summarized as follows (Krashen et al., 1979, p. 573):

- Adults proceed through early stages of syntactic and morphological development faster than children (where time and exposure are held constant).

⁶¹ Scovel (1988, p. 139) asserts that the evidence of Victor, Kamala and Genie “[...] *indirectly* supports critical period limitations for speech, and quite possibly for language too [...] we obviously have *direct* evidence [...] that early and natural socialization and interpersonal interaction is crucial to human development, irrespective of the acquisition of communicative skills”.

⁶² This is also age of arrival (AoA) for immigrants.

- Older children acquire faster than younger children (again in early stages of morphological and syntactic development where time and exposure are held constant).
- Acquirers who begin natural exposure to second languages during childhood generally achieve higher second language proficiency than those beginning as adults.

To summarize, for initial rates of acquisition, older learners perform better than younger learners; however, younger learners outperform older learners in the longer term. In other words, older is faster but younger is better, at least for learners exposed to naturalistic second language acquisition settings. In addition to Krashen, Long and Scarcella's (1979) seminal work, Long's (1990) review on age-related studies for the period 1967 – 1990 presents upper and lower boundaries for the acquisition of linguistic features, again for naturalistic settings:

“The available data suggest, however, that exposure needs to occur before age 6 to guarantee that an SL phonology can become native-like (given sufficient opportunity) before age 15 if the morphology and syntax are to be native-like, and somewhere between those ages for the remaining linguistic domains ... there is probably not just one sensitive period for SLA but several ... as with sensitive periods in many aspects of human and other animal development, there is some overlap due to the relationships among sub-systems across linguistic domains, and some variation across individuals”.
(1990, p. 274)

The introduction of such boundaries led to further speculation and investigation. In recent years, studies have focused on ultimate attainment among learners surpassing the offset period limits. Ultimate attainment studies have been largely concerned with the acquisition of morphology and syntax. They provide convincing evidence that falsifies the claim of a critical period by showing that even some very late second language learners are able to achieve exceptionally high levels of linguistic attainment even after starting to learn a second language after the closure of the putative critical period (Birdsong & Molis, 2001; Bongaerts, 2005; Singleton, 2005; van Boxtel, 2005; van Boxtel, Bongaerts, & Coppen, 2005). Contrastingly, ultimate attainment studies, which have been concerned with the acquisition of phonology consistently show a general, linear decline in second language pronunciation (Abrahamsson & Hyltenstam, 2009; Asher & Garcia, 1969; Flege, Munro, & MacKay, 1995; Oyama, 1976; Piske, MacKay, & Flege, 2001; Scovel, 1988), although there is evidence which shows that some exceptional learners appear to perform in the native-speaker range (Bongaerts, Mennen, & Slik, 2000; Bongaerts, van Summeren, Planken, & Schils, 1997).

Early instruction and the Critical Period Hypothesis

As mentioned in chapter 1, building a case for an early start to foreign language learning in primary school contexts has typically rested on the deep-seated belief that young children can learn foreign languages with relatively little effort and anxiety:

“What all children have in common is that they learn a language easily, especially in comparison to adults [...] in short, a child is the ideal language learner; reason enough to start early in primary education [...]”
(Onderwijsraad, 2008, p. 45-46)⁶³

Research on the role of age in second language learning is not an exact science, and this has been accredited to various (mis)interpretations of the term *critical period* and methodological considerations (Abrahamsson & Hyltenstam, 2009; Long, 2005; Marinova-Todd, Marshall, & Snow, 2000; Muñoz & Singleton, 2011). There is now sufficient evidence which would support a less rigid interpretation of the role of age in second language acquisition, which allows for the notion of multiple sensitive periods or multiple critical periods for the attainment of different linguistic features. This is a reasonable and acceptable manner of explaining the gradual and continuous decline in attainment levels in some though not all second language learners (Singleton, 2005).

In addition to the biological age effect, critical period research for second language acquisition has proffered a variety of reasons that might also account for successful language learning, much like any type of learning. These include social, psychological and affective factors, input factors (type and amount of input), cognitive factors and neurological or neuro-physiological factors (Long, 1990; Muñoz & Singleton, 2011). If a closer look is taken at input factors, establishing a causal and direct relationship between age and language outcome in an input-limited environment such as in a classroom seems premature:

“Regardless of one’s view of the critical period, it is important not to over-interpret its implication for educational practice. The observation that ‘earlier is better’ only applies to certain kinds of learning, which schools typically cannot provide. Therefore the implication of critical period research seems to be that instruction should be adapted to the age of the learner, not that learners should necessarily be taught at a young age”
(Dekeyser & Larson-Hall, 2005, p. 88)

⁶³ Original quotation:

“Wat alle kinderen gemeen hebben is dat ze en taal vrij makkelijk (leren), zeker in vergelijking tot volwassenen. Het leren van meerdere talen heeft bovendien een positieve invloed op hun cognitieve ontwikkeling en taalbegrip. Er zijn geen negatieve gevolgen voor de verwerving van het Nederlands bekend. Kortom: een jong kind is een ideale taalleerder; reden genoeg om in het basisonderwijs vroeg te beginnen”.

“... the long-term advantage of early learners in a naturalistic language learning context with unlimited input has also been credited to early learners in an instructed context, in this case with limited access to L2 input. Therefore the conclusion has been that an early age is the only necessary condition to guarantee success. This interpretation, sweepingly generalized to formal instruction situations in which the target language is a foreign language, has raised high expectations that an early start at school will also guarantee success”

(Muñoz, 2008, p. 198-199)

Empirical evidence relevant to school settings falls into three broad categories:

- evidence from naturalistic settings where there is full immersion in the community;
- evidence from school immersion, where the type of immersion can be subdivided into early, middle and late immersion, and
- evidence from foreign language settings where a foreign language is taught within the context of mainstream (monolingual) education.

Research which investigates the effects of starting age and learning outcome generally compares the learning outcomes of younger and older learners. Age of testing, amount of exposure and frequency of learning are three important explanatory variables that have been used to explain outcomes. In her review, Muñoz (2008) presents various research collected between 1962 and 2008, which fall into these categories. She summarizes that (in instructed settings):

- Older starters are faster learners even if exposure is kept constant. This rate advantage is associated with older starters' advanced cognitive skills.
- Younger starters show some slight advantage in situations where their exposure has been higher although this advantage “is not as impressive as might be expected given the extra amount of time and the supposed benefits of an early start” (Muñoz, 2008, p. 207). In the case of more exposure, younger starters have better communicative skills particularly in listening comprehension. However, for similar levels of exposure, older starters perform better and the gains in listening comprehension are less pronounced for the younger starters. This advantage is associated with older starters' advanced cognitive skills.
- Younger starters do not seem to exhibit the long-term advantages reported in naturalistic settings.

Muñoz (2008) states that older starters appear to perform better in instructed settings because of their cognitive maturity. Further, she mentions the method of instruction in low input settings is more favourable for older starters rather than for younger starters. The combination of cognitive maturity and method of instruction support and confirm the rate advantage for older learners observed in both naturalistic (Krashen et al., 1979) settings and instructional settings. Younger starters might therefore fail to show any superiority because they have not been provided enough exposure to the language in order to benefit from implicit learning mechanisms (Dekeyser & Larson-Hall, 2005). This could imply that language exposure is paramount to younger learners' learning outcomes, more so than for older starters. It

is therefore questionable as to whether an instructional setting where input is limited to just an hour or a few hours a week, will yield the superior language learning outcomes that seem to be expected. There is also evidence which suggests that the test instruments used in previous studies gave older learners an advantage because of their superior cognitive development (Larson-Hall, 2008; Muñoz & Singleton, 2011).⁶⁴

§ 3.3 Dealing with the question of age in the present study

The context of the present study is lower primary grades, grades 1 and 3 in particular. As noted, the vast majority of primary schools in The Netherlands that have already introduced foreign language learning into the curriculum have done so before the compulsory upper primary grades, and favour starting in the optional pre-primary first grade when children are four years old but discontinue learning in grade 3 when children are six years old (Europees Platform, 2011a). I contend that this is most probably due to the formal introduction of reading and writing in the first language, and the belief that a foreign language would be cumbersome. In this chapter, I argued that the idea that an earlier start automatically results in a superior learning outcome does not hold true. In the present study, I aim to explore whether age differences exist when four year olds and six year olds have participated in a series of content language integrated learning lessons. These differences refer to lexical development and L2 pronunciation, classroom interaction and learning experience. In the present study, the focus is the initial stages of the acquisition process. Grade 1 marks the beginning of primary education for the vast majority of children in The Netherlands, and is therefore a suitable baseline. Moreover, it coincides with the current trend to start as early as possible. Grade 3 is favoured over grade 2 based on the following points:

1. *Grade 3 represents the grade in which writing and reading in Dutch are formally introduced.*

Many schools consciously choose not to start foreign language learning in grade 3 because first language writing and reading skills are introduced formally. The emphasis on first language literacy development in grade three is bound up in arguments based on cognitive and social-emotional development. Such arguments support that children this age are “ready” to start learning how to read and write the first language. Starting to learn a foreign language in addition to the first language is therefore assumed to place a burden on the individual child and on an already heavily prescribed curriculum. However, if children are considered cognitively ripe to learn the more cognitively demanding skills in first language learning in grade three, sequencing foreign language learning in a highly-contextualized setting with an aim of acquiring surface fluency in the L2 may not necessarily be a problem.

⁶⁴ In the present study, the tests used for L2 vocabulary development and L2 pronunciation have been selected based on their suitability for the age group. I elaborate on this in chapter 4.

2. *Grade 3 represents the closure of optional pre-primary schooling in grade 1, and the first year of compulsory primary education.*
By grade 3, I assume that children have established themselves in the primary education context. They are used to the school's routines and rules, and have had time to become accustomed to the demands of the curriculum. In grade 2, children are still in pre-primary education.⁶⁵
3. *Grade 3 – six years old - represents Long's (1990) lower boundary for second language acquisition, particularly for the acquisition of native-like phonology.*
In chapter 3 I briefly discussed the boundaries for attainment of linguistic properties. Six years old represents an accepted lower boundary for phonology rather than four, or five and seven or eight years old.

⁶⁵ For example, separation issues between the home and the school, which some younger children may experience in grades one and two, will probably have been resolved, and children judged not to be "ready" to leave pre-primary or the first grade of compulsory primary school will have repeated the year to "catch up".

Chapter 4

Research design and method

§ 4.0 Introduction

This chapter is concerned with this study's research design and method. I present the practical considerations that were made with regard to organizing the process of data collection, and describe the test tools and preparation of the data. Section 4.1 recapitulates the research questions and describes the type of evidence that is collected at the child, classroom and school level. Next, the practical considerations that were made to allow for successful data collection in the research setting are described in section 4.2. Section 4.3 details the teaching approach that was used in the classroom. The school recruitment process is reported in section 4.4, and includes learning points that might be relevant for future studies. Section 4.5 concerns data collection. It describes the duration of the data collection phase, the level and nature of the data available. The types of testing used in the present study are described in the concluding section. Section 4.6 is an explanation of the Peabody Picture Vocabulary Test (Dunn & Schlichting 2005); the specially designed 11-word imitation task; the interviews for the children and the teachers, and the self-administered questionnaire for parents.

§ 4.1 Research questions and levels of evidence

In order to investigate the outcomes of early foreign language learning in lower Dutch primary education, evidence is collected at the child level (chapter 5), the classroom level (chapter 6) and the school level (chapter 7). The main research questions for these three levels are when children in grade 1 and grade 3 are taught ten hours of art and crafts or physical education in the English language,

1. is there an improvement in L2 vocabulary?
2. is there an improvement in L2 pronunciation?
3. how does the L1 child behave towards and interact with the L2 teacher and do these patterns of interaction change over time?
4. what are the children's, teachers' and parents' opinions of children's learning experience and L2 learning in primary education?

In addition to these questions, sub-analyses on the effect of grade (grade 1 versus grade 3), lesson type (physical education or art and crafts) and lesson frequency (once or twice a week) are carried out. The aim of these sub-analyses is to investigate whether such variables, relevant for education practice, affect language outcome and behaviour.

§ 4.2 The research setting

Primary schools are governed by rules and regulations which make them publicly accountable to the communities they serve. For this project, this raises various problems relating to feasibility. In order to make the project feasible, two basic assumptions, regarded as essential for successful data collection, were made very early on. First, the native English-speaking researcher would deliver the art and craft or physical education lessons in all of the research schools. Second, schools would permit the researcher to conduct the study precisely as described in the research proposal. Having the researcher take on the role of foreign language teacher was considered essential for successful data collection for the following reasons:

- The researcher is a native speaker of English;
- The researcher is a fluent speaker of Dutch;
- The researcher is an English language teacher in a Dutch secondary school and has a background in education;
- The researcher is an experienced English foreign language teacher;
- The researcher understands the Dutch education system.

In addition, having the researcher deliver the lessons exclusively would mean that:

- L2 proficiency would be high at C2 level,⁶⁶
- the teacher variable was constant in all the research groups;
- teaching would not be dependent on an external teacher;
- continuity in lesson content was maintained, and,
- organization and planning could be streamlined.

However, having the researcher take on the role of L2 teacher raised other issues, which are now presented alongside the additional considerations that were made. These considerations relate to the L2 teacher; the L1 teacher and L1 visitors; the language of instruction, the teaching approach; children's responses, and the organization:

1. The L2 teacher: how will we circumvent the problems of unqualified teacher status?
 - Problem: the Education Act stipulates that primary school teachers need to be qualified in order to teach in primary education. This is with the exception of special subjects such as music and physical education, where specialized teachers are sometimes used.
 - Remedy: schools exercise a high level of autonomy and are authorized to interpret and shape the way they deliver the curriculum. We decided to discuss this point with each school and allow the school to decide and take responsibility for requesting exemption from the Ministry of Education.
2. The L1 teacher and L1 visitors: how will we cope with interference from a well-meaning classroom teacher or observer?
 - Problem: teaching English in lower primary education is an exciting and unusual activity for many primary schools. It would be quite possible for each lesson to have classroom teachers and observers as visitors. If the visitor is

⁶⁶ C2 refers to the proficiency level (mastery) gained by the L2 teacher. See section 2.2.1.

known to the child, then we anticipated that the child might approach this person for clarification or help on certain activities.

- Remedy: ground rules for classroom teachers and observers were set at the beginning of the study. While visitors were welcome, they were told not to interfere with the English-only classroom process by communicating or helping children with activities, explaining that this would affect data and make comparisons between research groups difficult.
3. Language of instruction: how will we circumvent the problem of using English as an instruction medium instead of Dutch?
 - Problem: the Education Act stipulates that the curriculum must be delivered in Dutch, not English. Second of all, learning English is more usual in upper primary, not lower primary. The study conflicts with this in two ways. First, it must be conducted in grades 1 and 3, where foreign language learning is currently not usual. Second, the study has to be carried out within the context of the school timetable, leading to a reduction of teaching time for compulsory subjects and subject areas.
 - Remedy: see consideration 1.
 4. Language of instruction: what will we do when children fail to understand the instructions in English?
 - Problem: in the initial stages of the study, I entertained the possibility that a large number or all the children would fail to understand the input. In light of this, a contingency plan would be required to manage and address communication breakdown so that the use of the Dutch language could be circumvented.
 - Remedy: three solutions were proposed. The first was to ensure that the first few lessons would be designed for group work. Depending on the responses of the group, individual tasks could be introduced later. The second solution was to use different contextual supports. For example, in the art and crafts lessons, examples were used or sometimes the researcher would demonstrate what the children would need to do. The third was to purchase an educational puppet. There is some agreement among researchers that puppets and dolls help to create a low-anxiety setting for learning a foreign language in the school classroom. Children may find it easier to relate to a doll than to the researcher, at least for subjects of pre-school age and also at the beginning. The name of our educational puppet would be “Polly”.⁶⁷ She was used to introduce both linguistic input and the lesson activity. Polly was also used to show what she had made for the class.

⁶⁷ Educational puppets can be purchased from <http://www.babbelvriendjes.nl>

5. Language of instruction: how will an English-only instruction environment be maintained?
 - Problem: in order to maintain the charade that the researcher was English-speaking only, everyone involved in any communication with the researcher would need to speak English.
 - Remedy: to maintain the façade, classroom teachers were told to address the researcher in English.

6. Teaching approach: what teaching methodology will be used?
 - Problem: current methodology in upper primary education is based on a communicative curriculum, delivered by the classroom teacher using a textbook where English and Dutch are used interchangeably in the classroom. Such an approach in lower primary education could not be implemented because the target group is unable to read and write. Other classroom material is not available for learning English in lower Dutch primary grades.
 - Remedy: the teaching methodology used is the content language integrated learning approach where subject content is delivered using English as the exclusive instruction.

7. The children: what will we do with children who show signs of distress during the lessons?
 - Problem: it is well-known that affective factors play a role in foreign language learning. Distress is crying, withdrawal and unusual behaviour.
 - Remedy: an observation lesson prior to the start of the fieldwork was carried out, and the classroom teacher was requested to provide the researcher with helpful tactics for managing such circumstances and children.

8. The children: What will we do in an emergency situation requiring instructing children in Dutch?
 - Problem: in an emergency situation, like a fire, continuing to use English might confuse and increase anxiety among the children and jeopardize children's safety.
 - Remedy: in this situation, Dutch would be used.

9. Organization: How will we deal with administering the pre-tests and post-tests in Dutch?
 - Problem: in order to maintain the pretence that the researcher was English-speaking only, an alternative test administrator needed to be found.
 - Remedy: Three native Dutch-speaking test administrators, who were also near-native speakers of English, were used to carry out testing in each research group. In addition to this task, test administrators also performed a supporting role during data collection. The purpose of using the same administrator was to maintain continuity, and ensure that the children felt comfortable with them. All the children received instructions in Dutch. Before the start of the study, the test administrators carried out pilots with other children to ensure that they were

well-rehearsed in carrying out the test design. Native Dutch-speaking student assistants, well-rehearsed in administering the tests, and with an excellent command of the English language would be recruited for internships.

10. Finding schools: what are our selection criteria for school recruitment?
 - Problem: in the academic school year 2006/2007, very few primary schools were engaged in early foreign language learning. Finding a school that was willing to let us conduct research was a difficult undertaking.
 - Remedy: to merit inclusion in our study, a primary school needed to satisfy the following criteria:
 - School management, teachers and parents would have to be supportive and open to the concept of early foreign language learning in lower primary education.
 - The research proposal would need to be approved and accommodated by the whole school team.
 - The school was within a 90-minute drive of the researcher's residence.

11. Classrooms: how would we manage combination grades?
 - Problem: it is quite common for grades 1 and 2 to be combined classes in Dutch primary education. In schools with low pupil populations, this can also be the case for grades 3 and 4. Our first problem is therefore dealing with combined classes and deciding how to accommodate and test pupils in grades 2 and 4.
 - Remedy: in the present study, grade 1 research groups consisted of mixed age clusters. The majority of grade 3 groups are generally individual grades. The approach was to teach mixed classes but only test four-year-old and six-year-olds at the pre-test and post-test stages.

12. Classrooms: How would we manage increasing pupil numbers in grades 1 and 2?
 - Problem: pupil numbers in grade three tend to remain stable, but class sizes can grow significantly between the beginning and the end of the school year in grade 1. This means that a combination grade is quite likely to contain very young four-year-olds and very old six-year-olds. Some schools operate fixed admission periods throughout the school year to manage this influx.⁶⁸
 - Remedy: teach all the pupils and not request new pupils be removed.

⁶⁸ In some primary schools with large pupil populations, there might also be a grade 0 which is a grade that is designated for children who become 4 years old during the academic school year. Instead of joining an already established grade 1 and 2, they simply attend grade 0 and join grade 1&2 the following academic school year. Having a class 0 prevents the formation of very big grades and keeps the social development constant. In reality, the creation of a group 0 is influenced by the availability of school policy, pupil numbers, teacher availability, classroom availability and funding. However, none of the schools in our study had a grade 0.

§ 4.3 Teaching methodology

Two highly context-embedded school subjects – art and crafts and physical education – were selected for the purposes of teaching subject content. Lesson themes for art and crafts were linked with the syllabus (Gardner & Gardner, 2000; Reilly & Ward, 1997; Švecová, 2006; Watts, 2006).⁶⁹ Lesson plans were designed and discussed with the classroom teachers before the start of the study and comments were incorporated into the lesson plans. Art and crafts equipment, flash cards, examples of finished creations, songs relating directly to the context and an educational puppet proved useful contextual supports. In addition, lesson observations were carried out prior to the fieldwork to help establish a routine that was familiar to the age group. For example, all the lessons started and finished with circle time or in the case of physical education, an identical lesson set up was adopted. Songs were also included in the lesson plans and used where appropriate.

Structure

There is relatively little homogeneity with regard to the content of English foreign language provision in lower primary education in The Netherlands (Persson, 2012). The following section briefly outlines the content language integrated learning approach that was used in the present study.

Art and crafts (grades 1 and 3; see section 4.5, table 4.3)

The basic layout for the art and crafts lessons is circle time only or circle time and tablework. Circle time is teacher-led, instructional and takes place in the group. In circle time, pupils and the teacher are routinely engaged in:

- greetings,
- instruction,
- vocabulary review,
- singing, and,
- saying goodbye.

Tablework is pupil-led, occurs at children's desks or while they are walking around the classroom getting materials and equipment. During tablework, children work autonomously while the teacher plays a facilitative role. Children focus on:

⁶⁹ Internet resources consulted:

- <http://www.kleurplaten.com>
- <http://www.kennisnet.nl>
- <http://www.knutselidee.nl>
- <http://www.familyeducation.com>
- <http://www.abcteach.com>
- <http://www.canteach.ca/elementary/songspoems20.html>
- <http://www.sitesforteachers.com/index.html>
- <http://www.theteachersguide.com/ChildrensSongs.htm>
- <http://www.uptoten.com/kids/boowakwala-navigation-games.html>

- preparation (for example, gathering their colouring pencils, glue and scissors or collecting the next drawing that needs to be coloured in),
- performing the task at hand, and,
- clearing up at the end of the activity.

The teacher might occasionally engage in simple conversation or review vocabulary appropriate for situation.

Physical education (grade 1; see section 4.5, table 4.3)

The basic layout for the physical education lessons is:

- greetings,
- instructions,
- walking in pairs, hand in hand to the gymnasium,
- instruction,
- a guided or free activity (which may or may not include singing),
- step 3 in reverse, and
- saying goodbye.

For physical education, two variants were introduced owing to established school routines:

Variant 1 for the Eta school (variation of step 2)

- getting ready to go to the school gymnasium by distributing shoes in the classroom;
- giving children time to put shoes on while in the classroom;
- asking them to queue up at the classroom door, and,
- quietly walking in pairs to the gymnasium (inside the school).

Variant 2 for the Omega school (variation of step 2 and 3)

- getting ready to go to the school gymnasium;
- giving children time to put on their coats;
- asking them to queue up at the classroom door;
- briefly walking in pairs to the gymnasium using a route via the outside school playground, and, distributing shoes in the gymnasium.

Farewells did not always take place in Omega grade 1a (see section 4.4., table 4.2) because lessons were often followed by a break. In this case, children put on their coats, left the gymnasium to play outside and forgot to say goodbye.

Themes

The thread running through art and crafts lessons were the colours of the rainbow. The following age and season appropriate themes were used in the art & craft lessons: the colours of the rainbow; the autumn; farmyard animals; the human body; Christmas; Valentine's Day; Spring; Easter, and Mother's Day. In physical education, research groups spent roughly half the lessons playing games like "follow my leader" and "tag", and half of the lessons using physical education equipment e.g. climbing frames, slides, ladders, hula-hoops, balls, beams, a pommel horse and skipping ropes etc.. The use of physical education equipment was only introduced after the fifth lesson for safety reasons.

Lesson plans

In order to ensure continuity, lesson plans were made for each lesson. The lesson plan included core lexis (individual lexical items and chunks) and context-related songs (see appendix 1).

§ 4.4 School recruitment

Of course, school selection was an important phase. The following section describes how this was carried out.

§ 4.4.1 A four-step process

Contacting and selecting schools for our study was a process that lasted between six and nine months. Table 4.1 shows the four steps identified for preparing data collection.

Table 4.1: Overview of the four-step process for school recruitment and their duration.

Step	Description	Duration
1	Orientation	3-6 months
2	Screening and selection	1-2 months
3	Information exchange	2-4 weeks
4	Observation, planning and administration	1-2 weeks

Step 1 – Orientation

Orientation took place between three and six months before the planned start of data collection. A total of 120 mainstream primary schools in The Netherlands were contacted for the present study. To increase chances of success, I first contacted 100 schools using a list provided by the Dutch Branch of the European Platform for Education.⁷⁰ Each school was sent a brief cover letter and a two-page A4 attachment describing early L2 learning in primary education, the study's research questions and an outline of the learning approach (see appendix 2). A travel restriction was imposed, i.e. each school had to be located no more than a 90-minute drive from the researcher's residence. In addition to this, 15 primary schools located in the vicinity of the researcher's then residence were contacted.

The response was very low with almost all schools failing to respond at all. Of those remaining, some expressed an interest in the study, but declined to participate citing a lack of alignment between the study's research aims and their own school plans for the coming academic school year. Table 4.2 is an overview of the schools, which were willing to participate in the study at orientation. Nine schools (or 7.5%) expressed an interest to take part in our study. However, this number dropped to seven schools (or 5.8%) by step 2 and step 4. Table 4.2 shows two research periods, one in 2007/2008 and a subsequent period in 2008/2009. Beta, Gamma and Omega were recruited in 2006/2007, and took part in the study in 2007/2008. Alpha, Eta, Epsilon and Mu were recruited in 2006/2007, and participated in the 2008/2009

⁷⁰ The European Platform's address list was a mailing list that was put together during their Early English conference in 2004.

study. Two years of data collection were necessary because the distribution of groups was distorted towards grade 1 in the first year.

Table 4.2: Overview of participating schools at the orientation stage.

Name of school	Code	Recruitment period	Research Period
St. Willibrordusschool, Bakel	Beta	2006/2007	2007/2008
Swildensschool, Gemert	Gamma	2006/2007	2007/2008
Basisschool De Bunders, Oisterwijk	Omega	2006/2007	2007/2008
Nicolaasschool, Oss ⁷¹	Nu	2006/2007	2007/2008
Basisschool de Regenboog, Schijndel ⁷²	Sigma	2006/2007	2007/2008
Basisschool De Molenhoek, Oisterwijk	Alpha	2007/2008	2008/2009
Basisschool de Havel, Handel	Eta	2007/2008	2008/2009
Meester Ivensschool, Elsendorp	Epsilon	2007/2008	2008/2009
Basisschool Hertog Jan, Moergestel	Mu	2007/2008	2008/2009

Step 2 – Screening and selection

Screening and selection took one to two months to complete. Preliminary meetings were held with the nine primary schools that had expressed interest. These meetings were held with the school's principal, the foreign language co-ordinator, if the school had one, and the classroom teacher(s). The purpose of this first meeting was to (1) introduce the school to the concept of early foreign language learning in primary education; (2) explain the study's research proposal in more detail, and, (3) determine whether the school could accommodate the research design completely.

An important learning point emerging from the orientation stage relates to the teaching of physical education in grade 3 (six year olds). I was made aware that current legislation does not permit unqualified physical education teachers to instruct children in grade 3 and above. In addition, unlike children in grades 1 and 2, children in grades 3 to 8 are normally taught physical education in 45-minute blocks. These physical education lessons may or may not be taught in a local sports hall rather than the school gymnasium. These restrictions led to the exclusion of grade 3 pupils from physical education. Cooperation with Sigma fell through at this stage owing to a lack of common interest in the school team. In addition, I was informed that some teachers were concerned that parents would object to introducing English lessons in lower primary education. Eight schools were left over at this stage.

Step 3 - Information exchange

Information exchange was carried out at least four weeks before the study started. The school and the children's parents were provided with background information

⁷¹ Fell through after Information Exchange step.

⁷² Fell through after Screening and Selection step.

about early foreign language learning in primary education, and a brief synopsis of the study's aim as well as an outline of the learning approach. In addition, a short description of the researcher and the student assistants were also included. Some schools chose to communicate this information via the school newsletter, a standard letter, a letter hanging on the classroom door or verbally informing parents at a parents' evening. The children were also informed about the English lessons at the same time. This was carried out by the classroom teacher(s). Communication between parents and children was left at the discretion of each individual school. No problems can be reported about this stage.

Step 4 - observation, planning and administration

Observation, planning and administration took place one or two weeks before the study started. The observation lesson was either a physical education lesson or a lesson similar to an art and crafts lesson, depending on which subject was going to be taught at the school. A short interview with each classroom teacher was also conducted at the end of the lesson observation. This was used to discuss lesson planning and lesson content. Administrative details – children's names, gender and date of birth – were also exchanged at this point. The teachers were also requested to provide unusual information about the children participating in the study. This included but was not restricted to behavioural problems, knowledge of languages in addition to Dutch or learning difficulties. Again, this was left at the discretion of each individual school and teacher. Cooperation with the Nu school fell through at this stage owing to a misunderstanding with regard the research design, leaving seven schools for the study.

§ 4.5 The research groups⁷³

84 four-year-olds and 94 six-year-olds attending seven mainstream Dutch primary schools were taught either 10 hours of art and crafts lessons or 10 hours of physical education by the L2 teacher (researcher). The lessons were taught either once a week or twice a week in blocks of 30 minutes (20 lessons) and were scheduled as part of the normal school timetable, taking place in surroundings familiar to the children and appropriate for the age and school subject.⁷⁴ English was the exclusive medium of instruction used during the study. Table 4.3 summarizes the characteristics of the research groups.

⁷³ An overview of the research subjects used in this study is available upon request.

⁷⁴ The third graders at the Gamma school were taught in 60-minute blocks.

Table 4.3: Characteristics of the research groups.

Grade	Lesson frequency	School	Grade	Number of children available for testing
Grade 1, art and crafts	1 x week	Beta	1&2a	10
	1 x week	Beta	1&2b	8
	1 x week	Gamma	1&2	11
	2 x week	Eta	1&2a	14
	2 x week	Epsilon	1&2	10
				53
Grade 1, physical education	1 x week	Omega	1&2a	10
	1 x week	Omega	1&2c	8
	2 x week	Eta	1&2b	13
				31
Grade 3, art and crafts	1 x week	Alpha	3	24
	1 x week	Gamma	3&4	10
	1 x week	Mu	3	22
	2 x week	Eta	3	24
	2 x week	Epsilon	3&4	14
				94
				178

Table 4.3 shows that five out of the seven research schools had two or more groups running in parallel. In the Gamma, Eta and Epsilon schools, data was collected in grades 1 and 3. The remaining schools – Beta (grade 1), Omega (grade 1), Alpha (grade 3) and Mu (grade 3) – only had one grade participating in the study. In the Beta and Omega school two research groups in grade 1 ran simultaneously. In terms of the distribution of grades (and therefore age) a fairly even allocation of children in grade 1 (n=84) and grade 3 (n=94) can be reported. There is more variation with regard to subject content. 31 children had physical education lessons in grade 1, 53 children had art and crafts lessons in grade 1, and 94 group children had art and crafts lessons in grade 3. 8 groups were taught English once a week and 5 groups twice a week.

Mixed grades and their implications for analysis

The existence of mixed grades has an important implication for the analysis of classroom observations (chapter 6). With the exception of Mu, Alpha and Eta (grade 3), all research groups are mixed grades. This means that it is not always possible to make definitive statements about interaction based on a specific grade (or age) because it is impossible to distinguish between children's voices. The implication for this chapter is that the results must be interpreted within the context in which they were gathered. As mentioned in chapter 2, mixed grades are common practice in Dutch primary education, and for this reason the research groups are characteristic of the Dutch lower primary education context.

§ 4.5.1 Data sources and limitations for analyzing L2 classroom interaction

The analysis of L2 interaction in the classroom is drawn from my fieldwork journal (research notes), visual material and the orthographic transcriptions. The fieldwork

journal and the visual data have been used to provide a general framework for establishing the types of classroom interaction taking. The third research question is addressed by drawing on the orthographic transcriptions. Developmental changes over time and differences between age (grade 1 and grade 3) and subject content are also based on the orthographic transcriptions.

- A fieldwork research journal

The fieldwork journal was used to keep an account of my teaching experience and (unusual) linguistic events. In the 2007/2008 research cycle, notes were made at the end of the lesson on the lesson plans. In the 2008/2009 research cycle, notes were typed directly into a Word document and saved for analysis later. The fieldwork journal is an important source for reminding me how lessons went. It also allowed me to record interesting and unusual interactions. Having a dual role of practitioner and observer means that the journal might be considered as subjective. In order to control for neutrality, audio material of the individual lessons was also consulted to ensure that my notes could be corroborated.

- Visual material

Visual material was made available in the form of video recordings that were later transferred to DVDs. In the 2007/2008 cycle, video recordings were made of the middle hour (lesson 9 and 10) and final hour (lessons 19 and 20) of lessons per research group. In the 2008/2009 cycle, video recordings were made of the first hour (lessons 1 and 2), middle hour (lesson 9 and 10) and final hour (lessons 19 and 20). In the first research cycle, video recordings were not made of the first two lessons because I assumed that this would be threatening for children but it became clear that it was too cautious and the idea was abandoned at the end of 2007/2008. Filming was carried out using a video camcorder that was placed in a static position and operated by a student assistant. Although the camcorder remained largely unobtrusive during the lesson, its static position had limitations. For example, during circle time the student assistant filmed the L2 teacher and the group using a zooming out option so that the entire learning process could be recorded. This meant, however, that some children, whose backs were facing the camera, could not be caught on camera. During tablework, the student assistant was instructed to alternate between zooming in on children's desks and zooming out to capture classroom activity. The static position of the camera meant that not all activity could be captured uniformly. Finally, the sound quality of the video recordings was obviously dependent on the camera's position in relation to the group. Despite these limitations, the video recordings provide interesting material for general observation purposes, and convey realistic impressions of L2 interaction in the early learning classroom.

- Orthographic transcriptions

Orthographic transcriptions of the first hour (lessons 1 and 2) and final hour (lessons 19 and 20) of the study were made using the protocol guidelines for orthographic transcriptions used for the Spoken Dutch Corpus (Goedertier & Goddijn, 2000) and multimedia annotation technology, ELAN (Brugman & Russel, 2004).⁷⁵ Section 6.4 describes the conversion of the audio data to transcript format. Orthographic transcriptions of a selection of middle hour lessons were also made, however using them for analysis was reconsidered after deciding that the largest developmental changes would be most noticeable in a comparison of the first and final hour of the study. Utterances that were recorded for transcription purposes were limited to my location, because I was the only person who wore a tie-clip microphone during the recordings. This means that not all utterances occurring at the dialogic and group level can be accounted for. This has two implications. On the one hand, circle time discourse picked up (almost) all of the participants' utterances. On the other hand, tablework discourse only picked up partial segments of (background) conversations between children or between children and the researcher.

- The research groups and lesson content

Great care was taken to ensure that the content of the art and crafts or physical education lessons was taught in parallel but the dynamics of the school classroom means that in practice, this was difficult to achieve. This problem was more apparent in the art and crafts lessons because the themes were closely related to the time of year. For example, in 2007/2008, all research groups began in September or October and concluded in March or April except for Gamma grade 3, which started in November and finished in January. In the subsequent research cycle in 2008/2009, art and crafts lessons at the Epsilon school started after the Easter break in April while the same lessons began in September and October at the Alpha and Mu schools. At the beginning of the study, not all art and crafts groups started tablework at the same time because some groups were more ready than other groups to do so.

§ 4.6 Data collection

This section is about the data collection process. Section 4.5.1 describes the duration of the data collection process, and section 4.5.2 the nature and size of the data that was collected.

§ 4.6.1 Duration

In the conception phase of our study, a single intensive period of data collection for the duration of one academic school year (2007/2008) was scheduled. However, an unequal number of older research groups in 2006/2007 necessitated a second year of data collection, resulting in two research cycles:

⁷⁵ The Dutch protocol guidelines can be downloaded at http://lands.let.kun.nl/old/cgn.old/epubl_00.htm. ELAN can be downloaded at <http://tla.mpi.nl/welcome-to-the-new-tla-site/>.

○ *Research period 1 - 2007/2008*

The first research cycle took place from September 2007 until May 2008 during which time data from three primary schools were collected. The first research cycle generated data for six research groups, with an over representation of research subjects from grade 1 art and crafts.

○ *Research period 2 - 2008/2009*

The second research cycle took place from September 2008 until June 2009 during which time data from four primary schools were collected. The second research cycle produced data for seven primary research groups and corrected the uneven distribution of pupil numbers, at least with respect to ages.

Depending on the teaching frequency – once a week versus twice a week – each research group fell into a research period that can be defined either as a long cycle or a short cycle:

- The duration of a short research cycle was three to four months during which period lessons were taught twice a week, and,
- The duration of a long research cycle was seven to eight months during which period lessons were taught once a week.

This means that in either research year, the researcher was travelling to schools creating and collecting data for at least three days per week, spending the remaining time preparing lessons and organizing data for analysis later. Table 4.4 shows the frequency of data collection per week. Table 4.5 summarizes the type of data that was collected between 2007 and 2009 in each research school.⁷⁶

Table 4.4 : Frequency of data collection per week.

School	Duration	Research times
Alpha	September '07 – April '08	Monday afternoons and Wednesday mornings
Beta	September '07 – April '08	Wednesday mornings
Gamma	September '07 – April '08	Friday mornings
Eta	September '08 – December '08	Monday mornings and Wednesday mornings
Mu	September '08 – April '09	Monday afternoons and Wednesday mornings
Omega	September '08 – April '09	Thursday afternoons
Epsilon	February '09 – June '09	Monday afternoons and Wednesday mornings

⁷⁶ Each school was given a new code name to ensure anonymity. In the same vein, the names of the research subjects were also changed. The first letter of their school code correlates with the first letter of their coded name.

Table 4.5: Overview of data collection by cycle, grades and treatment.

School	Academic school year	Cycle	Grade 1 groups	Grade 3 groups	Treatment
Beta	2007/2008	Long	2	-	Art and crafts
Gamma	2007/2008	Long & short	1	1	Art and crafts
Omega	2007/2008	Long	2	-	Physical education
Alpha	2008/2009	Long	-	1	Art and crafts
Mu	2008/2009	Long	-	1	Art and crafts
Epsilon	2008/2009	Short	1	1	Art and crafts
Eta	2008/2009	Short	2	1	Art and crafts and physical education

Overall, data was collected in 13 research groups (n=178) from seven mainstream primary schools. Furthermore, although slightly more individual data was collected from grade 3 pupils, less group data was available for them. This is because grade 3 groups tend to have larger pupil numbers, whilst grade 1 pupils are grouped together with grade 2 pupils thus lowering their overall numbers in grade 1&2 clusters. Tables 4.4 and 4.5 also show that in any given school year, data was being collected in different schools simultaneously. Furthermore, five out of the seven schools have more than one research group participating in the study. In sum, the data collection period for the present study elapsed approximately two years, requiring an estimated 1400 hours of time.⁷⁷

§ 4.6.2 Types of data sources available per level

For each level, specific types of data were collected.

Child level

Table 4.6 is an overview of the data that was collected at the child level. These data comprise material collected at the pre-test and post-test stage. Only the oral questionnaire was administered at the end of the study. Pre-tests took five to ten minutes to administer, and post-tests took 15-20 minutes. All the children were tested one to two weeks before the lessons began, and a maximum of two weeks after the study concluded. Tests took place on the school premises, during school time and in a quiet room. Where this was not the case, a note was made.

⁷⁷ In The Netherlands, an academic school year lasts 40 weeks, and normally starts in August or September and finishes in June or July the following year.

Table 4.6: Overview of data collected at the child level.

Source material	Data	Pre-test or post-test?	Duration per child
Peabody Picture Vocabulary Test	Raw scores	Pre-test, one to two weeks before the treatment	5 - 10 minutes
Imitation Task	Audio fragments	Pre-test, one to two weeks before the treatment	5 - 10 minutes
Peabody Picture Vocabulary Test	Raw scores	Post-test, one to two weeks after the treatment	10 - 20 minutes
Imitation Task	Audio fragments	Post-test, one to two weeks after the treatment	10 - 20 minutes
Interviews	One-to-one audio interviews	Post-test, one to two weeks after the treatment	10 - 20 minutes

Classroom level

Table 4.7 shows that the data intended for use at the classroom level comprise audio and visual material recorded during the treatment. In addition, a fieldwork journal with research notes was kept to note down unusual incidents and reflection.

Table 4.7: Overview of data collected at the classroom level.

Source material	Data	Description
Treatment	Audio files	Complete audio files of all lessons per research group
Treatment	Transcriptions	ELAN transcriptions of lessons 1, 2, 9, 10, 19 & 20 from each research group
Treatment	DVD material	Lessons 9, 10, 19 & 20 in 2007/2008 Lessons 1, 2, 9, 10, 19 & 20 in 2008/2009 research cycle
Treatment	Research journal	For unusual incidents and reflection

School level

Table 4.8 presents the data collected at the school level, which was at the post-test stage only. These were one-to-one interviews with children, in-depth interviews with classroom teachers, and self-administered questionnaires for parents.

Table 4.8: Overview of data collected at the classroom level.

Source material	Data	Administered ...	Duration
Interview	One-to-one child interviews	on the day of testing.	2 - 5 minutes
Interview	One-to-one, teacher interviews	within 4 weeks after the treatment	10 - 45 minutes
Questionnaire	Self-administered parental questionnaire	immediately after the end of the treatment	Within four weeks after the study concluded.

Recording data

Unless otherwise stated, all audio recordings were made using a portable Sony Minidisc Player, and a standard tie clip microphone or stand-alone microphone. Each audio file was converted into a WAV file using a free downloadable programme called Audacity.⁷⁸ All the audio recordings were stored on an external hard disk and burned onto CD-ROMs.

§ 4.7 Testing and data analysis

Two curriculum independent tests were used.

§ 4.7.1 Peabody Picture Vocabulary Test

Background

The Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) is a curriculum independent test, which was originally “designed to provide an estimate of a subject’s verbal intelligence through measuring his hearing vocabulary” (Dunn 1959, p. 25). In other words, the test measures a child’s level of semantic reference through comprehension. The original Peabody Picture Vocabulary Test (Dunn, 1959) was standardized on an American population and was designed for assessing children’s receptive knowledge of English, who were resident in the United States and between the age of 2:6 and 18 years. To date, four versions of the American Peabody Picture Vocabulary Test have been published and the most recent edition was from 2006. The Peabody Picture Vocabulary Test is a very suitable vocabulary screening instrument for this study’s age group given that it is easy to administer, requires minimum training and does not require any oral interaction between the administrator and child: children are simply required to listen to a word and then select the appropriate picture by pointing to it. Dunn (1959) made an initial selection of words whose meanings could be illustrated using line drawings from all the entries that were available in the 1953 edition of Webster’s New Collegiate Dictionary (Merriam-Webster, 1953). This resulted in the selection of 3885 words of which 2055 were illustrated and tested out using 360 subjects ranging in age from two to 18 years. At this levelling stage, if 40 to 60 per cent of a particular age group could identify the items, the items were deemed age-appropriate. 200 pre-test plates were designed with four illustrations on each plate (800 illustrations in total). With 23 age groups, this resulted in eight test plates per age group of two to six and up to 18. Below two years old, 16 plates were developed to make the test especially sensitive for very young individuals and mentally-challenged subjects. This resulted in three forms: age two or less, two to six years and six years up to 18. All forms were tested among 750 individuals. After fine-tuning, the final test battery of 150 plates was developed for Form A and B (the best 300 words at the pre-testing stage were retained) and the plates were arranged in an empirically-determined order of difficulty. An even number of plates were placed at each level with a heavy concentration at the pre-school level. Decoys were also used in the plates. The decoys in the early plates were clearly dissimilar to the word that had to be selected.

⁷⁸ The Audacity programme can be downloaded at <http://www.audacity.sourceforge.net>

At the later stages of the test, the words became more difficult, and the decoys more similar. Plate categories were as follows: man-made objects, animals, birds, human actions in gerund form, nature scenes, plants, flowers, inanimate objects, adverbs, articles in a home, adjectives, musical instruments, occupations, scientific materials, parts of a house and clothing. Illustrations were made by an illustrator who ensured that they were of equal size, intensity and appeal and age-appropriate. Criteria for the selection of the four words to be used were:

- all four words had the same level of difficulty at the pre-test and levelling phases;
- all four words demonstrated good linear growth curves in terms of per cent passing at successive age levels;
- there were no gender differences between the words;
- biased words from a cultural, regional and racial perspectives, plurals, double words, outdated words and scientific terms etc. were excluded, and
- mainly singular and collective nouns, some gerunds and a few adjectives and adverbs were permitted.

In recent years its application has become more diverse, incorporating a wider age range and more test items and it has become available in a number of languages for use in specific countries. This is achieved through re-standardization following fresh item trials in the corresponding populations. The English Picture Vocabulary Test (EPVT) (Brimer, 1973; Brimer & Dunn, 1962), and the British Picture Vocabulary Scale (BPVS) (Dunn, Dunn & Whetton, 1982) are based on Dunn's (1959) original work. The second edition of the BPVS also includes a technical supplement for children who have English as an additional language (EAL), where different norms are used to gauge receptive vocabulary knowledge. There are also foreign language versions that have also been published in addition to the Dutch editions. It is also available in, for example, Chinese Mandarin, German and Spanish. From a design perspective, however, carrying out the test has remained largely unchanged. It is still a pictorial, multiple-choice test consisting of four line drawings per plate where children are asked to identify a picture corresponding to the spoken word, and its objective is still to measure a child's level of semantic reference through comprehension.

In the present study, the third edition of the Dutch version of the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) was used. All the test items were translated from Dutch into English, and then administered using the test protocol in the manual. The Peabody Picture Vocabulary Test-NL-III was selected instead of the EPVT as a screening instrument for two reasons. First, the BPVT had been standardized on the British population and was perhaps not entirely suitable for use on our Dutch subjects. How relevant would the selection of vocabulary for the BPVT have been for the research subjects? Would it have been fair to test Dutch children with words that they may not (yet) have encountered in their first language? At the beginning of the research cycle there was little time to conduct an extensive investigation into these issues. I felt satisfied with the choice that was made and the fact that the Dutch Peabody Picture Vocabulary Test had already been standardized. The assumption was made that the subjects had little or no knowledge of English so

testing began with the first set of test items rather than the age-appropriate set, as is recommended in the manual. This was also done to ensure that children were not unnecessarily discouraged at the beginning of the tests. Peabody Picture Vocabulary score forms were used at the pre-test and post-test, and raw scores were used to calculate outcome. A translation of the items can be found in appendix 5.

§ 4.7.2 The eleven-word imitation task

The aim of the imitation task was to establish if the research subjects were able to acquire a more native-like pronunciation as a result of the study. Studies indicate that children are sensitive to sound patterns and sound changes even as babies. Given the age of the children and the time, which we had allocated for testing, the imitation task was designed to be short and consist of words that contained a mixture of easy and difficult phonemes for Dutch speakers.

The imitation task in our study consisted of eleven monosyllabic and disyllabic words, which were recorded in a sound studio using the native-speaking researcher's own voice. The recording was then burned onto an audio CD. During the test, the administrator first allowed the child to get accustomed to the task by practicing *hello* and *door*. Once the administrator thought that the child understood the task and could speak clearly into the microphone, each word was played only once and the child was asked to do his/her best to imitate the word and speak clearly. Their reactions were recorded on a minidisk player and phonetic transcriptions of pre-test and post-test imitation speech samples were made using Praat. These were analyzed later. All the children did the imitation task after the Peabody Picture Vocabulary Test. The words used were: coffee, hand, mother, chair, three, look, fish, yellow, dog, finger, bye.

Size and nature of source data available

159 children completed both the pre-test and the post-test for the imitation task. For the evaluation of the imitation task, this should have resulted in a total of 1749 pairs of pre-test and post-test samples. However, only 1690 pairs could be used for analysis due to a poor recording or no utterance produced by the child.

*Collecting and preparing the data for analysis*⁷⁹

When the test administrator carried out the imitation task, she recorded the entire imitation task – including the CD with the stimuli – in succession, without stopping. At the end of the study, two audio files per child were available for analysis. Each file contained the uncut version of the pre-test and the post-test imitation task. After administering the tests, each child's uncut audio file was converted into an uncut WAV file using Audacity. Then, each word produced by the child was cut and pasted into a new file which was labelled as follows:

- child's name _child's age_pre_word e.g. Gerben_4_pre_bye
- child's name _child's age_post_word e.g. Gerben_4_post_bye

⁷⁹ With thanks to Mr. Joop Kerkhof and Prof. dr. Carlos Gussenhoven at Radboud University for their advice and expertise with regard to the preparation and design of the experiment.

This was done using Praat (Boersma & Weenink, 2011). In order to ensure that no data was lost from the utterance, the very beginning of the utterance and the very last part of the utterance was cut and pasted into a new file. Subsequently, the amplitude of each sample was normalized in PRAAT. The peak normalization was 0.97. The process of normalization ensures maximum amplitude per word so that one word does not sound louder than the next word, which might, in turn, influence rating behaviour. Finally, all the samples were randomized using a Perl script. First, the pre-test and post-test order within each stimulus was randomized. Then the order of all the stimuli was randomized. The inter-stimulus time in and between stimuli was 0.5 seconds. Given the large quantity of samples, four blocks of 417 stimuli and one block of 418 stimuli were prepared for the expert evaluation. Before the randomized blocks of data were given to the expert judges, all the samples were reviewed for suitability.

Evaluating the samples

The evaluation of the imitation task was done by an expert panel of three judges, accustomed to and familiar with using Praat (Boersma & Weenink, 2011). Instructions for evaluating the imitation task can be found in appendix 6.

§ 4.7.3 Preparing and analyzing the orthographic transcriptions

The first hour (two lessons) and the final hour (two lessons) in each research group were transcribed for analysis so that the largest differences in L2 language behaviour could be captured.

A labour-intensive process

Preparing and transcribing data are enormously time-consuming processes that require careful, meticulous work and repeated verification of utterances produced. In classroom interaction, transcribing child utterances at the dialogic and group level is complex because generally children do not always wait for one another to complete their sentences and often talk simultaneously. Mumbling and background noise also make some utterances difficult to decipher. Both problems can be solved by verifying audio fragments repeatedly. I found that the art and craft lessons took longer to transcribe than the physical education lessons. Art and craft lessons introducing new themes or reviewing vocabulary took the longest to transcribe and verify. I also noticed that L1 utterances made by four-year-olds were more difficult to distinguish than those made by their older peers. Preparing and transcribing a 30-minute lesson required an estimated six to ten hours of work depending on the grade, subject and classroom activity. For the present study, an estimated 400 hours were spent on preparing and transcribing 48 lessons. An equal amount of time was spent on the subsequent coding, analysis and tabulation of data for the presentation of the results.

ELAN

Before transcribing could take place, the audio data was converted into a .WAV file using a conversion programme, Audacity. Then, each .WAV file was linked to a new ELAN document. ELAN is an acronym for Eudico Language Archiving Technology (European Linguistics Annotator) (Brugman & Russel, 2004).⁸⁰ Then, a tier system was created so that transcribing could start. Lesson 1, 2, 19 and 20 were transcribed orthographically using the Spoken Dutch Corpus protocol for orthographic transcriptions (Goedertier & Goddijn, 2000).

The tier system

After the audio data was coupled to an ELAN document, a tier system was introduced so that participants' utterances could be transcribed orthographically. This tier system consisted of eight different data levels:

- Teacher: the nonnative-speaking teacher's utterances;
- Group: denotes the utterances of more than three children who speak at or around the same time;
- Student 1: first utterance made by a child;
- Student 2: second utterance from a child that is produced after the first child's utterance. This might be the same child or a different child;
- Student 3: third utterance from a child that is spoken after the second child's utterance. It is always clear that this is a different child. The utterance might start during or directly after the second child's utterance;
- L1 Teacher: if applicable, the L1 teacher's utterances were transcribed;
- Background noise: specifies any noise that was considered relevant for understanding the context of the situation. For example, if a door opened and someone walked in and interrupted the lesson, then this was described. However, if a chair was moved across the floor but this had no effect on the discourse, then this was not transcribed, and,
- Activity: refers to what the children are doing. It is described if it is deemed important for analysis so that the context or situation can be defined. For the physical education lessons, this might signify playing tag and running around the room. For the art and crafts lesson, this might denote a change from circle time to tablework.

Transcribing data

A short section of sound wave is first marked and then transcribed. Each orthographic transcription concludes with a full stop. No more than 3 seconds worth of spoken discourse is transcribed at a time even if this means that a full sentence is separated into smaller sections. This is not necessarily the fastest way of working through the transcriptions. However, it ensures that a consistent method is used and ensures that pauses, particularly in the L2 teacher's speech are accounted for. For the purposes of illustration in chapter 6 however, these smaller sections have been

⁸⁰ ELAN can be downloaded at <http://www.lat-mpi.eu/tools/elan/>. The Dutch protocol for orthographic transcriptions can be downloaded at http://lands.let.kun.nl/old/cgn.old/epubl_00.htm.

put together so that the reader can interpret the full utterance in the flow of spoken language. I have kept the full stops in the presentation of the data.

Coding

The coding used for the transcriptions is from the Dutch guidelines for orthographic transcriptions for the Corpus for Spoken Dutch (Goedertier & Goddijn, 2000). During analysis, not all codes were needed. Table 4.9 is an overview of the codes that were used for the present study.

Table 4.9: Overview of the most commonly-used codes for transcribing utterances.

Code	Description
ggg	clear and audible sounds made by speakers e.g. laughing, crying, giggling and coughing.
xxx	incomprehensible utterances.
Xxx	used for incomprehensible proper names and titles.
ah, au, bah, ha, haha, hé, hè, jee, o jee, mmm, oei, oh, sst ⁸¹ , uh, uhm, wauw	interjections
*x	used when uncertain about whether the word was said.
*a	broken words e.g. gre*a for “great”.
*u	words interrupted by “uh” e.g. heb jij het geld over-uh-gemaakt*u

Converting ELAN transcriptions into word files for coding and counting

Raw data files were used to perform further analyses. After the lessons had been transcribed in ELAN, the data was exported into a traditional transcript text. A word pad file (.txt) was copied and pasted into a word file (.docx), and then these word files were coded. Where necessary, audio fragments were consulted again to ensure that coding was accurate. Transporting files, coding, tabulating and analyzing the results took approximately 400 hours.

§ 4.7.4 The interviews

The children

170 children were interviewed at the post-test stage. The main objectives were to gather data about:

- children’s perceptions of their own English skills
- children’s likes and dislikes;
- what the children thought about the length of the lessons and continuing;
- strategies they used to repair communication breakdown;
- the use of English outside the classroom, and,
- their perception of the native-speaking teacher’s ability to understand their L1.

The test administrators administered the oral interview in Dutch after conducting the Peabody Picture Vocabulary Test and the imitation task. The interviews were conducted on a one-to-one basis. Each administrator used the same standardized

⁸¹ I changed this to the English equivalent “shh” for utterances made by the L2 teacher.

interview format for this purpose. The reader is referred to appendix 7 for details of the questions used in the interview protocol. Children's responses were first recorded, and then tabulated for analysis later.

The teachers

In our study, 18 classroom teachers took part in standardized interviews administered by the researcher. The main objectives were to gather data about teachers' general opinions and attitudes towards early English in primary education, and detailed information pertaining to the study itself. Each interview was conducted on a one-to-one basis and recorded for analysis later. The reader is referred to appendix 8 for details of the questions used in the interview protocol. Each interview comprised 27 questions and covered the following seven areas:

- general impressions (questions 1-7): the study, perceived results, its success and opinions about early and late English in primary education, recommendations and inspiration to continue;
- teacher's experience (questions 8-11): opinions about their role in the study, the desire to intervene, perceived learning outcome and children's behaviour before, during and after the lessons;
- lesson content (questions 12-21): content language integrated learning, lesson frequency, lesson duration, degree of difficulty, suitability with regard to the curriculum, effect of L2 on L1, ability to teach lessons themselves and corresponding needs, and other suitable school subjects;
- children's experience (questions 22-24): perceived learning outcome, experience and reasons for behavioural problems;
- parents (question 25): parents' opinion of the study;
- school (question 26): school's opinion of the study, and
- areas of improvement (question 27).

§ 4.7.5 The self-administered questionnaire

All parents and/or caregivers of the children in grade 1 and grade 3 were invited to participate in the present study.⁸³ They were given sealed envelopes, which contained a letter, a child-coded one-page questionnaire with six questions to fill in, and a stamped addressed envelope in which they could return questionnaires (see appendix 9). Classroom teachers were requested to distribute these envelopes to the children either on the last day of the study or within one week of the study concluding. The letter briefly explained that the child had had 10 or 20 English lessons in a given period and that the researcher was interested in gauging parents' opinions about the study. This was to be returned to the researcher either within two weeks during term time or three weeks if the questionnaires had been distributed just before a school holiday. Six questions were asked about parents' opinions:

⁸³ This is with the exception of form 1 at the Epsilon school. The classroom teacher requested that all the children, also in form 2, be given an envelope for their parents. This was to avoid children feeling excluded. The results reported in this chapter are only based on the questionnaires from the children in form 1; questionnaires received from form 2 parents were discarded. The term "parent" has been used throughout this chapter to denote parent or caregiver.

- the positioning of an early English programme in primary education;
- their child's learning experience during the study;
- any stimulation for learning English at home during the study;
- the influence of the L2 on L1 development, and
- the ideal age for starting L2 learning.

Chapter 5

Results at the child level

§ 5.0 Introduction

The earlier chapters of this thesis described the origins and pervasiveness of the role of age in second language acquisition and the belief *the earlier, the better*. The current chapter investigates the validity of this claim by determining whether the 10 hours of exposure to English in the shape of art and crafts or physical education lessons had an effect on children's receptive vocabulary development and L2 pronunciation. Two curriculum-independent types of tests were performed with children to evaluate this. The first was the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005), and the second a specially-designed 11-word imitation task for testing L2 pronunciation. Section 5.1 describes how the test design fared amongst the target group and presents a general description of the research data. The statistical analyses of the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) results can be found in section 5.2, and this is followed by the results of the imitation task in section 5.3. The chapter concludes with a summary of the findings in section 5.4.

§ 5.1 Evaluation of the test design

How did the test design fare among the very young research subjects? In the present study the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) was administered first, followed by the imitation task. The instructions for administering the Peabody Picture Vocabulary Test in the guide were adhered to by the test administrators. Practice items were incorporated in the imitation task to get children accustomed to the task before actually performing it. The administrators were told to make the tasks seem like games, encourage the children to respond, and make them feel as comfortable as possible. Before administering the tests, the test administrators carried out a small pilot to accustom themselves to the tests and equipment.

In contrast to the problem-free pilot, administering the imitation task to grade 1 children distressed six of them at the pre-test stage and three of them at the post-test stage. One child was difficult to motivate, and two were Polish native-speakers with little or no Dutch, who found it difficult to understand and process the instructions. The other three children were self-conscious and unwilling to imitate the words when they were requested. Although children in primary education are accustomed to doing school-related tests with external persons, the imitation task is different from school-administered tests in two ways. First, it requires children to produce sounds that may be quite alien to them. Second, using a stand alone microphone to

make the recordings was atypical, and required skill and willingness from the child. For example, a few children found it difficult to speak clearly into the microphone and a tie-clip microphone would have been more suitable. The classroom teacher explained that the problems could also have been due to the new (language) environment and an unfamiliar test administrator. Some of the problems were resolved by allowing these children to have a friend stand near the door of the test location or have a friend sit next to the child for support. This worked well and children were able to complete most of the imitation task. No children from grade 3 experienced problems performing the imitation task.

Few problems administering the test procedure at the post-test can be reported, confirming that previous test experience or perhaps exposure to a foreign language setting supports a more favourable test environment.

Further, the pre-tests took less time to perform than the post-tests because of the inclusion of the short interview. In addition interviews with the younger children took less time (about 5-10 minutes) than the older children (about 15-20 minutes). Children were generally more talkative between the different tests at the post-test stage, which resulted in extended test slots. These interludes were often filled with information about various activities ranging from the test itself and what they thought of the English lessons to after-school activities and their plans for the day. Despite the slightly longer test slots at the post-test, none of the children seemed particularly fatigued.

Three modifications for future test procedures involving young children are suggested. First, a class demonstration explaining the test procedure might dispel the element of surprise. The demonstration could be carried out by the test administrator one week before actual testing. A demonstration might also provide the classroom teacher with an opportunity to discuss the testing with the class beforehand, and warn the administrator of potential problems ahead of time. Second, a tie clip microphone with good sound quality could be substituted for the standalone microphone. Third, more time could be allocated for older children than for younger children at the post-test stage to allow for more interview time. These changes would require more planning and additional test days given the limitations of the school timetable.

§ 5.2 The Peabody Picture Vocabulary Test

178 children participated in the present study (see table 4.5 in chapter 4). 170 children completed both the pre-test and the post-test for Peabody Picture Vocabulary Test. An overview of the original sample, detailing school, subject matter, lesson type and frequency, and the data available for our analysis of receptive lexical development using the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) can be found in table 5.1.

In grade 3, one child left the Alpha school during the study and could not be tested at the post-test stage. In grade 1, complete Peabody Picture Vocabulary Test scores could not be collected from 8 children versus just one child in grade 3. The large difference between available post-tests in grade 1 is due to absence (holiday or illness) during the two-week test period. Table 5.1 also shows that the Eta school

had the highest deviation between the original sample available for testing and complete scores.

Table 5.1: Overview of usable data for the Peabody Picture Vocabulary Test.

Grade	Lesson Frequency	School	Grade	Original sample	Analyzed sample
Grade 1, art and crafts	1 x week	Beta	1&2a	10	10
	1 x week	Beta	1&2b	8	7
	1 x week	Gamma	1&2	11	11
	2 x week	Eta	1&2a	14	10
	2 x week	Epsilon	1&2	10	10
				53	48
Grade 1, physical education	1 x week	Omega	1&2a	10	10
	1 x week	Omega	1&2c	8	8
	2 x week	Eta	1&2b	13	11
				31	29
Grade 3, and crafts	1 x week	Alpha	3	24	23
	1 x week	Gamma	3&4	10	10
	1 x week	Mu	3	22	22
	2 x week	Eta	3	24	24
	2 x week	Epsilon	3&4	14	14
				94	93
				178	170

§ 5.2.1 Results

The four main variables to explain the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) scores are grade (grade 1 versus grade 3), subject (art and crafts versus physical education), frequency (once a week versus twice a week), and test moment (the pre- versus post-test scores).

The Peabody Picture Vocabulary Test box plot in figure 5.1 shows the relative spread of pre-test and post-test raw scores for grade 1 and grade 3. Although the raw scores are still quite low, the study seems to have had an astonishing effect on receptive vocabulary development given that the children only received a total of 10 hours of exposure. There are also two interesting points concerning the pre-test data. First, children already knew some words in English at the beginning of the study. This is probably because of the presence of English language programmes such as Dora or other types of media, for example songs and computer games, available to them in their living environments (Persson & Prins, 2012). Second, it would seem that the English language could quite possibly shift from being a foreign language to a second language. This idea is given credibility by the higher pre-test scores in grade 3. Van den Broek (2012, p. 72) showed that a closer examination of scores on linguistic variables in the ELLiE study indicated that Northern countries (Sweden, The Netherlands, and Croatia) outscored southern countries (Spain and Italy) on many of them, and that this was possibly due to the “linguistic unity in the form of language families”. If a typologically distant language had been taught for the purposes of the present study, a very different outcome could have been observed. In

addition, van den Broek (2012) also reports positive correlations between out-of-school exposure and the various linguistic measures analyzed. Children from a country with more out-of-school exposure (i.e. Sweden, The Netherlands and Croatia) performed better than children from a country with little exposure to English outside the classroom (Italy). This is also confirmed by other studies (Kuppens, 2010; Persson & Prins, 2012; Sundqvist, 2009).

There are two main differences between grade 1 and grade 3. First, grade 3 shows higher mean values than grade 1 in both the pre-test and the post-test scores. This could be explained by the longer periods of exposure that children in grade 3 may have had to English outside the classroom before the study started. The second difference concerns the whiskers of the box plots, which remain more similar for grade 1 than for grade 3. For example, in grade 1, similar minimum and maximum values for the pre-test and post-test scores (and outliers of 51 and 52 respectively) can be noted. Also, the spread of scores in the upper 50% is higher than in the lower 50% and this is more noticeable in the pre-test scores in grade 1 than in the post-test scores.

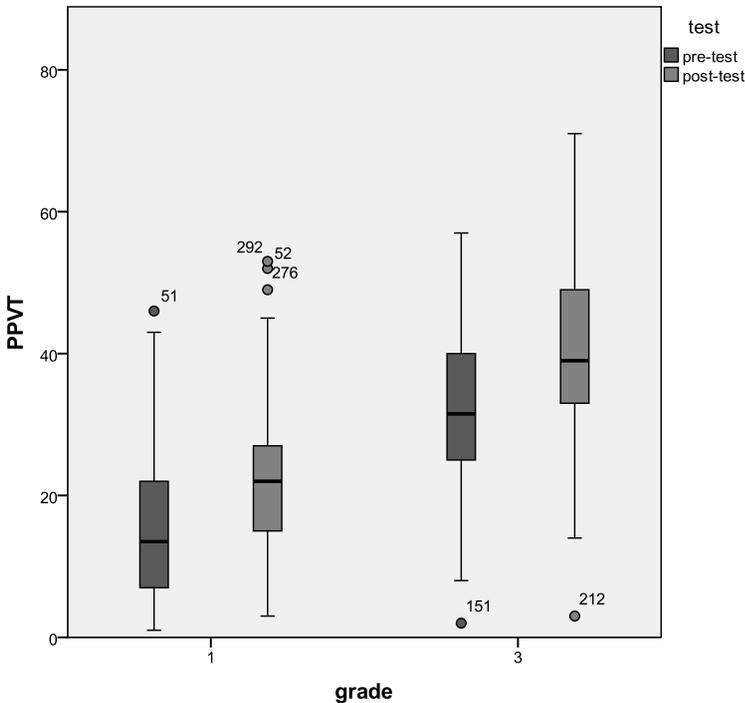


Figure 5.1: Box plot of the Peabody Picture Vocabulary Test scores split by grade and pre/post test.

The box plot in figure 5.2 shows the relative spread of pre-test and post-test raw scores for art and crafts (grade 1 and grade 3) and physical education (grade 1 only)

for all children. Progress has been made for each subject taught, but no clear distinction between subject matter can be seen. A number of similarities can be reported for the analysis of subject matter. First, the minimum pre-test and post-test scores are the same irrespective of subject matter. The interquartile range for art and crafts and physical education are also similar for the pre-test scores but become smaller for art and crafts at the post-test and larger for physical education at the post-test. Finally, the median raw scores increase by about the same level for both art and crafts and physical education at the post-test. The mean scores and the standard deviations are given in table 5.2 and table 5.3, and confirm what is observed in the box plots.

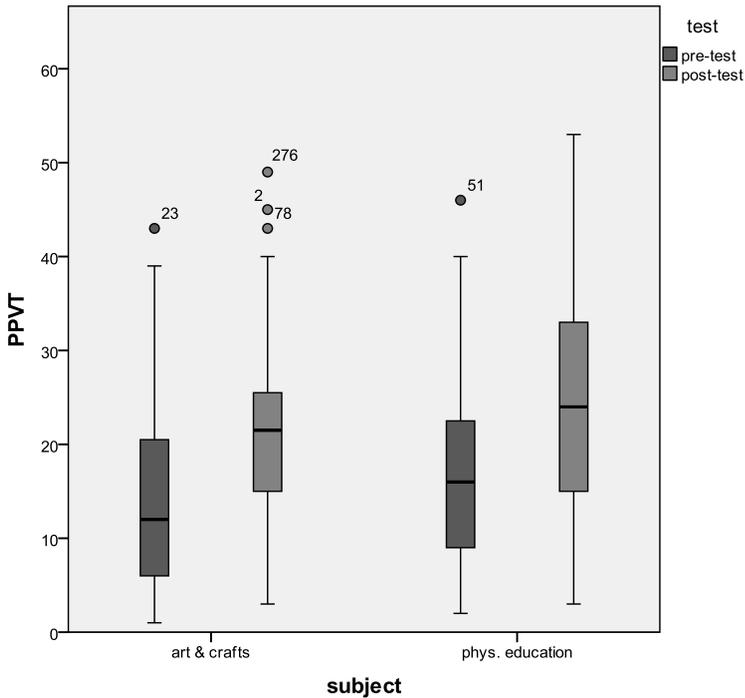


Figure 5.2: Box plot to show Peabody Picture Vocabulary Test scores split by grade.

Tables 5.2 and 5.3 present descriptive statistics for grade and for subject matter. We applied a mixed model analysis to the difference score with participants and schools as a random intercept (taking classes as the random intercept did not change the result). The fixed factors were lesson frequency, grade, and subject. The only significant variable was the general intercept ($F=32.787$, $df=1, 166$, $p=.000$), indicating that the gain between pre- and post-test was significant but unrelated to the three main variables of the research design. The mean scores on the Peabody Picture Vocabulary Test show a difference between the grades with grade 3 scoring

higher than grade 1. We tested this effect with a mixed model analysis including the outcomes of both the pre- and the post-test. We included schools and participants as random intercepts and lesson frequency, subject and grade as main effects. The only between-subjects effect being significant was grade ($F=89.817$, $df=1$, 9.052 , $p=.000$).

Table 5.2: Descriptive statistics for the Peabody Picture Vocabulary Test by grade.

Description	Group	Mean	SD	N
Raw scores, pre-test	Grade 1	15.10	10.183	77
	Grade 3	31.81	11.682	93
	Total	24.24	13.801	170
Raw scores, post-test	Grade 1	22.45	11.643	77
	Grade 3	41.13	14.103	93
	Total	32.67	16.005	170

Table 5.3: Descriptive statistics for the Peabody Picture Vocabulary Test by subject.

Description	Group	Mean	SD	N
Raw scores, pre-test	Art and crafts	25.60	14.006	141
	Physical education	17.66	10.701	29
	Total	24.24	13.801	170
Raw scores, post-test	Art and crafts	34.26	16.092	141
	Physical education	24.97	13.313	29
	Total	32.67	16.005	170

How may we interpret the raw scores in terms of children's age-related receptive vocabulary knowledge? Table 5.4 gives an overview of the items in the first 6 sets, and represents the most common sets that were used while testing the research subjects. Recall from chapter 4 that the Peabody Picture Vocabulary Test comprises 204 items distributed in 17 sets with each set containing 12 items. Testing ceases when 9 or more items are incorrect in a particular set but all the items in the set are tested. Subsequently, the raw score is calculated by subtracting the total number of items tested up to the last break item minus the incorrect number of items. Table 5.4 also shows a number of cognates or similar sounding Dutch / English words for example: cat (1), baby (5), drink (7), computer (20), plant (21), sick (28) kangaroo (35), vase (38), under (the table) (43), cactus (44), trumpet (45), chin (48), train (51), group (53), wrinkles (65), and welcome (66). These words may have helped word association and word recognition, but it is improbable that they would have accounted for very high raw scores during testing.

If the age indicators are applied to the results, a mean pre-test raw score of 15.10 (for grade 1 children) indicates a starting age of 2:6 – 2:11 and a mean post-test raw score of 22.45 indicates the same age range.⁸⁴ A raw pre-test score of 31.81 (for the grade 3 children) indicates a higher starting age of 3:0 – 3:11. Similarly for the post-test, the mean raw score of 41.13 indicates a starting age range of 4:0 – 4:5. Both grade 1 and grade 3 lag behind the age-appropriate range for receptive knowledge

⁸⁴ Or very possibly to 3:0 – 3:11 for a small number of children.

but this is not an unexpected result given the minimal exposure to English in the classroom.

Figures 5.1 and 5.2 show the highest and lowest scores among the research subjects. The lowest overall pre-test raw score was 1 (Harry, grade 1). Belle, Oona, Gijs and Mabel scored 2, and Barbara, Bianca, Gretchen, Huberta, Hugo, Homer and Eddy scored 3. All these children were in grade 1 with the exception of Mabel who was in grade 3. The highest overall post-test raw score was 71 (Alison and Gideon, grade 3), 69 (Gus, grade 3), 68 (Howard, Heide and Aiden, grade 3) and 67 (Max, grade 3). All these children's scores are in set 6, the age-appropriate category for six year olds. The highest post-test raw score for grade 1 was 53 (Hendrikje) and falls into set 5, which is a little higher than the age-appropriate category.

Another closer look at the individual raw scores also shows some interesting effects of the study. At the end of the study, six children in grade 1 had raw scores higher than the mean raw score for grade 3, and eight children in grade 3 had raw scores lower than the mean raw score for grade 1. The highest and lowest raw scores as well as the differences in raw scores compared to mean scores show that while some children excel at picking up words in a foreign language, others do not make similar progress.

Table 5.4: Overview of the first six sets of test words in the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) including age indicators.

Set 1 (2:3 – 2:5)			Set 2 (2:6 – 2:11)		
1	poes	cat	13	cadeautje	present
2	hand	hand	14	springen	jump
3	schaar	scissors	15	vlieg	fly
4	oog	eye	16	hek	fence
5	baby	baby	17	naar boven	go up
6	broek	trousers	18	bank	bench
7	drinken	drink	19	timmeren	hammer
8	vliegtuig	airplane	20	computer	computer
9	lopen	run	21	plant	plant
10	schildpad	turtle	22	trekken	pull
11	schommelen	swing	23	emmer	bucket
12	schep	spade	24	koe	cow
Set 3 (3:0 – 3:11)			Set 4 (4:0 – 4:5)		
25	trommel	drum	37	fruit	fruit
26	kruk	bar stool	38	vaas	vase
27	pijl	arrow	39	handschoen	glove
28	ziek	sick	40	blij	happy
29	blikje	tin	41	verrekijker	binoculars
30	varen	sail	42	vuilnis	rubbish
31	geld	money	43	onder de tafel	under the table
32	inschenken	pour	44	cactus	cactus
33	post	letters	45	trompet	trompet
34	slopen	demolish	46	haai	shark
35	kangoeroe	kangaroo	47	boren	drill
36	kist	box	48	kin	chin
Set 5 (4:6 – 5:5)			Set 6 (5:6 – 6:5)		
49	vitamine	vitamine	61	ventilator	fan
50	stopcontact	socket	62	hurken	squat
51	trein	train	63	sieraad	jewelry
52	drieling	triplets	64	schoffelen	hoe
53	groepje	group	65	rimpels	wrinkles
54	bouwwakker	builder	66	welkom	welcome
55	knagen	nibble	67	wortels	roots
56	vlot	raft	68	afleveren	deliver
57	mikken	throw	69	graan	grain
58	ambulance	ambulance	70	voetganger	pedestrian
59	vierkant	square	71	repareren	repair
60	tot ziens	goodbye	72	eiland	island

The Peabody Picture Vocabulary Test data provide support that an early start to foreign language exposure contributes to significant progress when all the children are grouped together. This is an astonishing outcome, given that the Peabody Picture Vocabulary Test is a curriculum independent test, and exposure is just 10 hours. The data also suggests that some children make little or no progress while others excel, providing evidence for individual differences between children's learning outcomes.

§ 5.3 The 11-word imitation task

158 children completed both the pre- and the post-test for the imitation task (see table 5.5). There is a discrepancy of 12 children compared to the Peabody Picture Vocabulary Test. One child from the Eta school was eliminated because she had Down syndrome and her speech samples were not understandable. Malfunctioning recording equipment resulted in lost data from the remaining 11 children. Further, had the evaluation of the imitation task been based on the responses of 158 children, it should have resulted in a total of 1738 pairs (158 children x 11 words). However, it is based on 1669 utterances. 146 (or about 92%) children had 10 or 11 pairs; 9 had (about 5%) nine pairs, two had seven pairs (a little less than 4%) and one (less than 1%) had two pairs. The most frequent responses from the 69 pairs for which no utterance was available were for dog (12), mother (10), hand (9), chair (8) and coffee (8). This does not mean that the pre-test and post-test utterances were missing. Rather, one utterance was missing or it was inaudible and could not be cut from the audio fragment. The child who only produced two utterances had below average Peabody Picture Vocabulary Test raw scores.

Table 5.5: Overview of usable data per child for the imitation task.

Description	School	Original sample	Analyzed sample
Grade 1, art and crafts	Beta (1a)	10	10
	Beta (1b)	8	7
	Gamma	11	7
	Eta	14	10
	Epsilon	10	10
	Total	53	44
Grade 1, physical education	Omega (1a)	10	9
	Omega (1b)	8	8
	Eta	13	11
	Total	31	28
Grade 3, art and crafts	Alpha	24	20
	Gamma	10	10
	Mu	22	22
	Eta	24	21
	Epsilon	14	13
	Total	94	87
		178	158

§ 5.3.2 Results

Table 5.6 summarizes the choices that the expert judges made when they were asked to judge the randomized samples of pre-test and post-test word pairs. Rater 1 did not rate all the samples due to a technical problem. 4784 randomized pairs were rated by the three expert judges. As a group, they rated 29.3% as “no choice”, 30.4% as “pre-test better”, and 40.3% as “post-test better”. “No choice” means that neither sample was better. The overall results seem to show a tendency for the post-test samples to be rated as superior, but also that rater 2 is less outspoken and indecisive about her choices. Table 5.6 clearly shows that judging imitation samples at the word level is a

difficult task, and confirms what has been written in the literature about evaluating imitation task samples (Ellis, 2009; Erlam, 2009). Further, the present analysis corroborates earlier issues encountered during a previous attempt to evaluate preliminary imitation task data from the present study; despite a consensus session and the use of a five-point differentiation scale, results among the expert judges were also quite varied, although they all illustrated progress had been made among the children (Lobo, 2009).

Table 5.6: Overview of results for the imitation task per rater.

	no choice		Choice				Total
			pre-test better		post-test better		
Rater 1	323	22%	505	35%	619	43%	1447
Rater 2	770	46%	394	24%	505	30%	1669
Rater 3	309	19%	555	33%	804	48%	1668
	1402		1454		1928		4784

Inter-rater agreement

The ratings for the post-test are higher than the pre-test but do the three raters agree in their scores? In other words, do the raters score the same stimuli and pairs in the same way? In order to gauge whether the expert judges were in agreement with each other, the kappa was calculated for agreement between the raters. The results are: raters_12 kappa =.197 (p=.018), raters_13 kappa=.206 (p=.020), raters_23 kappa=.220 (p=.016). The kappa calculation indicates that the raters are not consistent in the way they rate the stimuli. All three kappas are significant but agreement among them is low nevertheless. What does this tell us? It would seem that the expert judges have apparently evaluated different elements in the speech samples.

Can these differences in element evaluations be observed if a closer look is taken at the stimuli? That is, do the judges differ in the way that they hear and judge the various stimuli? Table 5.7 is an overview of the choices that the three expert judges made per stimulus. The figures are expressed as percentages (number of choices divided by total number of samples for the particular word). Figures highlighted in grey represent the top three words that were not rated as different. Figures in blue show the words that were rated as better in the pre-test and the figures in yellow refer to the words that had higher percentage scores for a superior post-test sample.

Table 5.7: Overview of how each expert judge rated the samples (in percentages).

Stimulus	Rater 1			Rater 2			Rater 3		
	No choice	Pre better	Post better	No choice	Pre better	Post better	No choice	Pre better	Post better
Bye	14	40	46	63	14	23	41	22	37
Chair	29	25	46	56	8	36	19	23	57
Coffee	28	32	40	53	25	22	19	34	47
Dog	16	48	37	34	30	36	18	26	56
Finger	20	40	40	44	27	29	11	40	49
Fish	20	29	52	62	16	22	15	26	59
Hand	18	37	46	26	30	44	5	46	48
Look	18	45	37	28	43	29	14	44	42
Mother	33	31	37	32	28	40	12	40	49
Three	24	34	43	46	25	29	29	32	39
Yellow	27	26	47	62	12	26	20	33	47
Overall	22	35	43	46	24	30	19	33	48

Table 5.7 shows that the following seven words were rated as superior in the post-test by the expert judges: *bye*, *chair*, *fish*, *hand*, *mother*, *three* and *yellow*. *Chair* and then *yellow* were rated by all three judges as being more superior in the post-test than in the pre-test. *Look* was rated better in the pre-test samples by expert judge 1 and 2. Expert judge 1 also rated *dog* as better in the pre-test. An equal number of pre-test and post-test samples were judged as (roughly) the same. This was for *finger* (rater 1 and rater 2), *coffee* and *three* (rater 2 only) and *look* and *hand* (rater 3 only). The table also shows differences between the words that the expert judges rated as best: expert judge 2 rated *bye*, *fish* and *yellow* as her top three; expert judge 1 rated *mother*, *chair* and *coffee*, and for expert judge two rated *bye*, *three* and *yellow* as the best. Note that for rater 3, the word *yellow* was very closely followed by *chair*, *coffee* and *dog*.

On reflection I had expected the post-test samples of *yellow*, *chair*, *three*, *look* and *hand* to have been noticeably better because they were frequently used in the classroom, though to different degrees depending on the theme and subject matter. However, the ratings were not consistently the same as illustrated in tables 5.6 and 5.7. Perhaps this reflects the idea that not all children are alert to the way words sound in spoken input unless focus is put on them. In this way, a careful conclusion might be that in a meaning-focused learning environment, children are more engrossed and focused on carrying out instructions and performing tasks rather than on the language used.

The significant progress made by the research subjects as a whole is quite impressive. Recall in chapter 4 that the research subjects received 10 hours of lessons in English. For the imitation task, they were requested to repeat stimuli verbatim after only listening to the stimulus once. In a review documenting evidence from Elicited Imitation studies from research in cognitive psychology (Bley-Vroman & Chaudron, 1994) state that imitation (of sentences) improves the more the foreign language is known. This therefore provides support for what was observed in the imitation task. Finally, the differences between the ratings of the expert judges does not mean that their ratings are not usable because in terms of overall impression,

they all rate the samples as significantly better in the post-test. I now turn to the analysis per expert judge.

Table 5.8 contains the minimum, maximum and mean scores, standard deviations and standard error deviations of the three expert judges who evaluated the imitation task. Total scores were computed per child. A score of 0 was used when the pre-test variant was evaluated to be better; a score of 1 was assigned when the post-test variant was judged to be better. When no decision between samples was made, a value of 0.5 was given. An average score was computed per rater. The results show a high standard deviation between the children, which represents the large variation between them. This confirms the variation seen earlier in the Peabody Picture Vocabulary Test.

Table 5.8: Descriptive statistics for the imitation task by rater.

	N	Minimum	Maximum	Mean	Std. Deviation	Std Error Mean
Rater 1	158	.15	1.00	.5388	.16093	.01280
Rater 2	158	.25	.80	.5308	.11584	.00922
Rater 3	158	.14	.91	.5707	.14648	.01165
Valid N (listwise)	158					

The large variation between the children would lead to the expectation that the three predictor variables – lesson frequency, subject matter and grade – have a noticeable effect. However, a mixed model analysis did not reveal any effect of these three variables, including no effect for grade. Grade 3 was not better than grade 1. A one sample t-test was applied to the scores of the three raters, the test value being .5 (no distinction between pre- and post-test). The results are reported in table 5.8. The mean values of the three raters were respectively .539 (SD=.161), .531 (SD=.116), and .571 (SD =.145). All three tests were significant ($t(157) = 3.03$, $p = .003$, $t(157) = 3.35$, $p = .001$, $t(157) = 6.07$, $p = .000$), implying that the children made progress, that was perhaps not spectacular yet consistent. In addition, while there is a change and improvement in pronunciation, no factors appear to influence this change. Combining the expert judges' scores is not wise. While there are significant correlations between the scores, they are far from perfect. Apparently there are some peculiarities in how the expert judges have rated the samples. Nevertheless, the important outcome is that all three expert judges agree that progress was made.

§ 5.3.3 Correlation between the Peabody Picture Vocabulary Test and the imitation task

Was there a relationship between the outcome of the Peabody Picture Vocabulary Test and L2 pronunciation? There is no relation between the progress made with regard to pronunciation and the progress made with regard to the Peabody Picture Vocabulary Test (respectively for the three raters $r = -.015$, $r = .052$, $r = .065$, $N = 158$, NS). Given the differences between the children, this is not an unexpected outcome.

§ 5.4 Summary

Did the English lessons have an effect on receptive vocabulary development and L2 pronunciation? Two curriculum-independent types of tests were performed at the child level to answer this. Both the Peabody Picture Vocabulary Test and the 11-word Imitation Task showed a significant difference in vocabulary development and native-like pronunciation. No effect was observed for grade, subject matter or lesson frequency, and in addition, no correlation between receptive vocabulary development and L2 pronunciation was established. What are the implications of these findings? First, while lexical development is significant, L2 pronunciation is not necessarily related to the ability to pick up words in the L2 classroom. Indeed, more emphasis was placed on interacting and communicating in English during the lessons and referring words to facilitate both was more important than pronouncing them correctly. Further, the L2 teacher hardly ever attended to improving children's L2 pronunciation during the study, because this is not a goal of a content language integrated learning approach. Nevertheless, the results are remarkable given that the children were able to show significant progress after only 10 hours of exposure using a syllabus that was based neither on form-focused instruction nor explicit phonetic instruction. This would suggest that implicit mechanisms of learning are at play during initial exposure in the early L2 classroom. In other words, "learners remain unaware of the learning that has taken place, although it is evident in the behavioural responses they make" (Ellis, 2009, p. 3). I shall explore the children's language behaviour in chapter 6, when interaction patterns are described.

Chapter 6

Results at the classroom level

§ 6.0 Introduction

How did children get on with the CLIL approach in practice? What can be said about their language behaviour towards the L2 teacher during initial exposure? What types of interaction patterns unfolded during the initial phase of L2 learning, and how salient were they? In this chapter I present descriptive material drawn from my corpus of classroom data. In order to describe the largest differences between first and final exposure (10 hours) the analysis is limited to the first two and final two lessons, and is further supplemented by the research journal. Section 6.1 recapitulates the main research questions in relation to L2 classroom interaction. Then in section 6.2, I discuss and define L2 interaction briefly, also in relation to linguistic modifications as a result of Collective Scaffolding and Foreigner Talk. Section 6.3 describes how the data were selected and coded for analysis, and I discuss (L1 and L2) data overlap. Subsequently, in section 6.4 and 6.5 I present the forms of interaction in the analyses.⁸⁵ Section 6.4 focuses on interaction, where some element of the English language is used by children in an effort to process and understand the L2 teacher's input or make themselves understandable when communicating with the L2 teacher. This means that the analysis on L2 interaction also includes L1 utterances that contain L2 elements. Section 6.4 describes Repetitions, English-intended utterances and Sensitivity to the L2.⁸⁶ Section 6.5 focuses on L1 interaction, and limits the illustrations to instances of Collective Scaffolding and Foreigner Talk, where the L1 is predominant. In contrast to L2 interaction, where the analysis has focused on L2-only utterances and mixed utterances during shorter periods of interaction, L1 interaction describes contexts in which longer periods of group interaction occur. Some overlap between the analyses described in section 6.4 and 6.5 can therefore be expected. In section 6.6 and 6.7, I describe the frequency patterns in the orthographic transcriptions of the same analyzed data. In keeping with sections 6.4 and 6.5, the data is divided into frequency of L2 interaction (section 6.6) and frequency of L1 interaction (section 6.7). Section 6.7 is quite short, because it only describes instances of Collective Scaffolding given that analyzing Foreigner Talk is not the main focus of enquiry in the present study. The inclusion of Collective Scaffolding is merited because of its

⁸⁵ I have made a selection from the corpus to capture the types of interactions in this chapter. Additional illustrations are available upon request.

⁸⁶ I have included some tabulated data in section 6.4 to illustrate the variation of frequency patterns in L2 interaction. This is limited to a description of the global results (section 6.6.1), Repetition (section 6.6.2) and English-intended utterances (section 6.6.3), Sensitivity to L2 use (section 6.6.4) and Collective Scaffolding (section 6.7).

saliency in lessons in the whole study. An inventory is made of Repetitions, English-intended Utterances, Sensitivity to L2 and Collective Scaffolding.⁸⁷ The frequencies in the inventory help to interpret the recurrence and importance of the L2 and L1 related instances. It is not appropriate to analyze these with statistical tests as the instances are not independent, and may be strongly related to child-specific rather than group-specific behaviour. I treat the numbers as indicators of emerging trends and possibly language development. It means as well that I will be cautious in relating them to subject-type and grade. Therefore I discuss the results in section 6.6 and 6.7 in terms of ranges rather than absolute numbers. Section 6.8 is a brief summary of other classroom observations not specific to L1 and L2 interaction. This chapter concludes with a summary of the results in section 6.9.

§ 6.1 The main research question

Relatively little is known about L2 interaction in the initial phases of second language acquisition among young sequential bilinguals in foreign language classrooms.⁸⁸ Yet observing and documenting children's early responses provide valuable insights into a developing linguistic repertoire, and the use of communication strategies during the unique onset period of language learning. An inevitable outcome of studying second language interaction in the present study is looking at the use of the first language to construct meaning because the learners cannot communicate adequately in the second language. This addresses the call for further research among learners with low proficiency, where time and input are limited (Philp & Tognini, 2009, p. 260-261).⁸⁹

“... learners’ use of L1 can be productive to L2 learning, particularly as a scaffold to participation for low-proficiency learners. Further research might explore the role of L1 or L2 learning and the way it may reduce or enhance learning opportunities ... Interaction as practices, particularly developing language competence through use of formulaic sequences may be particularly useful for learners with limited L2 resources and little time to build these up”.

In the present study children were taught in English during 10 hours of physical education or art and crafts lessons by the L2 teacher. Recall the main research question in relation to L2 classroom interaction:

⁸⁷ The analysis for English-intended utterances is divided into English-only utterances and language mixing. Sensitivity to L2 use is divided into playing with sounds, pronouncing names, the L2 teacher's English and other children's pronunciation. There is no inventory for Foreigner Talk because of its general dominance in the study, and because the focus of the analysis is on children's use of the L2.

⁸⁸ Baker (2006, p. 4) describes that “if a child learns a second language after about three years of age, it is termed consecutive or sequential bilingualism”.

⁸⁹ Philp and Tognini (2009) also include descriptive research concerning child and adult differences in relation to practices and outcome and the provision, and the use of corrective feedback as the two other main research trends relating to benefits of interaction in the foreign language context.

1. How does the L1 child behave towards and interact with the L2 teacher in the initial stages of L2 exposure in the classroom, and do these patterns of interaction change over time?

In keeping with chapter 5 and chapter 7, the results also describe developmental changes based on age (grade 1 versus grade 3), subject matter (art and crafts or physical education), and lesson frequency but these are limited to the frequency patterns presented in sections 6.6 and 6.7.⁹⁰

§ 6.2 Interaction

The term *interaction* in relation to language can be broadly defined as “the use of language for communicative purposes, with a primary focus on meaning rather than accuracy” (Philp & Tognini, 2009 p. 246). Interaction can play an important role in acquisition not just in relation to establishing communication; it also plays an essential role in triggering the acquisition process itself. The basic underlying principle of interaction research amounts to the argument that communication is a necessary condition for language acquisition (Wagner, 1996). Pica, Young and Doughty (1987, p. 740) describe the role of interaction as follows:

“... learners and their interlocutors negotiate the meaning of messages by modifying and restructuring their interaction in order to reach mutual understanding. As a result of this negotiation, learners come to comprehend words and grammatical structures beyond their current level of competence and ultimately incorporate them in their own production”.

§ 6.2.1 Interaction in second language acquisition

Research on interaction in second language acquisition has been concerned with establishing whether (1) communication and language acquisition are interlocked, (2) interaction aids comprehension, (3) interaction aids acquisition, and (4) whether salient modifications in interlocutors’ speech impede or encourage successful communication outcomes. Since the sixties and seventies, three dominant theoretical frameworks concerning interaction in second language acquisition have emerged: (1) Krashen’s Input Hypothesis (1982, 1985), (2) Long’s Interaction Hypothesis (Long, 1981), and (3) Swain’s Output Hypothesis (Swain, 1985). In each of these hypotheses, the study of interaction has been concerned with *input*, “any stretch of the target language which is available to learners” (Young 1988, p. 122), *intake*, specifically what goes in rather than what is available to the learner (Corder, 1967) and *output*, the interlanguage that is produced by the learner (Færch & Kasper, 1983).

⁹⁰ This is shown by comparing data from the initial hour and the final hour of the study.

§ 6.2.2 Interaction in L2 classrooms

Generally speaking, research on interaction in the L2 classroom focuses on the pedagogical purposes and linguistic forms or patterns of interaction in the language classroom that bring about language learning in instructed settings (Seedhouse, 1994). Classroom-based research is however much broader, and concerns “style-shifting in classroom interlanguage, cross-cultural comparisons in the use of speech acts, turn-taking behaviour of students and teachers, patterns of participation in native speaker and nonnative speaker interactions, the treatment of learners’ errors and the nature of the linguistic input provided by teachers” (Allen, Fröhlich & Spada (1983, p. 231).

Chaudron (1988) states that interaction analysis and discourse analysis make up important strands of classroom-based research. The analysis concerns classroom behaviour and interactions determined by coding classroom interactions using (observation) schemes such as the COLT scheme (Communicative Orientation in Language Teaching). Linguistic analysis of classroom interactions use transcripts to analyze utterances, which have been assigned to predetermined categories (Nunan, 1989). In bilingual classrooms, Martin-Jones (2000, p. 2) claims “attention shifted away from the communicative functions of individual utterances to the sequential structures of classroom discourse [...] the joint enactment of teaching and learning by bilingual teachers and learners rather than just on teacher talk”. The role of code-switching as a means of contextualization has also been the focus of research interest. Both teachers and learners use contextualization cues in the bilingual classroom. Martin-Jones (2000) states that contextualization cues are the use of verbal and non-verbal forms in a communicative encounter when the pattern of interaction deviates from what was expected to occur. These forms can be phonological, lexical and syntactic choices or different types of code switching and style shifting that can both operate at the prosodic, paralinguistic, kinesics and gestural level. It also relates to the provision of translations, reformulations, clarifications and explanations in participant-related code-switching, and links with inside and outside the classroom. This particularly concerns primary bilingual classrooms where the linguistic repertoires of the learners may still be in early development.

In the present study, I am primarily interested in the children’s L2 language behaviour, and how it develops in response to an environment where the L2 teacher continuously uses English to teach subject matter. However, because learners with low proficiency react differently than learners with a threshold or higher proficiency, the role of the L1 has to be accounted for (Philp & Tognini 2009). The analyses on L2 classroom interaction in the present chapter are an eclectic mix of traditional analyses on L2 classroom behaviour, frequency patterns of L2 interaction in the classroom (focusing on the children’s language responses in the L2, either as complete L2 utterances or mixed with the L1) in addition to frequency patterns of L2 interaction in the classroom limited to Foreigner Talk and Collective Scaffolding as tools to construct meaning.

§ 6.2.3 Studying L2 interaction in L2 classrooms

One of the main concerns of interaction research in second language acquisition relevant to the present study is how changes in interaction facilitate (situational) comprehension in circumstances of threatening incomprehension or failed comprehension. Long (1983b) describes interaction as exchanges in spoken discourse in the target language between a learner (novice) and two or more interlocutors (novice or experts) who are focused on some kind of activity in which the meaning of unclear words or structures is resolved. In order to reach a consensus, novices and experts therefore modify the discourse in order to make it comprehensible. Similarly, Wagner states that the modifications made are “either due to the speaker’s (S) inability to find the English word or triggered by her partner’s demonstrated non-comprehension” (1996, p. 217). Wagner distinguishes these modifications at the level of the interlocutor or at the level of the discourse itself. That is (1) interactional compensation for the speaker’s deficits (communication strategies) or the listener’s deficits (speech modifications, conversational adjustments, interlanguage adjustments or interactional modifications) and, (2) interactional comprehension at the level of the discourse itself (interaction of comprehension, negotiation of comprehensible input or discourse accommodation) (Wagner, 1996).

Interactive input understood to promote comprehensible input is termed negotiation of meaning. Gass (1997, p. 107) states that “negotiation refers to communication in which participants’ attention is focused on resolving a communication problem as opposed to communication in which there is a free-flowing exchange of information. Negotiation includes, then, both negotiation of form and negotiation of meaning [...]”. Long (1983a) was one of the first to identify descriptive categories for interaction, which were shown to be useful to (1) “avoid conversational trouble”, and (2) “to repair the discourse when trouble occurs” (Long 1983a, p. 131):

- Conversational frames
- Confirmation checks
- Comprehension checks
- Clarification requests
- Self-repetitions
- Other-repetitions
- Expansions

Interaction in conversational discourse can also be categorized according to the “functions they serve in conversations” (Long 1983a, p. 127). Table 6.1 shows how these functions can be divided into types of strategies and tactics (adapted from Long 1983a, p. 132) but other models also exist.⁹¹

⁹¹ For example Varonis and Gass’s model depicts different descriptions of interaction where the non-understanding routines in nonnative speaker discourse are characterized by four functional primes (1985, p. 73) per non-understanding routine.

Table 6.1: Overview of strategies and tactics (adapted from Long, 1983a, p. 132).

Strategies for avoiding trouble	Tactics for repairing trouble	Strategies and tactics for avoiding and repairing trouble
Relinquish topic control	Accept unintentional topic-switch	Use slow pace
Select salient topics	Request clarification	Stress key words
Treat topics briefly	Confirm own comprehension	Pause before key words
Make new topics salient	Tolerate ambiguity	Decompose topic-comment constructions
Check NNS's comprehension		Repeat own utterances
		Repeat other's utterances

In the present study, Long's framework is more relevant than Varonis and Gass's (1985) model because he accounts for exchanges with native speakers. Nonetheless, I have not been able to use Long's framework to the full for the following reasons:

- The limited linguistic repertoires of the research subjects greatly restrict L2 interactions with the L2 teacher. While the L2 teacher generally provides the conversational frames and performs confirmation, comprehension and clarification checks in the L2, the research subjects cannot respond adequately in the L2. This makes Long's categories superfluous for the purposes of my analysis. This is with the exception of Self-Repetitions and Other-Repetitions, which were salient linguistic modifications in the discourse so I have included them in the analysis.
- A substantial number of studies on L2 interaction study dyadic (adult or child) interaction in controlled laboratory settings, which do not capture the dynamic group interaction that prevailed in the present study.
- The present study drew on a larger corpus of data, and included both negotiations of meaning and free-flow exchanges whereas many studies on L2 interaction focus on examining negotiations of meaning only.

§ 6.2.4 Studying L1 interaction in L2 classrooms

It is not difficult to concede that very young learners in the initial stages of the second language acquisition process seek communicative compensation through L1 use. This means that Foreigner Talk (Ferguson 1971, 1975) and Scaffolding must also feature in our considerations of interaction in the L2 classroom (Hatch, 1978).

(Collective) Scaffolding

Scaffolding techniques are used when native speakers attempt to maintain communication with their nonnative-speaking partners during a series of conversational turns. In bilingual classrooms, scaffolding refers to "how the teacher supports the student by a careful pitching of comprehensible language" (Baker 2006, p. 301) Scaffolding therefore embraces the types of modifications used by native speakers and nonnative speakers or in the case of the present study, the collaborative efforts of children constructing knowledge:

“Classroom language learning and the learning strategies constructed there are the result of a process of mediation analogous to other forms of socioculturally mediated developments ... In short, strategic orientation to tasks originates in mediated goals-directed interaction”
(Donato & McCormick, 1994, p. 456)

In the present study, examples of scaffolding are profuse, occurring in both small and large group interaction. Jointly constructing knowledge in an effort to make input more comprehensible reflects Vygotskian (Vygotsky, 1962) perspectives on meaningful social interaction into mediating language learning. In the present study, the frequency of collective scaffolding among the research subjects is high. Although scaffolding generally refers to the efforts of the (L2) teacher to help make input comprehensible for the novice learner, I use it to describe the level of collective collaboration in L1 peer interactions in the early L2 classroom. I report these instances because of their pervasiveness in the early L2 classroom.

Foreigner Talk

The term ‘Foreigner Talk’ was coined in the early 1970s, and denotes a simplified speech register that (language) communities use with people who are considered incapable of understanding the normal speech of the community:

“A register of simplified speech ... is the kind of ‘foreigner talk’ speakers of a language to outsiders who are felt to have very limited command of the language or no knowledge of it at all ... languages seem to have particular features of pronunciation, grammar, and lexicon which are characteristically used”
(Ferguson 1971, p. 143).

Ferguson (1971, 1975) describes differences between standard English and Foreigner Talk at the level of phonology (slow rate, loudness, clear articulation, emphatic stress, exaggerated pronunciation, addition of a vowel after a word-final consonant e.g. *talkee talkee* and a few reduplicated forms), lexis (foreign language words, synonyms or paraphrasing), and syntax (omissions, expansions and replacements or rearrangement). Hatch (1983) offers a similar categorization of the language characteristics relevant to Foreigner Talk in her review of language addressed to learners: suprasegmentals (exaggerated intonation, gesture, loud speech, pauses, slow rate); phonological (clear enunciation, simplification); semantic (concrete lexicon), syntax and communication devices (repetition of words and phrases, rephrasing).⁹²

⁹² For syntax, Hatch (1983) lists the following: fewer coordinate, subordinate or embedded clauses, more imperatives, *no* + verb negation; omission of articles, omission of copula, omission of possessive, omission or wrong word endings, omitted pronoun or use of nouns, more tag questions, greater use of 1-word utterances, more questions, fewer questions, fewer verbs and more content words,

An important feature of Foreigner Talk is that it shares some, though, not all characteristics of caretaker speech and baby talk and can therefore be considered to form the same family of simplified registers (Ferguson, 1977; Snow 1977, 1979).⁹³ Foreigner talk is therefore not necessarily a degenerate form of input because of the shared features it has with first language acquisition among young children.⁹⁴ Identical features are frequent pauses, limited vocabulary and succinctness; shared features are the use of repetitions (self and other) and differences from baby talk are for example that Foreigner Talk is spoken louder, has phonological distinctions, a special lexicon and grammatical replacements (insertion of subject *you* in imperatives and replacement of pronouns (*me go* instead of *you go*) and analytic paraphrase (always = all time) (Freed 1981, p. 19). Ungrammatical Foreigner Talk is more pervasive if (1) the NNS has very limited command of the language of communication; (2) the NS is, or thinks he or she is, of higher social status than the NNS; (3) The NS has considerable FT experience, and (4) the conversation occurs spontaneously (Long, 1981). In the present study I limit the analyses to determining lexical, syntactic and phonological simplifications in the L1.

§ 6.3 Selecting, analyzing and coding selected data

As previously mentioned, my analysis on classroom observations is based on orthographic data, and is supplemented by a research journal and video recordings. Data is missing for Omega 1&2a (lesson 1), Eta 1&2b (lesson 2), Eta 3 (lesson 2) and Epsilon 3&4 (lesson 1) owing to technical problems with the recording equipment. The Gamma grade 3 group had one-hour lessons rather than 30-minute lessons so one transcript was available for lessons 1 and 2 and lessons 19 and 20. The complete corpus of audio recordings is 130 hours or 230 lessons.

Initially, a pre-selection of recurring interactions was taken from the raw data for the first analyses. These were divided into (1) Classroom Rituals (greetings, instructions, vocabulary review and farewells), (2) Interesting Events (birthdays, holidays, accidents, absences, cultural and religious occasions), and (3) Other Recurring Events (singing, laughing, crying and L1 use). However, categorizing the data in this way resulted in an overlap of events. For example, birthdays (an Interesting Event) were often introduced by the children themselves during greetings (Classroom Rituals). This is why complete raw data was used instead, coded for L2 interaction that comprised some element of English in the discourse (Repetitions, English-intended utterances and Sensitivity to L2), and L1 interaction (Collective Scaffolding and Foreigner Talk) where L1 use was pervasive. Once this was established, a method of defining, coding and counting these fragments was necessary to enable further illustration and analysis.

⁹³ Snow (1977, p. 36) characterizes mothers' speech to children as follows: simple and redundant; contains many questions and imperatives; few past tenses, coordinates, subordinates and disfluencies; pitched higher and exaggerated intonation.

⁹⁴ However, Long (1981) points out that ungrammaticality in Foreigner Talk was more evident in laboratory-type and classroom studies rather than studies in natural settings, possibly owing to methodological problems and the nature of comparisons conducted.

Definitions, coding and counting for L2 interaction

The following explains how Repetitions, English-intended utterances and Sensitivity to L2 were defined, coded and counted for analysis and illustration.

- Earlier it was shown that Long (1983) states that repeating one's own and others' utterances is used to repair and avoid communication problems. In the present study, a *Repetition* is an immediate verbatim response of the teacher (teacher repetition = TR) or child (child repetition = CR) that is made by a child or the group. Each separate instance was counted in the data. I group the two categories of Repetitions together because they often occurred together within a conversational frame.
- An *English-intended utterance* (English-intended word = EIW or English-intended sentence = EIS) is not a repetition or an imitation. It creates new meaning or shows that meaning has been understood. It may include partial repetition of a previous word or words. Repeating part of a sentence or selecting one word in a sentence is seen as an intentional act, which shows an understanding of the most important linguistic features needed for comprehending input. Each separate utterance with some element of English was counted. I group the two categories of English-intended utterances together because they often occurred together within a conversational frame.
- *Sensitivity to L2* denotes any phonological response in the data that led to or was meant to lead to a (successful) communication exchange. I counted each instance of playing with sounds (= PWS). For the remaining categories – pronouncing names (sensitivity to teacher's pronunciation of children's L1 names = STP), L2 teacher's English (sensitivity to teacher's use of English in comparison to child's L1 = STE) and other children's pronunciation (L1 child's sensitivity to other L1 child's L2 pronunciation = SCP) – each situation in which Sensitivity to L2 took place was counted. This was because playing with sounds (playing with sounds = PWS) was the most salient category, which had many instances of genuine English-sounding words, while the interaction patterns of the other three categories contained significantly more corrections in Dutch. I am aware these three categories may be considered L1 interaction. However, I cluster all four together under Sensitivity to L2 because children's responses had been provoked by the use of an English word or sentence. I report the four different types of Sensitivity to L2 separately because they were so few examples, but nevertheless relevant in the data that was analyzed. Table 6.2 is an overview of the forms of interaction, their codes and where they can be found in this chapter.

Table 6.2: L2 interaction: overview of interaction types, definitions and codes.

Interaction type	Definition	Code	Section	Example
Repetition	Teacher Repetition	TR	§ 6.4.1	1-4
	Child Repetition	CR		
English-intended utterance	English-intended word	EIW	§ 6.4.2	5-20
	English-intended sentence	EIS		
Sensitivity to L2	Playing with L1 or L2 sounds	PWS	§ 6.4.3	21-25
	Pronouncing names	STP	§ 6.4.4	26-27
	The L2 teacher's English	STE	§ 6.4.5	28-30
	Other children's pronunciation	SCP	§ 6.4.6	31

Definitions, coding and counting for L1 interaction

Collective scaffolding describes an instance of constructing meaning to make input understandable in a group context. Foreigner Talk describes instances of L1 simplification at the level of lexis, syntax and phonology. Situations of L1 use in relation to simplification were very prevalent given the L1 language dominance. For this reason, I did not count the data. Table 6.3 is an overview of the forms of interaction and their codes and where they can be found in this chapter.

Table 6.3: L1 interaction - overview of interaction types, definitions and codes.

Interaction type	Definition	Code	Section	Illustrations
Collective Scaffolding	Collective collaboration	CC	§ 6.5.1	32-45
Foreigner Talk	L1 use	L1U	§ 6.5.2	46-56

§ 6.4 Forms of L2 interaction

I will now focus on several types of L2 interaction: Repetitions, English-intended utterances and Sensitivity to L2. All these forms contain some element of the L2. Where appropriate, I have translated children's utterances into English, and placed them at the end of the utterance in italics and brackets. If the utterances are mixed, I have kept to the Dutch syntax. If they are L1 utterances, I have translated them using English sentence structure.

§ 6.4.1 Repetitions

Repeating the teacher and repeating a child (or group) were very salient features of classroom discourse, and were most frequent during ritualistic events like greetings, vocabulary reviews and farewells. In art and crafts lessons, colour words and topic-specific words (for example parts of the body or farmyard animals) were commonly repeated. In physical education, the teacher's instructions were sometimes repeated. Fragments 1 to 4 that follow illustrate how repetitions took place during two greetings, a farewell and an instruction.

Generally speaking, the vast majority of children appeared to know how to greet the teacher and say goodbye. At the very beginning of the study, children waited for the teacher to initiate the greeting ritual but by the end of the study, children were doing this by themselves. Grade 1 children were less likely to engage in greetings and goodbyes with the teacher at the beginning of the study while grade 3 children seemed more interested and less apprehensive about engaging in contact with the

teacher. The transcriptions show that this difference is no longer noticeable by the end of the study. In fragment 1, the L2 teacher and the class have greeted one another. At the early stage of the study, the correct salutation might well reflect that the pragmatic function of greetings in the L1 has been transferred to the L2. However, the teacher's second greeting, *how are you?* is repeated verbatim. It suggests that verbatim repetition could be due to a lack of contextualization or comprehension. The option of not responding at all or responding using 'yes' or 'no' is not employed. This might denote that in the initial phase of exposure repetition is used to lengthen communication with the L2 teacher and maintain contact.

1. [Be1a:2]

Teacher	so good morning.	
Group	good morning.	EIS
Teacher	ggg. how are you?	
Group	how are you?	RT
Teacher	oh I'm fine thank you.	

Fragment 2 shows a similar pattern of repetition behaviour but differs because one child responds to *how are you?* with *yes*. By the end of the study, this child might have inferred the meaning of the open question *how are you?* from the closed Dutch question *alles goed met je?* (are you okay?).

2. [Be1b:19]

Teacher	morning.	
Group	morning.	RT
Teacher	ggg. so.	
Student 1	so.	RT
Teacher	ggg. how are you?	
Group	how are you?	RT
Student 1	yes.	EIW

I now turn to farewells. My research notes describe farewells as a highly exaggerated event, and was particularly overdone in grade 1. This was achieved in grade 1 by repeating the word *bye* very often. This form of repetition was more likely to take the shape of loud chanting in chorus rather than directed contact meant for the teacher. This did not occur with the same intensity among the grade 3 groups. Fragment 3 is of a child repeating another child. Someone has learned the word *spaghetti* and decided to use it in a spontaneous response to the teacher's farewell greeting. This attracts the attention of many children, and even though the L2 teacher signals the incorrect word and tries to ignore it, it is too late. *Spaghetti* has caught on and has become a source of hilarity in the classroom. It is not until the end of the repartee when the teacher is leaving that a child finally responds appropriately. It would seem that stringing odd combinations of words together in English is an amusing way for children to communicate for longer with the L2 teacher. The L2 teacher accepts the farewell greeting and within seconds, the usual farewell routine is restored.

3. [Ep1:20]

Teacher	bye.	
Student 3	spaghetti.	EIW
Teacher	spaghetti? no you mean Vanessa? bye bye	
Student 1	bye spaghetti.	EIS
Teacher	bye Hendrikje.	
Student 2	bye spaghetti.	RC
Group	bye bye	EIS
Student 3	bye spaghetti.	RC
Student 3	bye spaghetti.	RC
Teacher	bye.	
Student 1	bye bye Vanessa.	EIS

Fragment 4 is repeating a child. In this fragment, the L2 teacher is giving children instructions about colouring in a picture and elicits what the picture is. A child correctly responds to the L2 teacher's question and the response is repeated by another child and then by the entire class. This interaction pattern – L2 teacher (elicitation), L1 child (English-intended word), L1 child (repeating a child) and L1 group (repeating a child) – occurred frequently in the research groups and might show that repeating a child is beneficial for whole class learning.

4. [A13:2]

Teacher	Today you're going to colour in this. Do you remember what this is from last time?	
Student 1	rainbow.	EIW
Student 2	rainbow.	RC
Group	rainbow.	RC

§ 6.4.2 English-intended utterances

Perhaps one of the most striking and unexpected outcomes of the present study, in addition to the emergence of English one-, two- and three-word utterances, is the gradual emergence of language mixing (or mixed utterances) from the beginning of exposure. Research on first language bilingual acquisition shows that a high incidence of language mixing is characteristic of the initial stages of the language acquisition process and it also diminishes over time (Arias & Lakshmanan, 2005; Bhatia & Ritchie, 1999; Genesee, 1989; Myers-Scotton, 1993; Myers-Scotton & Jake, 2009; Poplack, 1980; Redlinger & Park, 1980; Volterra & Taeschner, 1978).⁹⁵ The study of code mixing in the bilingual classroom is not new, but is less widely documented in L2 learners (Gardner-Chloros, 2009). As such, the emergence of language mixing in the present study provides insights into the L2 child's

⁹⁵ Research on language mixing can be broadly divided into investigating intra-sentential code mixing which examines the type and position of linguistic elements being inserted within a sentence, and inter-sentential code mixing which examines the use of two languages within conversational turns in spoken discourse. The mixing/switching of linguistic elements within a sentence can take place at the level of phonology, lexis, morphosyntax, pragmatics and semantics (Poplack 1980, Genesee 1989, Myers-Scotton 1993, 2009).

developing linguistic repertoire during the unique onset period of acquisition. The examples used have been divided into English-only utterances and mixed-utterances. I start with English-only utterances first.

English-only utterances

The data confirm that children could follow basic instructions. When instructions were used for the first or first few times, the L2 teacher demonstrated what was meant by setting the example, using props or by using the educational puppet, Polly. Transcriptions show that in the physical education research groups, and particularly at the Omega school, individual children answered *yes* to the instructions, and this was often followed up with the entire group doing the same, as in fragment 4. I begin with greetings and the overuse of *yes* in grade 1 physical education groups and the grade 3 art and crafts children. Interestingly, in contrast to frequently using *yes*, using *no* was very rare. Fragments 5 and 6 show how the confirmation word *yes* was used to answer the L2 teacher's questions during greetings. It is difficult to interpret whether children have really understood what the L2 teacher has asked but it would seem that the children have realized that using *yes* engages the L2 teacher in further conversation, and is therefore conducive to maintaining interaction.

5. [Et3:19]

Teacher	so good afternoon.	
Group	yes.	EIW
Student 1	yes.	CR
Teacher	how are you all?	
Group	yes	EIW
Teacher	are you fine?	
Group	yes.	EIW
Teacher	how was your weekend? did you have a nice weekend?	
Student 1	yeah.	EIW
Student 2	yes.	EIW
Teacher	yeah oh. okay.	

6. [Ep3:19]

Teacher	so morning.	
Group	good morning.	EIS
Teacher	how are you?	
Student 1	fine.	EIW
Student 2	yes.	EIW

Fragment 7 shows how a core instruction from the L2 teacher's long utterance has been selected and produced by a child. The child has been able to select the imperative form perfectly. Fragment 8 shows a similar pattern but is a two-step process. Both examples show how children can pick out meaningful formulaic chunks from the L2 teacher's long utterance and show a form of lexical processing.

7. [Om1a:19]

Teacher	huh? take your coats off and then go and sit on the bench okay? oh.	
Activity	children go and sit on the bench.	
Student 1	on the bench.	EIS
Teacher	on the bench yeah.	

8. [Et1:20]

Teacher	is everybody quiet? so we are going to walk back to the room now.	
Student 1	quiet.	EIW
Teacher	yeah. yeah but really uh. ssh.	
Student 1	really quiet.	EIS

Fragment 9 describes children doing a picture dictation, is one of the most interesting fragments because it illustrates the high amount of interaction between peers and the L2 teacher. Children have to add a rainbow to their picture but time is running out. A lot is happening in the fragment: collective scaffolding is pervasive, there is a great deal of repetition and a variation of negating utterances (in italics: *no finished / bijna finished*) and how the word *tree* is understood (*trees / boom / three booms* (language mixing, plural 's') / *Christmas tree*). There are 15 English-intended utterances in this fragment, of which 11 are multi-word.

9. [Ga3:19&20]

Teacher	there is a rainbow in my picture.	CC
Group	rainbow.	EIW
Teacher	the rainbow is in the sky.	
Student 1	oh in de lucht. (<i>oh in the sky</i>)	
Teacher	the colours of the rainbow are blue red yellow green orange and purple. there's a rainbow in my picture and the rainbow is in the sky. the colours of the rainbow are blue red yellow green orange and purple.	
Student 1	groen of rood. (<i>green or red</i>)	
Teacher	orange.	
Student 1	orange is toch oranje he? (<i>orange is oranje isn't it?</i>)	EIS
Teacher	thank you.	
Student 1	rood geel en dan? (<i>thank you. red yellow and then?</i>)	
Teacher	there is a rainbow in my picture. shh listen.	
Student 1	maggen we naar huis? (<i>can we go home?</i>)	
Teacher	blue.	
Student 1	blue.	RT
Teacher	red.	
Student 1	red.	RT
Teacher	yellow.	
Student 1	yellow.	RT
Teacher	green.	
Student 1	green.	RT
Student 2	orange.	EIW
Teacher	orange. and purple.	

Student 1	purple.	EIW
Student 2	en een zacht blue? (<i>and a light blue?</i>)	EIS
Student 3	blue yeah.	EIS
Student 1	rood geel en dan blauw he? (<i>red yellow and then blue right?</i>)	
Student 2	rood geel. (<i>red yellow</i>)	
Student 3	rood geel. (<i>red yellow</i>)	
Student 1	blauw. (<i>blue</i>)	
Student 2	rood geel. (<i>red yellow</i>)	
Student 3	paars. (<i>purple</i>)	
Teacher	hey Naomi where is your rainbow? ah like that. okay so have you finished the rainbow?	
Group	yes. no.	EIW
Student 1	no finished.	EIS
Teacher	a little bit faster.	
Student 2	ja.	
Student 1	no finished.	EIS
Teacher	not finished okay we'll wait.	
Student 1	ze wacht wel hoor. (<i>she'll wait you know</i>)	
Teacher	blue. red yellow green	
Student 1	orange and purple.	EIS
Student 2	purple purple orange heb ik nog niet. (<i>purple purple orange have I yet not</i>)	EIS
Teacher	orange? ask somebody maybe uh Ko*a uh yeah. oh Kane you have to sit down because of the video okay?	
Student 1	no no no no no.	EIS
Teacher	it's ok if you haven't finished that's all right.	
Student 2	no finished.	EIS
Teacher	not finished I know it's okay ggg.	
Student 1	bijna finished. (<i>almost finished</i>)	EIS
Teacher	okay next part of the picture. oh. there are three trees in my picture.	
Student 1	wat? (<i>what?</i>)	
Student 2	trees. boom. (<i>trees tree</i>)	EIS
Teacher	there are three trees in my picture.	
Student 1	three booms. (<i>three trees</i>)	EIS
Teacher	trees.	
Student 1	Christmas tree.	EIS

Songs and rhymes were used in class to introduce new themes and corresponding vocabulary. They contributed to active participation and a positive group atmosphere. It helped focus children's attention in the group, particularly in grade 1. With the introduction of new songs, children tried to hum the tune or say the words. I often noted how children enjoyed singing different types of songs in class and sometimes requested particular songs in class. Fragments 10 and 11 show how short segments of (repetitive) song text can be picked up by children and then used appropriately at a later point in time in response to such a request.

10. [Et1:20]

Teacher	let's sing a song about stars. are you ready? do you remember?	
Student 1	twinkle twinkle xxx star.	EIS
Teacher	yeah good.	

11. [Ep1:20]

Teacher	ok we are going to do another song uhm.	
Student 1	the wheels.	EIS
Teacher	pardon.	
Student 2	the wheels.	CR
Teacher	the wheels okay. Are you ready?	
Group	the wheels on the bus go round and round round and round round and round.	EIS ⁹⁶

Counting was also well-liked in lessons. In grade 1 physical education lessons, counting was used to initiate an activity (like tag) or get children to queue up at the door. For the art and crafts lessons, children in grade 1 often counted together with the L2 teacher when she wanted to wrap up the lesson and get children to return from working at their desks and into the circle. Counting has the overall effect of getting children's attention and hurrying them up. The ability to count was generally up to ten for grade 1 and up to twenty for grade 3. Fragment 12 describes how a counting sequence was first initiated by the L2 teacher in an attempt to get children to tidy up quicker, and shows how it is taken over by the group without encouragement.

12. [Et3:2]

Teacher	okay one. two.	
Group	three four five six seven eight nine ten eleven twelve thirteen xxx.	EIS

This section concludes with a closing sequence of a physical education lesson. Several children are saying *bye* or *goodbye* to the teacher. Notice also *doei doei* for 'bye bye' by one of them. At the end of the sequence, one of the children introduces *I love you*, inappropriate for a farewell greeting but friendly. At the end of the segment, it seems as if *I love you* might have been used to show off to peers and the L2 teacher. Fragment 13 also shows that children feel free to experiment with English words and phrases they have learned outside the classroom.

⁹⁶ This has been coded as an English-intended sentence in this fragment, however in the analysis, songs were not counted as English-intended sentences. This code has been used for illustration purposes only.

13. [Om1c:19]

Teacher	yeah you can go.	
Student 1	xxx bye.	EIW
Teacher	go to your classroom.	
Student 2	bye.	EIW
Student 1	xxx bye.	EIW
Student 2	twee aan twee. (<i>two by two</i>)	
Student 3	goodbye.	EIW
Teacher	ssh.	
Teacher	bye.	
Student 1	I love you.	EIS
Student 2	I love you.	CR
Student 3	bye.	EIW
Student 1	bye.	CR
Student 2	doei xxx doei doei xxx doei. (<i>bye xxx bye bye xxx bye</i>)	
Teacher	ssh.	
Student 1	bye bye.	EIS
Teacher	bye.	
Student 2	I love you.	EIS
Student 3	I love you.	CR
Teacher	Yeah.	
Student 1	I love you.	CR
Student 2	ik zei ook I love you. (<i>I said also I love you</i>)	EIS

Language mixing

Fragment 14 is the first example of language mixing and is also the most impressive one-to-one teacher-child example in the present study because it shows experimentation with the L2 at initial exposure in a first lesson in grade 1. It is taken from the end of a physical education lesson while children are putting on their coats before leaving the gymnasium and one child is asking the L2 teacher to help him do up his coat. The child has maintained the L1 syntactic structure but substituted the Dutch modal verb and Dutch pronoun for the correct English alternatives and then changed the Dutch infinitive to a continuous form.

14. [Om1a:1]

Student 1	can you mij helping? can you mij helping? (<i>can you me help-ING? can you me help-ING?</i>)	EIS
Teacher	can I help you? very good can I help y*a yes stand up.	
Student 1	de knopjes moeten nog. (<i>the buttons must still</i>)	

The next fragment shows a substitution of the Dutch noun with *scissors* within an intact Dutch syntactic structure.

15. [Be1a:19]

Student 1 juffrouw Vanessa mag ik de scissors doen? (*Miss can I the scissors do?*) EIS

Teacher Yeah? Yeah you can have the scissors yeah.

Patterns of interaction not only show how English-intended utterances are used to negotiate meaning; they also illustrate the importance of collective scaffolding. In fragments 16 and 17 two yellow objects, including a flag have been spotted in the classroom. Instead of pointing, a different child identifies a yellow butterfly 'vlinder' and is later helped by peers to make the input comprehensible to the L2 teacher. After pointing out the yellow butterfly to the L2 teacher, the L2 teacher offers the class the English equivalent and asks them to repeat the word. One child does so and the teacher follows up by asking the class to repeat the word again. Again, a child uses the Dutch term and after correction, one child does a partial repetition, which is later followed up by an English-intended utterance. The example exemplifies how children negotiate meaning in their L1; use contextual clues and highlights the importance of collective scaffolding in helping to support the learning process.

16. [A13:1]

Teacher	where's yellow?	CC
Activity	child points.	
Teacher	that's yellow very good. where else is yellow? yeah?	
Activity	a child points to a flag.	
Teacher	the flag? yeah. that's also yellow where else is yellow? where else is yellow? yeah?	
Student 1	de xxx. de vlinder. (<i>the xxx. the butterfly</i>)	
Teacher	what is that?	
Student 1	vlinder xxx. (<i>butterfly xxx.</i>)	
Student 2	xxx.	
Student 3	there.	EIW
Student 1	ja. (<i>yes</i>)	
Student 2	vlinder. (<i>butterfly</i>)	
Student 3	de gele. (<i>the yellow</i>)	
Student 1	vlinder. (<i>butterfly</i>)	
Student 2	da's een vlinder. (<i>there's a butterfly</i>)	
Teacher	I don't know. come show me wh*a what is that show me.	
Student 1	xxx.	
Student 2	hij haangt een beetje aan een xxx. (<i>it's hanging a little on a xxx</i>)	
Student 3	door xxx. (<i>through xxx</i>)	
Teacher	oh you know what that is? that's a butterfly. can you say butterfly?	
Student 1	yeah dat is een vlinder. (<i>yeah that is a butterfly</i>)	
Student 2	dat is xxx. (<i>that is xxx</i>)	
Teacher	butterfly. what is vlinder? I don't know what vlinder is.	
Student 1	dat is dat is een vlinder. (<i>that is that is a butterfly</i>)	
Teacher	no that's a butterfly in English.	
Student 1	butterfl*a	EIW

Student 2	ggg.	
Teacher	it's a butterfly in English.	
Student 1	xxx.	
Student 2	dat is iemand's butterfly. (<i>that is someone's butterfly</i>)	EIS

Fragments 17 to 20 are from physical education lessons and show patterns of interaction in which misconduct comes to light. Pushing and shoving, though not allowed in class, was often a source of frustration. Fragment 17 shows a child's sophisticated, persistent and successful effort at explaining to the L2 teacher that someone has pushed her down onto her knees. The child is able to convey the L2 teacher's disapproval back to the peer who is responsible for the accident in the first place.

17. [Om1c:20]

Student 1	she uhm weet je she pushed me. (<i>she uhm know you she pushed me</i>)	EIS
Teacher	who pushed you?	
Student 1	she pushed me op mijn knie. (<i>she pushed me on my knee</i>)	EIS
Teacher	who? who? Uhm go show me who pushed you. show me. tell her not to push you. tell her not to pu*a (three turns irrelevant to the conversation)	
Student 1	ggg.	
Student 2	she pushed mij op mijn knees. (<i>she pushed me on my knees</i>)	EIS
Teacher	oh I didn't see it xxx. tell her not to do it ok?	
Student 1	oh*x je mag niet duwen. (<i>oh*x you are not allowed to push</i>)	

During the physical education lessons in the present study, girls tended to enjoy holding hands when they were not supposed to, and boys enjoyed sliding on the floor when they were not allowed to. The L2 teacher, who used the phrase *no sliding on the floor*, always corrected such behaviour. In fragment 18, one of the boys proudly reports that he has, in fact, not slid on the floor during the entire lesson. It is another exceptional example of a longer English-intended sentence for grade 1.

18. [Om1c:20]

Student 1	ik heb geen een keer sliding op de floor gedaan. (<i>I have not once sliding on the floor done</i>)	EIS
Teacher	pardon?	
Student 1	ik heb xxx keer sliding on the floor gedaan. (<i>I have xxx once sliding on the floor done</i>)	EIS
Teacher	sliding on the floor?	
Student 1	yeah.	EIW
Teacher	Noah.	
Student 1	ik heb het geen een keer gedaan. geen een keer. (<i>I have not it once done. not once.</i>)	
Teacher	what is that?	

Physical education lessons also provide children with opportunities to be aggressive as well as practice established rituals as illustrated in fragment 19. The following

fragment shows both. An interesting part of this type of interaction is that it shows that a child is able to communicate successfully with the L2 teacher in one turn. Later, another child pre-empts the established ritual of sitting down. Both utterances are multi-word utterances.

19. [Om1c:19]

Student 1	xxx she pushed me.	EIS
Teacher	she pushed you?	
Student 1	nee pesten. (<i>no bullying</i>)	
Student 2	she pushed me.	EIS
Teacher	push is like this. this is to push. ok. everybody is quiet and listening to Vanessa. ssh.	(same child)
Student 1	sit down.	EIS
Teacher	sit down.	

This section concludes with the children's frequent toilet visits that took place in the study. Toilet visits require permission from the L2 teacher. In this example, a child states the problem in Dutch but after a failed attempt at communication by repetition the child uses another semantic reference, which also fails to be understood. Her final attempt produces the pronunciation of the word *toilet* (stress on the second syllable, pronounced in L1) to make the message comprehensible for the L2 teacher. This leads to successful negotiation of meaning.

20. [Om1a:19]

Student 1	ik moet plassen. (<i>I have to pee</i>)	
Teacher	what?	
Student 1	ik moet plassen. (<i>I have to pee</i>)	
Teacher	what is that?	
Student 1	naar de wc. (<i>to the wc</i>)	
Teacher	what is that?	
Student 1	het is uh naar de toilet. (<i>that is uh to the toilet</i>)	EIS
Teacher	oh toi*a did you go to the toilet yeah.	

§ 6.4.3 Playing with sounds

Fragments 21 to 25 show children changing L1 sounds to make them sound more like L2 sounds. In this way, they are attempting to make their input comprehensible for the L2 teacher. The first fragment is taken from the second half of a double lesson during circle time where the L2 teacher is introducing vocabulary about the human body. *Cheek* is associated with a previously learned farmyard animal, sheep, and another child is doing the same with *ken/chin/kitchen* and finally, a third child uses *kitchen* in a short English-intended utterance.

21. [Ga3:1&2]		
Teacher	and this one? yeah no yeah.	PWS
Student 1	wang*u. (<i>cheek*u</i>)	
Teacher	ggg no.	
Group	ggg.	
Teacher	it's a cheek. can you say cheek?	
Group	cheek.	EIW
Student 1	net zoals sheep. (<i>just like sheep</i>)	PWS, EIS
Teacher	cheek like sheep yeah very good. and here?	
Student 1	ken. (<i>chen</i>). ⁹⁷	PWS
Teacher	the chin.	
Student 2	cheek.	EIW
Group	chin.	EIW
Student 3	kitchen.	PWS, EIW
Teacher	like kitchen yeah.	
Student 1	de kitchen. (<i>the kitchen</i>)	EIS

Fragment 22 illustrates how children are trying to make the Dutch word *trein* 'train' more understandable for the L2 teacher by experimenting with the way the word sounds in three ways. The children are determined and after 53 turns, the exchange is successful.

22. [Et1:19]		
Student 1	ik wil trein een keer doen. (<i>I want train once do</i>)	PWS
Teacher	what's that the trein?	
Student 1	trijn*u. (<i>trine</i>) ⁹⁸	
Student 2	treen*u. (<i>treen</i>)	
Teacher	o the train. yeah yeah yeah. but first we do follow my leader. ok? (53 turns later)	
Student 2	twijn*u. (<i>twine</i>)	
Teacher	in a train yeah. very good.	

Fragment 23 was taken from a lesson after the carnival holiday was over, and the teacher was trying to discover where they had been. 'Oostenrijk' is the Dutch word for Austria. An L1 child tries to change the sound of the Dutch word in an effort to get closer to the English word but this is unsuccessful. Another L1 child who is using *dotch dotch* to change the semantic meaning scaffolds this. It is difficult to interpret exactly what is going on. I suppose [dotch dotch] might be extrapolated from the Dutch word for German (*Duits*) to the German word for German (*Deutsch*) or it could be another attempt at using the English word 'Dutch'. Perhaps the child is using repetition to reinforce meaning. The interaction does not lead to comprehension by the L2 teacher so she gives up and so do the children and the lesson picks up again without a hindrance.

⁹⁷ Child's utterance is supposed to be *kin* for chin, but he has changed it.

⁹⁸ These are all variations of the word train, of course.

23. [A13:20]

Teacher	Did you stay in Holland?	CC / PWS
Student 1	ik no. (<i>I no</i>)	EIS
Teacher	huh?	
Student 1	no.	EIW
Teacher	no? no? what did you do?	
Student 1	Os*a.	
Student 2	Osterijk. (<i>Austra</i>)	
Teacher	Osteraik. Osteraik? I don't know that. What did you do?	
Student 1	Osterijk. (<i>Austra</i>)	
Teacher	Osterik. I don't know that.	
Student 1	Osterijk. (<i>Austra</i>)	
Teacher	Osterijk	
Teacher	so you.	
Student 1	dotch dotch.	
Teacher	Dutch.	
Student 1	nee. (<i>no</i>)	
Teacher	I don't know. never mind. it doesn't matter.	

My research journal shows that children are rather curious about new things in the classroom. In this fragment, a child wants to know more about the colouring pictures. Later, some experimentation with the L1 word *uitgeprint* (printed) follows in an effort to make the question understandable. The only explanation that can be given for the breakdown in communication is that the L2 teacher speaks English and the L1 children do not. This fragment is another example that exemplifies the importance of Collective Scaffolding and Foreigner Talk.

24. [A13:2]

Student 1	Vanessa heb jij die uitgeprint? (<i>Vanessa have you printed it?</i>)	CC & PWS
Teacher	huh?	
Student 1	heb jij die al die computer gevonden? (<i>have you already that computer found?</i>)	
Teacher	computer?	
Student 1	ja dit. heb je die uh. (<i>yes this. have you it uh</i>)	
Teacher	no that's a rainbow.	
Student 1	maar waar heb je die eigenlijk vandaan? deze tekening. waar heb je die vandaan? (<i>but where did you get it from? this drawing. where did you get it from</i>)	
Teacher	I don't know.	
Student 1	heeft u deze van de computer? (<i>did you get it from a computer?</i>)	
Student 2	uitgeprint? (<i>printed?</i>)	
Student 3	uittebint uittebint*u. (<i>printed printed?</i>) ⁹⁹	STE
Student 1	ggg. uitgeprint. ggg. (<i>ggg. printed. ggg.</i>)	
Teacher	I don't know what you're saying.	
Student 1	ggg.	

⁹⁹ Variations of the Dutch word for printed.

- Student 2 Abraham. Abraham.
 Student 3 wij spreken Nederlands en jij Engels. ggg. (*we speak Dutch and you English. ggg.*)
 Teacher hey don't forget to put your name here ok?
 Student 1 je naam opschrijven. (*write your name*)

I have included fragment 25 to show that learning English can be a fun and amusing experience for children. The L2 teacher is attempting to establish authority by asking the child *who is the teacher?* However, instead of establishing authority, the children find the L2 teacher's word choice very entertaining because the children had associated the sound of the word *teacher* in English with the Dutch word *tietje* 'boob'.

25. [Et3:20]

- Teacher what are you doing Helen. are you the teacher? are you the teacher? who's the teacher? you're the teacher? who's the teacher? ggg. PWS
 Student 1 ggg.
 Teacher yeah Linda's your teacher yeah
 Group ggg.
 Activity children are laughing at the *tietje* / teacher joke.
 Student 1 where is the teacher? EIS
 Teacher she's your teacher.
 Student 1 where's the teacher yes? EIS
 Teacher teacher. she's the teacher. okay we're going to sing one song do you remember this song?

§ 6.4.4 Pronouncing names

Children were not wary of correcting the L2 teacher's pronunciation of Dutch names. Fragment 26 shows the boldness of the correction itself, and fragment 27 shows a how a child is explaining how to pronounce the /n/ in Dutch. The audio fragments reveal that the L1 explanations are slow and loud, reflecting the characteristics of Foreigner Talk. Note also how assistance is mustered from others.

26. [Be1a:1]

- Teacher Noortje and? CC / STE
 Student 1 Jip.
 Student 2 Noortje.
 Teacher Noortje. yeah that's difficult for me to say huh. I'm not Dutch. it's very hard for me to say that.
 Student 1 maar zij praat Engels. (*but she speaks English*)
 Student 2 niet niet niet Nooitje. (*not not not Nooitje*) STP
 Teacher what's happening? ssh.
 Student 1 Noortje.
 Teacher Noortje.
 Teacher okay and your name?
 Student 1 maar Noortje zij praat Engels. (*but Noortje she speaks English*)

Ton is a new addition to the class, and the L2 teacher does not know his name yet. In fragment 27, the L2 teacher has mistaken Ton for Tom. Explanations occur in both small group and large group interaction.

27. [Et1b:19]

Teacher	yeah good and what's his name?	CC / STP
Student 1	Ton.	
Student 2	Ton.	
Teacher	Tom?	
Teacher	are you ready?	
Student 1	Ton	
Teacher	Ton?	
Student 1	n.	
Group	Ton. n.	
Teacher	n. Ton. ok.	
Student 1	met een n. (<i>with an n</i>)	
Teacher	with an n. okay you ready?	

§ 6.4.5 The L2 teacher's English

As illustrated in fragment 28, children often reminded each other that they were required to speak English to the L2 teacher.

28. [Ep1:19]

Student 1	je hebt iets meegenomen. (<i>you've brought something with you</i>)	STE
Student 2	dat verstaat zij niet. (<i>she doesn't understand that</i>)	
Student 3	nee. (<i>no</i>)	
Student 1	Thomas je moet Engels praten. (<i>Thomas you have to speak English</i>)	
Student 2	ja. (<i>yes</i>)	
Student 3	maar dat ken je nog niet. (<i>yes but you don't know how to yet</i>)	
Student 1	zij*x wel zie je*x. (<i>she*x told you so told you*x</i>)	

Fragment 29 shows that using a different language was due to the L2 teacher's different sort of voice.

29. [Om1c:1]

Student 1	jij doet een andere stem. (<i>you're using another voice</i>)	STE
Teacher	pardon?	
Student 1	jij doet een andere stem. (<i>you're using another voice</i>)	
Teacher	I don't understand. What is that "jij hebt een andere stem"?	
	I don't understand that. what is that?	
Student 1	gewoon dat je dat je uhm dat je anders praat. (<i>you know that you uh soeak differently</i>)	
Teacher	I don't understand that. Polly do you understand?	
	No she doesn't understand either. Maybe you can tell me another time in English yeah?	

Fragment 30 shows that a conversation is struck between a group of children working at their desks and the L2 teacher, who is walking around and monitoring progress. The children are interested in the L2 teacher's other language skills and have hatched a plan to teach her some Dutch words (*hai* for 'hi', *nee* for 'no'; *ja* for 'yeah'; *regenboog* for 'rainbow'; *geel* for 'yellow'; *rood* for 'red'). Towards the end of the fragment, there is also some playing with L1 sounds. The children's instruction remains in their L1. My research notes show that the children continue colouring in their pictures, do not look directly at the teacher in the face and giggle now and then. There is also some degree of satisfaction that they have been able to teach the L2 teacher something. This fragment is another exceptional example that epitomizes the importance of Collective Scaffolding and Foreigner Talk.

30. [Mu3:2]

Student 1	kan je ook een andere taal net als Nederlands kan jij dat ook? zodat xxx wij praten. (<i>can you speak another language like Dutch can you do that yoo? just like xxx we talk</i>)	CC & STE
Student 2	nee zij kan geen Nederlands. (<i>no she doesn't know Dutch</i>)	
Student 3	kan je Nederland? (<i>do you know The Netherlands</i>)	
Student 1	kan die niet. (<i>she can't</i>)	
Student 2	ken jij uh ken jij uh hai? (<i>can you uh can you uh hi</i>)	PWS
Teacher	hi? hi?	
Student 3	ggg en hoi? hai. (<i>ggg and hi? hi?</i>)	
Teacher	I said hi. I don't.	
Student 1	en nee en nee. (<i>and no and no</i>)	
Student 2	hoi. (<i>hi</i>)	
Teacher	ggg.	
Student 1	en yeah? (<i>and yeah?</i>)	EIS
Student 2	no uh.	EIW
Student 3	en no? (<i>and no</i>)	EIS
Student 1	no. xxx.	EIW
Teacher	xxx.	
Student 1	en ja en ja? (<i>and yes and yes?</i>)	
Teacher	yeah yeah xxx.	
Student 1	oh.	
Student 2	wij kunnen jou ook Nederlands leren. (<i>we can teach you Dutch too</i>)	
Teacher	pardon?	
Student 3	wij jou ook Nederlands leren. (<i>we you also teach Dutch</i>)	
Student 1	zij is engels zij kan jou niet horen Matthijs. (<i>she's English she can't hear you Matthijs</i>)	
Teacher	here here.	
Student 1	xxx nederland xxx zij niet engels. (<i>xxx The Netherlands xx she not English</i>)	
Student 1	dit is geel. (<i>this is yellow</i>)	
Student 2	yellow heet geel. (<i>yellow means yellow</i>)	
Student 3	en dit al helemaal xxx regenboog in het Nederlands. (<i>and all this xxx rainbow in Dutch</i>)	
Student 1	red red.	EIS

- Teacher red? this is red.
- Student 2 red betekent dat je xxx tot rood red betekent in het EIS
nederlands (*red means that you xxx to red red means in
Dutch*)
- Student 3 rood. (*red*)
- Student 1 ja dat zeg jij ook uh. (*yes you say that too.*)
- Teacher uh very interesting.
- Student 1 dit helemaal heet regenboog in het nederlands. (*and all this
is called rainbow in Dutch*)
- Teacher yeah. oh.
- Student 1 regenboog betekent in Nederlands regenboog. (*rainbow
means rainbow in Dutch*)
- Teacher Oh. that's very interesting.
- Student 1 so kan ze denk ik jou wel verstaan Sem. (*I think she can
understand you like that Sem*)
- Student 2 ja. (*yes*)
- Student 3 voorbeeld in het nederlands betekent voorbeeld. (*example in
Dutch means example*)
- Teacher oh I don't know I don't understand.
- Student 1 Xxx.
- Teacher xxx nederlands voorbeeld. (*xxx Dutch example*)
- Student 1 ja.
- Student 2 voorbeeld. (*example*)
- Student 3 voorbeeld (changes sound) (*example*) PWS
- Student 1 zij verstaat dat niet. (*she doesn't understand*)
- Student 2 voorbeeld is nederlands. (*example is Dutch*)
- Student 3 zij snapt het wel. (*she gets it*)
- Student 1 ken jij xxx. (*do you know xxx*)
- Teacher pardon?
- Student 1 ken jij xxx en die heette xxx. (*do you know xxx and it was
called xxx*)
- Student 2 ggg.
- Teacher I don't know.

§ 6.4.6 Other children's pronunciation

There are very few examples of L1 children correcting other L1 children's pronunciation of L2 words. In fragment 31, children are colouring in a picture and seem to be reviewing the colours themselves. My research notes show that purple is a word, which children find pleasant to repeat. In this fragment, two children are concerned with a peer's incorrect pronunciation of the word purple. The fragment finishes off with another child providing the L1 translation.

31. [Ga3:1&2]

Student 1	uh die uh ik zie nog heel veel wit. (<i>uh it uh I see a lot of white</i>)	CC & SCP
Student 2	bubbel. ¹⁰⁰ (<i>bubble</i>)	
Student 3	bubbel? (<i>bubble?</i>)	
Student 1	purple.	EIW
Teacher	purple.	
Student 1	purple.	TR
Student 2	niet bubbel. (<i>not bubble</i>)	
Student 3	purple purple.	EIS
Student 1	das paars das paars. (<i>that's purple that's purple</i>)	

§ 6.5 Forms of L1 interaction

With respect to interaction in the L1, several patterns are of interest: Foreigner Talk and Collective Scaffolding, both L1 forms.

§ 6.5.1 Collective Scaffolding

Collective Scaffolding was strong and pervasive across all the research groups, taking place almost always in Dutch and at various stages of the lesson. The fragments I have selected are aimed at demonstrating the manifold situations in which collective scaffolding took place. At the beginning of the physical education lessons, children were asked to line up at the door in pairs or put their shoes on. Fragments 32 to 35 show how a child is helping a friend understand what to do.

32. [Om1a:1]

Teacher	here stand in a line.	CC
Student 1	ik ga voor. (<i>I'm in front</i>)	
Teacher	hello. here here you have to stand in a line here. here.	
Student 1	Pauline daar op de lijn staan. (<i>Pauline stand there on the line</i>)	
Teacher	you can stand here stand. oh I see the line is not long enough.	

33. [Om1c:2]

Teacher	first we have to stand in a line two by two.	CC
Student 1	staan in de lijn. (<i>stand in line</i>)	
Student 2	volgens mij zegt ze staan in de lijn. (<i>I think she said to stand in the line</i>)	
Student 3	wil jij mij*a... (<i>do you want my*a ...</i>)	
Student 1	Olaf Olaf.	
Student 2	wij gaan samen. (<i>let's go together</i>)	
Student 3	een rijtje maken. (<i>make a line</i>)	
Student 1	we staan in een rij toch? (<i>we're standing in a line, aren't we?</i>)	
Student 2	twee bij twee. (<i>two by two</i>)	
Student 3	nee rijen. (<i>no lines</i>)	
Student 1	ok.	

¹⁰⁰ Child is trying to pronounce purple.

34. [Om1c:2]

Teacher ok take your shoes off and then we'll do the the shoes. CC

Student 1 Pip schoenen uit. (*Pip shoes off*)

Student 2 ja.

Instructing children on how and when to use physical education equipment was an important and regular feature at the beginning of physical education lessons. In this fragment, the L2 teacher is explaining that only one child is allowed to climb on to the pommel horse and then jump off. Subsequently, two children give their interpretations of the L2 teacher's instructions. The first student is correct but the L2 teacher cannot confirm this. The most important message is that only one child is allowed to use the pommel horse at a time.

35. [Om1a:19]

Teacher so today yeah you're going to do what you did last week CC
okay you can go here. one person is all. Here only one.
okay?Student 1 je mag je mag hier niet met een oplopen en dat moeten de
andere even laten staan en dan xxx mag de andere weer op.
(*you may not you may not here with a walk on and that
must the others just let stand and then xxx may the other
again on*)Student 2 nee eerst springen en dan er op. (*no jump first and then get
on*)

Teacher okay. I don't know but only one person can go up here.

Fragments 36 – 41 are from art and craft lessons and illustrate how children help each other understand what task is expected of them.

36. [Et1a:2]

Teacher sit on your chair. on your chair. on your chair. good. on CC
your chair.Student 1 Herbert. Herbert je moet op je eigen stoel. (*Herbert.
Herbert you have to sit on your own chair*)
(14 turns later)Student 1 gaan we doen? (*are we going to do?*)

Teacher one two three four five.

Student 1 we gaan knutselen. (*we're going to do art and crafts*)

37. [A13:2]
 Teacher Earl. you have to be quiet. you have to be quiet and listen to Vanessa. sssh. put you*a. put it away. in your drawer. CC
 Student 1 drawer. xxx. EIW
 Student 2 je moet toch opruimen. moet hier in. (*you have to clear up. in here.*)
 Teacher yeah very good. is it all away now?
38. [A13:2]
 Teacher can you sit down please? CC
 Teacher hey Mitch can you sit down on your chair?
 Background noise ggg.
 Teacher Can you sit down on your chair? On your chair here.
 Group ggg.
 Student 1 zitten. (*sit down*)
 Student 2 Mitch je moet gaan zitten. (*Mitch you have to sit down*)
 Student 3 dat betekent zitten je moet gaan zitten Mitch. (*that means sit down you have to sit down Mitch*)
39. [Be1a:1]
 Teacher okay go back and sit sit down again. I want everybody to sit down CC
 Student 1 zitten zitten zitten zitten zitten (*sit down sit down sit down sit down sit down*)
40. [Be1a:1]
 Teacher Bram don't hurt her she'll cry. Put her on your lap. CC
 Student 1 op je schoot. (*on your lap*)
41. [Be1a:2]
 Teacher shall I help you? CC
 Student 1 help you? EIW
 Teacher shall I help you yeah.
 Student 1 dat betekent helpen. (*that means help*)

Sometimes Collective Scaffolding went beyond a simple one-step exchange as illustrated in the next four examples (42 – 45). Fragment 42 is from the last hour of lessons in grade 3 at the Gamma school. The focus of this lesson was a language review, which took the shape of simple elicitation, using objects and pictures as well as singing. Towards the second half of the lesson, a picture dictation was introduced. The picture dictation reviewed many of the lexical items that had been taught earlier in the study. The L2 teacher repeated the sentences two or three times during the activity and ensured that enough time was given to the children to complete each part of their drawing. Children often requested a repetition of the instructions themselves. The example clearly shows how children were jointly constructing knowledge in order to complete a task, achieved by translating the L2 instructions into the L1 and saying them out loud. With the exception of one child checking her progress with the L2 teacher, it is interesting to note that the L1 translations are

never challenged by peers and always taken to be accurate. My research notes confirm that this was consistent with other exchanges during the course of the study.

42. [Ga3:19&20]

Teacher	draw a house in your picture.	CC
Student 1	teken maar een huis. (<i>just draw a house</i>)	
Teacher	draw a house in your picture.	
Student 2	moet je een huis tekenen. (<i>you have to draw a house</i>)	
Teacher	draw a house.	
Student 1	house.	EIW
Teacher	a house.	
Teacher	draw a hou*a. yeah good draw a house	
Student 1	house moeten we een house tekenen. (<i>house must we a house draw</i>)	EIS
Teacher	ggg	
Student 1	Vanessa.	
Teacher	oh you don't have to show me Giselle yeah. So draw a house in the middle of your picture here. ok a small house.	
Student 1	oh.	
Teacher	turn it over turn it over.	
Student 1	in het midden had ik het. (<i>I had it in the middle</i>)	
Teacher	okay. My house has one door and two windows.	
Student 1	windows.	EIW
Student 2	nog een keer? (<i>again?</i>)	
Teacher	my house has one door and two windows.	
Student 1	huh?	
Student 2	oh ramen en deuren. (<i>oh windows and doors</i>)	
Student 3	een deur. (<i>a door</i>)	
Teacher	and two windows.	
Student 3	een deur. (<i>a door</i>)	
Student 1	een deur en twee ramen. (<i>one door and two windows</i>)	
Student 2	o ja. (<i>oh yes</i>)	

Fragment 43 is taken from the first lesson at the Mu school in which the colours of the rainbow were introduced. Children were then asked to find an object in the room with a certain colour. In this example, something with the colour purple is being located in the room. Several children are participating in the exercise and Miles is elected to do the job. In this case, despite helping each other, Miles was unable to perform the task because he could not reach the object in question.

43. [Mu3:1]
- Teacher and where else is purple yeah? CC
- Student 1 vlinder. (*butterfly*)
- Student 1 hier xxx nog een. (*here xxx another one*)
- Student 2 xxx.
- Teacher what's that?
- Student 1 xxx.
- Student 2 op da*a glas. (*on the glass*)
- Teacher pardon?
- Student 1 op da*a glas. (*on the glass*)
- Teacher Oh I don't understand. I don't know. I don't understand.
- Student 1 xxx.
- Student 2 zij kan dat niet verstaan. (*she can't understand you*) STE
- Group xxx aanwijzen. (*xxx point*)
- Student 3 Miles aanwijzen. (*point Miles*)
- Student 1 Miles moet het aanwijzen. (*Miles has to point*)
- Student 2 ik kan het niet aanwijzen want het is te xxx. (*I can't point to it because it's too xxx*)

Some time was spent reviewing some of the colours of the rainbow with the class. After colours were spotted, the L2 teacher sang songs with the class. Fragment 44 below shows how other children help Adele and Hilda spot the right colours in the room. The instruction is to find something pink in the room but Adele, on her friends' advice, has identified someone (herself) wearing pink instead. After correction (the L2 teacher gestures that pink should be found in the room), Adele completes the task. Then, the L2 teacher asks if Hilda can find someone who is wearing blue in the room. The group pick up where it left of and instead of finding someone wearing the colour, they help Hilda find something blue in the room. A child explicitly tells Hilda that the colour is *niet in de kring* 'not in the circle'. Hilda seems confused and the teacher repeats the question. With the help of someone in the circle, Hilda completes the task. In this fragment, children help each other to jointly construct knowledge. The absence of correction from the L2 teacher with regard to the actual meaning of the instruction means that peer collaboration overrides the L2 teacher's position as expert. In addition, although this is one of the last lessons of the study and despite the fact that this activity was a regularly repetitive task, the actual instructions were not correctly understood; it appears that it is the content word that directs children's attention rather than the actual instruction itself. This is confirmed by the fact that one child uses the word blue in a response rather than the utterance *who is wearing blue* or part of it.

44. [Et1a:19]

Teacher	where's pink Adele?	CC
Student 1	Adele.	
Student 2	Adele.	
Student 3	jezelf Adele. Adele jezelf. (<i>you Adele. You Adele</i>)	
Activity	Child shows she is wearing something pink.	
Teacher	yeah that's pink but Adele where's pink in the room? Where is pink in the room? Yeah there's also pink in the crown, very good. And now we're going to sing uhm about the colour mmm blue. Who is wearing the colour blue? Who's*a. Hilda who's wearing blue?	
Student 1	daar. (<i>there</i>)	
Student 2	die zakdoek. die zakdoek. (<i>the handkerchief. the handkerchief</i>)	
Student 3	die zakdoek. (<i>the handkerchief</i>)	
Student 1	Hilda die zakdoek. (<i>Hilda the handkerchief</i>)	
Student 2	niet in de kring he. (<i>not in the circle okay?</i>)	
Teacher	mmm but who is wearing blue?	
Student 1	blue.	EIW
Student 2	Hilda blauw. (<i>Hilda blue</i>)	
Student 3	blauw. (<i>blue</i>)	
Student 1	Hilda.	
Student 2	dit is blauw. (<i>this is blue</i>)	
Student 3	Hilda ik weet er een. (<i>Hilda I know one</i>)	
Teacher	Ssh who's wearing blue Hilda?	
Student 1	daar dat. xxx. (<i>there that. xxx</i>)	
Teacher	There there she's found someone.	

Fragment 45 describes the clearing up ritual. The lesson is coming to an end and children have to clear up and hand in their pictures. They also have to write their names on their drawings so that they can be handed back to them at the beginning of the next lesson. Children are helping each other understand the L2 teacher's requests. In the first part, they achieve this by translating what they think the L2 teacher has said. While the L2 teacher is asking Ans to hand something in, other children think that the child has to hurry up and tell the child to hurry up. Given the pretence that the L2 teacher cannot speak or understand Dutch, she does not correct what the first child says and Ans does as she is told. Later, Andrea is told by the L2 teacher to put her drawing in her desk (uses a gesture). However, her name has not yet been written on her drawing. In the second part, another child helps Andrea by translating the teacher's instruction while another repeats part of the teacher's utterance *put your name*.

45. [Mu3:1]
 Teacher can I have this? give it to Vanessa. CC
 Student 1 je moet het een beetje sneller doen vraagt ze. (*she's asking you to do it a little faster*)
 Student 2 dat je het sneller moet doen. (*that you have to do it faster*)
 Student 3 Ans schiet op. (*hurry up Ans*)
 Teacher here Andrea put it in your drawer. Put it in your drawer. Put it in your drawer.
 Student 1 maar m'n naam staat er nog niet op. (*but my name's not on it yet*)
 Teacher pardon?
 Student 1 m'n naam staat er nog. (*my name's not*)
 Teacher oh your name, put your name on it.
 Student 2 je naam*x. (*your name*)
 Student 3 put your name. EIS

§ 6.5.2 Foreigner Talk

The illustrations in this section describe the various types of Foreigner Talk produced by the children, presented at the level of phonology, lexis and syntax.

Phonology

Fragment 46 is an example of lexical and phonological adaptation that took place when children were colouring in buses and adding passengers to their bus during tablework. The L2 teacher is asking children more information about what they are drawing.

46. [Ep3:19]
 Teacher it's not the baby.
 Student 1 no.
 Student 2 nee. (*no*)
 Student 3 hier is die groter als een baby. (*it's bigger than a baby here*)
 Student 1 ietsie groter. (*a little bigger*) reduced speed
 Teacher ietsie groter? and change in
 Student 1 ja. (*yes*) lexis

In fragment 47, a child is making a phonological adaptation to her L1 to make interaction more comprehensible.

47. [Et3:2]
 Student 1 Heike Heike die kan nog die is nog gehandicapt. (*Heike Heike she can still she is still handicapped*)
 Teacher Heike?
 Student 1 ja? (*yes?*)
 [Two turns irrelevant to the teacher-child interaction]
 Student 2 die is gehandicapd. hand-i- capt*u die is gehandicapt. die is gehandicapd. (*she's handicapped. han-di-capped. she is handicapped. she is handicapped*) exaggerated pronunciation, repetition
 Teacher I don't understand she's different? she looks different louder, slower
 yeah. yeah here.

Syntax

A child is trying to get her jacket off and requests the teacher for help. In fragment 48, rearrangement of the L1 sentences, as well as the exclusion of words have been used to make the input more comprehensible.

48. [Et1b:1]

Student 1	juffrouw ik moet iets zeggen. (<i>miss I have to say something</i>)	
Student 2	ze heeft ze*a Evie krijgt niet haar schoenen aan want want want ze krijgt niet die knoop d'r uit. (<i>she has she Evie can't put her shoes on because because because she can't get the knot out</i>)	
Teacher	what's that. show me.	
Student 1	krijgt ie niet uit. (<i>she can't get it out</i>)	rearrangement and omission

In fragment 49, two children are trying to make clear to the teacher that there are two children in class who share the same name. Examples are used to clarify the situation. In the video fragment, the children are also using gestures to point to both children. The interaction shows exclusion of articles and syntactic expansion.

49. [Be1a:1]

Student 2	oudste Bram. (<i>oldest Bram</i>) (12 turns)	
Student 1	oudste Bram en dat is jongste. (<i>oldest Bram and that is youngest</i>)	expansion
Student 2	Bram.	
Teacher	Bram.	
Student 1	er zijn twee Brammen en dat is oudste en dat is jongste. (<i>there are two Brams and that is oldest and that is youngest</i>)	expansion
Teacher	oh.	

Hurting oneself is almost inevitable in physical education lessons. In fragment 50, a child is telling the L2 teacher that she will not be able to crawl on her knees because she has hurt them. There is rearrangement and omission of L1 words. Further, the audio fragment shows that the use of the L2 word "crawl" was used by the first child's friend. In this example, comprehension was facilitated by the L2 word, and not L1 simplification.

50. [Om1c:20]

Student 1	xxx Vanessa xxx.	
Student 2	ik heb pijn aan mijn knieën. (<i>my knees hurt</i>)	
Teacher	pardon?	
Student 1	hier heb ik hier heb ik pijn. (<i>here I have here I have pain</i>)	rearrangement, omission
Teacher	oh I see that yeah.	
Student 1	en kan ik niet dan kan ik niet kruipen. (<i>and I can't then I can't crawl</i>)	
Teacher	what is kruipen?	
Student 1	crawl.	L2 use
Teacher	what?	
Student 1	kruipen. (<i>crawl</i>)	omission
Teacher	oh crawl. you can't crawl no.	

Lexis

In physical education lessons, safety is paramount. In fragment 51, a child is trying to find out whether he can also jump off the tall climbing frame just like someone else. Problem-solving is extensive. Following syntactical simplification in the form of paraphrasing, the boy is helped by another child by way of gesturing to aid comprehension. The message is understood by the L2 teacher, who later tells both boys that jumping off the climbing frame is not allowed. The child who was doing this initially was also corrected.

51. [Om1c:20]

Student 3	Vanessa mag je ook op het klimrek en dan daar vallen? (<i>Vanessa are we also allowed to go on the climbing frame and then fall down from it?</i>)	
Teacher	I don't understand?	
Student 1	he Vanessa. (<i>huh Vanessa</i>)	
Student 2	uhm xxx niet. (<i>uhm xxx not</i>)	paraphrasing
Student 3	die klimmen nu. nu klimmen ze allebei daar in het midden omhoog. (<i>they are climbing now. now they are both climbing there to the top</i>)	paraphrasing paraphrasing
Teacher	that's ok what she's did so far.	
Student 3	en nu die vallen daar vanaf. (<i>and now they're falling off from there</i>)	
Student 1	nu gaan ze ook vallen. (<i>now they are going to fall too</i>)	gesturing
Student 2	xxx en dan hou je het zo vast en dan val je naar beneden. (<i>xxx and then you hold on and then fall back down</i>)	
Student 3	nee kijk. (<i>no look</i>)	
Student 1	kijk dat moet je zo doen. eerst met je arm. en dan val je zo naar beneden. (<i>see you have to do it like that. first with your arm. and then you fall back down</i>)	

Syntax and lexis

Fragment 52 captures the final stages of a lesson just before lunchtime. They are concerned about going home on time, and try to communicate this by paraphrasing,

omitting words and using synonyms in the L1. The children are persistent although the communication is not successful.

52. [Be1a:19]

Student 1	juffrouw Vanessa? (<i>miss</i>)	
Student 2	juffrouw Vanessa? (<i>miss</i>)	
Student 3	xxx?	
Teacher	like this?	
Student 1	moeten wij niet d*a de thuis? (<i>don't we have to home</i>)	
Student 2	ja. (<i>yes</i>)	
Student 3	moeten wij niet naar huis? (<i>don't we have to go home?</i>)	replacement
Teacher	what is naar huis?	
Student 1	thuis blijven. (<i>staying at home</i>)	paraphrasing
Student 2	naar huis. (<i>going home</i>)	paraphrasing
Teacher	oh.	
Student 3	naar thuis. (<i>going home</i>)	
Teacher	sit down.	paraphrasing
Student 1	sit down.	
Student 2	thuis. (<i>home</i>)	paraphrasing
Student 3	gaan we naar h*a thuis? (<i>are we going home?</i>)	paraphrasing
Teacher	what is that?	
Teacher	I don't know what that is.	
Student 1	wanneer gaan we naar huis? (<i>when are we going home?</i>)	paraphrasing
Teacher	what is that huis?	
Teacher	I don't understand.	
Student 1	wegrijden. (<i>driving away</i>)	synonym
Student 1	dat is wegrijden. (<i>that is driving away</i>)	paraphrasing
Teacher	I don't unders*a.	

Reporting absentees during circle time also provides opportunity for interaction with the L2 teacher, as shown by fragment 53 about Gwen's absence from school because of Ramadan.

53. [Ga1:2]

Teacher	and Gerben is here and Gerben is not here today.	
Student 1	en daar zat Gwen ook. (<i>and Gwen sat there as well</i>)	
Student 2	Gwen.	
Teacher	oh.	
Student 3	maar daar is suikerfeest. (<i>but they're having a Sugar Festival</i>)	
Teacher	Gwen. oh but I don't know what you mean. wh*a. is she sick today? she's at home?	
Student 1	nee suikerfeest. (<i>no Sugar Festival</i>)	Paraphrasing
Student 2	suikerfeest. (<i>Sugar Festival</i>)	Paraphrasing
Student 3	suikerfeest. (<i>Sugar Festival</i>)	
Teacher	what is that?	
Student 1	magge*d ze weer in het licht eten. (<i>they are allowed to eat when it's light</i>)	Expansion
Teacher	oh I don't know.	
Student 1	suikerfeest. (<i>Sugar Festival</i>)	

Teacher	what is eten? what is that?	
Student 1	eten. (<i>eat</i>)	Synonym
Teacher	like this?	
Student 1	zo. (<i>like this</i>)	Gesture
Teacher	oh like this ggg like that. oh I see that's to eat.	
Student 1	eten. (<i>eat</i>)	
Teacher	that's to eat yeah.	

Fragment 54 reports how a child is expressing her irritation at Amy's toilet visits. After addressing the L2 teacher, the L1 child omits *nou* (now) and replaces the initial verb *moet* (must) with *doet* (does). The L2 teacher fails to understand *plassen* (pee) and the L2 child resorts to paraphrasing and phonological adjustment of the Dutch word *toilet* to assist the teacher. Once understanding has been established, the L1 child confirms what the L2 teacher thinks. The interaction is successful.

54. [Om1a:19]

Student 2	nou Amy moet altijd plassen. (<i>Amy always has to go to the toilet</i>)	
Student 1	Vanessa.	
Teacher	yeah?	
Student 1	Amy doet altijd plassen. (<i>Amy always pees</i>)	replacement
Teacher	what's plassen?	
Student 1	naar de toilet gaan. (<i>going to the toilet</i>)	paraphrasing and L2 pronunciation of the word <i>toilet</i>
Teacher	oh toilet. who?	
Student 1	Amy moet altijd naar de toilet. (<i>Amy always has to go to the toilet</i>)	paraphrasing
Teacher	Amy. yeah. Amy always has to go to the toilet yeah.	

Fragment 55 describes the end of a lesson and a child is asking the L2 teacher when they are going to clear up and finish the lesson. The L1 child maintains the use of *hoe laat gaan wij* (when will we) and experiments with verbs and noun forms to denote finishing, starting with *opruimen* (clear up), *de finish* (the end), *opruimen* (clear up) again, *stoppen* (stop), *ga jij weg* (are you leaving). In the second half of the fragment, the L1 child is asking the same question again. The L2 teacher shows incomprehensibility with *pardon?* and *I don't understand*. The L1 child resorts to using *de finish* and the L2 teacher uses an ungrammatical sentence that includes *finish* to answer the L1 child's question. The interaction concludes and is successful. During the study, I never used the word *finish* in the way that the L1 child has experimented with it. Rather, I used *we have to finish the lesson* or *let's finish the lesson* to wrap up the lesson. I often asked children *have you finished* when enquiring about an activity. It is interesting that the L1 child has picked up on the core meaning of the word and uses it in her communication towards the L2 teacher.

55. [Ga1:19]

Student 1	hoe laat gaan we opruimen? (<i>what time are we clearing up?</i>)	
Teacher	I don't know what you're saying Gemma.	
Student 1	hoe laat is de finish? (<i>what time is the finish?</i>)	paraphrasing
Teacher	finish?	
Student 1	hoe laat gaan we opruimen (<i>what time are we clearing up?</i>)	paraphrasing
Teacher	ten minutes. ten minutes ok? good. do you want to draw something else? (8 turns later irrelevant to the interaction)	
Student 1	juffrouw hoe laat gaan we nou stoppen? (<i>Miss when are we stopping?</i>)	paraphrasing
Teacher	pardon?	
Student 1	hoe laat gaan uhm hoe laat gaan we hoe laat ga jij weg? (<i>what time are uhm what time are we going what time are you leaving?</i>)	paraphrasing
Teacher	I don't understand.	
Student 1	hoe laat is de finish? (<i>what time is the finish?</i>)	paraphrasing
Teacher	finish ten minutes.	

Children use their L1 to complain about other children misbehaving. Fragment 56 shows how this is achieved with the use of gesturing to help make the complaint easier to understand.

56. [Om1c:20]

Student 1	Vanessa?	
Teacher	yeah?	
Student 1	Harry laat mij struikelen. (<i>Harry made me trip</i>)	
Teacher	what is that?	
Student 1	zo dat iemand er over valt. (<i>so that someone falls over</i>)	paraphrasing
Student 2	kijk zo. (<i>like this look</i>)	gesture
Student 1	ja. (<i>yes</i>)	
Teacher	you fell over?	
Student 1	Egbert zullen wij het voordoen? (<i>Egbert shall we show her</i>)	
Student 2	doe jij je been eens zo? (<i>put your leg like this</i>)	gesture
Student 3	zo. (<i>like this</i>)	gesture
Student 1	xxx.	
Student 2	ggg.	
Student 1	met zijn hand deed hij dat. (<i>he did that with his hand</i>)	gesture
Teacher	who? you?	
Student 1	met zijn hand deed hij zo. (<i>he did like this with his hand</i>)	replacement, gesture

§ 6.6 Frequency patterns in L2 interaction

A global impression of the frequency results is first presented in an overview of the total number of repetitions, English-intended utterances and sensitivity to the L2 from the first (lessons 1&2) and final hour (lessons 19&20) of lessons. Next, a closer

look is taken at the three main research groups: (1) grade 1 physical education, (2) grade 1 art and crafts and, (3) grade 3 art and crafts. Subsequently, the results are presented in relation to (1) Repetitions, (2) English-intended utterances, (3) Sensitivity to L2 use and (4) Collective Scaffolding.

§ 6.6.1 Global results

The global results refer to the total number of utterances that were made in the orthographic transcriptions selected for analysis. There is missing data (highlighted in italics) for Omega 1&2a (lesson 1), Eta 1&2b (lesson 2), Eta 3 (lesson 2) and Epsilon 3&4 (lesson 1), due to technical problems with the recording equipment and lost data. As previously mentioned in the introductory paragraph for this chapter, it is not wise to extrapolate missing data because the frequency and type of interaction are not independent, and may be strongly related to child-specific rather than group-specific behaviour. For my calculations of the ranges, I have used the data that is available. However, if the missing data is compared with complete data for other lessons and groups, it would appear that the data available for estimating the ranges is about half of any set of complete data, though this is a broad generalization. Tables 6.4, 6.5 and 6.6 show a high level of variation in terms of frequency, and some overlap between the three research groups

Table 6.4: Overall number of language-related instances in grade 1 physical education. Missing data in italics.

	1 x week Omega 1&2a		1 x week Omega 1&2c		2 x week Eta 1&2a	
	first hour	final hour	first hour	final hour	first hour	final hour
Instances	58	52	94	55	29	28

Table 6.5: Overall number of language-related instances in grade 1 art and crafts. Missing data in italics.

	1 x week Beta 1&2a		1 x week Beta 1&2b		1 x week Gamma 1&2		2 x week Eta 1&2b		2 x week Epsilon 1&2a	
	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour
Instances	135	204	176	147	129	117	<i>40</i>	100	60	81

Table 6.6: overall number of language-related instances in grade 3 art and crafts. Missing data in italics.

	1 x week Alpha 3		1 x week Gamma 3&4		1 x week Mu 3		2 x week Eta 3		2 x week Epsilon 3&4	
	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour
Instances	149	146	149	201	121	174	<i>69</i>	157	<i>54</i>	99

The ranking on the basis of the range in frequencies, from lowest number of language instances to the highest number of language instances, is as follows:

- grade 1 physical education (a range of 28 – 94)
- grade 1 art and crafts (a range of 40 – 204)

- grade 3 art and crafts (a range of 54 – 201)

The tables show a difference between subjects rather than age. The ranges of language-related instances for all the art and crafts groups are quite similar and have a higher average, while the range is considerably lower for the physical education groups, which have a lower average. The reason for this difference between subject groups is the nature of the subject and the activities related to them. Physical education lessons are lessons where the function of interaction is predominantly at the group level; art and crafts lessons support a learning environment, which allows for more individual and small group interaction. For example circle time provides considerably more opportunities for the teacher to introduce, instruct and review vocabulary and therefore more occasions for children to respond to new vocabulary and recall old vocabulary. Similarly, tablework provides both the L2 teacher and pupils with more accessibility to one another for interaction. The absence of circle time and tablework in physical education is replaced with basic teacher instruction and then physical activity. The differences in variation reported here confirm the impressions in my research journal.

Grade 1 physical education

Table 6.5 shows the range of language-related instances for the physical education groups to be 28 - 94. The two Omega research groups have a much higher range of overall language-related instances in comparison to Eta 1&2a, even though lesson content was the same for all three groups. Research notes supplemented by video material show that all three groups responded positively to the lessons, followed the L2 teacher's instructions and were engaged in the activities.¹⁰¹ The only consistent difference that emerged was that the Omega groups were reported as being more creative and experimental in their interaction towards the L2 teacher, while the Eta group seemed less focused on interacting with the L2 teacher. This might explain the lower number of language-related instances.

Grade 1 art and crafts

Table 6.6 shows that the range of language-related instances for the art and crafts grades is 40 - 204. The most striking difference between research groups is for the Eta and Epsilon groups, and the Beta and Gamma groups. The former two exhibit a much lower range of language-related instances (40 – 100) compared to the latter (117 – 204). My research notes describe similar language behaviour patterns across the groups, though some minor differences relating to the individuals in the groups were recorded. The new arrival of a predominantly Turkish-speaking child in the Gamma 1&2 grade halfway through the study had a disruptive effect on the cohesion of the group as the new child got used to classroom and school rules. In the Eta 1&2b grade, a Dutch-speaking child was diagnosed with a behavioural problem (PDD-NOS) towards the end of the study. This child was often reported to be disruptive in class, and was capable of changing the atmosphere. In both cases

¹⁰¹ Video material for the final hour of lessons for the Omega school was only available for analysis.

though, the L1 classroom teacher reported that this behaviour was also observed in her own classes and not atypical for the art and crafts lessons. Although not related to behaviour, I noted that the Epsilon 1&2a group was exceptionally large, growing in size slightly during the course of the study. This may mean that larger classroom numbers might have presented fewer opportunities for interaction with the L2 teacher in general. I propose that individual disruptive behaviour could not have been the sole reason for Eta's lower number of language-related instances because the number of language-related instances in the Gamma group does not have a similar pattern. The outcome is therefore difficult to interpret.

Grade 3 art and crafts

Table 6.7 shows that the range of language-related instances for the art and craft grades is 54 - 201. The table also shows that the Eta 3 and Epsilon 3 research groups have a lower number of language-related instances (54 – 157) in comparison to Alpha 3, Gamma 3&4 and Mu 3, which are much higher (121 – 201). This difference is probably due to the missing data in Eta 3 and Epsilon 3. Nevertheless, even after accounting for the missing data, the number of language-related instances for Epsilon 3&4 is still much lower in comparison. I noted very few differences between the five groups in terms of participation and language behaviour towards the L2 teacher. Moreover, the group sizes of all the research groups were fairly similar and remained stable throughout the study. This means that group size does not seem to have a negative effect on the opportunities for L2 interaction. This result is difficult to interpret.

Differences between the first and final hour

One might expect an increase in the overall number of language-related instances from the first hour to the final hour of lessons based on the idea that the more the exposure, the more the output. But, were there any differences to speak of in practice? More language-related instances can be reported for seven out of the thirteen research groups: four of the five grade 3 groups (Gamma, Mu, Eta and Epsilon), three out of the five grade 1 art and crafts groups (Beta 1&2a, Eta 1&2b, Epsilon 1&2 a), but none of the three physical education groups. In Omega 1&2a Eta 1&2a and Alpha, no obvious change can be observed, and the number of language-related differences remained about the same. Note also that the missing first hour data for Omega 1&2a, Eta 1&2b, Eta 3, Epsilon3&4 may well change this outcome although it is uncertain how big this change may be. However, working with the data available, it would seem that grade 3 art and crafts produced more language-related instances by the end of the study in comparison to all the grade 1 groups, which vary more.

§ 6.6.2 Repetition

Tables 6.7, 6.8 and 6.9 show that repetition is a frequent feature of lessons at the beginning and at the end of the study, but also that strong trends between the first hour and the final hour of the study do not emerge. In some research groups, there were more repetitions in the first hour than the last hour for six groups (Omega

1&2a, Omega 1&2b, Beta 1&2b, Epsilon 1&2a, Alpha 3 and Mu 3) but the opposite was true for five groups (Beta 1&2a, Eta 1&2b, Gamma 3&4, Eta 3 and Epsilon 3&4), and there was little difference for Gamma 1&2 and Eta 1&2a. It is difficult to interpret the differences across the groups. Notes from my research journal indicate that the use of repetition varied according to opportunity and not so much the lesson sequence, suggesting it is an important part of communication and learning and is used by children when it is required.

Table 6.7: instances of repetition in grade 1 physical education. Missing data is in italics.

Repetition	1 x week		1 x week		1 x week	
	Omega 1&2a		Omega 1&2c		Eta 1&2a	
	first hour	final hour	first hour	final hour	first hour	final hour
Teacher	<i>10</i>	10	20	8	11	4
Child	<i>17</i>	1	16	12	2	5
Total	<i>27</i>	11	36	20	13	9

Table 6.8: instances of repetition in grade 1 art and crafts. Missing data is in italics.

Repetition	1 x week		1 x week		1 x week		2 x week		2 x week	
	Beta 1&2a		Beta 1&2b		Gamma 1&2		Eta 1&2b		Epsilon 1&2a	
	first hour	final hour	first hour	final hour						
Teacher	64	25	30	12	43	21	6	8	14	7
Child	24	84	41	22	5	23	5	12	16	11
Total	88	99	71	34	48	44	<i>11</i>	20	30	18

Table 6.9: instances of repetition in grade 3 art and crafts. Missing data is in bold italics.

Repetition	1 x week		1 x week		1 x week		2 x week		2 x week	
	Alpha 3		Gamma 3&4		Mu 3		Eta 3		Epsilon 3&4	
	first hour	final hour	first hour	final hour						
Teacher	44	7	3	32	10	4	2	9	<i>1</i>	3
Child	36	14	8	5	20	15	2	16	2	7
Total	80	21	11	37	30	19	4	25	3	10

The ranking range, from lowest number of repetitions to the highest number of repetitions, is as follows:

- grade 1 physical education grades (9 – 36)
- grade 3 art and crafts grades (3 – 80)
- grade 1 art and crafts grades (18 – 99)

The ranges in values suggest that repetition is salient. However, a *subject difference* appears to emerge given that repetitions are most salient in the art and crafts groups (and slightly more in grade 1), and least so in grade 1 physical education. This is probably due to more opportunities for interaction in art and crafts lessons.

Repeating the teacher versus repeating the child

The range of repetitions is highest in grade 1 art and crafts. The ranking range, from lowest number of repetitions to the highest number of repetitions, is as follows:

Repeating the teacher

- grade 1 physical education (4 - 20)
- grade 3 art and crafts (1 - 44)
- grade 1 art and crafts (6 - 64)

Repeating the child

- grade 1 physical education (1-17)
- grade 3 art and crafts (2 - 36)
- grade 1 art and crafts (5 - 84)

What sorts of utterances were repeated by the children? In grade 1 physical education the most commonly repeated utterances were the L2 teacher's monosyllabic words and then children's monosyllabic words: greetings (e.g. *hello*, *hi*); farewells (e.g. *bye bye*, *bye*, *goodbye*); affirmatives (e.g. *yes*), negatives (e.g. *no*) and single digit numbers. Occasional repeating-the-child instances were 'circle', 'thank you', 'I love you', 'shoes' and 'sick'. It is interesting that the Omega groups demonstrated more complex repetitions of mostly one to four words, and that these were not exclusively related to the L2 teacher's instructions (fragment 57 – 61):

57. [Om1a:1]

stan*a;
sit down;
down;
hop;
move up move up move up;
two by two.

58. [Om1a:2]

two by two.

59. [Om1c:2]

sit down;
xxx the line;
hands; ready.

60. [Om1c:19]

no sliding on the floor;
somewhere else;
only five;
sit down.

61. [Om1c:20]

here's five.

In grade 1 art and crafts, the most common repetitions were monosyllabic and included (1) greetings (e.g. *hello*, *hi*) and farewells (e.g. *bye bye*, *bye*, *goodbye*); (2) affirmatives (*yes*) and negatives (*no*); (3) the colours (e.g. *red*, *blue*, *yellow*, *green*, *orange*, *purple*, *black*, *brown*, *pink*, *rainbow*), farmyard animals (e.g. *butterfly*,

chicken, horse, dog, duck, pig, ladybird); (4) song titles (e.g. *jingle bell, the wheels, twinkle twinkle*), and (5) other theme-related vocabulary (e.g. *leaves, stars, Christmas tree, angel, wings*). Very few instructions were repeated. Fragments 62 – 66 illustrate some longer teacher utterances that were repeated:

62. [Be1a:1]

do you remember who I am?

63. [Be1a:20]

in English.

64. [Be1b:20]

sit down.

65. [Ep1a:19]

says move on back.

the baby on the bus.

66. [Ga1:19]

hoe laat is de finish? (*what time is the finish?*)

In grade 3 art and crafts, the most common repetitions were monosyllabic and included (1) greetings (*hello, hi*) and farewells (*morning, bye bye, bye, goodbye*); (2) affirmatives (*yes*) and negatives (*no*); (3) the colours (*red, blue, yellow, green, orange, purple, black, brown, pink, white, rainbow*); (4) single and double digit numbers; (5) farmyard animals (e.g. *sheep, butterfly, mouse, chicken, horse, dog, duck, pig, ladybird*); (6) song titles (*love me*); (7) parts of the body (*the brain, bum, shoulders, toes, thumb, chin*), and (8) other theme-related vocabulary (*leaves, stars, snowman, now, house, mask, Christmas tree, reindeer, elf wings*). Few instructions were repeated. Some longer utterances were repeated as shown in fragments 67 and 68:

67. [A13:2]

put your name.

understand.

68. [Ga3:19&20]

how are you?

§ 6.6.3 English-intended utterances¹⁰²

Tables 6.10, 6.11 and 6.12 show instances of English-intended utterances found in the analyses.

Table 6.10: instances of English-intended utterances in grade 1 physical education. Missing data in italics.

	1 x week Omega 1&2a		1 x week Omega 1&2c		1 x week Eta 1&2a	
	first hour	final hour	first hour	final hour	first hour	final hour
	Word	20	15	43	18	6
Sentence	9	25	14	30	8	10
Total	29	40	57	48	14	17

Table 6.11: instances of English-intended utterances in grade 1 art and crafts. Missing data in italics.

	1 x week Beta 1&2a		1 x week Beta 1&2b		1 x week Gamma 1&2		2 x week Eta 1&2b		2 x week Epsilon 1&2a	
	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour
	Word	29	71	90	75	55	51	15	36	24
Sentence	13	30	9	35	17	19	11	40	3	21
Total	42	101	99	110	72	70	26	76	27	61

Table 6.12: instances of English-intended utterances in grade 3 art and crafts. Missing data in italics.

	1 x week Alpha 3		1 x week Gamma 3&4		1 x week Mu 3		2 x week Eta 3		2 x week Epsilon 3&4	
	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour	first hour	final hour
	Word	72	95	109	93	58	133	47	91	41
Sentence	29	27	18	63	25	20	11	35	5	24
Total	101	122	127	156	83	153	58	126	46	84

The ranking range, from lowest number to the highest number of English-intended utterances, is as follows:

- grade 1 physical education grades (14 - 57)
- grade 1 art and crafts grades (26 - 110)
- grade 3 art and crafts grades (46 - 156)

The ranges suggest that while English-intended utterances are salient in all the research groups, they are most salient in grade 3 art and crafts and least so in grade 1 physical education. In contrast to the instances of repetitions, the results indicate an age difference with grade 3 producing more utterances than grade 1. I also examined the length and content of the utterances. English-intended words are more salient

¹⁰² An overview describing the length (2-word, 3-word, 4-word, 5-word and longer) and type of utterances (whole or mixed) made by the children in the first and final hour of the study in all the research groups is available upon request. Some data has been included in the presentation of the results for illustrative purposes.

that English-intended sentences in all research groups. The range of English-intended utterances is highest in grade 3 art and crafts and lowest in grade 1 physical education. The ranking range, from lowest to the highest, is:

English-intended words

- grade 1 physical education (6 - 43)
- grade 1 art and crafts (15 - 90)
- grade 3 art and crafts (41 - 133)

English-intended sentences

- grade 1 physical education (8 - 30)
- grade 1 art and crafts (3 - 40)
- grade 3 art and crafts (5 -63)

Types and content of utterances in grade 1 physical education

The most commonly produced words are salutations (*morning, hello*), affirmatives (*yes, yeah*), verbs (*crawl, jump, walk*), farewells (*goodbye, bye*) and single digit numbers. 59 different types of English-intended sentences were produced per research group in the following order:

- five-word or more utterances (18)
- two-word utterances (18)
- three-word utterances (14)
- four-word utterances (8)

The two-word and three-word utterances were salutations, farewells, single digit numbers and very basic instructions (e.g. *do gym, hurry up, really quiet, last time, whole line, go go, this side*). The four-word utterances are the least frequent and mostly variations of instructions (e.g. *oh uh mats opruimen, two by two two, come on kom shh*). The five-word and longer utterances are more communicative in nature, and mostly concern going to the toilet and longer counting sequences. There are also two requests for an activity (*be a monkey, be a monkey, ik wil ook een hula hoop*), two reports of good behaviour (*ik heb geen een keer sliding op de floor gedaan*), two non context-related utterances (*ik zei ook I love you and ik heb een nieuwe coat*) and one translation of an activity about jumping. The Omega grades produced the highest number of five-word or more utterances. Omega 1&2a produced 11 out of the 19 utterances and is followed by Omega 1&2c, which produced 7.

Types and content of utterances in grade 1 art and crafts

The most commonly produced words are salutations (*morning, hello*), affirmatives (*yes, yeah*), the colours, theme-related words (*cows, cat, dog, Christmas*), farewells (*goodbye, bye*) and single digit numbers. 139 different types English-intended sentences were produced in the following order:

- two-word utterances (56)
- three-word utterances (33)
- four-word utterances (28)
- five words or longer utterances (22)

57 (41%) utterances were monopolized by a colour-word. The utterances with a colour-word in them were mostly in two-word and three-word utterances. The remaining utterances comprised salutations (e.g. *good morning, good middag, hi morning*), theme-related (*Christmas tree, jingle bells, dat is een cat, ik he been butterfly*), requests for information, and chunks of songs (*move on back* and *twinkle twinkle*). There was only one utterance about instructions (*zit down*). The Gamma 1&2 grade produced the highest number of five-word or more utterances, which was 8 out of 22.

Types and content of utterances in grade 3 art and crafts

The most common words are salutations (*morning, hello*), affirmatives (*yes, yeah*), the colours, theme-related words, farewells (*goodbye, bye*) and single digit numbers. 242 different types English-intended sentences were produced in each research group, occurring in the following order:

- two-word utterances (125)
- five words or longer utterances (51)
- three-word (40)
- four-word (26)

73 (32%) utterances had a colour-word in them and occurred mostly in two-word utterances. The remaining utterances were quite varied:

- salutations (e.g. *good morning, bye goodbye*)
- offering thanks (*thank you, dank you*)
- affirmations (*yes finished*)
- negatives (*no no no no no no*)
- counting sequences
- finishing assignments
- theme-related (*oh ja dat is the brain, dat is iemands butterfly*)
- chunks of songs (*the colour red the colour red, heads shoulders knees and toes, de wielen van de bus*)

There were very few utterances about instructions (*zit down*). The Gamma 3&4 grade produced the highest number of five-word or more utterances, which were 14 out of 242 utterances. The Alpha grade also produced a high number of five-word or more utterances, accounting for 12 out of 225 utterances.

Language mixing

Children produced both L2-only and mixed utterances to varying degrees. Table 6.13 shows that 1942 utterances were made in the first and final hour of the study, and that 440 were mixed. Grade 3 art and crafts accounts for a little more than half of the utterances produced in the entire study.

Table 6.13: ranges of instances per research group.

	All utterances (% of total utterances in this category)	Number of two-word or more utterances (% of total utterances in this category)
Grade 1, physical education	206 (11%)	59 (14%)
Grade 1, art and crafts	684 (35%)	139 (32%)
Grade 3, art and crafts	1052 (54%)	242 (55%)
Total	1942	440

Tables 6.14, 6.15 and 6.16 show the length of utterances that were produced in each research group, and whether these were L2-only utterances or mixed utterances. Grade 1 physical education made more (about two-thirds) L2-only utterances within this group. The art and crafts groups show that about half of the utterances were L2-only and mixed. This would indicate that language mixing is least salient in grade 1 physical education and most salient in grade 1 art and crafts with grade 3 art and crafts lying somewhere in the middle. This could be due to the fact that the L2 teacher uses shorter heavily embedded instructional language to convey messages in physical education lessons which could in turn make learning L2-only utterances easier. This confirms earlier work (Asher & Garcia, 1969; Asher & Price, 1967) that identifies the importance of linking physical actions to verbal messages targeted at learners with limited L2 knowledge.

Two-word and three-word utterances are more likely to be English-only utterances. The results therefore suggest that the longer the utterance is, the more likely it will be mixed. Reliance on two-word and three-word utterances could be due to two factors. The first is that children have not had time enough to pick up on the complex syntactic structures of the L2 so make simple utterances to bridge the gap. A more likely reason is that they do not need to know and use longer utterances in order to communicate and that using simple content words in two-word and three-word utterances facilitates successful communication. This suggests that in the initial phases of L2 acquisition, the shortest of utterances are quite sufficient for successful communication between the L1 child and the L2 teacher. The emergence of language mixing could be explained by the need to communicate more complex ideas to the L2 teacher. In the absence of the required syntactic structures, children mix languages in order to explain what they mean. On examination of the linguistic elements that are mixed in these utterances, the child's L1 syntactic structure normally remains intact and the insertions are mostly nouns and a few noun and verb phrases. In addition, the emergence of language mixing was more apparent in the final hour of the study. This could indicate that after longer periods of exposure, more experimentation using both the L1 and L2 can be expected.

Table 6.14: Length of utterances in physical education grades.

	Utterances		
	Total	Only L2	Mixed L1/L2
2-word	19	18	1
3-word	14	14	0
4-word	8	3	5
> 5-word	18	3	14
Total	59	38	21

Table 6.15: Length of utterances in grade 1 art and crafts.

	Utterances		
	Total	Only L2	Mixed L1/L2
2-word	56	31	25
3-word	33	11	22
4-word	28	6	22
> 5-word	22	12	10
Total	139	60	79

Table 6.16: length of utterances in grade 3 art and crafts

	Utterances		
	Total	Only L2	Mixed L1/L2
2-word	125	87	38
3-word	40	19	21
4-word	26	8	18
> 5-word	51	18	33
Total	242	132	110

§ 6.6.4 Sensitivity to L2 use¹⁰³

The results show that the total number of instances of sensitivity to L2 occurs in lessons at the beginning and at the end of the study but are quite low. The ranking range, from the lowest to the highest number of instances, is:

- grade 1 physical education grades (1 - 2)
- grade 1 art and crafts grades (2 - 9)
- grade 3 art and crafts grades (2 - 11)

There are a total of 9 instances for grade 1 physical education, 42 for grade 1 art and crafts and 64 for grade 3 art and crafts. The total number and the ranges indicate a subject difference show that while instances of sensitivity to L2 use are salient in all the research groups, they are most salient in art and crafts groups.

Playing with L1 or L2 sounds

In comparison to all four sub-categories for sensitivity to L2 use, playing with L1 or L2 sounds has the highest number of instances: 6 occurrences (range of 1-2) in grade 1 physical education; 24 occurrences (range of 1-5), in grade 1 art and crafts, and 38 occurrences (range of 1-7) in grade 3 art and crafts. It is difficult to establish

¹⁰³ An overview of examples in the “playing with sounds” category from the first and final hour of the study in all the research groups is available upon request.

a pattern in relation to the first hour or the final hour. This would seem to indicate that playing with L1 or L2 sounds can be expected to feature in physical education and art and crafts lessons, and is more pervasive in the latter. This pervasiveness is probably due to more opportunities for interaction.

L2 teacher's pronunciation of L1 names

The results show that almost all instances of correction occur in the first hour of the art and crafts research groups. The difference in instances between art and crafts and physical education is straightforward to explain. Circle time in the art and crafts lessons permitted the teacher to get to know children's names. Time was created for the exercise and this took place at the level of the group. Getting to know children's names in the physical education lessons took place either while handing out shoes to children individually or helping children in small groups while they were doing an activity. It would seem then that a teaching environment in which the teacher is more open to group intervention might provide a safer setting in which to correct the L2 teacher. The virtual absence of correcting the L2 teacher's pronunciation of L1 names may mean that the L2 teacher learned how to pronounce the Dutch names properly or that the L1 children simply decided to accept a different pronunciation.

§ 6.7 Frequency patterns in L1 interaction

As mentioned in §6.1, the results reported here are limited to those of collective scaffolding. Recall that whole situations of collective scaffolding have been counted as one instance given that these instances are generally quite long. The ranking range, from the lowest to the highest number of instances, is:

- grade 1 physical education grades (4 - 9)
- grade 1 art and crafts grades (1 - 12)
- grade 3 art and crafts grades (1 - 18)

The analysis shows that collective scaffolding is an integral feature of L2 classroom learning. Some variation exists between research groups, but in contrast to the analysis of frequency patterns in L2 interaction, fewer differences between the research groups are present. Although grade 1 physical education has a lower total number of instances (42), this number is not substantially lower than that for grade 1 art and crafts (53). Grade 3 art and crafts has the highest number (70). There is also some variation between the first hour and the final hour of the study. Research notes indicate that the variation of the number of instances between research groups and between the first and final hour within groups was a reflection of the type of activity prescribed in class rather than the subject or age group being taught. The most common purpose of collective collaboration was to translate the L2 teacher's utterances for the benefit of a peer or whole group. Common to all research groups were explaining absences and injuries, asking to go to the toilet, anticipating and confirming instructions and explaining possession. In the physical education lessons, children often tried to explain how to pay tag or the *apenspel*, complained about missing or ill-fitting gym pumps and talked about how to form a circle. In the art and crafts lessons, children enjoyed helping each other to find colours of objects in the room, explaining the meanings of words, making enquiries about the printed

colouring-in sheets, and responding to elicitation activities. Finally, my research notes show that older children seemed to engage in somewhat longer episodes of collective scaffolding throughout the study, which may reflect a level of cognitive maturity yet to develop in their younger peers.

§ 6.8 Other observations

Laughing and looking confused

At the beginning, (forced and nervous) laughing was often used to mask incomprehension, particularly in grade 1 art and crafts and especially in a group setting. Laughing did not occur with the same intensity or frequency among third graders; they were likely to pull faces and give one another confused looks. This was not observed in grade 1 physical education, and laughing was no longer evident by the end of the study.

Contextual clues

Contextual clues (posters, pre-made examples of art and crafts creations, props and classroom objects) are an important foreign language support, to facilitate comprehension and encourage negotiation of meaning, especially if the teacher has already used them to communicate messages beforehand. The degree of communication success seemed greatly helped by the use of gestures (for example pointing) and contextual supports (for example referring to objects in class).

§ 6.9 Summary

This chapter began with a number of questions about L2 classroom interaction: how did children get on with the CLIL approach in practice? What can be said about their language behaviour towards the L2 teacher during initial exposure? What types of interaction patterns unfolded during the initial phase of L2 learning and how salient were they? These were answered by analyzing the orthographic transcriptions of the first and final hour of lessons, and supplemented by my research journal and video fragments. The results from the analyses were broken down into illustrative material and descriptive quantitative data, and were further divided into five main interaction types: Repetitions English-intended utterances, Sensitivity to the L2, Foreigner Talk and Collective Scaffolding. The first three contained some element of the L2 in the interaction while the last two were predominantly L1 interaction. In addition, other observations – laughing, looking confused, the use of contextual clues and the use of gestures – were also described. In the present study, children were taught 10 hours of physical education or art and crafts lessons using English as the only medium of instruction. Recall that the main research question was:

- How does the L1 child behave towards and interact with the L2 teacher in the initial stages of L2 exposure in the classroom, and do these patterns of interaction change over time?

The CLIL approach was successfully used in grade 1 and grade 3. Children showed interest in participating in the lessons, and interacted regularly with the L2 teacher, even at first (classroom) exposure. This was demonstrated by their ability to follow instructions and complete tasks. The CLIL approach also provided the L2 child with manifold opportunities to discover strategies and experiment with them in their interactions with the L2 teacher, as illustrated in the 68 fragments. The fragments described in section 6.4 and 6.5 are a small but representative selection of the interactions in the first and final hour of the study, although this would certainly have run into the hundreds if the entire 130 hours of data had been used.

What can be said about the negotiations of meaning or free flow exchanges occurring in the L2 classroom? Were the encounters successful? There were hardly any instances of unsuccessful exchanges, and two explanations are offered to account for this positive outcome. First, the children's L1 was the shared, dominant classroom language and led to heavy reliance on the L1. The L2 teacher did not encourage L1 use or punish children. The L2 teacher's toleration of the L1 in the L2 classroom transcends the usual novice and expert roles of the language learner suggested by Long (1983), and perhaps created a sense of security for the individual and the group. This is reflected in the plentiful and lengthy examples of Collective Scaffolding. Second, the highly contextualized subject content may mean that successful completion of tasks was never exclusively dependent on fully understanding the L2 (teacher). This probably contributed to the child's overall sense of security, and the feeling that the language environment was not threatening. Furthermore, many children were happy to interact with the L2 teacher even at initial exposure, and this interaction continued until the end of the study. The fragments further confirm what is seen in the video recordings and research notes: the children were resourceful in their attempts to communicate with the L2 teacher, and in some cases quite persistent. In chapter 7, I will present the findings of the individual child interviews in which children explained how they coped with the unfamiliar language learning environment and described which (non-linguistic) strategies were adopted to help them make the L2 input comprehensible. This so far addresses how children react to the L2 teacher and the L2 environment. I shall now discuss the patterns of interaction that I examined, and discuss whether changes were observed over time. Recall that the five main interaction types examined were Repetitions, English-intended utterances, Sensitivity to the L2, Foreigner Talk and Collective Scaffolding. The first three examined some form of interaction containing an element of the L2, while the latter two focused on the L1.

Repetition was a common feature, but the analyses in section 6.6 show that it was difficult to establish whether they became more or less important as time progressed. Rather, repetition seemed to perform an important and integral role in verbally processing the L2, and it was sometimes used to prolong interaction or show a willingness to participate. Its frequency of use also seemed dependent on opportunity. The analysis of English-intended utterances shows a similar pattern as does Sensitivity to L2. The emergence of language mixing in all the research groups corroborates earlier work on interaction in early bilingual classrooms: language mixing is a natural developmental stage in learning foreign languages. The data also

confirms earlier work which reports language mixing in early L2 classrooms in The Netherlands, where Dutch words were frequently used to fill communication gaps precipitated by a child's limited linguistic repertoire in the L2 (Spaetgens 2010; van den Broek 2012). In relation to Sensitivity to L2, I examined playing with sounds, pronouncing names, L2 teacher's English and other children's pronunciation. The most salient category was playing with sounds, and the instances in other categories were very low in comparison, but this could have been because of the way the data was treated for analysis; I counted each *instance* of playing with sounds and each *situation* for the other categories, and this could have resulted in some degree of under representation of the categories. Another plausible explanation is that children might have been less interested in each other's and the L2 teacher's pronunciation abilities, and placed more focus on other aspects of L2 use. Foreigner Talk was also examined and some examples of lexical, phonological and syntactic adaptations were presented. The data also showed that Collective Scaffolding is common practice in the early L2 classroom. Children assist peers to comprehend and carry out the L2 teacher's instructions, and this is achieved by translating L2 utterances into the L1. Translations remain largely unchallenged by peers even if semantically incorrect. There were also some examples of peers giving each other (unsolicited) advice.

Another important part of the present study is determining whether subject and age differences exist. In relation to subject matter, the results show that art and craft lessons offer more opportunities for interaction than physical education, and also that the disparity is due to the activities that were carried out; circle time and tablework in art and crafts lessons offered both L2 teacher and L1 child with more opportunities for dialogic language contact while activities in physical education frequently took place at the group level. This results in fewer opportunities for interaction with peers or with the L2 teacher. In relation to age, grade 3 children generally scored higher on all five interaction types examined in the frequency pattern analysis. A conclusion may be that an advanced cognitive maturity in grade 3 children had a positive effect on the way older children interact in the classroom. Quite possibly the metalinguistic stage of development of four year olds (grade 1) and six year olds (grade 3) is quite different. As we have seen in chapter 5, the frequency of interaction does not necessarily affect lexical or phonological development, which is sometimes a popular misconception. Interaction may be a necessary tool for situational comprehension, but not necessarily for acquisition. This would seem to challenge earlier work by Long (1981, 1983b) claiming that interactionally modified input is necessary for acquisition and confirm other studies that show that interactionally modified input is more beneficial for situational comprehension (Ellis 1994; Pica et al., 1987).

Finally, the observations at the classroom level show grade 3 art and crafts to be the most experimental, creative and productive in their attempts at interacting with the L2 teacher. The grade also accounts for more than half of the total number of utterances analysed, strongly confirming journal entries during the course of the study suggesting that the older children appeared more interested and engaged. The results provide good evidence to support starting English language learning in grade

3 because it seems to be at least as positive, if not more positive than in grade 1, as is current practice in Early Bird schools in The Netherlands.

Chapter 7

Results at the school level

§ 7.0 Introduction

What was the impact of the study for the schools? The present chapter describes the impressions of the children, teachers and parents in relation to foreign language learning outcome, learning experience and the positioning of foreign language learning in the primary school curriculum.¹⁰⁴ 80 illustrations are included to help the interpretation of the results. Attention is given to (1) lesson duration and frequency; (2) subject-related differences, and (3) age-related differences. In relation to subject-related differences, I have used the data from the child interviews and the in-depth teacher interviews. No specific questions in the parental questionnaire about subject-related differences were asked, which is why they have been omitted. The results at the school level comprise data collected from the children, their classroom teachers and their parents at the post-test stage. The outcomes of 163 one-to-one child interviews are presented in section 7.1. Then, section 7.2 summarizes the outcomes of the 18 in-depth teacher interviews followed by the results of the 120 self-administered parental questionnaires in section 7.3. Finally, section 7.4 summarizes the main findings in this chapter.

§ 7.1 The child interviews

76 children from the first grade (48 for art and crafts and 28 for physical education) and 87 children from the third grade participated in the one-to-one interviews. Children's responses were first recorded and tabulated for analysis later. Three salient points were identified during the content analysis:

- skills development - the children's own assessment of comprehension and oral skills, including using the English language orally outside the school classroom.
- learning subject content through an English-only medium (CLIL) - the children's reactions to the CLIL approach (the activities, their likes and dislikes, duration and prolongation of English lessons).
- communication strategies - the descriptions that children used to explain how communication breakdown was managed with the L2 teacher.

Note that no data is available for grade 3 physical education and this could affect the outcomes of the subject comparisons. I will first describe children's response behaviour before presenting the results.

Interview response behaviour

The test administrators reported that all the children were willing to participate in the interview, and seemed comfortable about sharing experiences. Where necessary,

¹⁰⁴ It is important to bear in mind that at the time of collecting data, neither the parents nor the teachers were aware of the outcome of the testing that had taken place at the child level.

the test administrators used elicitation techniques to try and gather more information.¹⁰⁵ The length of the interviews with grade 1 children lasted about two minutes, while the interviews with grade 3 children took about five minutes to complete. In addition, grade 1 children were reported to need a little more encouragement and prompting. A longer interview time was needed in grade 3 and this may well have been due to their more elaborate responses; their younger counterparts tended to give “yes/no/I don’t know” responses. A longer interview time among the older children could point toward a more positive learning experience; however, I contend that a longer interview period reflects the advancement of social skills and cognitive growth. In other words, older children’s increasing ability to remember and relay past experiences to the present, express feelings and formulate opinions improve as they mature. Expressing feelings and formulating opinions are synonymous with the development of their social, emotional and communicative abilities. In sum, a short interview does not necessarily have to denote a negative interview.

§ 7.1.1 Assessment of comprehension and oral skills and language use while outside the classroom

Comprehension skills

135 out of 163 children (82%) reported being able to understand English as a result of the study, as illustrated in fragment 1:¹⁰⁶

1. Ja, *don’t hold hands*. Dat is dat je zonder handen moet. Juffrouw Vanessa zegt “don’t hold hands” dan moet je alle kinderen los bij de handen laten gaan.
Yes, don’t hold hands. That’s when you mustn’t use your hands. Miss (Vanessa) says “don’t hold hands” then all the children have to let each other’s hands go.
Oona, 4, physical education

A closer examination of the results shows 55 children (72%) in grade 1 reported being able to understand English, while 80 children (92%) in grade 3 reported the same. No differences were found for subject matter: 112 (83%) children in art and crafts, and 23 (82%) children in physical education responded positively.

¹⁰⁵ For example: “can you give me an example?” and “which words do you mean?”.

¹⁰⁶ Quotations have been translated by the researcher and positioned underneath the original Dutch quotation.

Oral skills

135 children (82%) reported being able to speak English as a result of the study. Similarly, a closer examination of the results also shows differences between grades: 53 children (70%) in grade 1 reported being able to understand English, while 82 children (94%) in grade 3 reported the same. In terms of subject differences a substantially higher number of children in art and crafts (118 children or 87%) reported being able to speak English compared to those who did physical education (19 children or 68%).

Types of positive responses

Grade 1 responses were almost exclusively limited responses in contrast to the extended responses of third graders. To illustrate, in terms of comprehension skills only 2 out of 76 children from grade 1 answered “a little” to the question “can you understand English?”, and only 4 out of 76 answered in the same way when they were asked about their speaking skills. The remaining responses were all absolute (“yes”). Contrastingly, children in grade 3 gave varied responses. For comprehension skills, 49 children (61%) answered “yes” and 31 children (39%) answered by using terms like a little, a little bit or some. For speaking skills, 54 children (66%) answered “yes” with the remaining 28 children (34%) using a little, a little bit or some, as illustrated in fragments 2-4.

2. Ja, een beetje. *What is your name?*
Yes, a little. What is your name?

Abraham, 6, art and crafts

3. Ja. *Sit down.*
Yes. Sit down.

Otto, 4, physical education

4. Ja, beetje. *Bye, star, I love you.*
Yes, a bit. Bye, star, I love you.

Helen, 6, art and crafts

A substantial group of children in grade 1 reported not being able to understand (21 children or 28%) or speak (23 children or 30%) English; they form approximately one third of their age cohort. Fragments 5 and 6 capture the spirit of these responses:

5. Nee, nog niet zo heel goed. Een beetje tot 10 tellen, *yellow.*
No, not very well yet. A little, counting to 10, yellow.

Eli, 4, art and crafts.

6. *Yellow, hander, vinger. De rest weet ik niet meer.*
Yellow, hands, finger. I don't know the rest anymore.

Gabriella, 4, art and crafts

Across both grades elicited examples of spoken English were more likely to be single lexical items rather than chunks. Slightly more grade 3 children mentioned lexical chunks compared to the grade 1 children.

Usage outside the classroom

Was English used at home and with friends? 46 children (61%) in grade 1 and 72 children (83%) in grade 3 reported using English at home. Out of the 72 children in grade 3 reporting usage at home, 39 children answered “yes” and 33 children answered “sometimes but not always”, “now and then” or “often”. There was a tendency for children to use the language more at home with parents, especially their mothers, than with friends, as shown in fragments 7-8:

7. Ja, papa en mama willen horen wat ik heb geleerd, ze willen alle kleuren horen ... met vriendjes wel als het Engelse vriendjes zijn
Yes, mum and dad want to hear about what I have learned. They want to hear all the colours. (I talk) to friends when they are English friends.
Alex, 6, art and crafts
8. Ja, tegen vriendjes ook een beetje met grappige woordjes.
Yes, (I talk) to friends also a bit with funny words.
Anita, 6, art and crafts
9. Thuis niet vaak, tegen vriendjes nooit.
Not often at home, never to friends.
Matt, 4, art and crafts

More children in art and crafts (89 children or 66%) stated that they used English outside the classroom compared to physical education (15 children or 54%).

§ 7.1.2 Reactions to the CLIL approach

In the present study, the L2 teacher refrained from using Dutch and communicated with children in English only. This pretence was made more credible by their own classroom teacher’s admission that the L2 teacher could only speak English. The majority of children accepted the L2 teacher’s L1 “handicap” for which interesting explanations were fabricated. Fragments 10-14 illustrate the types of explanations given:

10. Gewoon omdat ze in een ander land woont.
Just because she lives in another country.
Humphrey, 4, physical education
11. Gewoon omdat ik dat nooit hoor.
Well because I never hear it (= Dutch)
Hazel, 4, physical education
12. Omdat Vanessa in Engeland woont.
Because Vanessa lives in England.
Gerard, 4, art and crafts

13. Doet zij nooit. Als ik iets zeg dan weet ze het niet, dan zeg ik 't anders.
She never does. If I say something, she doesn't understand it. Then I say it differently.
Hannelore, 6, art and crafts
14. Omdat zij altijd Engels praat en het is ook Engelse les.
Because she always speaks English and it is an English lesson as well.
Hadrian, 6, art and crafts

Fragments 15-17 show how a small proportion of children remained unconvinced about the teacher's lack of Dutch language skills:

15. Omdat zij Engels kan, dan kan zij ook Nederlands, net als Holly.
Because she can speak English, she can speak Dutch as well, just like Holly.¹⁰⁷
Hilary, 4, physical education
16. Dat heeft zij van ons geleerd.
She learned it from us.
Holmes, 6, art and crafts
17. Anders was het geen Engelse les.
Otherwise it wouldn't be an English lesson.
Hendrick, 6, art and crafts

Some children also reported that the L2 teacher could understand their L1, citing cognates: "hi" for "*hai*" and "group 4" for "*groep 4*" or the correct pronunciation of their names.

Likes

When asked what they liked about the lessons, children reported enjoying different aspects, from singing songs in a group to doing the activities themselves, as illustrated in fragments 18-20:

18. Weet niet, eigenlijk alles.
I don't know, actually everything.
Hector, 6, art and crafts
19. Zelf kleuren en de boerderij want dan mocht je een knuffel vasthouden en Polly.
When you coloured things in yourself and coloured in the farm, you were allowed to hold a cuddly toy and Polly.
Agnes, 6, art and crafts
20. Omdat het zo'n lieve juffrouw was.
Because the teacher was so sweet.
Gemma, 4, art and crafts

¹⁰⁷ Holly is bilingual, whose home language is Polish.

Fragments 21-24 capture how grade 3 children were more likely to state learning the English language rather than playing games, singing songs or making things:

21. Dat wij heel veel Engels leerden.
That we learned a lot of English.
Harmony, 6, art and crafts

22. Sommige Engelse woorden waren heel grappig.
Some words in English were very funny.
Marnix, 6, art and crafts

23. Dingen van je lijf. Omdat er een grappig ding bij zat. Dat vond ik grappig (Wat dan?)
Bum.
Things about the body. Because there was something funny included. That was funny.
(What was it then?). Bum.
Glen, 6, art and crafts

24. Donkey Kong doen bij *be a monkey*.
Being Donkey Kong with (the game) *be a monkey*.
Abraham, 6, art and crafts

Few subject differences can be reported.

Dislikes

When asked about their dislikes, children reported other children's disruptive behaviour, order in the classroom and discipline more often than language-related problems, as is illustrated in fragments 25-30.

25. Dat kinderen toch handen vasthielden als het niet mocht en dat jongens over de grond gleden, want dan kun je pijn doen.
Children kept on holding hands and that wasn't allowed and when the boys were sliding on the floor because you might hurt yourself.
Oprah, 6, art and crafts

26. Soms als ik de woordjes niet ken.
Sometimes when I don't know the words.
Holmes, 6, art and crafts

27. Dat de juf boos wordt als iedereen gaat gillen, want ik doe dat niet, maar dan wordt ze ook boos op mij.
When the teacher becomes cross when everyone starts yelling. I don't do that but she is cross at me, too.
Max, 6, art and crafts

28. Als we weer hetzelfde liedje moesten leren, dat is saai.
When we had to learn the same song again, that is boring.
Alan, 6, art and crafts
29. Een paar kindjes gingen er tussen praten, daar werd Vanessa niet blij mee.
A few children started talking when Vanessa was talking and she wasn't happy about that.
Andrea, 6, art and crafts
30. Dat ze allemaal die dingen aan het vertellen was en ik kon helemaal niet verstaan.
When she was talking about all these kinds of things and I couldn't understand it at all.
Gideon, 6, art and crafts

Few differences between subjects can be reported.

*Lesson duration and continuing lessons*¹⁰⁸

46 children in grade 1 (61%) and 21 children in grade 3 (24%) reported that the lessons were too long.¹⁰⁹ More children in physical education reported that the lessons were too long: 15 children (54%) compared to 52 children (39%). A selection of the children's responses can be found below (fragments 31 – 33).

31. Soms kort en soms lang. Soms heel, heel, heel erg kort.
Sometimes short and sometimes long. Sometimes it was very, very, very short.
Oralee, 4, physical education
32. Sommige lessen zijn best wel kort.
Some lessons were fairly short.
Oprah, 4, physical education
33. Soms kort en soms lang.
Sometimes short and sometimes long.
Ophelia, 4, physical education

74 children in grade 3 (85%) and 43 children in grade 1 (56%) reported wanting to continue the lessons. With regard to subject differences, 102 (76%) children who had art and crafts, and 15 (54%) who had physical education wanted more lessons, indicating a subject preference for art and crafts.

¹⁰⁸ In my study, all research groups that were studied had 30-minute lessons with the exception of Gamma grade 3 who had 60-minute lessons.

¹⁰⁹ In grade 1, 3 children reported that this varied and 10 children reported the same in grade 3. If I include these children in my calculation, 49 children in grade 1 (65%) and 31 children in grade 3 (36%) thought the lessons were too long.

Initial anxiety

Nine children in grade 1 (12%) and eleven children in grade 3 (13%) had some problems adjusting to the new learning environment, but reported that these were temporary, stopping after the first or second lesson. Slightly more children in art and crafts (18 children or 13%) reported negatively on this question (2 or 7% in physical education). Fragments 34-35 describe these reactions:

34. Nee. Wel eerste keer.
No. Just the first time.
Harmony, 6, art and crafts
35. Nee. De eerste keer alleen.
No. Only the first time.
Gail, 6, art and crafts

§ 7.1.3 The L2 teacher and repairing communication breakdown

Saville-Troike, McClure and Fritz (1984, p. 60) state that having acquired strategies for communicating with others in their L1, “second language acquisition is largely a matter of learning new linguistic forms to fulfil the same functions within a different social milieu”. The present study confirms this position. During the interviews, the test administrators asked the children whether they knew what they had to do in the English lessons. In grade 1, 61 children (80%) said they knew what they had to do, answering with a firm “yes”. In grade 3, responses varied from a firm “yes” (39 children or 45%), “yes but not all the time” or “no but not all the time” (33 children or 38%) and a firm “no” (15 children or 17%). When the first two response categories for grade 3 are combined, the figure increases to 72 children (82%) and is therefore comparable to the responses of the children in grade 1. No subject differences can be reported. 110 children (81%) in art and crafts, and 23 children (82%) in physical education reported knowing how to manage communication breakdown. Fragments 36-37 illustrate the types of answers that were given:

36. Ik begreep het altijd.
I always understood everything.
Hamlet, 6, art and crafts
37. Die juffrouw praat alleen maar Engels, dat verstond ik niet echt. Later begreep ik het wel. Dan zei ze het nog een keertje in het Engels.
The teacher only spoke English. I didn't understand it really. Later I did. Then she said it again in English.
Eileen, 6, art and crafts
38. Ja, best wel. Deed gewoon maar wat, keek naar anderen. Ik kon 't wel 't beste verstaan.
Yes, sure. Just did something, looking at others. I was the one who understood it the best.
Harmony, 6, art and crafts

As in previous responses, grade 3 children appear to express evaluations in terms of degrees of achievement rather than absolute achievement. Of those who didn't understand the instructions, repairing communication breakdown was addressed by using a wide variety of child-directed actions, as shown in fragments 39-46:

39. Paulus had alles van zijn ouders geleerd, die zei wat we moesten doen in het Nederlands.
Paulus learned everything from his parents. He told us what we had to do in Dutch.
Alan, 6, art and crafts
40. Gebarentaal, dan snapt Vanessa het.
Sign language. Then Vanessa understood it.
Harmony, 6, art and crafts
41. Vroeg het aan een van der anderen in mijn groepje.
I asked one of the others in my group.
Harriet, 6, art and crafts
42. Gewoon even blijven kijken.
I just kept watching.
Maurice, 6, art and crafts
43. Nee. Gewoon gekeken naar anderen.
No. I just looked at what the others were doing.
Bridget, 4, art and crafts
44. Gewoon ja zeggen alsof ik het wel begreep.
Just saying yes and acting as if I had understood it.
Michael, 6, art and crafts
45. Nee. Nou dan kan ik gewoon de andere kindjes zien.
No. I can just watch the other children.
Oona, 4, physical education
46. Aanwijzen, dan zegt Vanessa of het goed is of niet.
Pointing and Vanessa told me if it was right or not.
Heide, 6 jaar, art and crafts

§ 7.1.4 Summary

Ten conclusions can be drawn from the child interviews. The first is that the large majority of children report understanding and being able to speak English even though actual production using elicitation yielded limited responses (single lexical items or short formulaic chunks). The second relates to the learning approach used. A very low level of criticism was expressed about learning English in art and crafts lessons or physical education indicating that the approach is both feasible and acceptable for children in lower primary grades. Third, the role of affective factors in inhibiting learning among a minority of children is minimal. A small and roughly equal proportion of children in both grades reported feeling anxious at the beginning of the study. It would seem though that this initial distress is a natural way of

accommodating a new language setting, which disappears after a very short period of time. The fourth relates to classroom discipline and disruptive behaviour in the classroom, which are children's main concerns in contrast to learning the foreign language itself. In saying this, it is important to bring up the fifth conclusion, which is that while the foreign language was not always a primary source of concern, first graders reported more frustration in comparison to third graders. In the interviews, children were still able to express the ways that they used to mediate their and others' learning in the foreign language classroom. This was achieved by using linguistic (L1 communication with peers and the L2 teacher) and non-linguistic clues such as gestures and contextual supports. This account of learning implies the importance of group activities in which collaborative learning supports the learner in language development within the Zone of Proximal Development (Vygotsky, 1962). Linked to this is children's ability to accept and integrate an L2 teacher in the L1 classroom. The pretence of not being able to communicate in the L1 and the L2 teacher's persistent use of the L2 should not be viewed as retarding language learning. The sixth conclusion accounts for the practicalities of learning. In terms of lesson duration less than half thought the lessons were too long, and seven out of ten children wanted to continue learning English. The seventh conclusion emerging from the data is that foreign language processing occurs outside the classroom, mostly at home and mostly with the child's mother. The eighth learning point relates to the generally limited responses provided by grade 1 children in contrast to the generally varied responses provided by grade 3 children. The ninth conclusion is that in terms of age, third graders were generally more positive about the English lessons on all of the items asked during the interview:

- Comprehension skills: 92% versus 72% (grade 3 versus grade 1)
- Oral skills: 94% versus 70% (grade 3 versus grade 1)
- English usage outside classroom: 83% versus 61% (grade 3 versus grade 1)
- Lesson duration (too long): 24% versus 61% (grade 3 versus grade 1)
- Continuing lessons: 85% versus 56% (grade 3 versus grade 1)

Finally, some subject-related differences emerge from the comparisons, as illustrated in the list below (percentages are for art and crafts first, then physical education):

- Comprehension skills (yes, I can understand English): 83% versus 82%
- Oral skills (yes, I can speak English): 87% versus 68%
- Lesson duration (too long): 39% versus 54%
- Continuing with lessons (yes): 76% versus 54%
- Initial anxiety: 13% versus 7%
- Repairing communication breakdown: 18% versus 21%
- Using English at home: 66% versus 54%

There is no subject difference for comprehension skills. Art and crafts scores better for oral skills, but this is not surprising given that there were more opportunities for interaction in art and crafts than physical education. This is confirmed by the analyses in the previous chapter. A similar positive pattern can be observed for lesson duration and continuing with lessons; although closer analysis reveals that it is the grade 3 art and crafts responses that account for the more favourable outcome.

It is difficult to interpret the slightly higher score for using English at home for the art and crafts groups. Perhaps this is connected with the results reported for the oral skills, where the children from the physical education groups describe being able to do this substantially less, making it perhaps more challenging for them to use English at home. Another possible reason is that children in the arts and crafts grades were allowed to take their work home with them, and this could have provided both parent and child with a moment to discuss what was learned. The results for comprehension skills, initial anxiety and repairing communication breakdown are very similar. A conclusion could be that in the initial stages of classroom second language acquisition, the subject taught has little effect on these areas.

§ 7.2 The teacher interviews

18 classroom teachers took part in pre-designed interviews that were administered in Dutch by the researcher at the post-test stage.¹¹⁰ Table 7.1 shows the distribution of teacher interviews per school. More teachers from grade 1 participated in the in-depth interviews on account of more part-time teachers teaching in grade 1 compared to grade 3.

Table 7.1: distribution of teacher interviews per school.¹¹¹

Grade 1	Interviews	Grade 3	Interviews
Beta	3	Alpha	1
Gamma	2	Gamma	1
Omega	3	Eta	1
Eta	3	Mu	1
Epsilon	2	Epsilon	1
Total group 1	13	Total group 3	5

Each interview was conducted on a one-to-one basis and recorded for analysis later. Teachers wore a tie-clip microphone during the interview. At the beginning of each interview, the teachers were told the purpose of the interview and were invited to answer the questions freely. Teachers were also encouraged to expand on their responses. The main objectives of the interviews were to obtain:

- teachers' general opinions and attitudes towards early English in primary education;
- comments about the feasibility of delivering a CLIL approach in lower primary grades;
- teachers' perceived roles if early foreign language learning were to become a compulsory part of the curriculum
- other information pertaining to the study itself.

¹¹⁰ In some cases, teachers themselves observed a selection of the lessons, which means that their contribution in this chapter is also to provide an impression of what they saw and heard during the lessons. Teachers' close relationships with the children also meant that they were able to provide input on children's reactions to the lessons before and after them.

¹¹¹ The total number of teacher interviews for physical education groups is 4.

Before detailing the analysis of the results of the teacher interviews, the teachers' response behaviour is first presented.

Teachers' interview response behaviour

The interviewer/interviewee relationship was informal owing to the close working relationship that had been built between the researcher and the classroom teacher before and during the course of the study. The interviews took on average 20 minutes, and lasted between 12 minutes and 40 minutes. The teachers were co-operative, and none declined the opportunity to participate.

§ 7.2.1 Organizing the data for the analysis

Each interview comprised 27 questions and covered seven areas.

1. General impressions (questions 1-7): the study; perceived results; its success and opinions about early and late English in primary education, and recommendations and inspiration to continue.
2. Teacher's experience (questions 8-11): opinions about their role in the study; the desire to intervene; perceived learning outcome, and children's behaviour before, during and after the lessons.
3. Lesson content (questions 12-21): CLIL; lesson frequency; lesson duration; degree of difficulty; suitability with regard to the curriculum; effect of L2 on L1; ability to teach lessons themselves and corresponding needs, and other suitable school subjects.
4. Children's experience (questions 22-24): perceived learning outcome, experience and reasons for behavioural problems.
5. Parents (question 25): the parents' opinion of the study.
6. School (question 26): the school's opinion of the study.
7. Areas of improvement for classroom learning (question 27).

13 out of 18 teachers (all for art and crafts groups) were present for half of the lessons, and were either in the classroom working at their desks or used the lessons as an opportunity to observe behaviour. One teacher only observed one lesson since the lessons took place on days when she was absent. For the physical education groups, all four teachers were present during the study for two or three lessons. For the present study, all the classroom teachers were interviewed, irrespective of the nature of their part-time teaching contract.

The interviews took place after testing at the child level had finished, and between 2 weeks and 6 weeks after the last child in the research group was tested. This variation was due to school holidays, teaching schedules and room availability. If there was more than one teacher that had to be interviewed per school, all of the interviews were scheduled to take place on the same day. This was with the exception of the two first grade teachers at the Gamma school. One teacher was interviewed at school and the other teacher was interviewed in the researcher's home. The teacher who was interviewed at the researcher's home was invited to do so because she had left the Gamma school halfway through the study. The

researcher's home was convenient, and could be combined with the Gamma teacher's work schedule and location.

Using a standardized interview format enabled a content analysis of teachers' responses. For the purposes of analysis, the interview recordings were listened to and teachers' responses were noted down. Prior to the analysis, it was thought that the results could be summarized into the seven areas listed on the previous page; however, while processing the data, different data patterns emerged. After the interview process, it became apparent that the categories defined prior to the interview were too rigid, and failed to reflect the value that teachers placed on topics. This was because teachers directed discourse themselves and commented generously on a wide variety of topics. As a consequence, ten new data categories were created. The re-shuffling of the questions and the creation of the new categories (see table 7.2) also helped to address the questions at the beginning of this chapter about (1) the ideal length of a lesson; (2) the frequency of a lesson; (3) a comparison between art and crafts and physical education, and, (4) age differences better.

Table 7.2: The ten new data categories for the teacher interviews.

Category	Question
1. General impression	n/a
2. Children's learning outcomes	2, 3, 10, 22, 23, 24
3. General impression and positioning of study and early English in the curriculum	1, 6, 12, 16, 27
4. Ability to deliver the lessons	19, 20
5. Intervention and atmosphere	8, 9, 11
6. Content, lesson frequency, lesson duration, suitable subject areas	13, 14, 15, 17, 21
7. Influence of L2 on L1	18
8. Early vs. late L2 learning	4, 5
9. Reactions from parents and the school	7, 25, 26
10. Areas of improvement	27, all categories

During the interview, no questions were omitted or re-ordered. Teachers gave the same answers for categories 1 and 2. Questions about a teacher's ability to deliver the lessons themselves (category 4), the influence of the L2 on the L1 (category 7), and a statement about early vs. late learning (category 8) evoked answers that were common across the whole group.

§ 7.2.2 Results

Category 1: General impression

The teachers were very responsive and provided elaborate answers to most of the questions, using examples to illustrate their point. These involved reviewing specific incidents, naming children and highlighting particular activities. The teachers also expressed a high level of curiosity about children's learning outcomes but accepted that the results were still being processed. The following describes the outcome of my analysis per category.

Category 2: children's learning outcomes

The teachers thought that the children learned English as a result of the study but pointed out that learning outcome would vary per child. I noted that teachers' impression of the study was heavily influenced by the children's (language) behaviour on the basis of:

- enthusiasm;
- class involvement;
- spontaneous oral L2 production,
- correctly elicited examples of L2 words and phrases, and,
- parental feedback.

Individual variation in learning outcome and learning experience were attributed to the child's own ability rather than the explicit use of the L2 or the role of the researcher as the instructor. The only consistent exception to this was at the very beginning of the study when almost all children were reported needing time to adjust to the new situation, though teachers said that this was indicative of any new teacher or new subject. Getting used to the new learning situation varied from child to child but was in keeping with the child's own conduct in his or her usual L1 environment. Finally, very young four year olds, children with learning disabilities or a physical handicap and those who did not enjoy art and crafts in their L1 anyway, needed a longer period of time to adjust and accept the new learning setting.

Category 3: Impression of the study and positioning in the curriculum

Teachers were positive about the study, and thought that it was well-positioned in the school timetable and the wider curriculum.

Category 4: Ability to deliver the lessons

Teachers were confident about delivering English lessons themselves, and found the experience of watching how it was done helpful. However, supplementary material in the form of a teacher's resource pack that included lesson material and classroom language would be pre-requisites. Some teachers also voiced concerns about their own level of L2 fluency. In particular, the ability to use appropriate classroom language and the ability to speak English as well as a native-speaker were identified as problems. Addressing a below standard pronunciation by means of training was considered desirable and necessary.

Exposing children in English for the duration of the lesson was also seen as a potential problem. Some teachers thought that it would require a very high level of self-discipline to speak English constantly, stating that there would be a heavy tendency to rely on their L1 if speaking the L2 to the children would distress either party. This was more evident among grade 1 teachers than grade 3 teachers.

Category 5: Content, lesson frequency, lesson duration and other suitable subject areas

Generally speaking, subject content and lesson frequency were judged to be acceptable for the age group. In terms of content, thematically-based lessons employing diverse classroom activities were evaluated as necessary and important for children's overall development. Having lessons once or twice a week was considered adequate. Lessons lasting 30 minutes were approved. The thirty-minute lessons were considered an appropriate period of time for teaching English. Art and crafts or physical education lessons lasting less than 15 minutes would be difficult to arrange from a practical perspective. Lessons lasting more than 30 minutes would not appeal to the age group because of limited attention spans. Some correlation was found between having more lessons in a week with a better learning outcome; however it was obvious that this would only be feasible if there was enough time available for the lessons to be slotted into the timetable. In the only class where 60-minute lessons were used, the teacher stated that this was too long and suggested 30 or 45 minutes for her (Gamma) grade 3&4. Some teachers criticized the fact that no attention was paid to *Sinterklaas* in the English lessons. It appeared that failing to incorporate culturally important Dutch themes was difficult for younger children to accept even though, in this instance, *Sinterklaas* has no common ground with English-speaking cultures.

In addition to physical education and art and crafts, teachers deemed music, drama, and simple arithmetic as appropriate subjects for L2 instruction. Inappropriate subject areas were the Dutch language and subject areas requiring the use of concepts and terms, as is common in geography and history. Grade 1&2 teachers also said that circle time, playing (guessing) games, simple guided conversations, counting and reading short stories using picture books were appropriate for L2 instruction. No other differences between subjects could be determined.

Category 6: Influence of L2 on L1

In the absence of tangible results evaluating L1 development, classroom teachers were wary about drawing strong conclusions. However, they stated that the English lessons would not have had a damaging effect on L1 development given that the period of time that had been spent learning English was nominal in relation to the context of an entire school week. In addition, they reported no differences in general L1 development in the rest of the week. A few teachers suggested that the L2 might have had a favourable effect on L1 development, stating that children could unconsciously draw similarities between their L1 and L2 either through inferencing strategies or discovering cognates. Teachers said that this reinforcement could support the processing of L1 word meaning.

Category 7: Early vs. late L2 learning

The teachers were under the impression that an earlier start to L2 learning was conducive to a better learning outcome. The additional role that English plays as a lingua franca, and its privileged status in the media – particularly on television and

on the internet – were significant factors supporting an earlier start. However, while there was a general tendency towards promoting L2 learning before grade 7, teachers also expressed concerns on two levels. First, the status of English as an L2 in an already heavily prescribed primary school curriculum would need to be addressed; something would need to be eliminated in order to replace it with English language learning. Second, longer-term implications concerning continuity in the primary school curriculum, and alignment between primary and secondary education curricula would also need to be dealt with. None of the teachers cited cultural awareness or sensitization to foreign languages as a benefit.

Category 8: Reactions from parents and the school

At the end of the study, an evaluation of the study amongst the teachers and the school head had not always taken place. However, reactions were reported to be positive. Teachers reported that feedback from parents was positive though low, transpiring incidentally and occurring in passing on the playground or whilst picking up children from school or in a few cases, during parents' evening. The Mu, Alpha and Epsilon schools all expressed interest in continuing with the study.¹¹²

Category 9: Areas of improvement

Grade 1&2 teachers thought that a stronger focus on circle time, word games and singing would have been more beneficial for oral language development. In addition, the diversity in age and class population towards the second half of the school year meant that there was a need for more made-to-measure tasks appealing to age and level. This was more apparent for research groups where the research took place for 3 months or longer or beginning after the Christmas period. Grade 1 teachers also saw opportunities to use other aspects of the curriculum to review words in English. Towards the end of the study, teachers in grade 1 and 3 felt the material could have been made more challenging and difficult with an eye to integrating the English language into more subjects.

§ 7.2.4 Summary

The results from the in-depth teacher interviews are positive. Teachers were enthusiastic about the lessons, proud of their pupils' performance in class, and confident about children's learning outcomes. An important difference between teachers in grade 1 and grade 3 is the association made between foreign language learning and learning benefits/outcome. On the one hand, teachers in grade 1 were more likely to focus on the effect that the lessons had on children's social and emotional well-being, while on the other hand teachers in grade 3 tended to focus on learning outcome.

Four other conclusions emerge from the data. First, all the teachers thought that the children had picked up some words and could understand what was going on in

¹¹² The Alpha school continued experimenting with the programme under the researcher's supervision in 2009/2010 (with a new grade 3 and the existing grade 3 from the study which became grade 4 in the following school year). The Mu school also invited the researcher to present the study at a school conference in 2009.

class without knowing the results of the tests. Second, teachers thought that they could teach the material and lessons themselves in class, if they were given adequate training but maintaining an English-only environment for 30 minutes was perceived to be a difficult exercise in self-discipline, and the teachers seemed wary of their ability to do so. Third, there was a general consensus that starting earlier would result in a better learning outcome. This was based on their own observations during the lessons, but also outside the English lessons. Finally, grade 1 teachers reported that more teacher-led activities conducted during circle time would be a better use of education time, and in turn yield better learning outcomes rather than a CLIL approach.

§ 7.3 The self-administered parental questionnaire

178 parents of the children in grade 1 and grade 3 were invited to participate in the present study.¹¹³ Parents' evaluations of English lessons shed light on:

- how their child experienced the lessons;
- changes in their child's behaviour at home as a result of the study;
- general impressions about learning English in lower primary, and
- the desirability to have the language taught as part of the curriculum.

Classroom teachers were requested to distribute envelopes containing the questionnaires to the children either on the last day of the study or within one week of the study concluding. Parents were given sealed envelopes containing a letter of invitation, a child-coded, one-page questionnaire with 6 questions to fill in, and a stamped addressed envelope (see appendix 9). The letter briefly explained that the child had had a series of 20 English lessons in a specified period, and that the researcher was interested in gauging parents' opinions about the study and their child's learning experience.¹¹⁴ Parents were asked to return questionnaires either within two weeks during term time or three weeks if the questionnaires had been distributed just before a school holiday.

§ 7.3.1 Analyzing the self administered questionnaire

A slow influx of questionnaires within the time period that was specified in the letter were received; however questionnaires were accepted up to 2 months after the study had commenced to maximize coverage and representation. Once the questionnaires were received, parents' written responses were tabulated, and saved for analysis later. When all the responses had been tabulated, each response coded. The results are presented in the order that the questions were asked with the exception of questions 1 and 4, which have been combined given the overlap in responses. Where applicable, a further explanation of how the analysis was carried out is provided. A

¹¹³ This is with the exception of grade 1 at the Epsilon school. The classroom teacher requested that children in both grade 1 and grade 2 be given an envelope containing the questionnaire for their parents to avoid children feeling excluded. The results reported in this chapter are only based on the questionnaires from the children in grade 1 and questionnaires from grade 2 parents were discarded. The term "parent" has been used throughout this chapter to denote parent or caregiver.

¹¹⁴ Note that grade 3 in the Gamma school had 10 lessons of 60 minutes.

number of direct quotations from the responses have been included for illustration purposes.

§ 7.3.2 Overview of data

Table 7.3 provides an overview of the complete data collected. As previously mentioned, 120 questionnaires were completed and returned, yielding a return rate of 67 per cent. This suggests that parents were interested in expressing their opinions about their child's educational experience.

Roughly an equal percentage of parents in grades 1 and 3 returned questionnaires. One irregularity in response behaviour among third graders' parents at the Eta school was observed; less than half responded. This return rate deviates both from that of grade 1 at the same school and that of other research groups. Consultation with the class teacher on this point revealed that this was due to the general low level of interest amongst parents to respond to any school-related activity, and is thus in keeping with parents' usual patterns of participation.

*Table 7.3: Overview of questionnaires administered and questionnaires returned.*¹¹⁵

	number administered	number returned	percentage returned
Grade 1			
Beta (2)	20	12	60%
Gamma (1)	11	8	72%
Omega (2)	18	13	72%
Eta (2)	25	17	68%
Epsilon (1)	10	8	80%
Total	84	58	69%
Grade 3			
Alpha (1)	24	17	71%
Gamma (1)	10	6	60%
Eta (1)	24	11	46%
Mu (1)	22	18	82%
Epsilon (1)	14	10	71%
Total (13)	94	62	66%

§ 7.3.3 Results

Question 1: In your opinion, what did your child think about the lessons?

Table 7.4 summarizes parents' positive, negative and neutral responses. The results show that the response to this question was very positive, with the large majority of parents reporting that their child thought the lessons were fun, enjoyable and interesting.

¹¹⁵ The figure in brackets denotes the number of school groups that participated in this study. I have included this extra detail only in table 7.1 although the information is relevant for all the tables that are presented in this chapter.

Table 7.4: *In your opinion, what did your child think of the lessons?*

	responses	positive	negative	neutral
Grade 1				
Beta	12	10	1	1
Gamma	8	8	0	0
Omega	13	12	0	1
Eta	17	10	2	5
Epsilon	8	8	0	0
Total	58	48	3	7
Grade 3				
Alpha	17	17	0	0
Gamma	6	5	1	0
Eta	11	11	0	0
Mu	18	16	0	2
Epsilon	10	10	0	0
Total	62	59	1	2

Fragments 47-49 describe some of the parents' responses:

47. Marit vond het erg leuk, vertelde altijd wat zij had geleerd, wel dacht ze dat ze al na een paar keer helemaal Engels kan spreken en die nel haar tegen.
Marit liked it and always told us what she had learned. She even thought she could speak English a few times.
Marit, 6, art and crafts
48. Olaf vond de lessen erg leuk. Hij keek er ook echt naar uit.
Olaf really liked the lessons. He really looked forward to them.
Olaf, 4, physical education
49. Leuk. Stoer dat hij al Engels geleerd in groep 3.
Nice. Cool that he was already learning English in grade 3.
Elena, 6 art and crafts

The results also show that children looked forward to the lessons, showed enthusiasm about learning English. Some parents reported that the new environment required a period of time to allow for adjustment. Fragments 50-55 confirm children's earlier responses.

50. Leuk. Heeft link gelegd met Dora/Diego. In 't begin werd ze verlegen en onzeker als er gepraat werd.
Nice. Made a link with Dora and Diego. At the beginning she was shy and insecure when (English) was spoken.
Bianca, 4, art and crafts

51. Heel leuk maar soms was ze wel eens een beetje boos omdat de juf geen Nederlands praatte.
Really nice but she was sometimes a little angry because the teacher didn't speak Dutch.
Babette, 4, art and crafts
52. Moest heel erg wennen, vond het in het begin niet fijn. Dacht dat de juffrouw niet Nederlands wilde praten.
He really had to get used to it and didn't like it at the beginning. He thought that the teacher didn't want to speak Dutch.
Harald, 4, art and crafts
53. Zij vond het wel leuk maar ook wel moeilijk.
She enjoyed it but she also thought it was difficult.
Gwen, 4, art and crafts
54. Niet zo leuk. Duurde te lang.
Not so nice. It took too long.
Gregory, 6, art and crafts¹¹⁶
55. Gill vond het leuk om Engels te leren maar op het laatst wel een beetje saai / veel herhaling.
Gill enjoyed learning English but thought it became boring at the end / a lot of repetition.
Gill, 6, art and crafts

Fragments 56-78 illustrate the responses of the only two parents that said that their child reported nothing at home:

56. Geen idee. Hij vertelt nooit iets over school ook niet als we er naar vragen.
No idea. He never tells us anything about school, even if we ask him.
Hannes, 4, physical education
57. We hebben niets teruggehoord. Onze dochter heeft niets over de lessen of over de inhoud verteld.
We never heard anything. Our daughter didn't tell us anything about the content.
Hanneke, 4, physical education

Note here the substantial overlap between the parental responses above and children's responses, particularly those from fragments 18-36.

Question 4: Perhaps you know that the English (lessons) were taught as an integrated part of the curriculum, and not as an individual subject. Do you think that:

- a) the English lessons came as an expense to learning the Dutch language?
b) your child was over-burdened?*

¹¹⁶ Gregory is diagnosed with an attention deficit disorder.

No parents perceived the lessons to be a burden to their child or that the lessons came as an expense to curriculum time. The high level of satisfaction reported in this question draws a parallel with question 1.

Question 2: Did you notice your child spontaneously talking in English at home? If yes, which words were used?

A two-step analysis was carried out. First, I looked at whether any spontaneous production was reported. This is important given that parents were unaware of what had been taught during the study. Second, I analyzed the positive responses further, and coded these to highlight whether production reflected what was taught in the lessons. If this was not the case, it could have originated from other sources, such as the media. Table 7.5 summarizes the outcome of the first analysis.

Table 7.5: Did you notice your child talking spontaneously in English at home?

	responses	yes	no	only when prompted
Grade 1				
Beta	12	12	0	0
Gamma	8	8	0	0
Omega	13	12	1	0
Eta	17	14	3	0
Epsilon	8	8	0	0
Total	58	54	4	0
Grade 3				
Alpha	17	15	1	1
Gamma	6	6	0	0
Eta	11	10	0	1
Mu	18	16	1	1
Epsilon	10	9	0	1
Total	62	56	2	4

The results show that almost all the children produced some spoken discourse in their home environment or in a similar non-Dutch speaking environment (on holiday abroad, for instance). Fragment 58 illustrates how English was used during a family visit; fragment 59 describes jokes made in English, and fragment 61 deals with a holiday incident:

58. Tijdens bezoek aan vrienden met Engelse sprekende au pair stelde hij zich voor; *hello my name is Ernst*.
He introduced himself “Hello my name is Ernst” during visits to friends with an English-speaking au pair.

Ernst, 6, art and crafts

59. Af en toe. Hield een verband met grapjes zoals *see you later alligator*.
Now and then. Made connections with jokes like “see you later alligator”
Biance, 4, art and crafts.
60. Thuis sprak hij de kleuren in het engels geregeld uit. Op vakantie zei Alex spontaan een kort engels zinnentje (wat ben ik vergeten wat hij precies zei) tegen de ski-juffrouw.
He said the colours in English at home. When we were on holiday, Alex said short English sentences to the ski instructor (I have forgotten what he said precisely).
Alex, 6, art and crafts

Three parents reported that production was not always comprehensible. In cases when no production was mentioned, parents did not elaborate their answers to explain why this was the case. Fragments 61-63 provide evidence that what was learned in the classroom was put to use in the home environment.

61. Ja een beetje: *yes, happy birthday, one two, flower, bag, pack*. Met sommige woorden wisten we ook niet wat hij bedoelde.
Yes, a little: *yes, happy birthday, one two, flower, bag, pack*. We didn’t always know what he meant with some words.
Bram, 4, art and crafts
62. Ja, alleen haalde hij wel alles door elkaar. hij zei dan: *mama, ik weet wat black in Engels is: zwart*.
Yes, only he confused things with each other. He would say: “*mama, I know what black is in English – zwart*”.
Herbert, 4, art and crafts
63. Vormen en kleuren, niet altijd het juiste woord, maar vaak wel.
Shapes and colours but not always the correct word but quite often.
Annika, 6 art and crafts

Table 7.4 summarizes the outcome of the second analysis, which concerned the question “If yes, which words were used?” The data was coded in two ways. First, a code was assigned to responses that reflected production related to the input taught in the study. Then, responses that deviated from the input in the study and non-specific responses were coded again.

Table 7.6: *If yes, which words were used?*

	responses	related	unrelated / non-specific
Grade 1			
Beta	12	12	0
Gamma	8	7	1
Omega	12	12	0
Eta	14	14	0
Epsilon	8	8	0
Total	54	53	1
Grade 3			
Alpha	16	15	1
Gamma	6	5	1
Eta	11	11	0
Mu	17	16	1
Epsilon	10	10	0
Total	60	57	3

The results show that almost all spontaneous production reported by parents was related to the input that was offered to the children during the study. Further, a clear distinction in output between children in the art and crafts groups and those who did physical education was observed. In the art and crafts groups, songs, the colours of the rainbow and counting were reported most often. This was followed by other themes such as the body, farmyard animals and the autumn:

64. Sommige woorden vertaalde zij van het Engels naar Nederlands: *dog, horse, pig, cat, yes, no, finger toes*.
She translated some words from English into Dutch dog, horse, pig, cat, yes, no, finger toes.
Gail, 6, art and crafts
65. Ja. De dieren en kleuren kwamen vooral aan bod.
Yes. The animals and the colours came up most frequently.
Alison, 6, art and crafts
66. Ze sprak thuis over *rabbit, dog, cat*, en *yellow, blue, red*, het zijn dan ook de dieren en de kleuren die voornamelijk zijn bijven hangen.
At home she said rabbit, dog, cat, and yellow, blue, red. These are the animals and colours that mainly stuck.
Angela, 6, art and crafts
67. Ja zeker wel del kleuren, yes, no, lidejes, vlinder etc. vooral het liedje *if you're happy and you know it* was favouriet
Yes definitely the colours, yes, no, songs, butterfly etc. especially the song "if you're happy and you know it" was her favourite.
Babette, 4, art and crafts

Fragment 68 shows how some words made more impressions than others:

68. Het woord *bum* voor billen heeft indruk gemaakt. In het begin noemde hij alle kleuren. Later vroeg hij ons naar woorden uit Engelse liedjes (soms bedacht hij zelf een vertaling). Alle kleuren, *shoulder, bum, sheep, farmer, tractor*.
The word “bum” for bottom made an impression. At the beginning, he named all the colours. Later he asked us about words from English songs (sometimes he thought of a translation all by himself). All the colours, shoulder, bum, sheep, farmer, tractor.
Gus, 6, art and crafts

The next two fragments show how songs, single lexical items and short chunks in the physical education lessons were also reported:

69. Liedje *head shoulder* etc.. Ja, maar we zijn eerlijk gezegd ook wel zelf actief. Tellen, *father, mother, sister, brother, no sliding* etc.
The song “head shoulder etc”. Yes, but honestly speaking we are quite active ourselves. Counting, father, mother, sister, brother, no sliding etc.
Oona, 4, physical education

70. Alle kleuren, cijfers ..., *be a monkey, klap your hands*. Vroeg soms zelf wat de Engelse benaming voor iets was
All the colours, numbers ... be a monkey, clap your hands. Sometimes she asked us about the names of words herself.
Heather, 4, art and crafts

The results show that a great majority of children produced some spontaneous words and formulaic chunks at home, and that this correlated strongly with the input used in the study. What can be said about L2 learning and learning environments from these results? First, it suggests that although learning an L2 can start in the classroom, it does not necessarily have to stop there. Second, the children in the present study showed that further L2 learning is not dependent on the teacher, classroom interaction or peer discussion. Rather, it confirms that L2 learning is a continuous process and that other (English-speaking) environments can be equally stimulating. Third, if the overall foreign language experience is a positive one, as is reflected here, children will go on to integrate learning outside school. Indeed the home environment may represent an important learning opportunity that might be used to encourage and stimulate further learning. Fourth, even if classroom participation is low amongst some learners, it need not be the case outside the classroom. Therefore, perceptions of learning outcome in classroom environments may not necessarily reflect actual learning outcome.

Question 3: Did you stimulate your child to speak English as a result of the study and can you give examples of this?

Very few parents reported stimulating their children to speak English at home.

Question 5: In your opinion, what is the ideal age to start learning English at school and why?

As mentioned in the first three chapters, there is much debate that surrounds starting age for L2 learning in primary school. The results for this question show that opinion is quite varied. Some parents failed to answer the question properly, and

some gave multiple answers. To address this issue, a two-step approach was carried out. First, the responses were categorized into four general groups: “I don’t know”, “the earlier, the better”, “age” and “grade”. Then, the “I don’t know” category was eliminated, and the data was re-organized to obtain specific results about the question of age. The results of the analysis from the first step are presented in table 7.7.

Table 7.7: Response categories for question 5.

	responses	don't know	the earlier, the better	age given in years	school grade described
Grade 1					
Beta	12	1	2	7	2
Gamma	8	1	3	1	3
Omega	13	1	3	7	2
Eta	17	2	5	7	3
Epsilon	8	1	3	4	0
Total	58	6	16	26	10
Grade 3					
Alpha	17	1	3	8	5
Gamma	6	0	2	1	3
Eta	11	2	2	6	1
Mu	18	2	3	3	10
Epsilon	10	1	4	5	0
Total	62	7	14	22	19

Table 7.7 shows that less than half of the responses from grade 1 parents specified a certain age compared to only one third in grade 3. Roughly an equal number of parents in grade 3 specified an age or a grade. In both grades, statements like “the earlier, the better”, “as soon as possible” and “when they are young” were salient. The results suggest that although approximately two-thirds of parents were able to formulate a clear opinion about when a child should start learning an L2 in schooled contexts, one third could not. The significance of the one third is difficult to interpret, but should not be ignored since it suggests a level of disinterest in the topic, unawareness of the role of age in L2 learning or a superficial understanding of the role of age in L2 learning.

In the second step of the analysis, I assumed that “the earlier, the better” responses from grade 1 denoted starting in grade 1. This rationale was based on the fact that the present study is classroom-based, and the earliest moment that children can start learning English is when they are allowed to start attending primary education.

Table 7.8: The ideal age to start learning English at primary school.

	responses	Grade 1&2 Age 4/5	Grade 3&4 Age 6/7	Grade 5&6 Age 8/9	Grade 7&8 Age 10/11
Grade 1					
Beta	11	8	2	1	0
Gamma	7	6	0	1	0
Omega	12	10	1	1	0
Eta	15	12	2	0	1
Epsilon	7	6	0	1	0
Total	52	42	5	4	1
Grade3					
Alpha	16	3	11	0	1
Gamma	6	3	3	0	0
Eta	9	2	6	1	0
Mu	16	4	11	1	1
Epsilon	9	5	3	1	0
Total	55	17	34	3	2

The results show that the majority of parents expressed a preference for starting to learn English earlier rather than later, even though English has been taught as a compulsory school subject in upper primary school grades since 1986. Within the responses, a difference between the opinions of parents of children in grade 1 and grade 3 can be observed. The vast majority of first graders' parents expressed a preference for starting at the very beginning of primary school (i.e. grade 1), and is probably due to the fact that they were influenced by their child's learning experience in the study. However, if this were true, then third graders' parents would be expected to do the same, however one third of the parents expressing a preference for a lower grade start also expressed a preference for grade 1. Parents seem uncertain about a definitive ideal starting age. Also, an earlier start seems to be linked to success in L2 learning, confirming the pervasiveness of the belief *the earlier, the better*.

Question 6: In your opinion, how important is it that a child learns English from a native-speaker?

Table 7.9 shows parents' responses.

Table 7.9: Overview of responses with regard to the importance of a child learning English from a native-speaker.

	responses	important	unimportant, unnecessary or doesn't matter	I don't know / no opinion	no answer / other answer
Grade 1					
Beta	12	6	4	1	1
Gamma	8	4	1	1	2
Omega	13	6	5	1	1
Eta	17	7	8	0	2
Epsilon	8	2	4	1	1
Total	58	25	22	4	7
Grade 3					
Alpha	17	6	5	1	5
Gamma	6	2	1	0	3
Eta	11	6	1	1	3
Mu	18	3	8	2	5
Epsilon	10	6	1	3	0
Total	62	23	16	7	16

The response to this question was quite divided. 2 out of 5 parents deemed a native-speaker important, citing L2 pronunciation and L2 intonation as the main reason(s) motivating their response. Fragments 71-75 capture these responses:

71. Ik denk dat het goed is voor de goede uitspraak maar denk niet dat het noodzakelijk is.
I think that it is good for good pronunciation but I don't think that it is necessary.
Bram, 4, art and crafts
72. De klank is duidelijker en makkelijker te corrigeren misschien.
Perhaps the sound is clearer and easier to correct.
Holt, 6, art and crafts
73. In verband met de uitspraak ... Geraldine wist ook precies hoe ze iets uit moest spreken als ik of papa iets niet juist uitspraak werden we meteen gecorrigeerd door haar.
With regard to the pronunciation ... Geraldine knew exactly how she had to pronounce something if her father or I did not pronounce something correctly. We were corrected immediately by her.
Geraldine, 4, art and crafts
74. Volgens mij is correcte uitspraak essentieel.
I think correct pronunciation is essential.
Heather, 4, art and crafts
75. Belangrijk maar niet per se op deze leeftijd.
Important, but not a must at this age.
Edwina, 4, art and crafts

Thirty per cent of parents thought that a native-speaker was not so important, as fragment 76 illustrates, and that children's enjoyment was paramount, as shown in

fragments 77 and 78. Fragments 79 and 80 show the faith that parents may put in teacher training.

76. Niet belangrijk. Het basisengels is prima te leren van een Nederlandse leraar engels. Wij leren toch nooit het echte Engels spreken.
Not important. Basic English can be learned from a Dutch teacher of English. We can never learn how to speak real English.
Olga, 4, physical education
77. Maakt mij niet uit van wie hij het leert als hij het maar leuk vind om te leren.
It doesn't matter to me how he learns as long as he enjoys it.
Gerard, 4, art and crafts
78. Belangrijkst vind ik dat diegene het goed kan overbrengen, enthousiast is en met aan te sluiten bij beleving van de kinderen.
The most important thing is that the (teacher) can teach it, is enthusiastic and that (the subject) is closely related to the child's interests.
Martha, 6, art and crafts
79. Lijkt mij niet belangrijk, als je engels gestudeerd hebt kun je prima les geven lijkt mij. Moedertaal is vaak ook 'dialect of straattaal'.
It doesn't seem important to me. If you've studied English, then you can teach it well. The native language is also often a dialect or street language.
Annika, 6, art and crafts
80. Niet zo belangrijk. Een Nederlandse leraar kan het net zo goed.
Not so important. A Dutch teacher can do it just as well.
Humphrey, 4 physical education

An unexpected twenty per cent failed to answer the question at all or correctly. Of those offering incorrect answers, the significance of English as an international language, its dominance in the media, its social status and its importance for future job prospects were mentioned. Finally, ten per cent of parents said they had no opinion or didn't know.

§ 7.3.4 Summary

Overall, the results of the self-administered parental questionnaire are positive. Parents described that their child was enthusiastic and enjoyed the lessons. They also reported language processing continuing in the home environment. None of the parents felt that the English lessons presented an extra burden for their child, even though some parents reported that their child had shown signs of anxiety at the beginning of the study as he/she was getting accustomed to the new (language) situation. Finally, no overt positive or negative assessments were made about the suitability of a CLIL approach in lower primary grades.

Two other conclusions can be drawn from the data. The first concerns starting age. The vast majority of parents expressed a desire to start early in grade 1, stating that starting earlier is better. This is in spite of not knowing whether their child actually benefited linguistically from the study. The second concerns the use of a

native-speaker in the classroom. Opinion was divided on this score, with advocates stating that a native-speaker's superior pronunciation was indispensable. Neutral parents did not think that it was crucial to have a native-speaker in the classroom. These outcomes confirm the pervasiveness of the belief *the earlier the better*, but also challenge the notion that native-speakers are essential for classroom learning, at least from a parent's point of view.

§ 7.4 Conclusion

This chapter presented and summarized the results of the data that was gathered at the school level. The results were also supported by 80 illustrations from the child interviews and parental questionnaires. Before summarizing the similarities and differences between the responses of the children, teachers and parents, I first return to the points put forward in the opening paragraph of this chapter, and answer them in turn:

- Lesson duration and frequency
According to the children, teachers and parents, 30-minute lessons are an acceptable lesson length. No strong patterns about lesson frequency emerged from the data, although teachers noted that lessons need to be properly timetabled, if delivery was going to be successful.
- Subject-related differences
Overall, the CLIL approach was well received at the school level. Neither the teachers nor the parents were outspoken about the subjects taught. The children interviews revealed more differences. The outcomes of the art and crafts lessons were more encouraging than those for physical education, especially for oral skills. This outcome is not unexpected given that physical education provided fewer opportunities to communicate (see chapter 6), and may well have affected children's usage of English in the home environment. It is important to note the large difference between the numbers of pupils doing art and crafts and physical education (135 versus 28). The results for physical education should be treated as informative rather than conclusive. It is quite possible that more favourable outcomes for physical education may have emerged had grade 3 children had the same lessons. This would seem quite reasonable given that they were generally more positive when compared with grade 1.
- Age-related differences
Grade 3 children gave substantially more favourable responses, and were more enthusiastic about the English lessons than grade 1 children. This conclusion can be drawn from the child interviews. No strong patterns emerge from the teachers and parents, although both groups provide evidence, which confirms the pervasiveness of the belief *the earlier, the better*.

Children, parents and teachers

There is much agreement in the findings from the three different groups with regard to overall enthusiasm, likes and dislikes, initial feelings of anxiety and using English at home (children and parents only). Teachers and parents were inclined to state that all the children learned English, which contradicts children's perceptions. Teachers,

particularly in the first grade, were concerned with increasing input to help acquisition. This is not supported by the evidence in chapter 5.

Teachers and parents

The results confirm the pervasiveness of the deep-seated belief *the earlier, the better*. An interesting outcome relates to using a native-speaking teacher in the L2 classroom. Teachers and parents agree that it is important for better pronunciation, but not essential. It is equally interesting that neither teachers nor parents gave much credit to the superior fluency skills of a the native-speaking L2 teacher. Further, one of the arguments used to delay early English programmes in primary education or discontinue them in grade 3 is the idea that children are burdened by learning a foreign learning. The outcomes of the interviews and questionnaires dispute this. Also, the results show that relatively little attention was given to the pedagogic importance of teaching early learners using trained primary teachers. Rather, the L2 teacher in the present study had a privileged status among the teachers and parents. Finally, the success of the English lessons seemed to rest on children's enjoyment of lessons rather than language outcome. This seems to be something of a paradox given that many people link starting earlier with superior learning outcomes.

Chapter 8

Discussion and conclusions

§ 8.0 Introduction

In this closing chapter I reflect on the outcomes of the study in relation to the research questions. I will summarize each chapter briefly, and present the main findings in section 8.1. In the discussion in section 8.2, I describe the outcome of two very recent VVTO research projects that have bearing on the present study briefly, and discuss them in the wider context of early foreign language learning in Dutch primary schools. This thesis concludes in section 8.3 with a re-visitation of the question posed in chapter 1: can the Dutch early bird catch the worm?

In the present study 178 first graders (four years old) and third graders (six years old) attending seven mainstream primary schools in The Netherlands were taught primary school subject matter using English as the exclusive medium of instruction. The approach used was content language integrated learning (CLIL), and the subjects taught were physical education and art and crafts. I taught 30-minute lessons, once or twice a week for a period of three or six months, within the limitations of a primary school timetable. In an effort to analyze more than learning outcome only, as is often the case in research, I adopted a comprehensive approach to collecting data by gathering data at the child, classroom and school level. Recall that the research questions were: when children in grade 1 and grade 3 are taught ten hours of art and crafts or physical education in the English language,

1. is there an improvement in L2 vocabulary? (chapter 5);
2. is there an improvement in L2 pronunciation? (chapter 5);
3. how does the L1 child behave towards, and interact with the L2 teacher and do these patterns of interaction change over time? (chapter 6), and
4. what are the children's, teachers' and parents' opinions of children's learning experience and L2 learning primary education? (chapter 7)

§ 8.1 Main findings

In chapter 1, I put forward the rationale for the present study, describing the popular misconceptions relating to the role of age in foreign language learning, and the frequent over-extrapolation of outcomes and conclusions from (critical period) studies in second language acquisition quite dissimilar to the Dutch primary school context. While studies outside The Netherlands are most certainly valuable, they do not draw attention to the distinctive characteristics of the Dutch lower primary grades, nor the young learners themselves. I also made an appeal for using International Standard Classification of Education (ISCED) codes to classify pre-primary and primary grades to facilitate clearer comparisons of education outcomes between countries. All too often age is used as the main indicator, but this is

arbitrary if not placed in the proper context, especially given the substantial variation in school participation and starting ages in (compulsory) education across Europe. I further emphasized the need to distinguish properly between bilingual and foreign language learners, and bilingual and foreign language education (and in a related vein, immersion) in relation to early foreign language learning in lower primary education. In a brief sketch of foreign language provision in Dutch primary education, it is clear that the three current forms of English foreign language provision cannot be equated to a form of bilingual education in the traditional sense, where the aim is to develop a balanced bilingual. EIBO (English taught in grade 7 and 8 of primary education), early EIBO (English taught in grade 5 and 6) and VVTO (any foreign language taught from grade 1), in combination with the available hours and mode of instruction do not constitute bilingual education. The notion of incipient bilingualism may be more appropriate. Further, the absence of a (valid and validated) teaching approach in lower primary education was noted, despite the manifold publications which describe basic pedagogical principles and good practice. In the present study I chose to experiment with a content language integrated learning approach in the lower primary school classroom, and determine what its effect is in the initial stages of the second language acquisition process.

Chapter 2 was concerned with Dutch primary education against the background of the “mother tongue plus two” language policy of the European Union. The curriculum, home and foreign language instruction, and continuity of foreign language learning in secondary education were also described. Although The Netherlands might be seen to lag behind other member states in its path towards attaining the mother tongue plus two goals, historically speaking it has been at the forefront. This shift has gradually evolved as a result of changes in foreign language policy in education. Today, the growth of primary schools offering VVTO is dramatic with approximately 10% of primary schools providing it to varying degrees. While this is encouraging, many questions and issues remain unaddressed, some of which are being researched by longitudinal studies (for example, FLiPP and the 15% curriculum time project) and other foreign language projects (for example, LinQ) in The Netherlands, and in the European Union (ELLiE).

Chapter 3 presented the age factor briefly, and showed that using the idea of a critical period for foreign language learning to justify the case for an early start in primary education is not substantiated by scientific research. Chapter 4 described the research design and method, explained the practical issues raised by the design and method, and the solutions found. I also explained the process of data collection, testing and data analysis.

The first two research questions were addressed in chapter 5: did the English lessons have an effect on receptive vocabulary development and L2 pronunciation? Two curriculum-independent types of tests - the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) and an 11-word Imitation Task - showed a significant increase in vocabulary development ($n=168$) and native-like pronunciation ($n=159$), although no correlation between vocabulary development and L2 pronunciation could be determined. In addition, no effect was observed for grade, subject matter or lesson frequency. Even though the average raw scores for the Peabody Picture

Vocabulary Test (Dunn & Schlichting, 2005) are quite low, the results of the receptive vocabulary test are nevertheless quite remarkable, given that significant progress was made without any form-focused instruction. With regard to L2 pronunciation, a similar pattern is seen: significant progress overall without any explicit phonetic instruction. This would suggest that although the content language learning approach was meaning-focused, young learners were still able to attend to forms in language, leading to the impression that implicit mechanisms of learning operate during initial exposure in the early L2 classroom, even if exposure is still quite limited. The results at the child level confirm previous findings. Another important outcome of the analyses in chapter 5, though not directly linked to the research questions, were the problems encountered with rating imitation task samples.

The third research question was addressed in chapter 6, which presented the analysis of L2 classroom interaction. In contrast to traditional classroom-based studies on interaction, I focused on the language behaviour of the children rather than the L2 teacher's, because relatively little is known about how young children react to L2 exposure in the initial phases of second language acquisition in the classroom context. The analyses were based on 13 hours of orthographically transcribed lessons of the first (lesson 1 and lesson 2) and final (lesson 19 and lesson 20) hours of the study, and were supplemented with a research journal that was kept throughout the study, and video recordings where applicable. 68 illustrations of classroom interactions were divided into five main interaction types: Repetitions English-intended utterances, Sensitivity to the L2, Foreigner Talk and Collective Scaffolding. Then the frequency patterns of all types were presented in terms of ranges. The frequency patterns for Foreigner Talk were not reported because this was not the primary focus of enquiry in the present study.

The analyses showed that Repetitions regularly featured in L2 classroom interaction, and performed an important role in processing and prolonging L2 interaction on the part of the child. Interestingly, the analysis of English-intended utterances indicates both the use of English-only and language mixing as early as the first hour of L2 exposure. The patterns show that longer utterances are mixed more than shorter ones, with the exception of some long formulaic chunks. There were also several examples in which children exhibited some level of sensitivity to the L2, the most salient of which was playing with sounds. Generally speaking, the lowest ranges for frequency patterns were for physical education, and this was attributed to the fact that art and crafts created more opportunities for interaction than physical education. In terms of age, grade 3 children generally scored higher on all five interaction types examined, possibly supporting the idea that an advanced cognitive maturity positively affected the manner with which older children interact in the classroom. The analyses did not show any strong patterns of development over time for grade or subject, suggesting that (1) for interaction at least, neither variable is indicative of higher or lower levels of interaction, and (2) the 10 hours of foreign language instruction may not have been sufficient to observe any large differences. Finally, grade 3 accounts for more than half of the total number of

utterances produced, and the third graders were the most experimental, engaging and productive in their attempts at interacting with the L2 teacher.

Chapter 7 dealt with the results at the school level, I analyzed three types of data: 163 one-to-one child interviews (8 from grade 1 and 87 from grade 3), 18 in-depth interviews with classroom teachers, and 120 self-administered parental questionnaires, and used a selection of 80 illustrations to explain the data. Recall that neither the children nor the parents and teachers were aware of the outcomes of the testing that took place at the child level. In addition to gathering data on learning experience, the data was aimed at addressing four practical issues: (1) the ideal length of lessons, (2) lesson frequency (3) subject differences and, (4) age differences. The most important outcomes of the child interviews are now reported first because they illustrate the differences between the grades most clearly.

The child interviews demonstrated clear differences between grade 1 and grade 3, and provide data that contradicts the belief "*the earlier, the better*". A summary of the main findings of the child interviews showed that at least 30% or more of first graders reported negatively on comprehension and oral skills, and more than half wanted to stop learning English because the 30-minute lessons were thought to be too long. Overall, of course, grade 1 children reported enjoying the lessons, and this was comparable to the opinions of those in grade 3. In contrast to grade 1, almost all grade 3 children thought they could understand and speak English, and a large majority wanted to continue learning. There was even a difference with regard to the opinions about the length of lessons, with only a quarter in grade 3 thinking the lessons were too long whereas almost two thirds expressed similar opinions in grade 1. This suggests that for grade 1 children, a maximum lesson duration of 30 minutes in grade 1 is appropriate, and that this age group is more likely to struggle with understanding and communicating with the L2 teacher. This may well explain why many wanted to stop lessons or considered them too long. Despite the differences between grade 1 and 3, both groups described how they managed communication breakdown, which varied from copying what others were doing or requesting help from peers or the L2 teacher. This goes against the idea that L1 use by the L2 teacher is a necessary condition for learning and carrying out tasks in the L2 classroom. Attention should also be given to some children experiencing anxiety. Some 1 in 10 children in both grades reported feeling scared at the beginning of the lessons, confirming previous studies that learning a foreign language can be stressful for some learners (Krashen 1985). The results also showed that children seemed more positive about art and crafts lessons than physical education lessons, especially for oral skills (there was no subject difference for comprehension skills). I suggested that this was not surprising given that there were more opportunities for interaction in art and crafts than physical education (see chapter 6). In addition, there were no children in grade 3 who did physical education, and this could have resulted in slightly different outcomes for the child interviews.

Moving on now to L1 teachers and parents, both reported how many words and phrases children had learned, and thought that the children enjoyed the lessons and benefited from them. This data also corroborate the initial anxiety issues reported by the children at the beginning of the study. There was, however, much variation

concerning (1) the ideal length of lessons, (2) lesson frequency (3) subject differences, and (4) age differences. This could mean that these points do not seem to carry much weight in relation to how parents view the teaching of English in lower primary grades. Neither teachers nor parents found the teaching approach to be an extra burden for the children, and this contradicts what grade 1 children reported. With regard to subject differences, teachers and particularly those in grade 1 were concerned with increasing input to support acquisition, emphasizing that circle time in art and crafts lessons would result in more language learning. This is not supported by the data from the Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) and the imitation task, which shows no difference between subjects, and therefore challenges teachers' beliefs about L2 acquisition and input. Surprisingly, few teachers and parents gave credit to the L2 teacher's superior pronunciation and fluency skills as a native speaker. Further, the outcomes of the in-depth interviews and self-administered questionnaires confirm the pervasiveness of the deep-seated belief *the earlier, the better*. A definitive ideal age did not emerge from the data. Rather, there was an inclination towards starting in lower primary education: parents in grade 3 reported grade 3 or starting earlier in pre-primary was ideal, while those in grade 1 reported grade 1 as ideal. This suggests how influential personal experience is in forming opinions. Teachers' responses were generally quite similar, but they were more likely to be concerned about L2 status in the curriculum, continuity, their own language proficiency and transition into secondary education, which are expected outcomes given the teachers' roles in education. This also confirms evidence from earlier studies described in chapter 2. One of the most interesting outcomes relates to the discrepancy between first graders' perceptions of their own learning outcomes and the perceptions of their parents and teachers, challenging the strength of the claim *the earlier the better*.

The CLIL approach for primary education

As reported in chapter 1 there was no teaching methodology available for lower primary education at the outset of the present study. In upper primary education, established EIBO methods were in circulation, and were used to teach English as a subject in its own right. Faced with young children unable to read and write, and wishing to experiment with an approach that uses English as the instruction medium to teach subject matter prescribed in the curriculum, the CLIL approach was adopted, and a series of lessons were designed for art and crafts and physical education. The results in chapters 5, 6 and 7 show that the CLIL approach is a promising candidate for lower primary education, creating plenty of opportunities for learning, engaging with language, and meeting curriculum goals. Furthermore it was received well by the vast majority of children, teachers and parents.

§ 8.2 Discussion

The growth of early foreign language programmes in The Netherlands has been dramatic since the present study was conceived in 2006 (European Platform, 2011a). Yet scientific enquiry into the outcome of such programmes does not reflect this momentum. This has been due to a lack of research funding, prolonged political

debate, and slow-moving policy development. The Dutch government must step up if implementation and research into early foreign language programmes in primary education is to progress. The last decade of English language learning in primary education in the state of North Rhine Westphalia in neighbouring Germany is a good example of such progressive government support (Jansen, 2012; Ministerium für Schule und Weiterbildung, 2012).

The most recent study funded by the Dutch Ministry of Education was a two-year longitudinal study conducted by the FLiPP project team during the period August 2010 to July 2012 (Unsworth, de Bot, Persson, & Prins, 2012).¹¹⁷ The aims of the project most relevant to the present study were to provide data about English language development over time, and determine the effect of lesson frequency (60 minutes, 60-120 minutes and more than 120 minutes) on language development among early and late starters (grade 1 versus grade 7).¹¹⁸ The findings demonstrated significant progress for vocabulary and grammar with a significant effect for the number of minutes per week: fewer than 60 minutes of instruction led to significantly lower scores than the 60-120 minutes', and more than 120 minutes' groups. As in previous longitudinal research by Burstall (1974), Muñoz (2006) and Nikolov (2009), late starters performed significantly better than younger starters, although the FLiPP researchers noted that a valid comparison would require VVTO children to be compared to EIBO children after 8 years of VVTO instruction. Regrettably, classroom observations had not (yet) been carried out in the FLiPP project. This would have enhanced understanding of L2 interaction patterns. Further, the teaching approaches used at the research schools had not been controlled for, and this means that the outcomes cannot be viewed in relation to a particular teaching context. This is certainly problematic for studies of this size, and the difficulties that were reported in recruiting enough schools for the project corroborate this. Nevertheless, it is important to bear this in mind, when using the data for interpretative purposes. Unlike the present study, no attention was given to L2 pronunciation, even though the acquisition of a native-like accent is known to be constrained by age (see chapters 1 and 3). Different results for the role of teacher proficiency and its relationship with superior L2 pronunciation may have emerged. In addition to the FLiPP data, the qualitative results of the 15% pilot project (maximum of 4 hours of instruction per week) were also presented (see chapter 2 for details of the project) (van Loon & Setz, 2012).¹¹⁹ The main research question was: what are the experiences of schools offering English and German that participate in

¹¹⁷ Preliminary findings were presented at a conference hosted by the European Platform, the University of Groningen, the University of Utrecht and the Ministry of Education, Culture and Science on 12 & 13 December 2012 in Amersfoort, The Netherlands.

¹¹⁸ The other aims: (1) the relationship between English language proficiency and Dutch as a first and second language; (2) the influence of VVTO on cognitive and intellectual development versus EIBO; (3) the effect of using 15% of curriculum time versus regular programme; (4) the relationship between children's English language proficiency and the teacher's language proficiency, and (5) early (grade 1) versus later (grade 7) learners. The study was conducted among 168 children in 14 established VVTO schools. A control group of 26 children in 2 schools was also included.

¹¹⁹ Due to time constraints, the MA theses was not consulted. The summarized version of the research made available to conference participants was used for the discussion.

the 15% VVTO pilot? 13 VVTO schools using an intensive form of instruction since January 2010 were recruited. Observation schemes for measuring teacher behaviour (28 lessons observed), and in-depth interviews (12 school managers, 17 teachers, 27 pupils and 13 parents) were used as test instruments. There are three important findings relevant for the present study. First, confirmation that a CLIL approach is feasible for implementation in intensive forms of VVTO. Second, the outcomes of the observations and interviews confirmed children's enthusiasm and involvement in VVTO lessons, similar to the present study. A third though less relevant finding for the present study but nevertheless important for the implementation of VVTO is that the participating schools failed to achieve spending 15% of curriculum time on VVTO because of practical problems. This highlights the practical issues of implementation within the limitations of a heavily prescribed curriculum, even among experienced VVTO schools.

The FLiPP data (Unsworth, de Bot, Persson, & Prins, 2012), and data from the ELLiE projects (ELLiE 2009, Spaetgens 2010, van den Broek 2012) show the high level of out-of-school exposure Dutch children had of English, and confirms what was observed in the pre-test Peabody Picture Vocabulary Test (Dunn & Schlichting, 2005) raw scores in the present study. The pervasiveness of English outside the classroom quite possibly provides the English language with a privileged position in lower primary education, making implementation easier, but possibly degrading the position of other modern foreign languages. This is in spite of the European Platform's initiatives to promote the teaching of German and French through the LinQ project, and the fact that The Netherlands shares borders with both Belgium and Germany (Adam, Gonzalez, & Lunshof-Venema, 2010). The continued focus on the English language in pre-primary and primary education will certainly not address the "mother tongue plus two" mandate, which paradoxically was instrumental in implementing early English programmes in pre-primary and primary education in the first place. Furthermore, the emphasis on implementing English language VVTO has probably shifted focus away from the existing problems surrounding EIBO (see chapter 2), which remain equally valid for VVTO. Other problems hover on the horizon: will the children attending the 10% of Dutch primary schools offering VVTO be taught in the same way when they attend secondary education as the children attending the majority of primary schools offering an EIBO-only programme? The existing problems of continuity with secondary education, reported in EIBO studies will surely be exacerbated by the influx of ex-VVTO children, if the problems of curriculum continuity are left unaddressed. This gives credit to the concerns expressed by the Wijnen Committee (Wijnen, et al., 2002) more than a decade ago about the heterogeneous nature of pupil populations in primary education, and a lack of continuity in the English language curriculum. A call is made for specific VVTO attainment targets, attention to curriculum continuity within primary education and between primary and secondary education, in addition to improvements in teacher training and teaching methodologies (European Platform, 2011c). This can be achieved through close partnerships with practitioners, politicians and researchers. Perhaps the time is also ripe to re-examine the goals of early foreign language learning in pre-primary and

primary education. The link between starting earlier and superior language learning outcomes may have to be severed in order to introduce other goals relating to language sensitization and cultural awareness.

Implications for further research

What are the implications of the present study for future research? I have focused on the initial stages of second language acquisition in grade 1 and grade 3, using English as the sole medium of instruction for art and crafts and physical education. A total of ten hours of lessons were taught over a period of three or six months. The present study's findings at the child, classroom and school level are encouraging, and warrant further investigation that ventures beyond the limits of the present design. It would be useful to determine language outcomes and learning experience after longer periods of time, and conduct research using other school subjects and cross-curricular activities. In the present study, simple arithmetic, music, drama, storytelling and reading were proffered as alternatives by the classroom teachers themselves. In an attempt to meet the "mother tongue plus two" objectives, it would be wise for researchers to help stimulate the teaching of other modern foreign languages in primary education, using the existing framework and network of schools established by the LinQ project (see chapter 2) for instance. Further, I did not study the use of gestures in the present study because it was not the focus of my enquiry. In addition, I did not have complete video recordings of all of the first hour of lessons in the 2007/2008 research cycle. Nevertheless, the importance of gestures is well documented in second language acquisition research (Gullberg & de Bot, 2010; Gullberg & Indefrey, 2010), and is clearly demonstrated by the analyses on classroom interactions (chapter 6), and children's own accounts of how they repaired communication breakdown (pointing or acting for example). Finally, it may be useful to extend the upper grade limit I used in the present study. In Dutch primary education, children start grade 5 and grade 6 when they are eight and nine years old respectively. Many studies conducted in Europe also start around this age (Muñoz, 2006a), and further research in these grades would complement the present study and current research.

§ 8.3 Can the Dutch early bird catch the worm?

I began this thesis by stating that building a case for an early start to foreign language learning in pre-primary and primary education has typically rested on the belief "the earlier, the better." On the one hand, this viewpoint was confirmed by various documentary evidence, and supported by the outcomes of the teacher interviews and self-administered parental questionnaires in the present study. On the other hand, it was contested by a substantial number of studies concerning second language acquisition research on the age factor.

In the present study, I have challenged the belief *the earlier, the better* by investigating the effect of a content language integrated learning approach on children in grade 1 and grade 3 in Dutch pre-primary and primary education. Significant progress for receptive vocabulary development and L2 pronunciation was reported for both grades, providing evidence that starting in either grade is

beneficial. This challenges the current trend in Dutch primary schools to begin teaching English in grade 1, but discontinue in grade 3 (European Platform 2011a). Although this trend is probably due to the introduction of literacy and numeracy skills in grade 3, and learning a foreign language is assumed to be an extra burden for third graders, the present study offers evidence to the contrary: not only is linguistic outcome in grade 3 at par with grade 1, the parents and teachers who participated in the present study did not consider their children to be burdened with the lessons. These outcomes challenge current beliefs and trends observed in The Netherlands. Based on the outcomes of the present study, I contend that grade 3 should be considered a candidate in primary schools wishing to implement early English in lower primary education.

Another important question was: could any differences between grade 1 and grade 3 be established in the present study? The results in chapter 5 show no difference, yet the evidence of the classroom interactions in chapter 6, and the child interviews in chapter 7 provide evidence that first and third graders reacted differently to the lessons. In grade 3 children produced more utterances and instances of language mixing, and their impressions of the lessons corroborate these findings. Third graders were also consistently more positive than their younger counterparts. So, can the Dutch early bird catch the worm? On the basis of the evidence from the present study, the answer is yes. However all things considered, the present study also provides valuable evidence that distinguishes the younger from the older learner, leading to the new notion of *the later, the better*, a notion that pertains to the lower primary education grades.

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Appendix 1

Lesson plans

Art and crafts

School	Beta
Class	Grade 1
Date and time	
Sequence	2
Duration	30 minutes
Title	The colours of the rainbow
Aim	<ul style="list-style-type: none">○ Getting to know each other.○ Striking rapport with the subjects.○ Re-cap of the first colour activity.○ Individual work and group work.
Description	<ul style="list-style-type: none">○ Children are re-acquainted with Polly and the researcher.○ The lesson begins and ends with circle time.○ Absentees are noted.○ More accent is placed on doing something in smaller groups.○ A seating map is made to help with getting the children to sit in their smaller groups.○ The researcher shows the children what Polly has made (the cloud with the crepe paper rainbow).○ The colours of the rainbow are reviewed using the picture and the jars of colours.○ Basic phrases for greetings, valedictions, requests and imperatives are also reviewed.○ There is a chance for children to finish off last week's activity.
Materials	<ul style="list-style-type: none">○ Lesson-specific: Polly, crayons and colouring pencils and handouts○ Research-specific: recording equipment and cassettes

Core lexical units	Red	Crayon	Hello	Everybody	
	Blue	Chair	Goodbye	Listen	
	Orange	Desk	Good	Quiet	
	Yellow	Paper	Sorry	Boy	
	Green	Cloud	Thanks	Girl	
	Purple	Rainbow	OK	Teacher	
	White		Here	Polly	
	Pink		There	Friend	
	Black		Happy	Come	
	Grey		First	Yes	
	Brown		Second	No	
			Third		
	Core lexical chunks	Good morning.		Stand up.	
		How are you?		Sit down.	
I hope you are all feeling well.			Be quiet.		
My name's			Look at me.		
What's my/your name?			Put your hand up.		
Is everybody listening?			I like that.		
We are going to make ...			Do it like this.		
Go and sit at your desks			Can I help you?		
It's time to finish now.			That's better.		
Put your things away.			That's nearly right.		
It's time to finish now.			Try again.		
Let's colour in some pictures.			Not quite.		
Let's sit down in the circle.			That's nice.		
We'll finish this next time.			Here you are.		
Do you remember ...?			Polly made.		
Shall we ...?			I don't know.		
Can I have ...?			What's this ...?		
Can you sing with me?					

Context-
related songs

Circle Time

Sung to: "Row, Row, Row Your Boat"

Hush, hush, quiet please.

Come and stand around.

Take two hands and form a circle;

Now, let's all sit down.

Rainbow colours

Sung to: "The Muffin Man"

Oh, can you find the colour _____,

The colour _____, the colour _____?

Oh, can you find the colour _____,

Somewhere in this room?

Sung to: "The farmer in the dell."

Oh, (name) is wearing blue,

Oh, (name) is wearing blue.

High Ho the derry oh,

(name) is wearing blue.

(Change name and colours accordingly)

Sung to: "Oh, Christmas Tree"

Oh, rainbow, oh, rainbow,

How lovely are your colours.

Oh, rainbow, oh, rainbow,

How lovely are your colours.

Purple, red and orange, too,

Yellow, green and blue so true.

Oh, rainbow, oh, rainbow,

How lovely are your colours.

Physical education

School	Omega
Class	Group 1&2 C
Date	
Lesson sequence	1
Lesson duration	30 minutes / 14.15 – 14.45
Theme	Physical education
Aim	<ul style="list-style-type: none">○ Getting to know each other.○ Striking rapport with the subjects.○ First English language activity.○ Simple introductions and some games.○ Children feel comfortable with whatever they do.○ All actions are correct.○ Children receive praise for anything they do correctly.
Description	<ul style="list-style-type: none">○ Children are led from their classroom to the gymnasium in double file, holding hands (as they do normally).○ Once in the gym, shoes are distributed.○ Throughout I will use phrases for greetings, valedictions, requests and imperatives as required.○ A warm up activity (with fast music).○ The first two lessons will be teacher-led. Children are just expected to do what I do (e.g. Simon Says ...).○ If things are going well then we will play “It” or “stuck in the mud”.○ A cool down activity (with slow music).
Materials	Lesson-specific: CD-player, CD “Klassiek” Mozart, Bach, Beethoven, Vivaldi and a whistle Research-specific: recording equipment and mini disc cassettes

Core lexical units	Skip	Clap	Hello	Everybody	
	Jump	Catch	Goodbye	Somebody	
	Stand up/still	Stop	(Very) good	Listen	
	Walk		Sorry	Quiet	
	Run		Thanks	Boy	
	Hop	Left / Right	OK	Girl	
	Crawl	Up / Down	Here	Teacher	
	Stretch	Slow / fast	There	Polly	
	Bend (down)	Breathe in		Friend	
	Sit (down)	Breathe out	Head	Come	
	Touch your	On your front	Shoulder	Yes	
	Turn around	On your back	Knees	No	
	Follow		Toes		
	Stand on one		Hand		
	leg	Whistle	Leg		
	March	Gymnasium	Hips		
	Stomp your	Room	Bottom		
	feet	Music	Toes		
	Core lexical chunks	Good afternoon.		Are you ready?	
		How are you?		Can you sing with me?	
		I hope you are all feeling well.		See you next week.	
		My name's		Be quiet.	
		What's my/your name?		Look at me.	
		Is everybody listening?		Put your hand up.	
		We are going to play ...		I like that.	
		Stand in a line.		Do it like this.	
		Hold hands with someone.		Can I help you?	
Find a partner.			That's better.		
It's time to finish now.			That's nearly right.		
I want you to copy me.			Try again.		
Put your shoes on.			Not quite.		
Take your shoes off.			That's nice.		
Sit down on the bench.			Here you are.		
Let's sit down in the circle.		I don't know.			
Context-related songs	Circle Time				
	Sung to: "Row, Row, Row Your Boat"				
	Hush, hush, quiet please.				
	Come and stand around.				
	Take two hands and form a circle;				
	Now, let's all sit down.				
	Sung to: "Are you sleeping?"				
	Walking, walking [children walk in place or in circles]				
Walking, walking					

Hop, hop, hop [children hop in place or in circles]

Hop, hop, hop

Running, running, running (children run on the spot or in circles)

Running, running, running

Now we stop (children stop)

Now we stop

Appendix 2

Letter of application for school recruitment (example)

Institute for Gender Studies

Th, v, Aquinostraat 2
6525 HD Nijmegen

Centrum voor Promotieonderzoek

Basisschool

T.a.v. de directie

.....

.....

Ons kenmerk

Uw kenmerk

Doorkiesnummer

Datum

.....

.....

Betreft

E-mail

Promotieonderzoek naar vroeg
Engels op de basisschool in
Nederland

v.lobo@maw.ru.nl

Geacht directielid,

Ik heb uw contactgegevens gekregen van het Europees Platform. Op dit moment voer ik een onderzoek uit op een aantal scholen in Noord Brabant naar vroeg Engels in het Nederlandse basisonderwijs. Vroeg Engels betekent het geven van een bescheiden aantal lessen Engels in groep 1 & 2 en/of in groep 3 & 4. Dit onderzoek betreft de verwerving van woorden en klanken van het Engels als vreemde taal in vroege fases van het taalverwervingsproces door jonge kinderen.

In de bijlage treft u een beknopte samenvatting aan van de achtergrond, de doelen en de geplande uitvoering van dit onderzoek . Het onderzoek zal eventueel pas in het volgende schooljaar plaatsvinden. Op dit moment ben ik bezig met de voorbereidingen daarvoor.

Ik weet dat basisscholen vaak benaderd worden door onderzoekers en instellingen over het uitvoeren van verschillende soorten onderzoek. In dit onderzoek zorg ik zelf

voor de lessen en het materiaal. Evenmin zijn er kosten aan verbonden voor u als school. Wellicht bent u al geïnteresseerd in hoe jonge kinderen een vreemde taal kunnen leren? Of misschien bent u van plan om Engels eerder in het curriculum in te voeren maar weet niet precies hoe dat zou kunnen gebeuren. Deze studie zou u erbij kunnen helpen deze vragen te beantwoorden.

Wilt u meer informatie ontvangen of van gedachten wisselen, dan kunt u mij bellen of een e-mail sturen. Ik kom graag u en uw team aanvullende informatie geven. Ik stel het ook zeer op prijs om te weten of u geen belangstelling heeft voor dit onderzoek. Dit kunt u n via een e-mail kenbaar maken..

Ik hoop u voldoende te hebben geïnformeerd.

Met vriendelijke groeten,

Drs. Vanessa Lobo

Bijlage

Onderzoekstitel

Early Bird Engels – een studie over de verwerving van woorden en klanken van het Engels als vreemde taal in de vroege fases van het taalverwervingsproces.

Gegevens onderzoeker

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 Telephone: 0492 341576 / 06 1421 4984
 E-mail: vrlobo@planet.nl

Promotoren op de Radboud Universiteit

- Prof. R. van Hout (Toegepaste Taalwetenschap), Faculteit Letteren, tel.: 024-3612122, e-mail: r.v.hout@let.ru.nl
- Prof. P. Muysken (Algemene Taalwetenschap), Faculteit Letteren, tel.: 024-3612169, e-mail: p.muysken@let.ru.nl

Inleiding

De meeste kinderen leren hun moedertaal ogenschijnlijk moeiteloos. Dit proces begint stap voor stap vanaf de geboorte en in vier jaar de tijd is de uitspraak, de woordenschat en de grammatica voor een belangrijk deel ontwikkeld en kunnen de meeste kinderen op eigen kracht het reguliere onderwijs volgen. Het verwerven van een tweede of vreemde taal op latere leeftijd verloopt heel wat minder vanzelfsprekend en kost meestal heel wat onderwijsuren.

Is het niet beter om al op jonge leeftijd een andere taal te leren? Kinderen op jongere leeftijd hebben nog het vermogen om een andere taal te leren als zij voldoende contact hebben met die taal. Veel ouders hebben de ervaring hoe snel en makkelijk kinderen – bijvoorbeeld als zij op vakantie zijn – een vreemde taal kunnen oppikken. Ook al kunnen de kinderen nog niet veel zeggen, ze weten vaak al voldoende te begrijpen om een eenvoudig gesprek te kunnen volgen.

Maar hoe zou het proces verlopen als kinderen een vreemde taal structureel aangeboden krijgen in de context van de school, in een beperkt aantal uren in de week? Wat zouden zij oppikken? Wat blijft hangen? Wat niet? Welke leeromgeving levert de beste resultaten op? Dat is wat ik in mijn promotieonderzoek zou willen achterhalen.

Maatschappelijk en sociaal belang

Het beheersen van een vreemde taal staat hoog op de agenda van de Europese politici. In de afgelopen jaren zijn er behoorlijk wat taalinitiatieven tot stand gekomen niet alleen op Europees niveau maar ook landelijk. Het Engels is in Nederland de belangrijkste vreemde taal. De basisscholen zijn sinds 1986 verplicht om Engels als vak aan te bieden in groep 7 en 8, en in het voortgezet onderwijs is Engels een verplicht vak. De interesse in vroeg vreemdetalenonderwijs vanaf vier jaar, en met name dan voor het Engels, is langzaam maar zeker aan het groeien. Het

Europees Platform in den Haag is actief bezig om vroeg vreemdetalenonderwijs te stimuleren in Nederland. Dit onderzoek is ook bekend bij hen.

Onderzoeksvragen

Er zijn twee hoofdvragen:

- 1 Welke woorden pikken jonge kinderen op als zij in de lessen in het Engels moeten gaan communiceren?
- 2 Wat nemen zij daarbij aan uitspraakkenmerken over?

Het betekent dat de kinderen elke week een aantal lessen in het Engels, van een echte moedertaalspreker van het Engels. Als voldoende data verzameld kunnen worden kan ook meer specifiek op de volgende vragen worden ingegaan:

- 3 Wat is de invloed van totale lestijd en frequentie van het lesgeven op (1) en (2)?
- 4 Pikken kinderen meer woorden op als Engels als instructietaal voor een schoolvak als gymnastiek gebruikt wordt?

Uitspraakkenmerken zijn interessant omdat bekend is dat mensen op latere leeftijd niet echt gevoelig meer zijn voor veel klankverschillen in andere talen. Op jonge leeftijd bestaat die gevoeligheid nog wel.

Doelgroep

Kinderen van vier jaar/vijf jaar en zes/zeven jaar (groep 1/2 en groep 3/4) die in het reguliere basisonderwijs zitten in Nederland.

Design

- Aantal uren Engels: 10 of 20
- Aantal maanden: maximaal 9 maanden vanaf het begin van het schooljaar
- Aantal kinderen van vier jaar: 40 (verspreid over verschillende klassen en/of basisscholen)
- Aantal kinderen van zes jaar: 40 (verspreid over verschillende klassen en/of basisscholen)
- Lesblokken en frequentie: 1 x 30 minuten per week , 2 x 30 minuten per week of 3 x 20 minuten per week
- Metingen (toetsmomenten): halverwege en aan het einde van het onderzoek

Tijdpad

Het onderzoek is gepland voor het schooljaar 2007/2008. Het begint in oktober 2007 en eindigt in april 2008. Er komt eerst een pilot van 1 of 2 lessen voordat het onderzoek begint. Er kan ook een vervolg onderzoek plaatsvinden naar aanleiding van de eerste resultaten.

Wat betekent het voor de kinderen?

- De kinderen krijgen les in een taal die ze niet kennen en zullen moeten proberen desondanks te gaan begrijpen wat er gezegd wordt en ze zullen moeten proberen

zichzelf begrijpelijk te maken. Overigens spreekt de lesgevende Nederlands, maar de leerkracht zelf zal ook steeds bij de les aanwezig zijn.

- De kinderen zullen halverwege en aan het einde van het onderzoek een aantal opdrachten moeten maken om vast te stellen wat ze hebben geleerd. Het gaat om eenvoudige toetsen., waarbij kinderen in een spelsituatie antwoorden moeten geven op vragen en eenvoudige opdrachten moeten uitvoeren.

Wat heb ik nodig van de leerkracht, de school en de ouders?

- De mogelijkheid om een aantal meeloopdagen te organiseren in 2006/2007.
- Het vrijmaken van 10 uur onderwijstijd (structureel vrijgemaakt elke week op dezelfde tijdstip) om les te geven.
- Een rustige ruimte voor de toetsmomenten.
- Toestemming van de ouders waarbij de school helpt om de ouders te overtuigen van het nut om mee te werken aan het onderzoek.
- Leerkrachten en een directie die achter het onderzoek staan.
- Een aantal achtergrondgegevens over de kinderen.

Wat bied ik aan?

De school en leerkrachten maken kennis met vroeg vreemdetalenonderwijs zonder veel tijdsinvestering, personele inzet en hoge kosten. Het onderzoek is kindvriendelijk en wetenschappelijk verantwoord en levert concrete resultaten op over wat kinderen oppikken van het leren van een vreemde taal binnen het reguliere onderwijs. Ouders en school hebben ten alle tijde inzicht in de lessen die gegeven gaan worden. Ouders kunnen altijd aankloppen voor nadere informatie over het onderzoek.

Wie ben ik?

Ik ben in India geboren in 1972 en mijn moedertaal is Engels. Op zeer snel is mijn familie naar Singapore verhuisd waar ik mijn eerste contact met vreemde talen had op de basisschool; ik was net vijf toen ik Mandarijn en Maleisisch geleerd heb. Toen ik acht jaar was, is mijn familie verhuisd naar Engeland waar ik mijn basis- en middelbaar onderwijs heb afgesloten. In die tijd raakte ik helaas het Mandarijn en Maleisisch kwijt, maar leerde ik wel Duits en Frans op school. Ik heb intussen twee dochters van vier jaar en zes jaar die tweetalig worden opgevoed. Ik woon sinds 2001 in Nederland.

Ik ben van oorsprong chemicus. Na het afsluiten van mijn eerste universitaire studie in 1994 in Engeland, ging ik werken als productontwikkelaar voor Johnson & Johnson GmbH in Duitsland en daarna RoC S.A. in Frankrijk. Mijn werk was uitdagend en stimulerend, maar toch voelde ik me niet helemaal op mijn plek. Na een carrièrewisseling in 1998 stapte ik het onderwijs in. Ik begon met een eigen bedrijf in Duitsland waarbij ik cursussen Engels gaf voor mensen in het bedrijfsleven. Mijn interesse in het onderwijs groeide hard en naast mijn eigen bedrijf ging ik Engels geven op een Nederlands middelbare school in Asten, het Varendonck College. In 2003 heb ik mijn doctoraalexamen onderwijskunde gedaan

en ik heb mijn Nederlandse lesbevoegdheid (tweedegraads Engels) gekregen in 2004.

Mijn werk op het Varendonck College breidde zich uit naar andere taken. Eerst als mentor en remedial teacher en later in middenkader functies. Bij mijn vertrek in juli 2006, was ik teamleider van de brugklas. In juli 2006 ging ik weer 100% als zelfstandig ondernemer werken. Ik verzorg cursussen Engels voor mensen in het bedrijfsleven maar ik geef ook studiebegeleiding aan middelbare scholieren en coaching voor teams en vakgroepen in ziekenhuizen en het onderwijs.

Ik heb altijd al willen promoveren. Door al de veranderingen in mijn leven in de voorbije jaren werd het mogelijk om meer tijd en aandacht te besteden aan mijn passie voor taalverwerving. Ik heb het voorstel voor mijn promotieonderzoek in oktober 2006 ingediend bij de Radboud Universiteit in Nijmegen. Ik werd officieel toegelaten als buitenpromovendus in november 2006 en sinds maart 2007 ben ik als onderzoeker verbonden aan het Centrum voor Promotieonderzoek op de Radboud Universiteit.

Websites

www.talenopdebasisonderwijs.nl

www.europeesplatform.nl

www.earlybird.nl

Appendix 3

Information for parents

Promotieonderzoek vroeg vreemdetalenonderwijs Radboud Universiteit, Nijmegen

Onderzoekstitel

Early Bird Engels – een studie over de verwerving van woorden en klanken van het Engels als vreemde taal in de vroege fases van het taalverwervingsproces.

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Maar hoe zou het proces verlopen als kinderen een vreemde taal structureel aangeboden krijgen in de context van de school, in een beperkt aantal uren in de week? Wat zouden zij oppikken? Wat blijft hangen? Wat niet? Welke leeromgeving levert de beste resultaten op? Dat is wat ik in mijn promotieonderzoek zou willen achterhalen.

Dit promotieonderzoek zal ongeveer vijf jaar in beslag nemen. Ik ben nu ruim een jaar bezig geweest om de betreffende literatuur te lezen en mijn onderzoeksvragen en onderzoeksdesign vorm te geven. Het veldwerk loopt van oktober 2007 tot maart 2008 op drie Nederlandse scholen. Er komt zeer waarschijnlijk een vervolg onderzoek in het schooljaar 2008/2009.

Gegevens onderzoeker

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E-mail: v.lobo@maw.ru.nl
Website: www.ru.nl/cvp/onderzoek/lobo_vanessa/

Promotoren op de Radboud Universiteit

- Prof. R. van Hout (Toegepaste Taalwetenschap), Faculteit Letteren, Radboud Universiteit.
- Prof. P. Muysken (Algemene Taalwetenschap), Faculteit Letteren, Radboud Universiteit.

Subsidie

Deze activiteit is mogelijk dankzij de financiële steun van het Europees Platform voor het Nederlandse Onderwijs (PITON-07-44)

Picture here

Vanessa Lobo (onderzoeker)

Ik ben in India geboren in 1972 en mijn moedertaal is Engels. Na het afsluiten van mijn eerste universitaire studie in 1994 in Engeland, ging ik werken als productontwikkelaar in Duitsland en Frankrijk. Na een carrièrewisseling in 1997 stapte ik het taalonderwijs in. Ik heb meer dan tien jaar werkervaring als teamleider, docent, trainer, mentor, en remedial teacher.

In 2003 heb ik mijn doctoraalexamen onderwijskunde gedaan en ik heb mijn Nederlandse lesbevoegdheid (Engels) gekregen in 2004. Ik heb altijd willen promoveren op het gebied van tweede taalverwerving. Ik ben sinds november 2006 bezig met dit promotieonderzoek en ik doe het in mijn eigen tijd naast mijn werk als taaltrainer. Sinds maart 2007 ben ik ook als onderzoeker verbonden aan het Centrum voor Promotieonderzoek op de Radboud Universiteit.

Naast mijn moedertaal, spreek ik ook Nederlands en Duits. Ik heb ook twee dochters van vijf jaar en zeven jaar die tweetalig worden opgevoed. Ik woon in Nederland sinds 2001.

Picture here

Student 1 (Masterstagiaire)

Ik studeer Taalwetenschap aan de Radboud Universiteit te Nijmegen. Momenteel ben ik bezig met de Master van deze opleiding en richt mij voornamelijk op toegepaste taalwetenschap, zoals eerste en tweede taalverwerving. Voor mijn Masterstage loop ik mee met het promotieonderzoek van Vanessa Lobo over vroeg Engels in de onderbouw van het basisonderwijs. Ik vind het een erg interessant onderwerp, dat zeer goed binnen mijn richting past. Mijn stage is als volgt ingericht. Net voordat de Engelse lessen beginnen, neem ik twee testen af bij leerlingen van vier en zes jaar om te kijken naar hun begrip van het Engels. Na de periode van Engelse lessen, zal ik deze testen herhalen bij dezelfde leerlingen. Tevens zal ik tijdens de Engelse lessen een paar keer komen kijken in de klas en ik ben erg benieuwd hoe het gaat verlopen.

Picture here

Student 2 (Masterstagiaire)

Hallo, ik ben XXXXX XXXXX, 23 jaar en woon in XXXXX. Ik studeer Taalwetenschap aan de Radboud Universiteit te Nijmegen. Ik zit in het laatste jaar van de opleiding (de zogenaamde Masterfase). In dit jaar behoor ik een stage te lopen en een scriptie te schrijven om de opleiding af te kunnen ronden. De stage vul ik in door mee te lopen bij het onderzoek van Vanessa Lobo over vroeg Engels in het basisonderwijs. Tevens zal ik het onderwerp van mijn scriptie hierop afstemmen. Tijdens deze stage zal ik voor het begin (in september) en na afloop (in maart) van de Engelse lessen bij vierjarige kinderen op school twee testen afnemen over hun begrip van het Engels. Ook kom ik een paar keer in de klas kijken tijdens de lessen Engels. Dit alles doe ik op twee basisscholen, nl. basisschool De Bunders in Oisterwijk en de St. Willibrordusschool in Bakel. Zelf vind ik het een erg leuk en interessant onderzoek en ik ben zeer benieuwd naar wat de kinderen allemaal gaan oppikken van de Engelse lessen!

Appendix 4

Data collected at the classroom level

Lesson plans	Number
Art and crafts lesson plans for 4-year-olds	30
Art and crafts lesson plans for 6-year-olds	20
Physical education lesson plans for 4-year-olds	20
Lessons	
Total number of lesson recorded	250
Total number of hours recorded	130
Number of audio files of the lessons	
Audio files of art & craft lessons (4-years-old)	100
Audio files of art & craft lessons (6-years-old)	90
Audio files of physical education lessons (4-years-old)	60
DVDs	
Illustrative material in DVD form	80 lessons @ 30 mins
Interview guides for interviews	2
Self-administered questionnaire	1
Imitation task design and test design	1
Research notes (fieldwork journal)	1

Appendix 5

Translations of the Peabody Picture Vocabulary Test

Set 1 (2:3 – 2:5)		Set 2 (2:6 – 2:11)		
1	poes	cat	13 cadeautje	present
2	hand	hand	14 springen	jump
3	schaar	scissors	15 vlieg	fly
4	oog	eye	16 hek	fence
5	baby	baby	17 naar boven	go up
6	broek	trousers	18 bank	bench
7	drinken	drink	19 timmeren	hammer
8	vliegtuig	airplane	20 computer	computer
9	lopen	run	21 plant	plant
10	schildpad	turtle	22 trekken	pull
11	schommelen	swing	23 emmer	bucket
12	schep	spade	24 koe	cow
Set 3 (3:0 – 3:11)		Set 4 (4:0 – 4:5)		
25	trommel	drum	37 fruit	fruit
26	kruk	bar stool	38 vaas	vase
27	pijl	arrow	39 handschoen	glove
28	ziek	sick	40 blij	happy
29	blikje	tin	41 verrekijker	binoculars
30	varen	sail	42 vuilnis	rubbish
31	geld	money	43 onder de tafel	under the table
32	inschenken	pour	44 cactus	cactus
33	post	letters	45 trompet	trompet
34	slopen	demolish	46 haai	shark
35	kangoeroe	kangaroo	47 boren	drill
36	kist	box	48 kin	chin

Set 11 (14:0 – 15:11)		Set 12		
121	peulvrucht	133	verorberen	consume
122	rund	134	twijg	twig
123	valuta	135	bronciën	bronchi
124	agrarisch	136	coöperatief	cooperative
125	identiek	137	symbol	symbol
126	oase	138	conflict	conflict
127	porselein	139	globe	globe
128	doceren	140	berispen	reprimand
129	karaf	141	silo	silo
130	silhouet	142	coupe	haircut
131	duet	143	projectiel	projectile
132	transparant	144	culinair	culinary

Sets 13 – 17 were not used in the present study because the upper age limit was not relevant for the research context.

Appendix 6

11-word imitation task: instructions for the expert judge

In our study, 178 children aged four and six were taught physical education or art and crafts in English at their primary school for ten hours by a native-speaking researcher. In this experiment, we would like you to listen to the outcome of the imitation task we carried out at the pre-test and post-test stage. Each child was asked to imitate a word after listening to it once on an audio CD. The stimuli for our task are listed below. Before recording their responses, two practice items, hello and door, were used to teach the children how to do the task.

Stimuli

1. Coffee
2. Hand
3. Mother
4. Chair
5. Three
6. Look
7. Fish
8. Yellow
9. Dog
10. Finger
11. Bye

The objective of this experiment is to determine whether the ten-hours of English had an effect on the children's pronunciation. Three judges will be used to evaluate the data we have collected. All our data has been randomized.

Organization of the data

- There are 4 blocks of data containing approximately 420 randomized words.
- Each block will take about 20 minutes to complete.
- You must complete each block in one sitting and save the data in each block immediately.

Opening the experiment

- Open Praat Objects.
- Open script.
- Read from file
- Export bestand laden
- Run (automatic)

The experiment

- You will see a screen like the one the next page. For instruction purposes, we have included tiers although these do not appear on the screen.
- You will hear the same word twice (word pair) with a short 1-second break in between. One word is from the pre-test and one word is from the post-test. The same child says both words.
- After listening to the word pair, you will need to make an evaluation.

WORD (e.g. MOTHER)

Tier 1	Sample A	Sample B	No difference	Not Rateable	
Tier 2	Small difference	Medium difference	Large difference	No difference	Not rateable
Tier 3					Repeat
Tier 4					Next

Steps

- The word that needs to be evaluated is at the top of the screen. In this example it is mother.
- The randomized word pair plays automatically. There is a 1-second break between words.
- The randomized pair can be listened to up to 5 times by clicking 'repeat' in tier 4.
- When you have finished listening to the word pair, rate the sample:
- If you think sample A is better, click Sample A in tier 1. Then rate what the improvement is in tier 2.
- If you think sample B is better, click Sample B in tier 1. Then rate what the improvement is in tier 2.
- If you think there is no difference, click no difference in tier 1 and no difference in tier 2.
- If you think the sample is not rateable, click not rateable in tier 1 and not rateable in tier 2.
- After you have finished your rating in tier 2, click 'next' in tier 4.
- The next word pair is played after 2 seconds.
- The rating begins with a new word.

ALWAYS SAVE A BLOCK WHEN YOU HAVE FINISHED

Appendix 7

Interview questions for the one-to-one child interview

Questions in Dutch

1. Kan je nu Engels begrijpen?
2. Kan je nu Engels praten? (Zeg maar iets)
3. Wat heb je gedaan in de Engelse lessen?
4. Wat vond je leuk (aan de Engelse lessen)?
5. Vond je het ook eng?
6. Wat vond je niet leuk (aan de Engelse lessen)?
7. Vond je de les lang duren?
8. Wil je nog meer Engelse lessen?
9. Wist je altijd wat je moest doen in de les?
 - a. Nee, wat heb je gedaan om het wel te begrijpen?
 - b. Wat heeft Vanessa dan gedaan?
10. Zeg je wel eens iets in het Engels thuis/ met vriendjes en vriendinnetjes?
11. Kan Vanessa Nederlands praten?
 - a. Waarom denk je dat?

English translation

1. Can you understand English now?
2. Can you speak English now? (say something)
3. What did you do in the English lessons?
4. What did you like about the English lessons?
5. Did you think it was scary?
6. What did you not like about the English lessons?
7. Did you think the lessons were too long?
8. Do you want to have more English lessons?
9. Did you always know what you had to do in the lessons?
 - a. No, what did you do to understand what you had to do?
 - b. What did Vanessa do then?
10. Do you ever say anything in English at home or with friends?
11. Can Vanessa speak English?
 - a. Why do you think so?

Appendix 8

Interview questions for the one-to-one teacher interview

Questions in Dutch

Naam:

Geboortedatum:

School:

Onderzoekperiode:

Aantal bijgewoonde lessen:

Datum bijgewoonde les(sen):

Algemeen

1. Wat is uw algemene indruk van de lessenserie?
2. Welke resultaten denkt u dat de lessenserie heeft geboekt en welke niet?
3. Hoe succesvol is de lessenserie geweest?
4. Wat is uw mening over versterkt Engels (vanaf groep 5) op de basisschool?
5. Wat is uw mening over vroeg Engels (vanaf groep 1) op de basisschool?
6. Wat zou u andere scholen aanraden over vroeg Engels op de basisschool?
7. Heeft de lessenserie de school kunnen inspireren om verder te gaan met vroeg Engels? Waarom?

U als leerkracht

8. Hoe moeilijk was het voor u om de kinderen niet te mogen helpen tijdens de lessen?
9. Hoe moeilijk was het voor u om de kinderen niet tot de orde te roepen tijdens de lessen?
10. Heeft u het gevoel dat de kinderen iets hebben opgepikt? Zo ja, hoe merk je dat?
11. Hoe was de stemming onder de kinderen voor, tijdens en na de lessen?

De lessen

12. Wat vond u van het idee om Engels te leren als geïntegreerd in het curriculum en niet als afzonderlijk vak?
13. Wat is uw mening over de frequentie van het aantal lessen?
14. Wat is uw mening over de lengte van de les?
15. Hoe moeilijk waren de lessen voor de kinderen volgens u?
16. Wat is uw mening over de aansluiting van de inhoud van de lessen en het curriculum?
17. Hoe ingrijpend waren de lessen voor uw eigen planning?

18. Welke consequenties hebben de lessen gehad op de Nederlandse taalontwikkeling van de kinderen?
19. In hoeverre zou u deze lessen zelf kunnen geven?
20. Wat hebt u daarbij nodig?
21. Welke andere schoolvakken zijn geschikt voor vroeg engels?

De kinderen

22. Wat hebben de kinderen geleerd in de lessen volgens u?
23. Wat is de ervaring van de kinderen geweest?
24. Welke kinderen hebben aanpassingsproblemen gehad? Hoe kwam dat?

De ouders

25. Wat vonden de ouders van het onderzoek?

De school

26. Wat vindt de school van het onderzoek?

Verbeterpunten

27. Welke verbeterpunten of opmerkingen heeft u voor het onderzoek?

English translation

General

1. What is your general impression about the lessons? ?
2. Which results do you think the lessons achieved and which were not achieved?
3. How successful were the lessons?
4. What is your opinion about starting English from grade 5 at primary school?
5. What is your opinion about early English (from grade 1) at primary school?
6. What would you advise other schools about early English at primary school?
7. Have the lessons been able to inspire the school to continue early English? Why?

You, as a teacher

8. How difficult was it for you not to be allowed to help the children during the lessons?
9. How difficult was it for you not to be allowed to discipline children during the lessons?
10. Do you feel as if the children have learned something? If yes, how have you noticed that?
11. What was the children's mood like before, during and after the lessons?

The lessons

12. What do you think about learning English as integrated in the curriculum rather than as a separate subject?
13. What do you think about the frequency of the lessons?
14. What do you think about the duration of the lessons?
15. In your opinion, how difficult were the lessons for the children?
16. What is your opinion about the overlap between the lesson content and the curriculum?
17. How invasive were the lessons for your own teaching schedule?
18. What consequences did the lessons have on the children's development of the Dutch language?
19. To what extent could you teach the same lessons?
20. What do you need for that?
21. Which other school subject would be suitable for early English?

The children

22. In your opinion, what did the children learn in the lessons?
23. What was the children's experience like?
24. Which children had adjustment problems? Why?

The parents

25. What did the parents think about the research project?

The school

26. What did the school think about the research project?

Areas of improvement

27. What areas of improvement of comments do you have for this research project?

Appendix 9

Self-administered parental questionnaire (translations in chapter 7)

Onderwerp: Vroeg Engels op de basisschool

Nijmegen, XXXX XXXX

Geachte ouders/verzorgers,

In het kader van het onderzoek van Vanessa Lobo met betrekking tot vroeg vreemde-talenonderwijs heeft uw kind dit schooljaar (van maart 2009 t/m juni 2009) twintig lessen in het Engels gekregen. Omdat wij belang hechten aan uw ervaringen met betrekking tot deze lessen stellen wij u op de volgende pagina enkele vragen.

Zou u zo vriendelijk willen zijn deze vragen te beantwoorden en de enquête terug te zenden in de bijgevoegde gefrankeerde enveloppe vóór ddmmyy? Ook indien u niets invult, gaarne deze enquête retourneren.

Met vriendelijke groet,

Drs. Vanessa Lobo
Onderzoeker van het Centrum voor Promotieonderzoek,
Docent, Afdeling Taalwetenschap,
Radboud Universiteit
Institute for Gender Studies
Centrum voor Promotieonderzoek
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6500 HE Nijmegen
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1. Hoe vond uw kind de Engelse lessen naar uw mening?
2. Heeft u in de thuissituatie gemerkt dat uw kind uit zichzelf Engels sprak? Zo ja, om welke woorden ging het?
3. Heeft u in verband met het onderzoek uw kind zo nu en dan gestimuleerd om Engels te praten en kunt u voorbeelden hiervan geven?
4. Zoals u wellicht weet was Engels tijdens het onderzoek geïntegreerd in het curriculum en werd het niet gegeven als een afzonderlijk vak. Bent u van mening dat:
 - a) de Engelse lessen ten koste van het Nederlands gingen?
 - b) uw kind overbelast werd?
5. Wat is naar uw mening de ideale leeftijd om op school te beginnen met het leren van Engels en waarom?
6. Hoe belangrijk is het naar uw mening dat een kind Engels leert van een moedertaalspreker?
Als u geen bezwaar heeft dat wij eventueel nog contact met u opnemen, graag uw telefoonnummer hieronder vermelden.

Bedankt voor uw medewerking.

Drs. Vanessa Lobo

Summary in English

Research on the question what is the best age for second language (L2) acquisition does not wholly support the belief *the earlier, the better*, given that maturational constraints alone cannot satisfactorily explain the varying levels of attainment among second language learners. Yet the case for an early start to foreign language learning (often called early bird teaching, learning or education) in Dutch primary education has often rested on this very premise.

This thesis describes the outcomes of a longitudinal classroom study, which examined the effect of a content language integrated learning approach on linguistic development among 178 very young children attending 7 mainstream primary schools in The Netherlands. In an effort to analyze more than linguistic outcome only, as is often the case in research, a comprehensive approach to data collection was adopted. This means that data was also gathered at the classroom and school level. The main research questions were: when children in grade 1 and grade 3 are taught ten hours of art and crafts or physical education in the English language,

1. is there an improvement in L2 vocabulary?
2. is there an improvement in L2 pronunciation?
3. how does the L1 child behave towards, and interact with the L2 teacher and do these patterns of interaction change over time? and
4. what are the children's, teachers' and parents' opinions of children's learning experience and L2 learning in primary education?

Chapter 1 describes the popular misconceptions relating to the role of age in foreign language learning, and highlights the importance of treating the outcomes and conclusions of non-Dutch (critical period) studies in second language acquisition with caution. While studies outside The Netherlands are most certainly valuable, they do not draw attention to the distinctive characteristics of the Dutch lower primary grades, or the young learners themselves. A call is also made for using International Standard Classification of Education (ISCED) codes to classify pre-primary and primary grades in order to facilitate better comparisons of education and linguistic outcomes between countries. This ties in well with the discussion on the substantial variation in school participation and starting ages in education across Europe, and further exemplifies the dangers of over-extrapolating data from other countries. Further, an appeal is made to discriminate properly between foreign language learning and bilingual education; EIBO (English taught in the grade 7 and 8 of upper primary grades), early EIBO (English taught in grade 5 and 6) and VVTO (any foreign language taught from grade 1) are not forms of bilingual education but are often perceived to be or are thought to result in high levels of L2 proficiency.

Chapter 2 is concerned with presenting the Dutch primary education against the

background of the “mother tongue plus two” policy language policy of the European Union. Traditionally, The Netherlands has had a long history of offering various modern foreign languages in education, but provision has gradually changed as a result of modifications in foreign language policy. New life has been injected into (early) foreign language provision through the Barcelona Agreement, and this has contributed to the increasing permeation of English language provision earlier in primary education. Unfortunately, the long-standing issues relating to foreign language instruction, mediocre language outcomes and continuity of foreign language learning into secondary education associated with EIBO appear to have been swept aside as the provision of VVTO has gained in popularity and taken center stage. Little attention has been given to rectifying these problems, and this is cause for concern. **Chapter 3** presents the age factor briefly, and demonstrates that the notion of a critical period for foreign language learning is not substantiated by scientific research. Previous longitudinal research and more recent research conducted in Dutch primary schools also demonstrate that late starters perform significantly better than younger starters. **Chapter 4** describes the research design and method, explains the practical issues raised by the design and method and the solutions, and presents data collection, testing and analysis. It also describes how a content language integrated learning approach is implemented in the early foreign language classroom.

Chapter 5 addresses the first two research questions: did the English lessons have an effect on receptive vocabulary development and L2 pronunciation? Two curriculum-independent types of tests - the Peabody Picture Vocabulary Test and a specially-designed 11-word Imitation Task - show a significant increase in vocabulary development (n=168) and native-like pronunciation (n=159), although no correlation between vocabulary development and L2 pronunciation can be determined. Further, no effect is observed for grade, subject matter or lesson frequency. While the average raw scores for the Peabody Picture Vocabulary Test are quite low, the results remain remarkable, given that significant progress was made without any form-focused instruction. The results of the 11-word imitation task show a similar tendency: significant progress overall without any explicit phonetic instruction. The results seem to suggest that in the earliest phases of second language acquisition the young learners in the present study still attended to forms in language even though the learning approach was meaning-focused. This impresses on the idea that implicit mechanisms of learning operate during initial exposure in the early L2 classroom, even if exposure is very limited.

The third research question - how does the L1 child behave towards, and interact with the L2 teacher and do these patterns of interaction change over time - is addressed in **chapter 6**, which describes the results at the classroom level. The analyses are based on 13 hours of orthographically transcribed lessons of the first (lesson 1 and lesson 2) and final (lesson 19 and lesson 20) hours of the study, supplemented with a research journal that was kept throughout the study, and video recordings where applicable. 68 illustrations of classroom interactions are divided into five main interaction types: Repetitions English-intended utterances, Sensitivity to the L2, Foreigner Talk and Collective Scaffolding. Then the frequency patterns of

all types are presented in terms of groups. The frequency patterns for Foreigner Talk are not reported because this was not the primary focus of enquiry in the present study. Repetitions regularly feature in L2 classroom interaction, and perform an important role in processing and prolonging L2 interaction on the part of the child. Children produce English-only utterances and language mixing as early as the first hour of L2 exposure; longer utterances are mixed more than shorter ones except for some long formulaic chunks. Children are also curious about the way English sounds. The most salient category in the analysis is playing with sounds, where children adapt their Dutch words to sound more English or make simple sound associations. The lowest groups for frequency patterns are for physical education, and this is attributed to the fact that art and crafts create more opportunities for interaction than physical education. In terms of age, grade 3 children generally score higher on all five interaction types examined, possibly supporting the idea that an advanced cognitive maturity positively affects how third graders interact in class. The analyses do not show any strong patterns of development over time for grade or subject, suggesting that (1) for interaction at least, neither variable is indicative of higher or lower levels of interaction and (2) the 10 hours of foreign language instruction may not have been sufficient to observe any large differences. The results show that third graders account for more than half of the total number of utterances produced, and the third graders are the most experimental, engaging and productive in their attempts at interacting with the L2 teacher.

Chapter 7 deals with the results at the school level. One-to-one child interviews (76 first graders and 87 third graders), 18 in-depth interviews with classroom teachers, and 120 self-administered parental questionnaires are summarized. In addition to gathering data on learning experience, the data is aimed at addressing four practical issues: (1) the ideal length of lessons, (2) lesson frequency (3) subject differences and, (4) age differences. The child interviews demonstrate clear differences between grade 1 and grade 3, and provide data that contradicts the belief *the earlier, the better*. A summary of the child interviews show that at least 30% or more of grade 1 children report negatively on comprehension and oral skills, and more than half want to stop learning English because the 30-minute lessons are considered too long. This is in stark contrast to third graders, the majority of whom report being able to understand and speak English and express wanting to continue learning. This suggests that for first graders, 30-minute lessons are a maximum. Despite the differences between grade 1 and 3, both groups report enjoying the lessons. They describe various strategies to cope with communication breakdown, and this goes against the idea that L1 use by the L2 teacher is a necessary condition for learning and carrying out tasks in the L2 classroom. Some 1 in 10 children in both grades report feeling anxious at the beginning of the lessons, confirming previous studies that learning a foreign language can be stressful for some learners. It is important to note that no children in grade 3 are taught physical education and this may have resulted in slightly different outcomes for the child interviews. Surprisingly, few teachers and parents gave credit to the L2 teacher's superior pronunciation and fluency skills as a native speaker. The outcomes of the in-depth interviews and self-administered questionnaires confirm the pervasiveness of the

deep-seated belief *the earlier, the better*, although the results of the Peabody Picture Vocabulary Test and the imitation task do not. The results challenge teachers' beliefs about L2 acquisition and input. Further, a definitive ideal age does not emerge from the data. Rather, there is an inclination towards starting in lower primary education: parents in grade 3 report grade 3 or earlier as ideal, while grade 1 parents report grade 1 as ideal. This suggests how influential personal experience is in forming opinions. Teachers respond similarly but are more likely to be concerned about L2 status in the curriculum, continuity, their own language proficiency and transition into secondary education. These are expected outcomes given their roles in education.

The present study experiments with a content language integrated learning approach. This is because no teaching methodology is widely available for lower primary education. A series of lessons are designed for art and crafts and physical education, and the results in chapters 5, 6 and 7 confirm that the CLIL approach is a promising candidate for lower primary education, creating plenty of opportunities for learning, engaging with language, and meeting curriculum goals.

On the basis of the present study, a call is made for specific VVTO attainment targets, attention to curriculum continuity within primary education and between primary and secondary education as well as improvements to teacher training and teaching methodologies. This can be achieved through close partnerships with practitioners, politicians and researchers. Perhaps the time is also ripe to re-examine the goals of early foreign language learning in pre-primary and primary education. The link between starting earlier and superior language learning outcomes may have to be severed in order to introduce other goals relating to language sensitization and cultural awareness.

Finally, what can be concluded about the question of age in early foreign language classrooms? Significant progress for receptive vocabulary development (though quite low) and L2 pronunciation is reported for both first and third graders, providing evidence that starting in either grade is beneficial. Furthermore, neither parents nor teachers report that children are burdened with the art and crafts or physical education lessons, and the results thus challenge the current trend observed to avoid teaching a foreign language in grade 3. Could any differences between first and third graders be observed? Evidence of the classroom interactions (see chapter 6) and the child interviews (see chapter 7) demonstrate an age distinction: the older learners produce more utterances and instances of language mixing, and are generally more positive about learning English than their younger counterparts. So, can the Dutch early bird catch the worm? Yes, the present study confirms this question. However all things considered, it also provides important evidence that distinguishes the younger from the older, leading to the new notion of *the later, the better*, at least in relation to the lower primary education grades.

Summary in Dutch

Het onderzoek naar de vraag wat de beste leeftijd voor tweede taalverwerving (L2) ondersteunt het idee *hoe eerder, hoe beter* niet helemaal, gezien het feit dat ontwikkelingsbeperkingen op zich de verschillende niveaus van taalvaardigheid van tweede taalverwerwers niet voldoende kunnen verklaren. Toch wordt deze aanname vaak als argument gebruikt om vroeg met het leren van een vreemde taal (vaak *early bird* onderwijs of vroeg vreemde talenonderwijs genoemd) in het Nederlandse primair onderwijs te beginnen.

Dit proefschrift beschrijft de uitkomsten van een longitudinale klaslokaalstudie naar het effect van een *Content and Language Integrated Learning* (CLIL) aanpak op de taalontwikkeling van 178 hele jonge kinderen op 7 reguliere basisscholen in Nederland. In een poging om meer dan alleen de taalresultaten te analyseren, iets dat vaak het geval is bij dit soort onderzoek, is er een meer uitgebreide gegevensverzameling geweest. Dit houdt in dat er ook op klas- en schoolniveau gegevens verzameld zijn. De belangrijkste onderzoeksvragen waren: wanneer kinderen in groep 1 en groep 3 tien uur handvaardigheid of gymles in het Engels onderwezen krijgen,

1. is er een verbetering van L2 woordenschat?
2. is er een verbetering van L2 uitspraak?
3. hoe gedraagt het L1 kind zich tegenover, en communiceert het met de L2 docent en hoe veranderen deze communicatiepatronen na verloop van tijd?
4. wat vinden de kinderen, de docenten en de ouders van de leerervaring van de kinderen en het vroeg vreemde talenonderwijs?

Hoofdstuk 1 beschrijft de populaire misvattingen met betrekking tot de rol van leeftijd in het leren van een vreemde taal en benadrukt het belang om voorzichtig om te gaan met de uitkomsten en conclusies van niet-Nederlands onderzoek naar de kritische periode in tweede taalverwerving. Hoewel onderzoeken buiten Nederland natuurlijk waardevol zijn, besteden ze geen aandacht aan de typische kenmerken van de laagste groepen van het Nederlandse basisonderwijs, noch aan de jonge leerlingen zelf. Ook wordt er gepleit om de International Standard Classification of Education (ISCED) codes te gebruiken om de kleuter- en basisgroepen te classificeren, en zo een betere vergelijking van onderwijs- en taalresultaten tussen de verschillende landen mogelijk te maken. Dit sluit goed aan bij de discussie over de substantiële verschillen in schoolparticipatie en startleeftijd in het onderwijs in Europa, en verklaart ook het gevaar van het overextrapoleren van gegevens uit andere landen. Verder wordt er gepleit om een duidelijk onderscheid te maken tussen vreemde talenonderwijs en tweetalig onderwijs; EIBO (het onderwijzen van Engels in groep 7 en 8 in de bovenbouw van het basisonderwijs), vervroegd EIBO

(Engels onderwezen in groep 5 en 6) en VVTO (het onderwijzen van een vreemde taal vanaf groep 1) zijn geen vorm van tweetalig onderwijs, hoewel ze vaak zo worden beschouwd of worden gedacht te leiden tot een hoog niveau van L2 vaardigheid.

In **Hoofdstuk 2** wordt het Nederlandse primair onderwijs besproken in het licht van het “moedertaal plus twee” taalbeleid van de Europese Unie. Van oudsher heeft Nederland een lange geschiedenis van het aanbod van meerdere vreemde talen, maar dit is geleidelijk aan minder geworden door de veranderingen in het vreemde talenbeleid in het onderwijs. Het Barcelonaverdrag heeft het aanbod van vreemde talen nieuw leven ingeblazen en dit heeft bijgedragen tot het groeiend aanbod van de Engelse taal vroeg in het basisonderwijs. Jammer genoeg lijken de langdurige problemen gerelateerd aan de instructie van een vreemde taal, middelmatige taalresultaten en de continuïteit van het leren van een vreemde taal tot aan het middelbaar onderwijs toe gekoppeld aan EIBO naar de achtergrond verdrongen te zijn door het groeiend aanbod en de steeds grotere populariteit van VVTO. Deze problemen hebben weinig aandacht gekregen en dit is reden tot zorg.

Hoofdstuk 3 laat de leeftijdsfactor kort zien, en toont aan dat het idee van een kritische periode voor het leren van een vreemde taal niet onderbouwd wordt door wetenschappelijk onderzoek. Eerder longitudinaal onderzoek en meer recent onderzoek in Nederland in klaslokaalverband toont aan late beginners significant beter presteerden dan vroege beginners. **Hoofdstuk 4** beschrijft de onderzoeksopzet en methode, licht de praktische problemen als gevolg van de opzet en methode en de oplossingen toe, en presenteert de gegevensverzameling, tests en analyse. Hier wordt ook beschreven hoe een CLIL aanpak wordt uitgevoerd in het vroege vreemde taalklaslokaal.

Hoofdstuk 5 behandelt de eerste twee onderzoeksvragen; hadden de lessen Engels een effect op de receptieve woordenschatontwikkeling en L2 uitspraak? Twee lesprogrammema-onafhankelijke tests – de PPVT en een speciaal ontwikkelde 11-woorden imitatieopdracht – laten een significante groei zien in woordenschatontwikkeling (n = 168) en op moedertaal gelijkende uitspraak (n=159), hoewel er geen verband tussen de woordenschatontwikkeling en L2 uitspraak kan worden vastgesteld. Verder lijken groep, onderwerp of lesfrequentie geen verschil te maken. Ofschoon de gemiddelde originele scores vrij laag zijn, blijven de resultaten opmerkelijk, gegeven het feit dat de vooruitgang significant was en gemaakt werd zonder enig formeel grammaticaonderwijs. De resultaten van de 11-woorden imitatieopdracht laten een vergelijkbare tendens zien: een algehele significante vooruitgang zonder enige expliciete fonetische instructie. De uitkomsten lijken te suggereren dat in de vroegste fase van tweede taalverwerving onze jonge leerlingen aandacht blijven besteden aan vorm in taal terwijl de leerbenadering betekenis-georiënteerd was. Dit bevestigt het idee dat impliciete leermechanismen tijdens de eerste blootstelling in het vroege L2 klaslokaal in werking zijn, zelfs als de blootstelling zeer beperkt is.

De derde onderzoeksvraag – hoe gedraagt het L1 kind zich t.o.v. de leerkracht en hoe verloopt de communicatie over en weer – wordt behandeld in **hoofdstuk 6** en beschrijft de resultaten op klassen/lokaalniveau. De analyses zijn gebaseerd op 13

uur orthografische transcriptie van de eerste (les 1 en 2) en de laatste (les 19 en 20) uren van het onderzoek, aangevuld met een onderzoeksdagboek bijgehouden gedurende het onderzoek, en video-opnamen waar toepasselijk. 68 voorbeelden van klasinteracties werden ingedeeld in vijf belangrijke types/soorten van interactie: *Repetitions*, *English-intended sentences*, *Sensitivity to the L2*, *Foreigner Talk (FT)* en *Collective Scaffolding*. Hierna zijn de frequentiepatronen van alle types verdeeld in groepen. De frequentiepatronen van FT worden niet besproken, omdat dit niet tot het primaire doel van het huidige onderzoek behoorde. Herhalingen komen regelmatig voor in L2 klasseninteractie, en vervullen een belangrijke rol in de verwerking en de verlenging van de L2 interactie van het kind. Kinderen produceren al tijdens het eerste uur van de L2 blootstelling alleen-Engelse uitingen en taalvermenging; langere uitingen worden vaker vermengd dan kortere met uitzondering van een aantal langere lexicale eenheden. Kinderen zijn ook nieuwsgierig naar hoe het Engels klinkt. De saillantste categorie in de analyse is het spelen met klanken, waarin kinderen hun Nederlandse woorden aanpassen om ze Engelser te laten klinken of simpele klankassociaties maken. De laagste categorie in termen van frequentie is de gymles, en dit kan toegeschreven worden aan het feit dat handvaardigheid meer mogelijkheden tot interactie geeft dan gym. Op het gebied van leeftijd scoren kinderen uit groep 3 over het algemeen hoger op alle vijf onderzochte interactietypes, wat waarschijnlijk het idee ondersteunt dat een gevorderde cognitieve rijping de manier van interactie van kinderen uit groep 3 in de klas positief beïnvloedt. De analyses laten geen sterke ontwikkelingspatronen zien op het gebied van groep of vak, wat suggereert dat (1), voor interactie tenminste, geen van deze variabelen iets zegt over hogere of lagere niveaus van interactie en dat (2) de 10 uur van vreemde taal instructie misschien niet voldoende is geweest om grote verschillen waar te nemen. De resultaten laten zien dat de groep 3 leerlingen goed zijn voor meer dan de helft van het totaal aantal geproduceerde uitingen, en dat deze leerlingen het meest experimenteel, boeiend en productief zijn in hun pogingen om te communiceren met de L2 docent.

Hoofdstuk 7 behandelt de resultaten op schoolniveau. Één op één interviews met kinderen (76 leerlingen uit groep 1, 87 uit groep 3), 18 diepte-interviews met klassendocenten en 120 ouderenquêtes worden samengevat. De opzet was om niet alleen gegevens over de leerervaring te verzamelen, maar deze gegevens ook te gebruiken om vier praktische zaken toe te lichten: (1) de ideale lengte van de les, (2) de frequentie van de lessen, (3) verschillen tussen de vakken en (4) leeftjidsverschillen. De kinderinterviews laten duidelijke verschillen tussen groep 1 en groep 3 zien, en leveren gegevens die het idee *hoe eerder, hoe beter* tegenspreken. Een samenvatting van de kinderinterviews laat zien dat tenminste 30% van de groep 1 leerlingen negatief oordeelden over taalbegrip en orale vaardigheden, en meer dan de helft wilden stoppen met het leren van Engels, omdat ze de lessen van 30 minuten te lang vonden. Dit staat in schril contrast met de leerlingen uit groep 3, waarvan de meerderheid rapporteerde in staat te zijn Engels te spreken en te verstaan en aangaf door te willen gaan met leren. Dit impliceert dat een les van 30 minuten het maximum is voor leerlingen uit groep 1. Ondanks de verschillen tussen groep 1 en groep 3, geven beide groepen aan dat ze de lessen leuk

vonden. Ze beschrijven verschillende strategieën om met een communicatieprobleem om te gaan, en dit komt niet overeen met het idee dat het gebruik van L1 door de L2 docent een noodzakelijke voorwaarde is om te leren en opdrachten uit te voeren in het L2 klaslokaal. Ongeveer 1 op de 10 leerlingen in beide groepen geeft aan zich angstig te voelen aan het begin van de les, en dit bevestigt de bevindingen van eerder onderzoek, nl. dat het leren van een vreemde taal voor sommige leerlingen stressvol kan zijn. Het is belangrijk om op te merken dat geen van de kinderen uit groep 3 gymles kregen en dit zou voor een iets andere uitkomst van de kinderinterviews gezorgd kunnen hebben. Er wordt vreemd genoeg door maar weinig docenten en ouders waarde gehecht aan de betere uitspraak en taalbeheersing van de *native speaker*. De uitkomsten van de diepte-interviews en zelf-uitgevoerde ouderenquêtes bevestigen de overtuigingskracht van het diep verankerde idee *hoe eerder, hoe beter*, hoewel de resultaten van de PPVT en de imitatie opdracht iets anders zeggen. De uitkomsten weerspreken de ideeën van docenten over tweedetaalverwerving en input. Verder komt er niet echt een definitieve ideale leeftijd naar voren uit de resultaten. Er was eerder een tendens om te beginnen in de onderbouw van de basisschool: de ouders uit groep 3 vonden groep 3 of eerder ideaal, terwijl de ouders uit groep 1, groep 1 ideaal vonden. Dit laat zien hoe invloedrijk persoonlijke ervaringen zijn in het vormen van een mening. De docenten reageerden vergelijkbaar, maar waren eerder geneigd bezorgd te zijn over de status van L2 in het leerplan, de continuïteit, hun eigen taalvaardigheid, en de overgang naar de middelbare school. Deze uitkomsten lagen in lijn der verwachting gezien de rol die ze spelen in het onderwijs.

De huidige studie experimenteerde met een CLIL aanpak, omdat er geen leermethode voor de onderbouw van het basisonderwijs algemeen verkrijgbaar is. Een lessenserie werd ontwikkeld voor handvaardigheid en gymles, en de resultaten in hoofdstuk 5, 6 en 7 bevestigen dat de CLIL aanpak een potentiële kandidaat is voor de onderbouw van de basisschool, omdat deze aanpak veel leeromgevingen creëert, zich bezighoudt met taal en leerplandoelstellingen haalt.

Op basis van de huidige studie wordt er gepleit voor specifieke eindtermen voor het VVTO, aandacht voor een doorlopende leerlijn in het basisonderwijs en tussen het basisonderwijs en het middelbaar onderwijs, alsmede verbeteringen op het gebied van scholing voor docenten en leermethodes. Deze doelen zouden bereikt kunnen worden door nauwe samenwerking tussen docenten, beleidsmakers en onderzoekers. Misschien is de tijd ook rijp om de doelen van vroeg vreemde taalonderwijs in het kleuter- en basisonderwijs eens opnieuw te onderzoeken. Het verband tussen eerder beginnen en betere taalresultaten zou misschien verbroken moeten worden, om zo andere doelen die te maken hebben met taalsensibilisering en cultuurbewustzijn te introduceren.

Tenslotte, wat kan er geconcludeerd worden over de leeftijdsvraag in de vroege vreemde taal-klaslokalen? Significante vooruitgang op het gebied van receptieve woordenschatontwikkeling (hoewel vrij laag) en L2 uitspraak wordt gemeld voor zowel de leerlingen van groep 1 als die van groep 3, een indicatie dat het lonend is om in die klassen te beginnen. Verder gaven geen van de ouders of docenten aan dat de kinderen de handvaardigheid- en gymlessen als belastend ervoeren. De resultaten

weerspreken dus de huidige trend om het doceren van een vreemde taal in groep 3 te vermijden. Zijn er ook verschillen tussen groep 1 en groep 3 te zien? Voorbeelden van klaslokaalinteracties (zie hoofdstuk 6) en de kinderinterviews (zie hoofdstuk 7) laten een leeftijdsonderscheid zien: de oudere leerlingen produceerden meer uitingen en meer gevallen van taalvermenging, en waren in het algemeen positiever over het leren van Engels dan hun jongere tegenhangers. Dus, heeft de morgenstond goud in de Nederlandse mond? Ja, de huidige studie bevestigt deze vraag. Echter, (alles in overweging nemend), geeft het ook belangrijk evidentie voor een jongeren-ouderen onderscheid, leidend tot het nieuwe inzicht *hoe later, hoe beter*, tenminste wat de groepen uit de onderbouw van het basisonderwijs betreft.

Curriculum Vitae

Vanessa Lobo was born in Calcutta, India on 19 June 1972. After spending her early childhood in India and Singapore, she moved with her family to the United Kingdom in 1981. She studied at Kingston University from 1990-1994, where she obtained a BSc Honours degree in Chemistry with German. During her degree, she completed a 13-month industrial placement as an R&D trainee in the Ion Exchange Department at Dow Chemicals Inc. in Rheinmünster in Germany. After graduating, she continued working in R&D as a Project Leader at Johnson & Johnson GmbH and RoC S.A. in Düsseldorf and Paris. She began a career in English foreign language training in 1998, establishing her own company in Düsseldorf after obtaining a Trinity College Certificate in Teaching English to Speakers of Other Languages (Cert. TESOL). She began teaching in secondary education about a year after relocating to The Netherlands in 2001, and obtained qualified teacher status soon after. Vanessa obtained her MA in Education (Lifelong Learning) from The Open University (UK) in 2003, and began working on her PhD project entitled *Teaching L2 English at a very early age: a study of Dutch schools* as an external candidate in the Department of Linguistics at Radboud University in 2006. She received two subsidies from the European Platform in 2007 and 2008, and a Replacement Subsidy from the Dutch Scientific Organization in 2011 to help carry out and complete her research project. In addition to conducting research, Vanessa has also held positions at Radboud University, and assisted in the teaching and assessment of the Bachelor and Master Second Language Acquisition modules, as well as other degree courses. Currently she works as a secondary school teacher of English at Varendonck College in Asten. In addition to teaching mainstream VWO/HAVO, she also coordinates and helps deliver the curriculum for the International Baccalaureate A2 English examination in the school's upper secondary bilingual stream.