# Studies in Second Language Learning and Teaching 

# Game on! Young learners' incidental language learning of English prior to instruction 

Vanessa De Wilde<br>Ghent University, Artevelde University College Ghent, Belgium<br>vanessa.dewilde@ugent.be

June Eyckmans
Ghent University, Belgium
june.eyckmans@ugent.be


#### Abstract

In this paper the incidental language acquisition of 11 -year-old Flemish children $(\mathrm{n}=30)$ who have not received any formal English instruction is investigated. The study looks into children's English proficiency and the learner characteristics that can be associated with it. In order to measure the children's English proficiency, a receptive vocabulary test and a proficiency test (which measured listening skills, speaking skills, reading skills and writing skills) were used. Information about learner characteristics was gathered through two questionnaires (for children and parents). The results show that a significant proportion of the 11-year-olds can already perform tasks at the A2 level (The Common European Framework of Reference for Languages) without having had any formal instruction. The study confirms that children learn English from the input they receive through different media (especially gaming and computer use). Furthermore, the data reveal a strikingly positive attitude towards English and demonstrate that in some situations Flemish children prefer using English over their L1 with their peers.


Keywords: incidental language acquisition; young learners; media exposure; computer games

## 1. Introduction

The ubiquity of English in the daily lives of non-English native speakers around the world is a well-established fact. Its impact on present day societies is unprecedented and has been explained by the extent of its geographical diffusion, the huge cultural diversity of its speakers, and the central role it plays internationally in domains such as science, technology, the media and many others (Dewey, 2007). English has clearly become the lingua franca among language users who do not share a common tongue. In Europe, the pervasiveness of the English language in the street (e.g., in advertising, shop windows, etc.) has prompted scholars to also consider English as part of the linguistic landscape of many European countries (Griffin, 2004; McArthur, 2000). In fact, English seems to have passed the stage of being considered a foreign language, and instead has become part of the working and social life of many EU citizens.

The position of English in today's society also has an impact on the young. Because of the international status of English and its prevalence in contemporary media, children are exposed to English long before they start their formal L2 English instruction. As a result of this abundant input, children are exposed to-and may interact with-different types of semantic and syntactic information that can be processed and acquired. This type of incidental language acquisition is defined as a "by-product, not the target, of the main cognitive activity" (Huckin \& Coady, 1999, p. 182) and has received a lot of attention in the SLA research of the past two decades (Hulstijn, 2012).

Flanders too is a region where the prevalence of English in Europe is strongly felt, and this is heightened by the overwhelming supply of English-spoken television broadcasts that are subtitled instead of dubbed. This situation has created an interest in what has been called "incidental foreign language acquisition from media exposure" (Kuppens, 2010, p. 65). This particular kind of incidental language acquisition has been acknowledged as being different from in-struction-based language acquisition as well as immersion, but surprisingly few studies have been conducted concerning its development.

In this study we look into the English competence of young Flemish learners who might have "pre-learned" the language (mainly) through media exposure. We will explore the false beginner status of these learners, and we will focus on the individual differences that shape language learning gains in this pre-instructional phase.

After delineating the educational system in Flanders with regard to English instruction, the results of previous studies about incidental knowledge of English in children will be chronicled so as to arrive at the research aims of a new smallscale investigation. The procedure and materials of this new study are outlined in

Section 4 and are followed by the results section. In the discussion and conclusion sections, the main findings of this pilot study are interpreted and future research avenues are put forward.

## 2. Background to the study and literature review

In Flanders, formal instruction in English starts a lot later than in many other European countries (Enever, 2011). As there are three official languages in Belgium (Dutch, French and German) and the capital region is officially bilingual, Belgian legislation requires that the first foreign language to be taught in Flanders be French. Children start learning French at the age of 10 (at the latest), and English becomes compulsory at the start of secondary school (where it is taught from the first or second year onwards, i.e., when children are 12 to 13 years old). This is in sharp contrast with the surrounding countries where English lessons start at age 10 at the latest, but often much earlier and sometimes as early as age 4 (Enever, 2011).

The educational targets set by the Flemish government concerning language competences are linked to The Common European Framework of Reference for Languages (CEFR). For example, children are expected to obtain the A1 level for French at the end of primary school, that is, after two years of French instruction. In secondary education, the attainment targets for French and English are the same. At the end of the first grade of secondary education, learners are expected to be at the A2 level for both French and English. This is after four years of French instruction (4 hours per week) and after one or two years of English instruction (2 or 3 hours per week) depending on the school's program (Onderwijs Vlaanderen, 2016). This situation, where English is clearly expected to be learned more quickly than French, is undoubtedly the result of the perceived dominant status of English in Flanders. In large parts of Europe, English is considered as a lingua franca. This is no different in Flanders, where English is omnipresent in daily life, not in the least because of the profusion of the English language in the different media.

Flemish children, like many other children in Europe (Edelenbos, Johnstone, \& Kubanek, 2006), are often exposed to English outside the school from an early age onwards. English-spoken TV broadcasts in Flanders are mainly subtitled and hardly ever dubbed. There is also exposure to English through social media, computer games, watching things online (e.g., Youtube), and so on. Recent research has demonstrated that nearly all (98.2\%) 9-year-old to 12 -yearold Flemish children have access to a computer at home. Two thirds of the children have their own computer, $40 \%$ have their own smartphone, and $18 \%$ have their own tablet. They mainly use these devices for gaming but also for watching films, clips and using social media (M ediaraven \& Linc, 2016).

A couple of recent studies seem to indicate that contexts of abundant language input may lead to a form of language acquisition which is neither instruc-tion-based nor a type of immersion but can be seen as a form of naturalistic acquisition through media exposure (Saville-Troike, 2012). A study by Kuppens (2010), which examined the translation skills of 374 Flemish children in the last year of primary school, found significant effects of watching subtitled English television programs and movies on the scores of the Dutch-to-English and English-to-Dutch translation tests. In the study children were asked to translate eight sentences from Dutch to English (e.g., Het spijt me. 'I'm sorry.') and eight sentences from English to Dutch (e.g., What's going on? 'Wat gebeurt er?'). Playing English computer games was also positively associated with English-to-Dutch translation skills.

Another study, carried out in Iceland (Lefever, 2010), investigated 182 children's listening, reading and oral communication skills in English before the start of classroom instruction and found that many of these children had a basic understanding of spoken English before the start of formal instruction and were in the first stages of understanding written English. Furthermore, over half of the children could take part in a simple conversation in English. Lefever concludes that these skills seem to be influenced by the type and amount of language input children are exposed to in a naturalistic environment. He summarizes the findings as follows: "Above all, the study substantiates that children are learning English on their own and demonstrates that they are active and autonomous learners" (p. 15).

In a sub-study of the Early Language Learning in Europe (ELLiE) project, Lindgren and Muñoz (2013) investigated the influence of exposure to a foreign language ${ }^{1}$ on children's test results (listening comprehension and reading comprehension). In this study watching movies and films in the foreign language (possibly subtitled) explained most of the variance in test results, and listening to music with lyrics in the foreign language and playing computer games came far behind. It should be noted that the children in this study all received foreign language classroom instruction.

Finally, a study by Sylvén and Sundqvist (2012) with 86 Swedish children aged 11-12 showed that children who frequently gamed in English outperformed moderate gamers, who outperformed non-gamers on an English vocabulary test. A study by Jensen (2016) with 49 eight-year-old and 58 ten-year-old Danish children confirmed the relationship between gaming and the development of English vocabulary knowledge: Children who gamed frequently scored higher on a receptive vocabulary test. Here again, out-of-school exposure seemed

[^0]to be an important factor in children's second language acquisition. As in the ELLiE study, the children who participated in this study also received formal English instruction in school.

## 3. Aims and research questions

The aim of this study is twofold. First, we want to investigate Flemish learners' English language skills and vocabulary knowledge before the start of formal English instruction. By gathering these data, we hope to get a clearer picture of the false beginner status of young learners and the differences that exist between them regarding knowledge of English before the start of formal instruction. Secondly, we wish to identify the variables which are related to young Flemish learners' language skills and vocabulary knowledge. The research questions of this study are:

1. How proficient are Flemish children in English (listening comprehension, reading comprehension, writing ability, speaking ability and receptive vocabulary size) before embarking on formal English classroom instruction?
2. Which learner characteristics can be associated with children's English proficiency before the start of formal English classroom instruction (e.g., gender, socio-economic status, use of different media)?

## 4. Method

### 4.1. Participants

In this study 30 children were tested. The children were all in the last year of primary school. They made up two intact classes of a school in Ghent, Belgium. They had not had any English lessons prior to the test as English is not part of primary schools' curricula in Flanders. The group consisted of 16 boys and 14 girls. Eighteen children were native speakers of Dutch, and 12 children had a multilingual background (Arabic-Dutch, Turkish-Dutch, French-Dutch, Dutch-Cape Verdean Creole).

### 4.2. Instruments, procedure and analysis

Listening comprehension, reading comprehension, writing ability and speaking ability were measured with the Cambridge English Test for Young Learners - Flyers. This test, which was designed for EFL-learners aged 7-12, measures learners' language skills at the A2-level (CEFR). This level corresponds to the level which is expected from Flemish children at the end of the second year of secondary school. For this study we used the sample papers of the test (Cambridge

English Language Assessment, 2014). The test itself was not adapted, but the instructions were provided in English and in Dutch, the official language of instruction in Flanders. This was done because the children had not had any English lessons before and instructions had to be clear for all participants.

The listening test consisted of five tasks, each including five items. In Task 1, the participants saw a drawing of a children's party and were asked to connect a child in the picture with the correct name based on a dialogue they heard. In Task 2, the participants were asked to listen for specific information and fill in the correct word in a police report. In Task 3, a drawing of a piece of furniture had to be connected with the room it belonged in based on a dialogue they heard. In Task 4, five questions were asked and the participants had to respond by choosing one of three drawings. In Task 5, the participants had to follow the instructions given by the speaker in order to color, draw and write things in a drawing.

Reading and writing were tested together. The reading and writing test consisted of seven tasks. In Task 1, the participants were given 10 definitions which they had to link with the correct word. In Task 2, children had to assess whether statements about a drawing were correct or incorrect. In Task 3, they had to complete a dialogue by choosing the correct answers to the questions asked. Task 4 was a gap-filling exercise. The participants had to complete a story by filling in the correct word in the gap. They could choose a word from a list. In Task 5, the participants had to read a text and answer questions about the text. Task 6 was again a gap-fill. The participants had to complete ten sentences with the correct word that they could choose from among three alternatives. The last task was a gap-fill where no choices were furnished. The participants had to complete the sentence with a word they thought suitable in this context. Both tests (listening and reading/writing) were administered in the classroom.

The last part of the test for young learners was an oral test. This test consisted of four tasks. The first task was about identifying the differences between two similar drawings. The examiner made a statement about the drawing and the speaker had to react by saying how his/her drawing was different. The second activity was an information gap activity. Both the examiner and the speaker asked questions and gave answers. The third task was a storytelling task. The speaker told a story about buying a new television based on five pictures. The examiner described the first picture and the speaker continued. The last task was a short interview about the learner's family and personal interests. The oral test was administered individually. To score it a rubric was developed based on the criteria laid out in the teachers' manual provided with the Flyers test. The five criteria used to assess the children's oral proficiency in English were interactive listening ability (1), production of appropriate and extended responses (2), pronunciation (3), grammar (4) and vocabulary (5).

The children's receptive vocabulary size was tested with the Peabody Picture Vocabulary Test 4 (PPVT-4) form A (Dunn \& Dunn, 2007). The first 108 items were tested (nine sets of 12 items). The test ended when children had done all 108 items or when they had more than eight mistakes in a set of 12 items. The test was administered individually.

Apart from the language tests for the children, parents and children also filled in a questionnaire that was developed with the help of teachers' and policy makers' input (see Appendices A and B). These questionnaires served to gather information about exposure to English through different media, contact with speakers of English, use of English, attitude towards English, children's and parents' language background and parents' educational level and current job. The parental questionnaire was filled in before the tests. The children's questionnaire was given to the participants on the same day they took the listening, and reading and writing tests.

In the results section the descriptive statistics for the administered tests and the correlations between the test scores are discussed. Kendall's correlations were calculated due to the small sample size. The children's individual learner characteristics, as reported in the questionnaires, are also looked at in the results section. Finally, the relationships between the learner characteristics and the language test scores are analyzed by means of non-parametric tests (Kruskal-Wallis and M ann-Whitney $U$ tests).

## 5. Results

### 5.1. English proficiency

Table 1 demonstrates a large range in test results for all four tests. M ean scores were higher for receptive skills than for productive skills. For the listening test $25 \%$ of the children got an (almost) perfect test result.

Table 1 Descriptive statistics for the administered tests ( $\mathrm{n}=30$ )

| Statistic | Receptive vocabulary (PPVT-4) <br> (maxscore =108) | Listening <br> (max score $=25)$ | Reading and writing <br> (max score = 50) | Speaking <br> (maxscore =20) |
| :--- | ---: | ---: | ---: | ---: |
| Mean | 66.20 | 16.13 | 23.03 | 9.98 |
| Median | 72 | 16 | 19 | 8 |
| SD | 26.30 | 7.06 | 13.60 | 5.66 |
| Range | 90 | 21 | 47 | 18.50 |
| Minimum | 12 | 4 | 2 | 1 |
| Maximum | 102 | 25 | 49 | 19.50 |
| Percentile 25 | 48.25 | 10 | 13 | 5.36 |
| Percentile 50 | 72 | 16 | 19 | 8 |
| Percentile 75 | 86.75 | 24 | 35.75 | 15.75 |

Figure 1 shows that the distribution of the results for the receptive vocabulary test, the listening test and the speaking test was bimodal, pointing to a clear gap between children with very low scores and children with very high scores. This was not the case for the results of the test that measured reading and writing ability, where the distribution was positively skewed (Figure 1), with many children having a low score and only few children obtaining a high score.


Figure 1 Distribution of the results for the different language tests
In order to explore the relations between the different language tests in this relatively small sample, Kendall's correlation coefficients have been calculated. Table 2 shows that there were strong and significant correlations between the test scores on all measures.

Table 2 Kendall's correlation coefficients between the scores on all administered tests

| Test | Receptive vocabulary test | Listening | Reading and writing | Speaking |
| :--- | ---: | ---: | ---: | ---: |
| PPVT-4 |  | .68 | .73 | .75 |
| Listeningtest | .68 |  | .78 | .71 |
| Reading and writingtest | .73 | .78 |  | .67 |
| Speakingtest | .75 | .70 | .67 |  |

Note. All correlations are significant at the 01 level.

### 5.2. Learner characteristics

In order to gain insight into the relationship between the individual learner characteristics and children's pre-school knowledge of English, information concerning their exposure to different English media and their actual use of English was gathered by
means of a survey. Figure 2 shows the amount of time the children spent doing each of these activities per day.

It needs to be pointed out that only three options were available in the survey: 0-30 minutes per day, 30 minutes- 1 hour per day, and more than 1 hour per day. This means that children who did not spend time doing a particular type of activity ( 0 minutes) couldn not be distinguished from children who spent a limited amount of time doing a particular type of activity (anything from 1 to 30 minutes per day) in the data analysis. Also, children who spent 30 minutes per day on an activity could tick two boxes ( $0-30$ minutes or 30 minutes- 1 hour). They were asked to tick the box which was closest to their average exposure per day. We only used the answers about exposure to English from the children's questionnaire for our analyses since many children reported they had also filled in this part of the parents' questionnaire.


Figure 2 Daily exposure to English media as reported in the children's questionnaires
The results demonstrate that watching English television with subtitles in the home language was quite common in this group of children. Seventeen children spent more than 30 minutes per day on this activity, and of these 17, six children spent more than 1 hour per day doing this. Only few children watched English television without subtitles or English television with English subtitles for more than 30 minutes per day.

Twenty-nine children did not read in English or spent little time reading in English (0-30 minutes per day). Only one child read in English more than 30 minutes per day. Ten children spent more than 1 hour playing computer games in English per day, eight children gamed between 30 minutes and 1 hour per day, and 12 children reported spending less than 30 minutes per day gaming in English. The results for computer use in English per day were similar: 12 children
spent more than 1 hour doing this activity, seven children spent between 30 minutes and 1 hour, and 11 children spent less than 30 minutes.

Listening to English music was clearly the most prevalent activity for these children. Seventeen children reported that they listened to English music more than 1 hour each day, five children said they listened between 30 minutes and 1 hour, and eight children reported listening to English music less than 30 minutes per day. It is important to note here that a lot of the music played on the radio in Flanders has English lyrics, which explains the amount of time children are exposed to English music. Even if they do not deliberately look for opportunities to listen to English music, it is all around them.

Three children spoke English more than 30 minutes per day, of whom one child spoke English more than 1 hour per day. None of the children spoke English at home. When asked about the occasions on which they spoke English, the children mentioned they sometimes used English when they were on holiday (4), during gaming (7), when talking to English-speaking family (4) or for fun with friends or parents (10).

When asked about their attitude towards English, an overwhelming majority of them (27) professed to find English fun. Only two children claimed not to like English, and one child did not answer this question.

With regard to the educational level of the parents, the responses to the survey revealed that 20 mothers had a degree in higher education, eight mothers had a secondary education degree and two mothers had a degree in primary education. Twenty-one fathers had a degree of higher education and eight had a secondary education degree. One answer was missing.

### 5.3. Relationships between English proficiency and learner characteristics

In order to investigate the relationship between the learner characteristics and the test scores obtained by the children, the appropriate non-parametric tests were selected, the results of which are presented in Table 3. The Kruskall-Wallis test was used to measure the exposure effects of different media. The test showed a significant relationship between gaming in English and all test scores. Computer use was significantly related to three out of four English language tests (receptive vocabulary test, reading and writing, speaking ability), but there was no significant relationship with the scores of the listening test. Watching television with subtitles in the first language and listening to English music did not seem to be related to the test scores of the children. ${ }^{2}$

[^1]M ann-Whitney U tests showed that there was no significant relationship between gender or language used in the home and the children's test scores. A Kruskall-Wallis test showed that there was no significant relationship between parents' education and the children's test scores either.

Table 3 The relationship between the learner characteristics and the test scores as measured by Kruskall-Wallis and M ann-Whitney U tests

|  | PPVT-4 | Listening | Reading and writing | Speaking |
| :--- | :---: | :---: | :---: | :---: |
| Exposure effects |  |  |  | $.015^{*}$ |
| Gaming in English | $.001^{*}$ | $.022^{*}$ | $.011^{*}$ |  |
| Computer use in English | $.007^{*}$ | .155 | $.020^{*}$ | $.008^{*}$ |
| English TV subtitles home language | . .784 | .570 | .483 | .823 |
| Listening to English music | .672 | .263 | .354 | .843 |
| Gender |  |  |  | .318 |
| Language used in the home | .603 | .646 | .730 | .723 |
| Parents' education | .532 | .187 |  | .253 |
| M other's education | .397 | .384 | .163 | .616 |
| Father's education | .884 | .825 | .678 | .864 |
| Speaking English "for fun" | .006 | .033 |  | .020 |

Note. *p <. 05


Figure 3 Boxplots showing the distribution of test results for the various situations in which children spoke English: children who spoke English for fun (fun), children who spoke English during gaming (games), children who spoke English because they had to or who did not speak English (no)

In order to get a more detailed picture of the various situations in which children claimed to speak English, three categories were distinguished. First, there was a group of children who did not speak English "for fun": they either did not speak English or spoke English because they had to (on holiday or with family members they did not share any other language with). A second group of children mentioned that they spoke English "for fun" with friends or family although they had no communicative imperative to use English with these people
since they share at least one other language (Dutch). A third group mentioned they spoke English during gaming. These conversations could be with someone with whom the only language they share is English or not. A Kruskall-W allis test was used to look at the relationship between reasons for (not) speaking English and the test results. The test showed a significant difference for all test scores (PPVT: .006, listening: .033, speaking: .020, reading and writing: .013). Figure 3 shows the distribution of the test scores for the different groups.

## 6. Discussion

Before discussing the results with reference to the main research questions of this study, the different sets of test scores merit some attention. Although the test scores for the different skills tests (listening, reading and writing, speaking) and the scores of the receptive vocabulary test showed strong correlations, it is clear that the children did much better on the listening test and on the receptive vocabulary size test than on the productive skills test (admittedly, writing skills were measured together with reading skills in the Flyers test). The mean percentage of correct responses in the PPVT was $62 \%$ and for the listening test it amounted to $64 \%$. However, the reading and writing test only reached a mean of $46 \%$ and the speaking test $49 \%$. This discrepancy in test scores seems to indicate that the receptive skills of these children, who had not received any formal instruction in English before they were tested in this study, were better developed than their productive skills. This is different from the test results of the Flyers tests taken in a "normal" situation (i.e., after having received formal instruction). The scores on this test are expressed as shields, results ranging from one to five shields. When we look at the grade statistics for the Flyers test (Cambridge English Language Assessment, 2017), $26.2 \%$ of the children have a score of five shields for the listening test and $33.7 \%$ of the children get four shields. For reading and writing $13 \%$ of the children have a score of five shields and $29.8 \%$ receive four shields. For speaking $63.1 \%$ of the children have a score of five shields and $27.1 \%$ get four shields. The fact that, in this study, the test scores for the listening test were much higher than the scores for the reading, writing and speaking tests could be explained by our participants' predominant exposure to spoken English through different media.

With reference to the first research question of this paper, the distribution of the test scores furnishes a response as to the differences in children's uptake of English before the start of instruction. In the receptive vocabulary test, the listening test and the speaking test a bimodal distribution was observed. This means that our participant group displayed two distinct profiles: children who obtained decidedly low scores on the tests and children who obtained high or very high scores and could already communicate at the A2 level (CEFR) before the start of English classes
in school. The results for listening comprehension are especially revealing in this respect since 12 of the 30 children had a score below $50 \%$ and 13 children had a score of $80 \%$ or higher (with five children obtaining the maximum score).

When we interpret these results in light of the competence levels that have been stipulated for the different curricula in Flanders, we can conclude that $40 \%$ of the children had already reached the required competence level for listening comprehension at the end of the second year of secondary education when they were in the final year of primary school. One can imagine that this makes for very heterogeneous classes at the start of formal English instruction, which poses considerable challenges for the foreign language teacher.

The results obtained for the other skills tests (reading, writing and speaking) were markedly lower than those for listening. For speaking, reading and writing more than half of the children scored less than $50 \%$, but there were still children with high scores for each of these tests. On a reading and writing test four of the 30 children scored $80 \%$ or higher. With regard to speaking ability seven children had a score which was higher than $80 \%$. In summary, for these skills too about $10-25 \%$ of the children had obtained the required competence level set for the end of the second year of secondary education (CEFR A2) in the final year of primary school.

On the receptive vocabulary test eight children had a score lower than $50 \%, 22$ children knew at least half of the 108 words, eight of which had a score of $80 \%$ or higher. Again, this shows that a lot of children already knew quite a few English words receptively before the start of English classes in school.

With regard to the second research question about the factors that are related to children's incidental acquisition of English before starting formal English instruction, the variables related to media use seemed to be most telling. The amount of gaming in English and the number of hours of computer use in English were significant predictors of children's test scores (with significant results for the relationship between gaming and all four tests and significant results for the relationship between computer use and receptive vocabulary size, speaking ability and reading and writing skills). This confirms earlier research (Jensen, 2016; Sylvén \& Sundqvist, 2012) in which a significant correlation was found between the time spent gaming and the results of vocabulary tests. As stated above, the children in the Swedish and Danish studies had already received English instruction in school whereas the Flemish children had not. Still, the Flemish children also seem to pick up language from playing games.

The number of hours the children reported watching television with subtitles in the first language or listening to English music does not seem to be linked to the test scores. The results for watching television were somewhat different from what was attested in earlier research. Kuppens (2010) found a significant effect for watching English television with subtitles on the scores of a Dutch-to-English and
an English-to-Dutch translation test of Flemish children. This incongruence can be explained by the type of test that was used. In the study by Kuppens children were asked to translate eight short sentences from Dutch to English (e.g., Het spijt me. 'I'm sorry.') and eight from English to Dutch (e.g., I love you. 'Ik hou van jou.'). The children in our study had to engage in various complex tasks (see Section 4.2), which required more active interaction with the English language.

The effect of watching television with subtitles on children's foreign language proficiency was also found in Lindgren and M uñoz (2013). In their study, children from seven European contexts were tested. The fact that the children in this study came from different European contexts in which television programs are dubbed in some countries and subtitled in others will probably have influenced these children's English proficiency. In our study, however, all children are brought up in a context in which English television programs are nearly always subtitled. This explains why the factor of watching television with subtitles did not discriminate between our participants: They all watch a significant amount of English spoken television from which they undoubtedly reap the rewards.

As was mentioned above, no significant differences in test results were attested between boys and girls. In previous research (Sylvén \& Sundqvist, 2012) boys seemed to outperform girls, but it was also reported that boys were more fervent gamers than girls, which might explain the differences in test results between boys and girls. In this study, both boys (6) and girls (4) spent a lot of time gaming (more than 1 hour per day), rendering gender insignificant.

The data analysis also shows significant differences between the test results for children who use English for fun (with peers and during gaming) and children who do not do this. The more proficient children seem to use English spontaneously because they like to do so, not only with speakers of other languages (i.e., during gaming) but also in situations where they engage in role plays with their peers.

## 7. Conclusion

The results of this study showed that a significant proportion of the 11-year-olds could already perform tasks at the A2 level (CEFR) without having had any formal instruction. The results of the skills test and the receptive vocabulary test revealed that a couple of children were very adept. The test results were very high especially for listening comprehension, with 13 children scoring $80 \%$ or higher. On the other hand there were also children with (very) low scores on the different tests.

The bimodal distribution of the test results for the PPVT, listening and speaking ability confirmed that there was a group of children who hardly knew any English and another group of children who had reached all the curriculum objectives before the start of instruction.

All of the children reported having at least some contact with the English language, mainly through listening to music, watching television, gaming and computer use. Reading in English and speaking English happened far less frequently. In this study, only two exposure factors were shown to be significantly related to the children's test results: gaming and computer use.

The children's answers in the questionnaire revealed a positive attitude towards the English language. A large majority of the children (27 out of 30) considered English a "fun" language. Children with poor test results also displayed a positive attitude towards the language. Another interesting result which could be linked to the status of the language is the fact that many children reported speaking English "for fun" with their parents or peers, with whom they shared either their first language or the language spoken at school.

Among the limitations of the study, the limited number of participants is the most obvious. A large-scale data collection is currently being organized in order to check the generalizibility of these initial findings. In this follow-up study a "zero-category" has been included in the survey so as to distinguish between the children who spend little time doing particular media-related activities and those who spend no time at all doing this activity. The new survey also accounts for more types of computer use than the current one. Specific information about computer use will shed light on the relationship between the use of different media and incidental acquisition of English.

Despite its limitations, this study confirms that children learn English from the input they receive through different media (especially gaming and computer use). Some children have already become quite proficient before the start of formal English classroom instruction and can communicate at the A2 level of the CEFR.

Furthermore, it seems that these children, who live in an environment where English is omnipresent but where it is not the majority language, sometimes speak English amongst each other. In some situations children seem to choose English over their L1. Whether this is because the children want to practice English or because they feel English is the most appropriate language in certain contexts is something to be taken up in future research.

This study shows that Flemish children embark on formal instruction in English at very different starting points. This is something teachers should take into account in their teaching practice, which should include opportunities to practice the basics as well as more challenging tasks for pupils who have already reached the set competence level before the start of the course. What unites these children is their positive attitude towards English. It is up to teachers to create a challenging learning environment for all children, regardless of their entry level. Because this is no mean feat, further research should also be aimed at finding ways for teachers to deal with these heterogeneous English proficiency levels in the classroom.

Vanessa De Wilde, June Eyckmans

## Acknowledgments

The data collection was funded by Artevelde University College Ghent in the context of the False Beginners PWO-project. We thank the schools, the teachers, the pupils and their parents for participating in the project.

## References

Cambridge English Language Assessment. (2014). Cambridge English: Young Learners: Flyers. Retrieved from http://www.cambridgeenglish.org/exams/young-le arners-english/
Cambridge English Language Assessment. (2017). Cambridge English: Flyers (YLE Flyers): Grade Statistics. Retrieved from http:// gradestatistics.cambridgeengl ish.org/2015/ylef.html
Dewey, M. (2007). English as a lingua franca and globalization: An interconnected perspective. International Journal of Applied Linguistics, 17(3), 332-354. doi: 10.1111/j.1473-4192.2007.00177.x
Dunn, L., \& Dunn, L. (2007). Peabody Picture Vocabulary Test (4th ed.). Circle Pines, M N: American Guidance Service.
Edelenbos, P., Johnstone, R., \& Kubanek, A. (2006). Languages for the children in Europe: Published research, good practice and main principles. Retrieved from http://ec.europa.eu/dgs/education_culture/repository/languages/ policy/language-policy/documents/young_en.pdf
Enever, J. (Ed.). (2011). ELLiE - Early language learning in Europe. London: British Council.
Griffin, J. L. (2004). The presence of written English on the streets of Rome. English Today, 20(2), 3-8. doi: 10.1017/S0266078404002020
Huckin, J., \& Coady, J. (1999). Incidental vocabulary acquisition in a second language: A review. Studies in Second Language Acquisition, 21(2), 181-193.
Hulstijn, J. H. (2012). Incidental learning in second language acquisition. In C. A. Chapelle (Ed.), The encyclopedia of applied linguistics (pp. 2632-2640). Oxford: Blackwell. doi: 10.1002/9781405198431.wbeal0530
Jensen, S. H. (2016). Gaming as an English language learning resource among young children in Denmark. CALCO Journal, 34(1), 1-19. doi : 10.1558/cj. 29519
Kuppens, A. H. (2010). Incidental foreign language acquisition from media exposure. Learning, M edia and Technology, 35(1), 65-85. doi: 10.1080/174398 80903561876
Lefever, S. (2010, October). English skills of young learners in Iceland: "I started talking English when I was 4 years old. It just bang . . . just fall into me." Paper presented at the M enntakvika Conference, Reijkjavik, Iceland.
Lindgren, E., \& M uñoz, C. (2013). The influence of exposure, parents, and linguistic distance on young European learners' foreign language comprehension. International Journal of Multilingualism, 10(1), 105-129. doi: 10.1080/14790718.2012.679275

McArthur, T. (2000). Interanto: The global language of signs. English Today, 16(1), 33-43. doi:10.1017/S0266078400011421

[^2]
## APPENDIX A

## Questionnaire for children

## How much contact do you have with English?

1. Tick the box. How many minutes/hours do you do the things from the list per day?

| In ENGUSH | $0-30$ minutes | $30 \mathrm{~min}-$ <br> 1 hour | M ore than 1 hour |
| :--- | :--- | :--- | :--- |
| Watch TV without subtitles |  |  |  |
|  |  |  |  |
| Watch TV with English subtitles |  |  |  |
| Watch TV with subtitles in the home language |  |  |  |
| Listen to English music |  |  |  |
| Read English books, magazines, comics |  |  |  |
| Game in English |  |  |  |
| Youtube/social media (in English) |  |  |  |
| Speak English |  |  |  |


| In the HOME LANGUAGE | $0-30$ minutes | $30 \mathrm{~min}-$ <br> 1 hour | More than 1 hour |
| :--- | :--- | :--- | :--- |
| Watch TV |  |  |  |
| Listen to music |  |  |  |
| Read books, magazines, comics |  |  |  |
| Gamen |  |  |  |
| Youtube/sociale media |  |  |  |

2. Do you have any contact with people who speak English? Yes / No

If yes, where, when, with whom?
a. On holiday? Yes/ No

How often? $\qquad$
b. At home? Yes / No How often? $\qquad$
c. In other situations? Yes / No

How often? $\qquad$
3. Do you sometimes speak English? Yes / No

If yes, where, when, with whom?
4. Do you think English is a fun language? Yes/No
5. Do you sometimes look for opportunities to speak English? Yes/ No If yes, where, when, with whom? If no, why not?

Vanessa De Wilde, June Eyckmans

## General information:

1. What is you mother tongue?
2. Which language(s) do you speak at home?
3. I am a $\square$ boy.
$\square$ girl.

## APPENDIX B

## Questionnaire for parents

## How much contact does your child have with English?

1. Tick the box. How many minutes/hours does your child do the things from the list per day?

| In ENGUSH | $0-30$ minutes | $30 \mathrm{~min}-$ <br> 1 hour | More than 1 hour |
| :--- | :--- | :--- | :--- |
| Watch TV without subtitles |  |  |  |
| Watch TV with English subtitles |  |  |  |
| Watch TV with subtitles in the home language |  |  |  |
| Listen to English music |  |  |  |
| Read English books, magazines, comics |  |  |  |
| Game in English |  |  |  |
| Youtube/social media (in English) |  |  |  |
| Speak English |  |  |  |


| In the HOME LANGUAGE | $0-30$ minutes | $30 \mathrm{~min}-$ <br> 1 hour | M ore than 1 hour |
| :--- | :--- | :--- | :--- |
| Watch TV |  |  |  |
| Listen to music |  |  |  |
| Read books, magazines, comics |  |  |  |
| Gamen |  |  |  |
| Youtube/sociale media |  |  |  |

2. Does your child sometimes look for opportunities to speak English? Yes / No If yes, where, when, with whom? If no, why not?

## Information parents

3. What is your mother tongue?

M other: $\qquad$
Father: $\qquad$
4. Which language(s) do you speak at home?

## Vanessa De Wilde, June Eyckmans

5. Which types of education did you do?

M other
$\square$ Primary education
$\square$ Secondary education

Higher education

Father
$\square$ Primary education
$\square$ Secondary education
$\square$ Higher education
6. What is your job?

M other: $\qquad$
Father: $\qquad$


[^0]:    ${ }^{1}$ The children in this study came from seven European countries (Croatia, England, Italy, the Netherlands, Poland, Spain and Sweden). The foreign language was English in all countries except England, where children studied French or Spanish.

[^1]:    ${ }^{2}$ We did not perform any tests for the variables of watching English television without subtitles, watching English television with English subtitles, reading English books and speaking English as most of the children in this pilot study indicated they simply did not do these activities.

[^2]:    M ediaraven, \& Linc. (2016). Onderzoeksrapport Apestaartjaren 6.1. Retrieved from https://drive.google.com/file/d/0B0Gf3skoGlynU3NKTm1xczltNkU/view
    Onderwijs Vlaanderen. (2016). Eindtermen M oderne Vreemde Taalen - Frans/Engels - A-stroom, eerste graad. Retrieved from http:// www.ond.vlaanderen .be/curriculum/secundair-onderwijs/eerste-graad/vakgebonden/a-stroom /moderne-vreemde-talen-frans-engels/eindtermen.htm
    Saville-Troike, M. (2012). Introducing second language acquisition (2nd ed.). Cambridge: Cambridge University Press. doi:10.1017/CB09780511888830
    Sylvén, L. K., \& Sundqvist, P. (2012). Gaming as extramural English L2 learning and L2 proficiency among young learners. ReCALL, 24(3), 302-321. doi:10. 1017/S095834401200016X

