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**Vocabulary and Receptive Knowledge of English
Collocations among Swedish Upper Secondary
School Students**

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Abstract

The aim of this study is to examine the vocabulary and receptive collocation knowledge in English among Swedish upper secondary school students. The primary material consists of two vocabulary tests, one collocation test, and a background questionnaire.

The first research question concerns whether the students who receive a major part of their education in English have a higher level of vocabulary and receptive collocation knowledge in English than those who are taught primarily in Swedish. The second concerns if the students who started to learn English before the age of 7 have a higher level of vocabulary and receptive collocation knowledge in English than those who started after 7. The third concerns if the level of the students' vocabulary and receptive collocation knowledge correlates. The fourth addresses whether external inputs of English may have had an effect on the students' vocabulary and receptive collocation knowledge level.

The results indicate that reinforcement of English through an education mostly in English has rendered a higher level of vocabulary and receptive collocation knowledge in English. In addition, starting to learn English before age 7 also appeared to have had a positive effect on these levels. In addition, the results suggest that an early onset (before 7) of English compensates for lack of reinforcement of English. Conversely, reinforcement of English compensates for a late onset (after 7) of English. However, the results imply that the combination of an early onset (before 7) of English and reinforcement of English is the most efficient means to achieve a high level of vocabulary and receptive collocation knowledge.

Moreover, a clear correlation was found between vocabulary knowledge and receptive collocation knowledge, which also points to the importance of a large exposure to English.

For the high performance students, external influences such as English in primary and secondary school, and a high motivation to learn English may have contributed to a higher language confidence, and possibly a higher level of vocabulary and receptive collocation knowledge.

Keywords: vocabulary, collocation, receptive, correlation, exposure, Swedish, English, upper secondary school, onset, reinforcement.

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1 Introduction

1.1 Introduction

Today, a high level of proficiency, even fluency, in English is a necessity, and “certain learner categories need to attain native-like command of an L2” (Gyllstad 2007:1). According to research in this area, an important aspect of being fluent in a language is the use of collocations, which are conventionalised word combinations that are often used together in a language. “To know a language you must know not only its individual words, but also how they fit together” (Wray 2002:143). However, being able to recognise or to use a collocation is not always easy for a second language learner, although a native speaker will notice quite easily when a learner uses a different word combination than the conventional one (Lewis 2008:2).

To improve the level of collocation knowledge, Gyllstad points to the importance of the amount of exposure to the language, and suggests “there is progression in receptive collocation knowledge concomitant of learning level, overall language proficiency, and vocabulary size. This arguably favours a great deal of language exposure as an important factor for implicit acquisition of collocations, in addition to explicit instructions” (Gyllstad: 2007: abstract).

English is already compulsory as a second language in Swedish schools, introduced when the students are between 7 and 9 years old. Normally, all teaching is in Swedish except the English classes. However, an increasing number of schools, often independent, offer a programme where at least 50 percent is in English.

In this study, an attempt has been made at measuring the vocabulary and receptive collocation knowledge in students at a Swedish upper secondary school, and at examining possible relationships between their knowledge levels in these areas and an increased amount of exposure of English, the age when they started to learn English, and external sources of inputs of English.

1.2 Terminology

The term *collocation* is one among many others that describe close to the same thing, all of which generally fall under the wide term *formulaic language*. “Words and word strings which appear to be processed without recourse to their lowest level of composition are termed *formulaic*”, states Wray (Wray 2002:4). Gyllstad confirms that collocations are described in many ways (Gyllstad 2007:6). However, the short version of Gyllstad’s definition of a collocation was the obvious choice, as he has constructed the collocation test used in this essay, (COLLMATCH 3) (Gyllstad 2007:308ff). Accordingly, in this study, collocations are “conventionalized, recurring word combinations” (Gyllstad 2007:1). The following word combinations are examples of English collocations: “*say a prayer, draw a conclusion, make a mistake, do justice and lose count*” (Gyllstad 2007:1).

Vocabulary knowledge in this study relates to the students’ knowledge in the type of vocabulary tested in Test 1 and Test 3.

Collocation knowledge relates to the students’ knowledge in the kind of collocates tested in Test 2.

1.3 Aim and scope

The aim of this essay is to examine the vocabulary and receptive collocation knowledge in English among Swedish upper secondary school students. The following research questions are addressed:

- Do the students who receive a major part of their recent education in English have a higher level of vocabulary and receptive collocation knowledge in English than those who receive their recent education primarily in Swedish?
- Do the students who started to learn English before the age of 7 have a higher level of vocabulary and receptive collocation knowledge in English than those who started after the age of 7?
- Do the students’ levels of vocabulary knowledge correlate with their levels of receptive collocation knowledge?
- Are the results inferred by external inputs of English?

The scope of this essay is the results from three tests and a background questionnaire, taken by two groups of students from Åva Gymnasium in Täby, in April 2008. A total of 48 students participated, 30 that study mostly in English, and 18 mostly in Swedish. A quantitative study on this material has been carried out, measuring the students' vocabulary and receptive collocation knowledge, and an assessment of possible correlations between the two areas of knowledge. The background questionnaire has served as an aid to divide the students into categories, and to answer research question 4.

1.4 Previous research

Works by Alison Wray (2002), Nadja Nesselhauf (2005), Henrik Gyllstad (2007), and Margareta Lewis (2008) are of special interest, as they deal with questions closely related to those in this essay. However, a great deal of the research in this area has been carried out on productive collocation knowledge, whereas this study is carried out on receptive collocation knowledge.

A much-quoted book on the subject of formulaic language, such as collocations, is Wray's *Formulaic Language and the Lexicon* (2002). Wray suggests that the notion that learners' success with formulaic sequences tends to lag behind as they become more proficient may be just an impression. According to her, certain expressions that native speakers use naturally are unknown to the L2 learner who may never have come across the expression before. She also states "collocations can only be learned if they are encountered, and it may be that our expectations of learners are too high, relative to their experience of language input [...], for some reason, learners do not pay attention to collocational relationships" (Wray 2002:183).

Nesselhauf (2005) focuses on the productive use of collocations by advanced learners, based on a learner corpus. Her study shows that increased proficiency does not correspond to an increased use of collocations, and neither did the number of correct collocations produced (2005:235). Nesselhauf states that the results of her study indicate that "learners are often not aware of the problems collocations can pose and are not able to consciously control their collocation production" (2005:238).

Gyllstad's (2007) study on Swedish L2 learners of English investigates the aspect of testing and the aspect of learning in regards to collocation knowledge. Lacking a reliable way of testing collocation knowledge Gyllstad uses and evaluates self-constructed tests on collocation knowledge, one of which, COLLMATCH 3 (2007:308ff), is used in this study. He also examines the relationship between vocabulary size and learning level, and receptive knowledge of collocations.

Gyllstad's tests COLLEX and COLLMATCH were found reliable, and show a strong connection between vocabulary size and recognition of collocations (2007:242). In addition, a cross-sectional study shows a connection between the learning level and receptive collocation knowledge, which suggests that more years of classroom exposure of English had an impact on the students' receptive collocation knowledge (2007:250). Gyllstad mentions other factors that may implicitly influence the students' receptive collocation knowledge independent of classroom teaching, such as motivation and general exposure to English through media, music, and the Internet (2007:244).

Lewis's (2008) study investigates and compares intermediate learners' and native speakers' usage of formulaic sequences in their written production of L2 English. The results show that although the amount of formulaic language is in the region of the amount that native speakers use, a large part of the learners' production is non-accepted formulaic sequences. However, the results confirmed a correspondence between proficiency and knowledge of formulaic language, both in productive and receptive ability (Lewis 2008:230ff). Lewis concludes that "[k]nowledge of formulaic language thus seems to be an indicator of overall proficiency." (2008:abstract).

2. Material

2.1 The informants

The informants that participated in the tests for this study were two groups, consisting of a total of 48 second-year upper secondary school students from Åva gymnasium in Täby. The groups were selected on the basis of the criteria of the study. One of the greater difficulties in selecting students for this study was to find two groups of learners that were homogenous enough for a

reliable result. As Wray points out “it is not a simple matter to separate out learners into ‘groups’ since a learner can have a mixture of inputs and experiences, and variables may interact” (Wray 2002:145).

One group consisted of 18 students who attend a Natural Science program, in Swedish “Naturvetenskapsprogrammet”, hereafter called **NV**. The **NV** program is taught in Swedish, except for the English classes. The number of students in the **NV** group was substantially smaller than would have been preferred, both in comparison to the other group, and in general. However, as these two groups fit very well for this study, the advantages were considered to outweigh the disadvantages.

The other group consisted of 30 students who attend an International Baccalaureate program, hereafter called **IB**. The **IB** program is taught in English, except for the Swedish classes. These students have studied in English for different lengths of time. Their motivation to do well in English may be higher than the **NV** students’, as the **IB** program is internationally renowned and, as a result, may attract students who plan to study or work abroad.

Before the test began, the students were informed of the purpose of the study. In addition, they were given a brief explanation of the concept of collocations, as it may have had an effect on the result of the collocation test if they had been unfamiliar to the concept. The students were asked to put down their names on the tests, but were assured that these would only be used for possible further questions. Furthermore, the students were given instructions, both verbally and on the tests, of how long time they had at their disposal to finish the different tests, and they were under supervision all the time during the tests.

The low number of students, in **NV** in particular, represents a limitation for the results of this study. A larger number would have provided more dependable results, whereas the results from this study should be viewed as trends.

2.2 The questionnaire and the tests

The primary materials used for this essay are the results of a background questionnaire (Appendix A), and three different tests assessing the students' vocabulary and receptive collocation knowledge (Appendix B-D).

The test session started with a questionnaire with the purpose of examining how the students' results may have been influenced by external sources of English. An existing questionnaire from the English Department at Stockholm University was used, although modified to fit this study. The students were given 10 minutes to finish the questionnaire, which contains 11 questions regarding gender, language background, language confidence, and spare time habits in regards to TV, computer games, and book reading.

There are certain limitations to the background questionnaire. The line of questions on the students' extra curricula activities should have included questions on the extent to which these activities were carried out in English. In addition, questions on whether the students had lived in an English-speaking country, or had English-speaking friends may have rendered important information on the students' language background.

Test 1 and Test 3 of the three-part test were selected to jointly assess the students' English vocabulary knowledge. Test 1 – *Word Placement* is a vocabulary test from “Dialang”, a language test site developed with the support of the European Commission (<http://www.dialang.org/english/index.htm>). The part selected for this study is a verb recognition test called “Word Placement” containing 75 questions, which the students had to finish within 5 minutes. They were asked to circle “yes” if the word was English, and “no” if it was not.

However, Test 1 was discovered not to distinguish the groups from one another. The test was designed for quite broad proficiency levels (e.g. beginners vs. advanced users) and clearly cannot be used for a fairly homogeneous, advanced group of L2 users.

Test 2 - *Common Phrases – Collocations* (hereafter called Test 2 - *Collocations*) is based on a test called “COLLMATCH 3”, which is developed by Gyllstad (Gyllstad 2007:308ff), and designed to assess receptive collocation knowledge. The students were given 25 minutes to finish this test.

They were presented with 100 possible English collocations, and asked to tick the box that said “yes” if they thought the collocation was a word combination that is used in English, or the box that said “no” if it was not. As mentioned above, the students were given a short verbal explanation of what a collocation is, as a part of my introduction before the tests were handed out.

Test 3 – *Academic Vocabulary* is an existing test from the English Department at Stockholm University, which has been used for other studies. A section out of the “Academic Vocabulary Test” was chosen for this study. The students were given 15 minutes to complete the test, which assesses the academic vocabulary skill, and is divided into 5 parts containing 10 sentences, each with a gap. They could choose from 15 different words that are listed at the bottom of each part to fill the gap. They had to pick the correct word for each gap and give it the appropriate form for the sentence (the correct ending/tense).

2.3 Test administration, and collecting the material

On 15 April, 18 **NV** students and 30 **IB** students took the tests, in separate classrooms. The tests were carried out during regular school hours, which means that the students attended class because it was compulsory rather than voluntary. The mentor teachers of each class had selected time and place for the test, and informed the students briefly of my study. I calculated the whole test session to take approximately 1,25 hours, distributed as follows: introduction speech - 5 minutes, background questionnaire – 10 minutes, Test 1 – 5 minutes, Test 2 – 25 minutes, Test 3 – 15 minutes, and 5 minutes between each event to gather the previous test and hand out the next one. As the two classes’ test times overlapped, the mentor teachers stayed with their class for the whole test session, to supervise and help collect and hand out the tests. As a result of their helpfulness I could give the introduction speech and start the tests off in both classes. No breaks were offered during the 1,25 hours of testing.

3. Methods

3.1 *The model of the research method*

The method of testing students' vocabulary and receptive collocation knowledge and investigating possible relations between these areas has been strongly influenced by Gyllstad's study (2007) and, as stated above, the collocation test was designed and tested by Gyllstad in his study.

Although this study set out with the intention to investigate the differences, if any, between Swedish upper secondary school students who receive their education mostly in English, and those who receive it mostly in Swedish, another important factor emerged as the results came back from the tests, which was the age of introduction of learning English. As a result, the investigation took on one more dimension, and that was to investigate the effects of starting to learn English before the age of 7, in comparison to after 7.

3.2 *Abbreviations*

The following abbreviations will be used throughout this study:

- **L2** = second language, which is “[a]ny language other than the first language learned” (Lightbrown and Spada 1999:178)
- **IB** - the International Baccalaureate class.
- **IB All** – all students in the International Baccalaureate class.
- **IB EB7** – the students in the International Baccalaureate class that started to learn English before the age of 7.
- **IB EA7** – the students in the International Baccalaureate class that started to learn English after the age of 7.
- **NV** - the Natural Science class (naturvetenskapsprogrammet).
- **NV All** – all students in Natural Science class (naturvetenskapsprogrammet).
- **NV EB7** – the students in Natural Science class (naturvetenskapsprogrammet) that started to learn English before the age of 7.

- **NV EA7** – the students in the Natural Science class (naturvetenskapsprogrammet) that started to learn English after the age of 7.

3.3 Scoring and analysing the material

The results from the quantitative tests are presented in tables. These figures represent the mean results of each group. The results have been calculated in three ways: the means of the two groups as a whole (**IB AII**, and **NV AII**), the means of each group that started to learn English before the age of 7 (**IB EB7**, and **NV EB7**), and the means of those that started to learn English after the age of 7 (**IB EA7**, and **NV EA7**). However, the correlation tests and the *t*-tests have been carried out on the students' individual scores.

When showing the results in percentage, the decimals have been rounded up to the nearest whole number. The results in numbers are shown with one decimal. The correlation figures are shown with two decimals. The significance values show three to four decimals.

To make the results more comparable, it was decided that the students who stated in the background questionnaire that they were brought up by a native speaker of English should be excluded from the quantitative results.

Test 1 – *Word Placement* consists of 75 questions. The answers were corrected using the key provided at the test website. Each correct answer was awarded 1 point. The students' individual results and the mean of the group were noted.

Test 2 – *Collocations* consists of 100 examples of collocations. As Gyllstad does not provide a key to this test in his thesis, a key was produced by my supervisor and used when marking this test. As with Test 1, each correct answer was awarded 1 point, and the individual results and the groups' means were noted.

Test 3 – *Academic Vocabulary* consists of 5 parts with 10 sentences with a gap in each. An answer with the correct vocabulary and form has been given 1 point. The individual results and the mean from each group were noted.

Subsequently, a series of correlation tests were carried out in order to find out the relationship between the tests that measured the student's vocabulary knowledge, Test 1 – *Word Placement* and Test 3 – *Academic Vocabulary*,

and the test evaluating their receptive collocation knowledge, Test 2 – *Collocations*. Firstly, a correlation test was made between the students' individual test scores from Test 1 and Test 2. Secondly, a correlation test was carried out between the students' individual test scores on Test 3 and Test 2. Thirdly, the student's individual test results from Test 1 and Test 3 were added together, as the total results of these tests would give an indication of their vocabulary knowledge, and correlated with their individual test results from Test 2, the collocation test.

The correlation test results have been evaluated according to the following levels, presented by Lewis (as cited in Heiman 2000:178): 0 to $\pm .20$ – very weak to probably negligible, $\pm .20$ to $\pm .40$ – weak to moderate, $\pm .40$ to $\pm .60$ – medium to substantial, $\pm .60$ to $\pm .80$ – very strong, and $\pm .80$ to ± 1.00 – extremely strong (Lewis 2008:124ff). I.e. “[t]he closer the correlation coefficient is to 1, the stronger the relationship is, and -1 indicates a negative relationship” (Lewis 2008:124).

Finally, to confirm if the differences in scores between the groups were statistically significant or merely due to chance, Excel was used to carry out a two-tailed, unpaired *t*-test, with similar variance, on the students' individual test scores. For a result to be considered statistically significant in this study, the *p*-value (probability value) had to be lower than 0,05 (Lewis 2008:125). Firstly, significance tests were carried out between the corresponding groups, **IB AII** and **NV AII**, **IB EB7** and **NV EB7**, and **IB EA7**, and **NV EA7**; secondly, between **IB EB7** and **IB EA7**, and **NV EB7** and **NV EA7**; and thirdly, between **IB EB7** and **NV EA7**, and **IB EA7** and **NV EB7**.

The outcome of the questionnaire was assembled into a table, both in numbers and percentage.

4 Results

4.1 Quantitative results

Two main results will be presented in this section. In section 4.1.1 the results from Test 1, 2, and 3, all of which are aimed at answering research question 1 and 2 regarding vocabulary and receptive collocation knowledge, are presented individually in subsections 4.1.1.1- 4.1.1.3. In subsection 4.1.1.4,

the results from Test 1 and Test 3 have been added together to exhibit the students' level of vocabulary knowledge. These results are presented next to the results from Test 2, which show the informant's level of collocation knowledge. The discussion on these results is presented in subsection 4.1.1.5.

Section 4.1.2 shows the results from the correlation tests, which are aimed at answering research question 3 regarding a possible relation between vocabulary knowledge and receptive collocation knowledge. Firstly, subsection 4.1.2.1 illustrates the results from a correlation test between the two tests that measure vocabulary knowledge – Test 1 and Test 3 –, and the test that measures receptive collocation knowledge – Test 2. Secondly, subsection 4.1.2.2 demonstrates the results from a correlation test between the added results from Test 1 and Test 3, and Test 2. The results from subsections 4.1.2.1 – 4.1.2.2 are discussed in subsection 4.1.2.3.

4.1.1 Vocabulary and collocation knowledge

4.1.1.1 Test 1 – Word Placement

Table 4.1 demonstrates the mean results, and the *p* values on *Test 1 – Word Placement*, which was selected to measure the students' vocabulary knowledge.

Table 4.1 Test 1 – Word Placement. The mean scores on the test, in numbers (N), and percentage (%), and the p values.

	N	%	<i>p</i> value
IB All	67,8	90%	0,068
NV All	63,3	84%	
IB EB7	69,8	93%	0,261
NV EB7	68,2	91%	
IB EA7	66,6	89%	0,136
NV EA7	61,3	82%	
Maximum score	75		

Table 4.1 illustrates that the means are quite high overall. **IB All** has a higher score than **NV All**, and the results thus indicate that the students who receive

most of their education in English have higher vocabulary knowledge than those who receive most of their education in Swedish. In addition, **IB EB7** has a higher score than **IB EA7**, which **NV EB7** also has compared to **NV EA7**. These results suggest that when English is introduced before the age of 7 it has a positive effect on vocabulary knowledge. However, as previously mentioned in 2.2, Test 1 was discovered not to be a dependable tool in distinguishing the groups from one another, as none of these differences were found to be statistically significant.

Nevertheless, **NV EB7** has a slightly higher score than **IB EA7** and this difference is statistically significant at $p 0,020$, which implies that the **NV EB7** students have benefited more from starting to learn English before age 7, than the **IB EA7** have from receiving reinforcement through their education.

4.1.1.2 Test 2 – Collocations

Table 4.2 demonstrates the mean results and p values on Test 2 – *Collocations*, which was selected to measure the students' receptive collocation knowledge.

Table 4.2 Test 2 – Collocations. The mean scores on the test, in numbers (N), and percentage (%), and p values.

	N	%	p values
IB All	78,5	79%	0,001
NV All	68,9	69%	
IB EB7	81,1	81%	0,413
NV EB7	77,4	77%	
IB EA7	76,8	77%	0,001
NV EA7	65,3	65%	
Maximum score	100		

Table 4.2 illustrates that **IB All** has a higher mean than **NV All**, which indicates that the students that have received most of their education in English have higher receptive collocation knowledge than those who received most of their education in Swedish. This difference is statistically significant ($p 0,001$).

In addition, a significance test between the IB subgroups and the NV subgroups produced some interesting p values:

Table 4.3. P-values for the different tests where the age of learning English distinguishes groups, i.e. the before-7 and the after-7 subgroups.

	NV EB7/NV EA7	IB EB7/IB EA7
	p value	p value
Test 1	0,168	0,222
Test 2	0,009	0,230
Test 3	0,097	0,343
Test 1 + Test 3	0,033	0,220

The low p value (0,009) for NV EB7/NV EA7 on Test 2 in table 4.3 indicates that the knowledge of collocations can be used to distinguish those who started to learn English before age 7 from those who started after 7. The corresponding score for the IB groups is not significant.

Furthermore, as illustrated in table 4.2, **IB EA7** shows comparable results to **NV EB7**, which indicates that the **NV** students who started to learn English before the age of 7 have reached the same level of receptive collocation knowledge as the **IB** students who started after 7. In this case, the age of introduction of English has played an important role for the **NV** group, just as being taught mostly in English has for the **IB** group. The comparison is not statistically significant (p 0,413), which is an expected result if both factors contribute more or less the same to the knowledge level of the students.

Conversely, **IB EA7** has a higher and statistically significant (p 0,001) score compared to **NV EA7**, which suggests that for students who start to learn English after the age of 7, an increased amount of English in school will result in higher collocation knowledge.

4.1.1.3. Test 3 – Academic Vocabulary

Table 4.4 presents the results and p levels from Test 3 – *Academic Vocabulary*, which was selected to measure the students' vocabulary knowledge.

Table 4.4 Test 3 – Academic Vocabulary. The mean scores on the test in numbers (N) and percentage (%), and p values.

	N	%	p value
IB All	17,0	34%	0,013
NV All	9,6	19%	
IB EB7	19,2	38%	0,437
NV EB7	15,2	30%	
IB EA7	15,6	31%	0,019
NV EA7	7,3	15%	
Maximum score	50		

Table 4.4 shows that **IB All** has a considerably higher score than **NV All**, a result that is statistically significant. The results thus indicate that the students who have received most of their education in English have reached a higher level of academic vocabulary knowledge than those who receive most of their education in Swedish.

IB EB7 shows a higher score than **IB EA7**, although the difference is not statistically significant (p 0,437). The result suggests, however, that the age of introduction has influenced the level of academic vocabulary knowledge. The difference between **NV EB7** and **NV EA7**, however, is both larger and statistically significant (p 0,019), which implies that among the students who study in Swedish, having started to learn English before the age of 7 has rendered them a higher level of academic vocabulary knowledge than the students who started after the age of 7.

Furthermore, **IB EA7** shows comparable results to **NV EB7**, which implies that the age of introduction of English has been an important factor for the **NV EB7** student's academic vocabulary knowledge, just as the reinforcement of English by being taught mostly in English has been an important factor for the students in **IB EA7**. This assumption is supported by the fact that the results are not statistically significant (p 0,938), which can be expected as the two different factors have rendered them a comparable knowledge level.

4.1.1.4 Test 1 + Test 3, and Test 2

The results of Tests 1, 2, and 3 have all been individually presented in 4.1.1.1 – 4.1.1.3. In addition, below in Table 4.5, the results from Test 1 and Test 3 (both of which assess the students' vocabulary knowledge) have been added together to indicate the students' vocabulary knowledge, and are presented next to the results from Test 2, which indicate their collocation knowledge (also in table 4.2). In addition, the table shows the results from the significance test.

Table 4.5 The added results in numbers (N) of Test 1 – Word Placement and Test 3 – Academic Vocabulary, both of which test vocabulary knowledge, and Test 2 – Collocations, which tests collocation knowledge, and p values.

	Test 1 + Test 3 Vocabulary Knowledge	Test 2 Collocation Knowledge
	N	N
IB All	84,8	78,5
NV All	72,9	68,9
<i>p</i> value	0,010	0,001
IB EB7	89,0	81,1
NV EB7	83,4	77,4
<i>p</i> value	0,013	0,413
IB EA7	82,2	76,8
NV EA7	66,9	65,3
<i>p</i> value	0,290	0,001
Maximum score	125	100

Table 4.5 shows that **IB All** has a higher score than **NV All** on *Vocabulary Knowledge*, as well as on *Collocation Knowledge* (also shown in 4.1.1.2). A significance test showed that the difference between the two groups is statistically significant at *p* 0,010 on *Vocabulary Knowledge* and at *p* 0,001 on *Collocation Knowledge*. These results indicate that receiving most of the education in English has resulted in a higher level of vocabulary knowledge, as well as a higher level of receptive collocation knowledge, than when most of the education is in Swedish.

IB EB7 has a higher score than **IB EA7**, both on *Vocabulary Knowledge* and *Collocation Knowledge*. The differences, however, are not statistically significant at $p 0,220$, and $p 0,230$. Nevertheless, **NV EB7** has a higher score than **NV EA7** in both categories, and these differences are statistically significant at $p 0,033$ on *Vocabulary Knowledge*, and $p 0,009$ on *Collocation Knowledge*. These results suggest that the **NV** students who started to learn English before the age of 7 have reached a higher level of knowledge in both areas than those who started after the age of 7, and have benefited more from an early onset of English than the corresponding group in **IB**.

Moreover, not only is **IB EA7**'s score higher than **NV EA7**'s, but also close to the same level as **NV EB7**'s. On the one hand, these results suggest that **IB EA7** has benefited from receiving the recent education in English, and on the other, that **NV EB7** has benefited from having started to learn English before 7, in regards to the level of vocabulary and receptive collocation knowledge. The differences are not statistically significant ($p 0,873$ and $p 0,413$), which implies that the two groups are the same population.

4.1.1.5 Discussion

The quantitative results from this study suggest that both the age of acquisition of English and reinforcement of English through an education mostly in English are important factors for reaching a high level of vocabulary and receptive collocation knowledge.

However, the results imply that the students who receive their education mostly in English (**IB**) have reached both a higher level of vocabulary and receptive collocation knowledge than those who receive it mostly in Swedish. When comparing **IB AII** with **NV AII**, **IB EB7** with **NV EB7**, and **IB EA7** with **NV EA7**, the **IB** groups have generally produced higher scores than their corresponding group in **NV**, on all three tests. The differences are statistically significant between **IB AII** with **NV AII** on Test 2 and Test 3, a result that supports the implication that reinforcement through an education in English will render a higher vocabulary and collocation knowledge.

The results also imply that the **IB** students who started to learn English before the age of 7 (**IB EB7**) have reached a higher level of vocabulary and receptive collocation knowledge, than those who started after the age of 7 (**IB**

EA7). The same observation can be made when comparing **NV EB7** with **NV EA7**. The difference, however, is only statistically significant between **NV EB7** and **NV EA7**.

On Test 1, when comparing **IB** students with **NV** students, **NV EB7** has produced a higher score than **IB EA7**, which suggests that on the type of vocabulary knowledge tested in Test 1, starting to learn English before the age of 7 has been more influential than an education mostly in English. However, as mentioned in 2.2, Test 1 does not distinguish the groups from one another, as the differences are not statistically significant.

Nevertheless, the results from Test 2, and Test 3, which tests academic vocabulary, indicate that both starting to learn English before the age of 7, and receiving the education mostly in English have had a large impact on the level of academic vocabulary and receptive collocation knowledge, as **IB EA7** and **NV EB7** have produced comparable results on both tests. Their level of knowledge is comparable; therefore the results are not statistically significant, which indicates that the groups are the same population.

The most considerable difference, however, is found between **IB EB7** and **NV EA7**. On all three tests, **IB EB7** has produced the highest score, and the significance tests show that these differences are all statistically significant. These results imply that among the students in this study, the combination of starting to learn English before the age of 7 and receiving the education mostly in English, has resulted in the highest level of vocabulary and receptive collocation knowledge. This implication is supported by **NV EA7**'s results, which show that the combination of having started to learn English after the age of 7, and receiving most of the education in Swedish has resulted in the lowest level of vocabulary and receptive collocation knowledge among the students in this study.

4.1.2 Correlation between vocabulary and receptive collocation knowledge

4.1.2.1 Correlation coefficients

Table 4.6 The correlation between Test 1 – Word Placement and Test 2 – Collocations.

	Coefficient
IB All	.56
NV All	.53
IB EB7	.25
NV EB7	-.63
IB EA7	.62
NV EA7	.57

Table 4.6 demonstrates that all groups show a positive correlation between Test 1 and Test 2, except **NV EB7** who shows a strong negative correlation. **IB EA7** shows the strongest correlation and **IB EB7** the weakest.

Table 4.7 The correlation between Test 3 – Academic Vocabulary and Test 2 – Collocations

	Coefficient
IB All	.83
NV All	.72
IB EB7	.77
NV EB7	.84
IB EA7	.85
NV EA7	.55

Table 4.7 reveals that all groups show a positive correlation between Test 3 and Test 2. **IB All**, **NV EB7** and **IB EA7** show the strongest correlation and **NV EA7** the weakest.

Table 4.8 The correlation between the added results of Test 1 – Word Placement and Test 3 – Academic Vocabulary, both of which assess vocabulary knowledge, and Test 2 – Collocations, which assesses collocation knowledge.

	Coefficient
IB AII	.83
NV AII	.77
IB EB7	.71
NV EB7	.85
IB EA7	.87
NV EA7	.37

Table 4.8 shows that there is a positive correlation between vocabulary knowledge and receptive collocation knowledge in all 6 groups. The strongest correlation is in **IB AII**, **NV EB7**, and **IB EA7**, and the weakest in **NV EA7**.

4.1.2.2 Discussion

The general results suggest that there is a correlation between vocabulary and receptive collocation knowledge. In all correlation tests the relationships were positive, except one that was negative. The strongest correlation coefficients and most similar results were found in **NV EB7** and **IB EA7**.

As regards the correlation test between Test 1 – *Word Placement*, and Test 2 – *Collocations*, all but one correlation was positive. **NV EB7** showed a negative correlation (-.63), the strongest positive correlation was found in **IB EA7** (.62), and the weakest correlation was found in **NV EA7** (.25).

The results from Test 3 – *Academic Vocabulary* were found to correlate highly with those from Test 2 – *Collocations*, with coefficients ranging between .55 and .88. The strongest correlation was found among **IB EA7** (.85), **IB AII** (.83), and **NV EB7** (.84), with a drop to **IB EB7** (.77) and **NV AII** (.72), and the weakest in **NV EA7** (.55).

The final correlation test was carried out between the students' level of vocabulary knowledge (the added results from Test 1 and Test 3), and their receptive collocation knowledge (the results from Test 2), and this showed a strong relationship between the two. The correlations were all positive, ranging between .37 and .87. The strongest correlations were found among **IB EA7** (.87), **NV EB7** (.85), and **IB AII** (.83), followed by **NV AII** (.77) and **IB EB7** (.71), and the weakest in **NV EA7** (.37).

These results suggest that there is indeed a correlation between vocabulary and collocation knowledge, which corresponds to Gyllstad's study, where he concludes that "a large vocabulary size facilitates the recognition of collocations" (Gyllstad 2007: 242).

Although the tests have shown that there is a correlation between vocabulary and collocation knowledge, the low number of students, especially in **NV**, is a limitation, and the results should be considered with this in mind.

4.2 Background Questionnaire

The outcome data from the background questionnaire will be presented according to four categories: *gender* in subcategory 4.2.1, *language background* in 4.2.2, *language confidence* in 4.2.3, and *extra curricula activities* in 4.2.4, with a discussion in section 4.2.5. The questions appear in a slightly different order and fashion than in the original questionnaire (appendix 4:1). The outcome data will be commented on and discussed in 4.2.5.

The results are presented both in numbers (N), and percentage (%).

4.2.1 Gender

Question 1: Gender

	IB N	NV N	IB %	NV %
Male	15	13	50%	72%
Female	15	5	50%	28%

4.2.2 Language background

Question 2: When did you start to learn English?

	IB N	NV N	IB %	NV %
Before age 7	14	5	47%	28%
Between age 7 and 11	16	11	53%	61%
After Age 12	-	2	-	11%

Question 3: Were you brought up by a native speaker of English?

	IB N	NV N	IB %	NV %
Yes	4	1	13%	6%
No	26	17	87%	94%

Question 4: What language was most of you primary school education in?

	IB N	NV N	IB %	NV %
Swedish	19	18	63%	100%
English	9	-	30%	-

Other (specify)-----

	IB N	NV N	IB %	NV %
Other:	2	-	7%	-
Bulgarian	1	-	3%	-
Spanish	1	-	3%	-

Question 5: What language was most of you secondary school education in?

	IB N	NV N	IB %	NV %
Swedish	17	18	57%	100%
English	10	-	33%	-

Other (specify)-----

	IB N	NV N	IB %	NV %
Other:	3	-	10%	-
Spanish	2	-	7%	-
Swedish/English	1	-	3%	-

Question 8: Answer all relevant parts

Question 8a: If you answered 'No' or 'Yes, Swedish (and/or Danish/Norwegian)' in question 7:

Could you READ a newspaper in any language other than English (and Swedish/Danish/Norwegian?)

	IB N	NV N	IB %	NV %
No	13	10	50%	67%
Yes, I could read a newspaper in this language:	13	5	50%	33%
German	5	1		
Spanish	6	2		
French	3	1		
Swedish	2	-		
Italian	1	-		
Arabic	1	-		
Persian	-	1		

4.2.3 Language confidence

Question 6: Compared to other upper secondary school students at your level and in your country, what do you think of your English reading skills?

	IB N	NV N	IB %	NV %
Above average	28	10	93%	56%
Average	2	4	7%	22%
Below average	-	4	-	22%

Question 7: Do you SPEAK any other language(s) as well as, or almost as well as, (or better than) English? (Tick all relevant boxes)

	IB N	NV N	IB %	NV %
No	1	2	3%	11%
Yes, Swedish (and/or Danish/Norwegian)	25	13	83%	72%

Yes, other (please mark language)

	IB N	NV N	IB %	NV %
Yes, other:	13	8	43%	44%
German	1	2	3%	25%
French	2	1	7%	13%
Other European language	2	1	7%	23%
Arabic	3	2	10%	25%
Spanish	5	3	17%	38%
Other Asian	2	-	7%	-

Question 8b: If you answered 'Yes, Swedish (and/or Danish/Norwegian)' in question 7:

Compared to other upper secondary school students at your level in Sweden, what do you think of your READING skills in Swedish?

	IB N	NV N	IB %	NV %
Above average	16	5	64%	38%
Average	8	5	32%	38%
Below average	1	1	4%	8%

Question 8c: If you answered 'Yes, other' in question 7:

Compared to other upper secondary school-educated readers of this language, what do you think of your READING skills in the language you

indicated? (If you indicated several languages, tell us about the one you read best and specify it:

	IB N	NV N	IB %	NV %
Above average	6	2	46%	29%
Average	-	2	-	29%
Below average	6	2	46%	29%
Can't read/read poorly	1	1	8%	14%

Language	IB N	NV N
German	-	1
Arabic	3	2
Spanish	5	2
French	1	1
Bulgarian	1	-
Other Asian	2	-

4.2.4 Extra curricula activities

Question 9a: Do you watch TV in your spare time?

	IB N	NV N	IB %	NV %
Yes	30	15	100%	83%
No	-	3	-	17%

Question 9b: If you answered 'Yes' in question 9a:

How many hours do you spend a week watching TV?

	IB N	NV N	IB %	NV %
Less than 2 hours	9	2	30%	13%
2-4 hours	8	9	27%	60%
More than 4 hours	13	4	43%	27%

Question 10a: Do you play computer games in your spare time?

	IB N	NV N	IB %	NV %
Yes	15	10	50%	56%
No	15	8	50%	44%

Question 10b: If you answered 'Yes' in question 10a:

How many hours do you spend a week playing computer games?

	IB N	NV N	IB %	NV %
Less than 2 hours	3	-	20%	-

2-4 hours	2	-	13%	-
more than 4 hours	10	10	67%	100%

Question 11a: Do you read books in your spare time?

	IB N	NV N	IB %	NV %
Yes	26	14	87%	72%
No	4	4	13%	22%

Question 11b: If you answered 'Yes' in question 11a:

Are the books in English, or in Swedish?

	IB N	NV N	IB %	NV %
English	5	-	19%	-
Swedish	-	2	-	15%
Both	21	11	81%	85%

4.2.5 Discussion

Although the students have been asked to state their gender, the test results have not been analysed out of a gender perspective due to the limited size of this study. Another reason is that the gender mix of the two groups is not comparable.

The language background questions showed that the share of **IB** students who started to learn English before the age of 7 was 47%, compared to 28% in **NV**. Moreover, about 30% of the **IB** students had their entire primary and secondary school education in English, compared to none in **NV**.

The number of students that were brought up by a native speaker of English was low in both groups, 4 in **IB** and 1 in **NV**, and to make the quantitative results more comparable these students have been excluded from the results in section 4.1.

In view of the fact that the students go to school in Sweden, it was an expected result that a large majority in both groups stated that they speak Swedish (and/or Norwegian) *as well as, almost as well as, or better than* English. In addition, about two fifths in both groups stated that they speak *other* languages, *as well as, almost as well as, or better than* English. Furthermore, half of the students in **IB** and over three fifths of the **NV** students, stated that they cannot read a newspaper in any language other than English (and Swedish/Danish/Norwegian).

The results of the question regarding the students' knowledge in languages other than Swedish or English will not be discussed, as it is not considered to be relevant for this study.

The outcome from the questions on language confidence indicates that it is significantly higher among the **IB** students than among the **NV** students. A high number of the **IB** students (93%) rated their reading skills in English as "above average", compared to only 50% in **NV**, which is expected from students who receive most of their education in English and who have chosen that type of program, presumably motivated by a particular interest in English.

A more surprising result, however, is that the **IB** students also show much higher confidence in their reading skills in Swedish than the **NV** students, in spite of receiving very few hours of education in Swedish compared to the **NV** students. 64% of the **IB** students rated their skills as "above average", compared to 38% in **NV**.

In addition, among the students who had stated that they speak another language as well as, or almost as well as, (or better than) English, or Swedish (and/or Danish/Norwegian), the **IB** students' answers indicated a higher degree of confidence than the **NV** students'.

As mentioned above, it is close to impossible to find a completely homogenous learner group for testing. Every learner is exposed to English in different ways outside the classroom. According to the questionnaire the **IB** students watch TV, play computer games, and read books more than those in **NV**, which could indicate a positive influence on the test results. But as we do not know what kind of programs they watch on TV, what kind of computer games they play, and how much reading they do in English, the amount of input of English is uncertain.

5 Summary and Conclusion

The aim of this study was to examine the vocabulary and receptive collocation knowledge in English among Swedish upper secondary school students. The informants in this study were 18 students who receive most of their education in Swedish (**NV** or **NV AII**), and 30 who receive most of their education in English (**IB** or **IB AII**). These groups were subsequently divided into subgroups, to distinguish the students who started to learn English before 7

(**IB EB7** and **NV EB7**) from the students who started to learn English after 7 (**IB EA7** and **NV EA7**). The primary material included 3 written tests, 2 on vocabulary knowledge and 1 on receptive collocation knowledge, and a background questionnaire.

The first research question concerned whether the students who receive a major part of their education in English (**IB AII**) have a higher level of vocabulary and receptive collocation knowledge in English than those who are taught primarily in Swedish (**NV AII**). The results indicate that **IB AII**, who have received a reinforcement of English through their recent education, have reached a higher level of both vocabulary and receptive collocation knowledge than those without reinforcement of English (**NV AII**). **IB AII** had higher scores than **NV AII**, both on the vocabulary tests and the collocation test, and significance tests, with a threshold p -level of 0,05, indicate that both differences are statistically significant at p 0,010 and p 0,001.

The second research question addressed if the students who started to learn English before the age of 7 have a higher level of vocabulary and receptive collocation knowledge in English than those who started after the age of 7. The results show that the **IB** students who started to learn English before the age of 7 (**IB EB7**) had higher scores than the **IB** students who started after 7 (**IB EA7**). These differences, however, are not statistically significant at p 0,230 on collocation knowledge and p 0,220 on vocabulary knowledge. Similarly, the **NV** students who started to learn English before 7 (**NV EB7**) had higher scores than the **NV** students who started after 7 (**NV EA7**). These differences, however, are statistically significant at p 0,009 on collocation knowledge and p 0,033 on vocabulary knowledge. These results suggest that the **NV** students who started to learn English before the age of 7 have benefited more from an early onset (before age 7) of English than the corresponding group in **IB**.

On the one hand, the students who started to learn English before the age of 7 have reached a higher level of vocabulary and receptive collocation knowledge than those, in their group, who started after 7 (although, as mentioned above, the differences in the **IB** group were not statistically significant). On the other hand, the students who receive their recent education in English (the **IB** students), and can be said to have received

reinforcement of English, have reached a higher level of vocabulary and collocation knowledge, than those who receive their recent education in Swedish (the **NV** students), i.e. without English reinforcement. However, whereas the difference between **IB EB7** and **NV EB7** is not statistically significant, it is so between **IB EA7** and **NV EA7**. The table below illustrates the results:

	+ reinforcement	- reinforcement
Before age of 7	IB EB7	NV EB7
After age of 7	IB EA7	NV EA7

Nonetheless, it is worth noting that **IB EA7** and **NV EB7** produced similar results on both the collocation test and the vocabulary tests, which were not statistically significant at $p 0,413$ and $p 0,873$. This implies that these two groups have reached a comparable level of vocabulary and receptive collocation knowledge, presumably the one group (**NV**) has the advantage of starting English before 7 and the other group (**IB**) has the advantage of receiving reinforcement in English through their education program.

As regards **IB EB7** and **NV EA7**, the dual benefits from an education in English and having started to learn English before the age of 7 have placed **IB EB7** on the top end of the scale on all the test results compared to the other groups. Conversely, the combination of an education in Swedish (no reinforcement of English), and having started to learn English after the age of 7 has placed **NV EA7** on the lowest end of the scale, compared to the other groups. The differences between **IB EB7** and **NV EA7** are statistically significant at $p 0,0001$ on receptive collocation knowledge, and $p 0,0004$ on vocabulary knowledge. These results suggest that the combination of starting to learn English before the age of 7 and receiving reinforcement of English through a recent education in English are the most influential means to reach a high level of vocabulary and receptive collocation knowledge.

Furthermore, the results from the significance tests indicate that Test 2, the collocation test, distinguishes the **NV EB7** from the **NV EA7**, i.e. among the students who receive their education mostly in Swedish, their knowledge of

collocations can make a distinction between those who started to learn English before the age of 7, and those who started after 7. The corresponding score for **IB EB7/IB EA7** was not statistically significant. This result implies that for students who have received their recent education in Swedish, starting to learn English before the age of 7 has a strong positive effect of later knowledge of English collocations, and, by implication, effect on general fluency.

The third research question was aimed at establishing if the students' vocabulary knowledge correlates with their level of collocation knowledge. The figures from all the correlation tests indicate that there is a correlation between vocabulary and collocation knowledge. The correlation test between Test 3, which tested academic vocabulary, and Test 2, which tested collocation knowledge, showed high correlation coefficients ranging from .84 to .55. The highest correlation was found in **IB EB7**, the students who benefited both from reinforcement of English through receiving their education mostly in English and having started to learn English before the age of 7, and the lowest in **NV EA7**, who have had no reinforcement of English as they receive their education mostly in Swedish, and who started to learn English after the age of 7.

The fourth and final research question concerned if the results may be inferred by external sources of English. The outcome of the background questionnaire shows that a large part of the **IB** students, 47%, began to learn English before the age of 7, compared to 5% in **NV**. Moreover, about one third in **IB** have received most of their primary and secondary school education in English compared to none in **NV**. In addition, the **IB** students show a greater language confidence, not only in English, but also in Swedish. The higher confidence may be related to a stronger motivation to learn English in **IB**, as some of the students have probably chosen this kind of education with the intention of studying or working abroad in the future. However, this is only a personal reflection, as the students have not been asked about it. Although the questionnaire showed that the **IB** students watch TV, play computer games, and read books to a greater extent than the **NV** students the amount of influence from these sources is uncertain, as the students have not been asked to what extent these activities have been performed in English.

A suggestion for further studies in this subject is to conduct a longitudinal study of two groups with a comparable level of vocabulary knowledge, where one group had received specific training in the subject of collocations (awareness, etc.). This type of study would help establish the effects of explicit teaching of collocation. According to Nesselhauf “[i]t is essential that learners recognize that there are combinations that are neither freely combinable nor largely opaque and fixed (such as idioms) but that are nevertheless arbitrary to some degree and therefore have to be learnt” (Nesselhauf 2005:252).

There are several limitations in this study that need to be taken into consideration when evaluating the accuracy of the results. Firstly, the number of students, especially **NV**, is smaller than would have been desired. Therefore the results should be regarded as tendencies in this group of students rather than as being general for all Swedish upper secondary school students. Secondly, a more carefully designed background questionnaire might have rendered information that could have been valuable for the study, such as questions on whether the students ever lived in an English speaking country, had English speaking friends, etc.

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DIALANG

<http://www.dialang.org/english/index.htm>

Appendices

Appendix A: Background Questionnaire

Stockholm University
English department
Linguistic Bachelor Degree Project
Tutor Alan McMillion

Survey
12 March 2008
Kerstin Bergström

Background Questionnaire

You have 10 minutes to complete this test

Name:.....
Class:.....

1 Gender

- Male
- Female

2 When did you start to learn English?

- Before age 7
- Between age 7 and 11
- After age 12

3 Where you brought up by a native speaker of English?

- Yes
- No

4 What language was most of you Primary School (lågstadiet) education in?

- Swedish
- English

Other (specify)-----

5 What language is most of you Secondary School (högstadiet) education in?

- Swedish
- English
- Other (specify)-----

6 Compared to other Upper Secondary School students (gymnasieelever) at your level and in your country, what do you think of your English reading skills?

- Above average
- Average
- Below average

7 Do you SPEAK any other language(s) as well as, or almost as well as, (or better than) English? (Tick all relevant boxes)

- No
- Yes, Swedish (and/or Danish/Norwegian)
- Yes, other (please mark language)
 - Arabic
 - Chinese
 - Portuguese
 - French
 - German
 - Spanish

- Other African language (Amharic, Somali, Yoruba, Zulu, etc.)
- Other Asian language (Hindi/Urdu, Kurdish, Japanese, Persian, Tagalog, Vietnamese, etc.)
- Other European language (Dutch, Bosnian/Croat/Serb, Polish, Portuguese, Russian, etc.)
- Other

8 Answer all relevant parts

8a If you answered 'No' or 'Yes, Swedish (and/or Danish/Norwegian)' in question 7:

Could you READ a newspaper in any language other than English (and Swedish/Danish/Norwegian?)

- No
- Yes, I could read a newspaper in this/these language(s):

8b If you answered 'Yes, Swedish (and/or Danish/Norwegian)' in question 7:

Compared to other Upper Secondary School students at your level in Sweden, what do you think of your READING skills in Swedish?

- Above average
- Average
- Below average

8c If you answered 'Yes, other' in question 7:

Compared to other Upper Secondary School-educated readers of this language, what do you think of your READING skills in the language you indicated? (If you indicated several languages, tell us about the one you read best and specify it:

Language: _____)

- Above average
- Average
- Below average
- Can't read/read poorly

9, 10, and 11 Answer all relevant parts

9a Do you watch TV in your spare time?

- Yes
- No

9b If you answered 'Yes' in question 9a:

How many hours do you spend a week watching TV?

- Less than 2 hours
- 2-4 hours
- More than 4 hours

10a Do you play computer games in your spare time?

- Yes
- No

10b If you answered 'Yes' in question 10a:

How many hours do you spend a week playing computer games?

- Less than 2 hours
- 2-4 hours
- More than 4 hours

11a Do you read books in your spare time?

- Yes
- No

11b If you answered 'Yes' in question 11a:

Are the books in English, or in Swedish?

- English
- Swedish
- Both

Appendix B: Test 1 – Word Placement

Stockholm University
English department
Linguistic Bachelor Degree Project
Tutor Alan McMillion

Survey
12 March 2008
Kerstin Bergström

Part one – Word Placement

From “Dialang diagnostic test”.

You have 5 minutes to complete this test.

Name:.....

Class:.....

Instructions: Circle Y if you think the verb to the right is a word of English, N otherwise.

1. Y N to campaign
2. Y N to futt
3. Y N to bourble
4. Y N to fear
5. Y N to preyout
6. Y N to study
7. Y N to savedown
8. Y N to complile
9. Y N to motivate
10. Y N to decite
11. Y N to megalize
12. Y N to markle
13. Y N to abolish
14. Y N to root
15. Y N to distinguish
16. Y N to outlate
17. Y N to sink
18. Y N to encompass

19.	Y	N	to review
20.	Y	N	to celebrate
21.	Y	N	to demolish
22.	Y	N	to administer
23.	Y	N	to erode
24.	Y	N	to fabrication
25.	Y	N	to join
26.	Y	N	to settle
27.	Y	N	to draggle
28.	Y	N	to witness
29.	Y	N	to emerge
30.	Y	N	to sprinkle
31.	Y	N	to pronate
32.	Y	N	to complicate
33.	Y	N	to squeeze
34.	Y	N	to congratulate
35.	Y	N	to keepsick
36.	Y	N	to hesitate
37.	Y	N	to chariover
38.	Y	N	to strang
39.	Y	N	to permit
40.	Y	N	to oldenate
41.	Y	N	to skey

42.	Y	N	to unleash
43.	Y	N	to honch
44.	Y	N	to name
45.	Y	N	to organize
46.	Y	N	to mention
47.	Y	N	to struggle
48.	Y	N	to yell
49.	Y	N	to promise
50.	Y	N	to violate
51.	Y	N	to digame
52.	Y	N	to numbelate
53.	Y	N	to colour
54.	Y	N	to wordle
55.	Y	N	to complement
56.	Y	N	to repair
57.	Y	N	to reform
58.	Y	N	to quote
59.	Y	N	to address
60.	Y	N	to waste
61.	Y	N	to announce
62.	Y	N	to mayto
63.	Y	N	to type
64.	Y	N	to wait

65.	Y	N	to eau
66.	Y	N	to kinnear
67.	Y	N	to stay
68.	Y	N	to monadate
69.	Y	N	to box
70.	Y	N	to authorize
71.	Y	N	to commission
72.	Y	N	to trace
73.	Y	N	to judge
74.	Y	N	to conceive
75.	Y	N	to inherit

Appendix C: Test 2 – Common Phrases: Collocations

Stockholm University
English department
Linguistic Bachelor Degree Project
Tutor Alan McMillion

Survey
12 March 2008
Kerstin Bergström

Part two – Common Phrases: Collocations

You have 25 minutes to complete this test.

Name:.....

Class:.....

Instructions:

This part consists of 100 word combinations (1-100). Your task is to decide whether the word combinations are used in the English language or not. If you think a word combination is used in the English language you tick the “yes” box. If you don’t think a word combination is used in the English language, tick the “no” box.

Please make sure that you have answered all the test items.

Example

101	catch importance attention	102	take precautions	103	shed
<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes
<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no

In the example above, word combination 102, “take precautions” has been chosen as an existing word combination in English, whereas word combinations 101 and 103 have been chosen as not existing.

The test starts here:

PART A

1	have a say	2	lose sleep	3	do justice	4	draw a breath	5	turn a reason
<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	Yes
<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	No
6	say grace	7	pick a glance	8	break news	9	make a move	10	claim trade
<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	Yes
<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	No
11	raise objections	12	bear witness	13	supply one's assistance	14	give a speech	15	serve a sentence
<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	Yes
<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	No
16	stretch a regard	17	restore a favour	18	keep pets	19	catch fire	20	hold meetings
<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	Yes
<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	No
21	pull a face	22	run a bath	23	throw a party	24	shake a smile	25	set an example
<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	Yes
<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	No

PART B

26	fetch an illness	27	drop hints	27	play a trick	29	pay attention	30	meet a need
<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	yes	<input type="checkbox"/>	Yes
<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	no	<input type="checkbox"/>	No
31	reach a conclusion	32	drag a limit	33	gather a matter	34	assume responsibility	35	suffer damage

yes
 no yes
 no yes
 no yes
 no Yes
 No

36 cut a corner

 yes
 no

37 fly a flag

 yes
 no

38 realise a potential

 yes
 no

39 sink speed

 yes
 no

40 fit the bill

 Yes
 No

41 push one's luck

 yes
 no

42 gain ground

 yes
 no

43 perform a miracle

 yes
 no

44 win one's memory

 yes
 no

45 impose success

 Yes
 No

46 adopt an approach

 yes
 no

47 clear one's throat

 yes
 no

48 strike a blow

 yes
 no

49 beat eggs

 yes
 no

50 employ a technique

 Yes
 No

PART C

51 press charges

 yes
 no

52 settle a dispute

 yes
 no

53 swing a secret

 yes
 no

54 grant permission

 yes
 no

55 express a worry

 yes
 no

56 rule an award

 yes
 no

57 commit a sin

 yes
 no

58 launch a campaign

 yes
 no

59 stick one's mood

 yes
 no

60 acquire a skill

 yes
 no

61 deliver a speech

 yes
 no

62 spread one's wings

 yes
 no

63 assess damage

 yes
 no

64 afford an opportunity

 yes
 no

65 ride a storm

 yes
 no

66 jump a queue

 yes
 no

67 score problems

 yes
 no

68 roll a look

 yes
 no

69 exercise discretion

 yes
 no

70 blow one's nose

 yes
 no

71 rush rank

 yes
 no

72 steal someone's thunder

 yes
 no

73 dress a wound

 yes
 no

74 pursue a career

 yes
 no

75 challenge a view

 yes
 no

PART D

76 knock a concern

 yes
 no

77 lay pressure

 yes
 no

78 pack an affair

 Yes
 No

79 abandon ship

 yes
 no

80 clean windows

 yes
 no

81 dismiss an idea

 yes
 no

82 shift gear

 yes
 no

83 justify one's existence

 Yes
 No

84 bind blood

 yes
 no

85 charge respect

 yes
 no

86 cast a vote

 yes
 no

87 kick one's heels

 yes
 no

88 bend a rule

 Yes
 No

89 fill an aim

 yes
 no

90 lend support

 yes
 no

91 sustain an injury

 yes
 no

92 hit approval

 yes
 no

93 cease fire

 Yes
 No

94 snap one's fingers

 yes
 no

95 shrug one's shoulders

 yes
 no

96 stand an occasion
 yes
 no

97 grab a hold
 yes
 no

98 sit seed
 Yes
 No

99 fall a failure
 yes
 no

100 file a report
 yes
 no

Part three – Academic Vocabulary Test

You have 15 minutes to complete this test.

Name:.....

Class:.....

Instructions

For each sentence, choose the appropriate word from the list at the bottom of each page and write the appropriate form of this word in the gap. The appropriate forms means that you may need to change the word by adding *-s*, *-ing*, *-ed*, *-ly*, *-ation*, etc. The appropriate word is the one that is most likely to be used in this sentence, considering the implied situation and the sense of the words used. Each word is used only once.

Example:

1. In the theory of relativity, space and time are not viewed as separate [entities].
2. The [orientation] of new students in our program is the responsibility of the socio-cultural coordinator.

...

10.

adjust
entity
orient
welfare

The test starts here:

Section I

1. Cancer cells can [_____] throughout the body, and produce additional tumours.
2. The cost of food in Belarus used to be heavily [_____] by the government, so prices there were quite low.
3. Do you think that a two-year-old child is [_____] of knowing the difference between telling the truth and lying?
4. The government has announced a number of tax [_____] to attract new businesses to our province.
5. Iron is [_____] in the body in the formation of red blood cells.
6. Teaching in elementary school remains largely the [_____] of women in our society.
7. The new budget [_____] an increase of over a billion dollars to the Ministry of Health.
8. The earthquake was [_____] by a loud boom.
9. An essential aspect of random samples is that the population must be [_____] defined or identified.
10. The situation is not as bad as [_____] reported.

allocate
capable
domain
exceed
explicit
incentive
incidence
initial

migrate
neutral
precede
presume
reveal
subsidize
utilize

Section 2

1. Teachers act as the major vehicle for [_____] the school curriculum and associated values to children.
2. We need to do a [_____] review of the plan before putting any large amounts of money into the idea.
3. His skills, [_____] with his education, guarantee he will find a good job.
4. John Calvin and other Protestant leaders of his time were distrustful of art in worship and [_____] the singing of all but biblical texts in church.
5. Citric acid which is [_____] from fruits such as oranges and lemons can be used to make powerful cleaning products.
6. Our family doctor does not [_____] the use of antibiotics for an ear infection unless it is really severe.
7. The victims were put in [_____] to keep the other patients from being exposed to the disease.
8. After quantitative data have been collected, they are [_____] to analysis.
9. The major environmental issue in Fiji is how to [_____] of waste materials in a responsible manner.
10. The [_____] notions of the traditional culture clash with the democratic principles of increasing numbers of the population.

adapt
advocate
comprehensive
comprise
couple
differentiate
dispose
extract

hierarchy
infer
isolate
prohibit
submit
thesis
transmit

Section 3

1. The people in my hometown were suspicious of anyone who [_____]
from the norm.
2. The chemical balance of the brain which controls awareness can be
[_____] altered by the introduction of external agents.
3. Studies suggest that children are more likely than adults to [_____] to
group pressure.
4. The water level in the lake [_____] each year depending on the
previous winter's snowfall.
5. Computers have allowed many people to work out of their home, communicating
with their colleagues [_____] e-mail and the Internet.
6. Free-moving liquid in outer space will form itself into a sphere because of its
surface [_____].
7. Due to observer [_____], it is extremely difficult to obtain accurate
and objective observations.
8. I have [_____] enough air-miles now to fly about 25 miles.
9. Management is predicting that this costly upgrade in our equipment will be
[_____] by an increase in productivity, and should result in a net
profit within the first year.
10. In some cities in the developing world, at least 30% of the population live in
either illegal settlements with little or no [_____], or in overcrowded
areas.

accumulate
ambiguous
bias
clarify
conform
deviant
eventual
fluctuate

implicit
infrastructure
inspect
offset
radical
tension
via

Section 4

1. Canadian sprinter Ben Johnson received a lengthy [_____] from international competition after testing positive for steroids at the Seoul Olympics.
2. Courts of law in the United States [_____] about half their time to cases involving automobiles.
3. I learned how to drive on a [_____] transmission, so driving an automatic is easy for me.
4. His extravagant lifestyle doesn't seem very [_____] with his left-wing political views.
5. Each side in the conflict accused the other of [_____] the ceasefire.
6. Attempts to reach a [_____] agreeable solution to the conflict have ended in disaster.
7. [_____] requires that everyone remain standing until the Queen has been seated.
8. The [_____] of these structures makes them vulnerable to cracks in the event of an earthquake.
9. James spoke on our [_____] at negotiations with management last week.
10. We'll need to change the [_____] of our presentation because they don't have the software to support a presentation of this kind in the meeting room.

behalf
compatible
devote
distort
format
inherent
mutual
manual

mediate
protocol
refine
rigid
route
suspend
violate

Section 5

1. Using a computer makes [_____] data so much faster and easier.
2. The prime minister has announced that he will retire before the [_____] election.
3. New reproductive technologies [_____] serious moral dilemmas for modern society.
4. The child [_____] gave the toys back to his friend when it was time to go home.
5. Environmental groups want the government to impose a special [_____] on SUVs because of their poor fuel efficiency.
6. Investigators believe some kind of [_____] design fault caused the accident.
7. She made a profit, [_____] a very small one, on her first investment in the stock market.
8. He couldn't sleep because of the noise coming from the [_____] apartment.
9. Every society has its general [_____] of the desirable goals that people are expected to strive to attain.
10. Travelling allows you to [_____] new ideas, and new ways of living.

adjacent
albeit
collapse
compile
conceive
encounter
forthcoming
incline

intrinsic
invoke
levy
persist
pose
reluctant
whereby