# VOCABULARY INPUT IN EFL TEXTBOOKS 

Rosa Mª ${ }^{\text {an }}$ Iménez Catalán<br>Rocío Mancebo Francisco<br>Universidad de La Rioja


#### Abstract

This paper reports the results obtained after analysing the vocabulary input contained in a corpus of EFL textbooks from the last year of Spanish Primary and Secondary Education. We consider the fifty most frequent words in each textbook under study as a sample of analysis and deal with their word type, word frequency, frequency rank, and the percentage they represent in the whole textbook. A comparison between the textbooks belonging to the same and different educational level is carried out, and we also attempt to assess the influence of the increase in the number of types and tokens between the end of each educational stage and regard the implications of their repetition in EFL textbooks for the acquisition of vocabulary.


KEYWORDS: Vocabulary input, EFL textbook, type, token, corpus.

RESUMEN. En este artículo presentamos los resultados de un análisis del input de vocabulario que contienen un corpus de libros de texto de inglés como lengua extranjera, utilizados en el último curso de educación primaria y en el último curso de educación secundaria. En nuestro análisis nos basamos en las cincuenta palabras más frecuentes en cada libro de texto e identificamos el tipo de palabra, su frecuencia, su orden y su representación en el libro de texto. Llevamos a cabo comparaciones entre los libros de texto del mismo nivel y entre los libros de texto de las dos etapas educativas. Asimismo, evaluamos el incremento del número de tipos y recurrencias en los libros de texto de cada etapa educativa y reflexionamos sobre las implicaciones de la repetición de los tipos y recurrencias para la adquisición del vocabulario.

PALABRAS CLAVE: Input de vocabulario, libros de texto de inglés lengua extranjera, tipos, recurrencias, hábeas.

## 1. INTRODUCTION

A textbook can be regarded as a metaphor that means or describes something else. The idea of a textbook as a container of information is present in most definitions found
in the English as a Foreign Language (EFL) literature. Also present is the idea of the textbook as an object that can be used for some purpose such as to study the subject (Cobuild Students's Dictionary and Grammar 1994; Harmer 1991), as a resource or guide to language learning and teaching (Asher 1994; Harmer 1991), or for instruction or information (Asher 1994). The idea of the textbook as a container of vocabulary input is not as frequent but still it is possible to find that concept in the EFL field. Among the few scholars that have related textbooks and vocabulary, we find Thornbury (2002), who sees textbooks as sources for words. He claims that vocabulary input is realized in the actual content of books by means of segregated vocabulary activities, integrated textbased activities, grammar explanations and task instructions. We believe that the analysis of language teaching textbooks is a necessary step for the improvement of EFL education. We understand the textbook as a container of vocabulary input as well as an important resource for language learning and teaching. For this reason, in the present study ${ }^{1}$ we look at a sample of EFL textbooks in order to ascertain whether there is either a systematic or a haphazard approach in the vocabulary input contained in textbooks of the same educational level.

## 2. Previous Research

The assessment of language textbooks has attracted the attention of language teachers and researchers, as can be observed in the EFL literature from the eighties to the present. However, its systematisation is not easy, let alone the drawing of implications for either teaching or research. The reason has to do with the existence of differences as regards purpose, scope, and languages involved. Even when the language investigated is the same, the comparison is not always possible as studies may focus either on a different language component or adopt a different perspective of analysis. Within this section we will review the main studies that have focused on the analysis of vocabulary in language teaching materials and textbooks. For convenience, we will draw a distinction between non-corpus studies and corpus-based studies. In the first group we classify studies that adopt a qualitative stance in the analysis of vocabulary, while in the second group we include studies grounded in a large collection of lexical data, usually handled by means of electronic vocabulary tools. The purpose of the latter is to verify hypotheses about patterns of lexical behaviour by means of quantitative analyses, which may be complemented by further qualitative analyses.

To our knowledge, within a non-corpus based perspective only a few studies (Scholfield 1991; Martínez 1999; Ojeda 2004; Mancebo 2005) have dealt exclusively with the analysis of this component; however, in spite of the scarcity, they are different in aim and scope. Scholfield (1991) looks at the rate at which new vocabulary is introduced and old words are recycled in EFL coursebooks, finding lack of agreement among textbook writers; in this respect. Martínez (1999) explores the influence of language learning theories on the design of vocabulary activities and shows that textbook designers do not
seem to take into account results from research on language learning. Mancebo (2005) investigates whether a sample of EFL textbooks used in Spanish schools meet the criteria proposed by the European Framework of Reference. She concludes that they follow the guidelines except in relation to vocabulary: in spite of the fact that the European Framework of Reference explicitly speaks of word frequency, word selection and word grading, no information is provided in this respect in her sample of textbooks. From a different perspective of analysis, Ojeda (2004) observes common tendencies in textbooks concerning vocabulary related to social success. In her comparative analysis of the vocabulary input of textbooks from two different levels -University and Primary Education- she finds that English language teaching textbooks overuse the vocabulary related to material things and highlight social success linked to money.

With regard to analyses of vocabulary from a corpus-based approach in textbooks and teaching materials, three lines of research can be distinguished: i) studies on the application of corpora to the design of main course EFL syllabuses (Sinclair \& Renouf 1988; Willis \& Willis 1988; Flowerdew 1996), ii) concordancing programs applied to the learning and teaching of English language (Johns 1989; Tribble 1990; Stevens 1991; and Gavioli 1997;) iii) analysis of already existing language teaching materials and textbooks. Without doubt, the studies on the application of corpora to the design of teaching materials as well as the studies on the application of concordancing programs are the most numerous. In comparison, we hardly find research on the analysis of already existing language teaching materials and textbooks. This dearth is not surprising if one has in mind -as Leech (1998) notes- the great difficulty of carrying out this kind of research, the few resources available in schools, and the lack of funding research projects applied to language teaching. Among the few corpus studies that have paid attention to the analysis of existing language teaching materials, we find a great diversity in the types of issues as well as texts investigated as shown by: research on the lexical profile of EFL textbooks (Takala 1984; Kaszubski 1998; Miranda 1990; Benitez Pérez \& Zebrowski 1993;), an investigation of graded readers (Nation \& Wang 1999), a study of the vocabulary load of academic texts (Sutarsyah, Nation \& Kennedy 1994) and a comparison of authentic data in textbooks (Ljung 1991).

Most analyses on vocabulary input in language teaching materials and textbooks undertaken in a corpus-based approach have aimed to ascertain the number of words contained in EFL textbooks. However, differences are observed concerning scope, target language, and type of textbook researched. Takala (1984) and Miranda (1990) investigate the vocabulary input in textbooks aimed at secondary students; Kaszubsky (1998) sets out to prove that EFL writing textbooks do not respond to learners' needs; the study of Nation and Wang (1999) attempts to ascertain whether their sample of readers provides good conditions for vocabulary learning; Sutarsyah, Nation and Kennedy (1994) analyse the vocabulary input of a collection of textbooks from different disciplines aimed at English native speakers; Ljung (1991) gives evidence of the overuse of concrete words to the detriment of abstract ones, as well as a poor representation of words which are useful in the establishment of communicative interaction and social
relationships. For their part, Benitez Pérez \& Zebrowski (1993) study the distribution of vocabulary in Spanish as L2 textbooks. However, in spite of the variety of perspectives, the conclusions arrived at by these studies are quite similar since they point to the lack of systematic criteria on three grounds: i) the number of words to be included in textbooks; ii) the selection of vocabulary; and, iii) the number of times a word should be repeated. However, none of these studies have addressed the comparative analysis of vocabulary input in textbooks corresponding to two different educational stages.

The present study investigates the vocabulary input contained in a selection of textbooks for EFL teaching in two Spanish educational stages: $6^{\text {th }}$ year of Primary Education and $4^{\text {th }}$ year of Secondary Education. It pursues the following specific objectives: 1) to find out the number of words contained in textbooks both at the same educational level and across different educational levels; 2) to identify the top fifty words contained in textbooks; 3) to draw a profile of the distribution of word categories within the fifty most frequent content words; 4) to ascertain whether textbooks share the vocabulary input provided to learners of same educational level; 5) to find out whether there is an increase in vocabulary input throughout $6^{\text {th }}$ grade of Primary Education and $4^{\text {th }}$ grade of Secondary education textbooks.

## 3. Method

Four textbooks comprise the sample used in the present study. As Figure 1 shows they are equally distributed into two stages of education: two for Primary and two for Secondary Education.

| Title | Editorial | Grade | Year | Authors |
| :--- | :--- | :--- | :---: | :--- |
| New Burlington T op Class for <br> ESO | Burlington Books | $4^{\text {th }}$ <br> Secondary <br> Education | 2002 | Pamela Field <br> Jeremy Last <br> Pura Muñoz <br> $\mathrm{M}^{\text {a }}$ Jesús Páramo |
| Changes for ESO | Burlington Books | $4^{\text {th }}$ <br> Secondary Education | 2002 | Sheila Day <br> Marcelle Gant <br> M $^{\text {J Jesús Páramo }}$ |
| Join In 4 | CU P | $6^{\text {th }}$ <br> Primary <br> Education | 2001 | Günter Gerngross <br> Herbert Puchta |
| Super Bus 4 | MacMillan Heinemann | $6^{\text {th }}$ <br> Primary Education | 2000 | Ma José Lobo <br> Pepita Subirá |

Figure 1. Sample of textbooks.
The countless number of EFL textbooks for Primary and Secondary Education that can be found in the market prevents a detailed analysis of a wider sample of textbooks. Selection is necessary even in an exploratory study such as ours, for several reasons: i)
they are the textbooks followed by more than 300 students belonging to four primary schools and four secondary schools in our region; ii) the receptive and lexical competence of those students is being investigated within the framework of a longitudinal research project, in which in the long run, we plan to investigate to what extent students' receptive and productive lexical competence is related to the vocabulary input contained in their textbooks; iii) these textbooks have been approved not only by the Spanish Ministry of Education but also by our regional Education Council; iv) they have been published by well-known publishing houses that cater for learners studying EFL in secondary schools in different countries of Europe; v) the analysis of these textbooks can be useful for other teachers and researchers, particularly if we bear in mind that two of the textbooks are used in $6^{\text {th }}$ grade of Primary Education and the other two in $4^{\text {th }}$ grade of Secondary Education, both grades standing for the end of compulsory educational stages in our country.

The texts contained in textbooks were encoded as separate computer readable files, one for each textbook. Then each file was subjected to frequency analyses by means of the textual analysis program WordSmith Tools (Scott 1998). The application of this program to a given text enables us to count words, calculate vocabulary size, order the words in alphabetical lists, and to find out the frequencies of words and their range of occurrence. In addition, WordSmith Tools gives us the option of a concordance program, which is very useful to conduct further analyses of patterns of word collocations, and to make comparisons between different texts. Several scholars have pointed out the convenience of using WordSmith Tools in data analysis. The application of WordSmith Tools to the analysis of the vocabulary input contained in our sample of textbooks provides us with a quantitative analysis of the vocabulary input contained in textbooks. We believe this is the appropriate starting point in any study of this kind as it helps us handle a huge amount of data and identify patterns of systematicity as well as inconsistencies, otherwise difficult to detect. However, the quantitative analysis does not exclude further qualitative analysis.

In the present study the unit of analysis will be the word, which following Carter (1998: 4) is defined as "any sequence of letters (and a limited number of other characteristics such as hyphen and apostrophe) bounded on either side by a space or punctuation mark". As far as lemmatisation is concerned -defined by Read (2000: 18) as the grouping under the same heading of the base and inflected forms of a wordalthough we are aware of the fact that in most corpus studies words are lemmatised, we decided not to do this for the present study after considering that our analysis focuses on educational textbooks. We believe that from a pedagogical point of view it is important to know which word forms are included in textbooks and which are not. Many vocabulary researchers (Beheydt 1987; Blum-Kulka 1981; Jiménez Catalán 2002; Laufer 1991; Nation 1990; Richards 1976; Wallace 1982) have claimed that to know a word means, among other things, to know its different word forms. In our EFL teaching experience in secondary schools as well as at university, we have found that
for language learners to know the base word does not necessary imply that they know every different form of it.

As regards homographs and polysemous words, we decided not to consider them, not because we do not believe them to be important and frequent, but because of the purpose and scope of our research and the electronic tools used in the counting and ordering of the data. The present study is quantitative in nature and as such, it attempts to count the number of words comprising the vocabulary input in a sample of textbooks. It attempts to establish ratios and percentages and to make comparisons of the vocabulary load of different textbooks. Wordsmith Tools is regarded as one of the best instruments for this purpose. On the contrary, this vocabulary analyser is not thought to be an appropriate tool for the analysis of homographs or polysemous words. In order to analyse them, either a manual analysis of other electronic analysers would be necessary, something that we contemplate as further studies but not as part of the scope of the present study.

Concerning the issue of grammatical and content words we made a difference depending on the textbook and the specific words under survey. In Primary Education textbooks, verb forms such as is, are, has, like, have, was and were were considered as content words and got and do as grammatical words. We took this decision because after using the Wordsmith tool for concordancing we observed that these verbs were not used as auxiliaries in any instance but as full verbs in the case of the first group and as auxiliaries in the case of got and do. In Changes for ESO (Secondary Education textbook) we considered is, have, are, was, do, were, can and don't as grammatical words because they appear with more frequency as auxiliary verbs than as full verbs or nouns. In New Burlington (a Secondary Education textbook, too) is, are, be, have, do, had, can, will and were are also considered as grammatical words because they appear with more frequency as auxiliary verbs than as full verbs or nouns.

## 4. Results

For the sake of clarity, we will report together the results concerning the number of words contained in the textbooks corresponding to each educational level. However, for the remaining issues put forward in our objectives, the analysis of the textbooks of each educational level will be addressed separately. For each educational level we will pay attention to: i) the number of words contained in each textbook; ii) the top fifty words (both grammatical and content word types); iii) the top fifty content words; iv) the shared and non- shared vocabulary found in textbooks at the same educational stage.

### 4.1. Number of words contained in Primary and Secondary Education textbooks

Regarding Primary Education textbooks, the results indicate almost the same number of types (different words) in the textbooks analysed: 1,291 in Join In
compared to 1,268 in Super Bus. In contrast, a considerable difference $(1,127)$ concerning the number of tokens (total number of running words) in each textbook: 7,481 in Join In versus 6,253 in Super Bus. However, the standardised TTRs point that lexical variation between the two textbooks is very similar: 34.97 for Join In, 34.92 for Super Bus, 39.24.

As far as Secondary Education textbooks, the figures reveal bigger differences than the ones appearing in Primary textbooks: 3,238 types and 32,251 tokens in Changes for ESO compared to 3,764 types and 40,449 tokens in New Burlington. We note a difference of 526 types and 8,198 tokens in favour of the latter. Nevertheless, the standardised TTRs shows that the lexical variation between the two textbooks is not as high as it might appear by looking at the raw figures: 39.24 for Changes for ESO and 40.32 for New Burlington Top Class for ESO.

### 4.2. The fifty most frequent words contained in Primary Education textbooks

The top fifty words for each textbook of Primary Education alongside their occurrences and percentages with respect to the total number of tokens in the text are shown in decreasing order in Table 1.

| Join In |  |  |  |  |  |  |  | Super Bus |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | W | Oc | \% | R | W | Oc | \% | R | W | Oc | \% | R | W | Oc | \% |
| 1 | The | 452 | 6.04 | 26 | His | 33 | 0.44 | 1 | The | 343 | 5.49 | 26 | Read | 33 | 0.53 |
| 2 | A | 215 | 2.87 | 27 | Children | 32 | 0.43 | 2 | And | 217 | 3.47 | 27 | I'm | 32 | 0.51 |
| 3 | And | 215 | 2.87 | 28 | Has | 32 | 0.43 | 3 | A | 170 | 2.72 | 28 | Robin | 31 | 0.50 |
| 4 | In | 191 | 2.55 | 29 | World | 32 | 0.43 | 4 | In | 151 | 2.41 | 29 | Can | 30 | 0.48 |
| 5 | Is | 167 | 2.23 | 30 | Come | 31 | 0.41 | 5 | Is | 120 | 1.92 | 30 | His | 29 | 0.46 |
| 6 | To | 126 | 1.68 | 31 | Me | 30 | 0.40 | 6 | Of | 98 | 1.57 | 31 | Old | 28 | 0.45 |
| 7 | Of | 119 | 1.59 | 32 | Robin | 30 | 0.40 | 7 | To | 83 | 1.33 | 32 | At | 27 | 0.43 |
| 8 | You | 107 | 1.43 | 33 | She | 30 | 0.40 | 8 | You | 79 | 1.26 | 33 | Look | 26 | 0.42 |
| 9 | I | 95 | 1.27 | 34 | Go | 29 | 0.39 | 9 | I | 75 | 1.20 | 34 | Good | 25 | 0.40 |
| 10 | It | 86 | 1.15 | 35 | From | 28 | 0.37 | 10 | Was | 75 | 1.20 | 35 | Got | 24 | 0.38 |
| 11 | Are | 83 | 1.11 | 36 | School | 28 | 0.37 | 11 | Are | 64 | 1.02 | 36 | Loch | 24 | 0.38 |
| 12 | There | 67 | 0.90 | 37 | Very | 28 | 0.37 | 12 | It | 61 | 0.98 | 37 | They | 24 | 0.38 |
| 13 | My | 66 | 0.88 | 38 | Like | 27 | 0.36 | 13 | On | 49 | 0.78 | 38 | With | 23 | 0.37 |
| 14 | People | 52 | 0.70 | 39 | This | 27 | 0.36 | 14 | Some | 47 | 0.75 | 39 | Were | 22 | 0.35 |
| 15 | He | 50 | 0.67 | 40 | About | 26 | 0.35 | 15 | This | 45 | 0.72 | 40 | An | 21 | 0.34 |
| 16 | Or | 47 | 0.63 | 41 | Most | 26 | 0.35 | 16 | People | 44 | 0.70 | 41 | Them | 21 | 0.34 |
| 17 | Your | 45 | 0.60 | 42 | Ghost | 25 | 0.33 | 17 | Very | 44 | 0.70 | 42 | Hood | 21 | 0.34 |
| 18 | Can | 44 | 0.59 | 43 | Her | 25 | 0.33 | 18 | For | 41 | 0.66 | 43 | Olympic | 21 | 0.34 |
| 19 | With | 44 | 0.59 | 44 | No | 25 | 0.33 | 19 | He | 39 | 0.62 | 44 | Sports | 21 | 0.34 |
| 20 | For | 42 | 0.56 | 45 | Big | 24 | 0.32 | 20 | That | 38 | 0.61 | 45 | Christmas | 20 | 0.32 |
| 21 | It's | 41 | 0.55 | 46 | Have | 24 | 0.32 | 21 | There | 37 | 0.59 | 46 | From | 20 | 0.32 |
| 22 | Listen | 38 | 0.51 | 47 | Then | 24 | 0.32 | 22 | Do | 36 | 0.58 | 47 | Your | 20 | 0.32 |
| 23 | On | 38 | 0.51 | 48 | Hood | 23 | 0.31 | 23 | What | 35 | 0.56 | 48 | Bus | 19 | 0.30 |
| 24 | At | 36 | 0.48 | 49 | Was | 23 | 0.31 | 24 | But | 34 | 0.54 | 49 | It's | 19 | 0.30 |
| 25 | They | 36 | 0.48 | 50 | When | 23 | 0.31 | 25 | Listen | 33 | 0.53 | 50 | Let's | 19 | 0.30 |

Table 1. Primary Education textbooks' 50 most frequent words

As can be observed, in the two textbooks there is a predominance of grammatical words over content ones. For Join In the number of grammatical words is 30 against 21 content words, for Super Bus there are 29 grammatical words and 21 content words.

Out of the above figures, 21 grammatical words are shared by the two textbooks and they are: the, a, and, in, is, to, of, with, for, from, at, on, I, you, it, he, they, your, his, can, this. As to the non-shared words, there is almost equal number of exclusive words in the two textbooks. In the case of Join in we note: about, an, her, my, or, then, she, me, and most. As to Super Bus, the list of exclusive words is: an, but, got, that, do (as auxiliary), some, them, and what.

In addition, differences are observed concerning the frequency rank of certain word types in the two lists. Even though up to position 11 the types are the same with some minor position changes, below that position telling variations appear. This is the case of your, placed in the $17^{\text {th }}$ position in Join In, compared to the $47^{\text {th }}$ in Super Bus; in the same vein, this occupies the $15^{\text {th }}$ position in Join In but the $39^{\text {th }}$ in Super Bus. If we take the words common to the two texts, we can calculate the Pearson correlation coefficient for the frequencies of the individual words in the two texts. The value of the coefficient, r , is 0.983 , which is significant at the $\mathrm{p}<0.001$ level. So even if we take into account the differences lower down the list, the correlation is still highly significant.

### 4.3. The top fifty content words in Primary Education textbooks

Table 2 shows two frequency lists in descending order, the list of the top fifty content words for Join in and the corresponding top fifty list for Super Bus.

| Join In |  |  |  |  |  |  |  | Super Bus |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | W | Frc | \% | R | W | Frc | \% | R | W | Frc | \% | R | W | Frc | \% |
| 1 | Is | 167 | 2.23 | 26 | Beautiful | 19 | 0.25 | 1 | Is | 120 | 1.92 | 26 | Big | 15 | 0.24 |
| 2 | Are | 83 | 1.11 | 27 | Help | 18 | 0.24 | 2 | Was | 75 | 1.20 | 27 | Book | 15 | 0.24 |
| 3 | People | 52 | 0.70 | 28 | Animals | 17 | 0.23 | 3 | Are | 64 | 1.02 | 28 | Go | 15 | 0.24 |
| 4 | Listen | 38 | 0.51 | 29 | Day | 17 | 0.23 | 4 | People | 44 | 0.70 | 29 | Monster | 15 | 0.24 |
| 5 | Children | 32 | 0.43 | 30 | Favourite | 17 | 0.23 | 5 | Very | 44 | 0.70 | 30 | Play | 15 | 0.24 |
| 6 | Has | 32 | 0.43 | 31 | Say | 17 | 0.23 | 6 | There | 38 | 0.61 | 31 | Put | 15 | 0.24 |
| 7 | World | 32 | 0.43 | 32 | See | 17 | 0.23 | 7 | Listen | 33 | 0.53 | 32 | London | 14 | 0.22 |
| 8 | Come | 31 | 0.41 | 33 | Take | 17 | 0.23 | 8 | Read | 33 | 0.53 | 33 | Say | 14 | 0.22 |
| 9 | Robin | 30 | 0.40 | 34 | Treat | 17 | 0.23 | 9 | Robin | 31 | 0.50 | 34 | Soup | 14 | 0.22 |
| 10 | Go | 29 | 0.39 | 35 | Want | 17 | 0.23 | 10 | Old | 28 | 0.45 | 35 | Story | 14 | 0.22 |
| 11 | School | 28 | 0.37 | 36 | Back | 15 | 0.20 | 11 | Look | 26 | 0.42 | 36 | Year | 14 | 0.22 |
| 12 | Very | 28 | 0.37 | 37 | Class | 15 | 0.20 | 12 | Good | 25 | 0.40 | 37 | Children | 13 | 0.21 |
| 13 | Like | 27 | 0.36 | 38 | Dreams | 15 | 0.20 | 13 | Loch | 24 | 0.38 | 38 | Here | 13 | 0.21 |
| 14 | Big | 24 | 0.32 | 39 | Play | 15 | 0.20 | 14 | Were | 22 | 0.35 | 39 | Know | 13 | 0.21 |
| 15 | Have | 24 | 0.32 | 40 | Unit | 15 | 0.20 | 15 | Day | 21 | 0.34 | 40 | Make | 13 | 0.21 |
| 16 | Then | 24 | 0.32 | 41 | Again | 14 | 0.19 | 16 | Hood | 21 | 0.34 | 41 | Now | 13 | 0.21 |
| 17 | Hood | 23 | 0.31 | 42 | Lives | 14 | 0.19 | 17 | Olympic | 21 | 0.34 | 42 | Tramp | 13 | 0.21 |
| 18 | Was | 23 | 0.31 | 43 | Loves | 14 | 0.19 | 18 | Sports | 21 | 0.34 | 43 | Loved | 12 | 0.19 |
| 19 | English | 22 | 0.29 | 44 | Story | 14 | 0.19 | 19 | Christmas | 20 | 0.32 | 44 | Nessie | 12 | 0.19 |
| 20 | Love | 22 | 0.29 | 45 | Trick | 14 | 0.19 | 20 | Bus | 19 | 0.30 | 45 | Scientist | 12 | 0.19 |
| 21 | Read | 21 | 0.28 | 46 | Later | 13 | 0.17 | 21 | Need | 18 | 0.29 | 46 | See | 12 | 0.19 |
| 22 | Sheriff | 21 | 0.28 | 47 | New | 13 | 0.17 | 22 | Ness | 18 | 0.29 | 47 | Stone | 12 | 0.19 |
| 23 | Write | 20 | 0.28 | 48 | Teacher | 13 | 0.17 | 23 | Want | 17 | 0.27 | 48 | Water | 12 | 0.19 |
| 24 | Live | 20 | 0.27 | 49 | Think | 13 | 0.17 | 24 | Long | 16 | 0.26 | 49 | Great | 11 | 0.18 |
| 25 | Place | 20 | 0.27 | 50 | Castle | 12 | 0.16 | 25 | Page | 0.26 | 0.26 | 50 | New | 11 | 0.18 |

Table 2. Primary Education textbooks' 50 most frequent content words

## VOCABULARY INPUT IN EFL TEXTBOOKS

If we group the list of the fifty most frequent words into nouns, verbs, adjectives, and adverbs, we note a similar distribution in each textbook, particularly as far as adjectives and adverbs are concerned since Join In contains 23 verbs, 18 nouns, 6 adjectives, and 4 adverbs, whereas Superbus comprises 22 nouns, 16 verbs, 7 adjectives, and 5 adverbs. Regarding the category of verbs, only got and do were used as auxiliaries in both textbooks, the remaining verbs are used as lexical verbs.

A chi-square test on these figures gives a value of 0.31 for chi-square, which has a probability of 0.857 of occurring by sampling error. In other words, the difference in distribution is non-significant. In order for no expected frequency to fall below 5 (a requirement for the validity of the test), we have combined frequencies for adjectives and adverbs when doing this test.

When we look at the list from the perspective of shared and non-shared vocabulary, notable differences between the two textbooks become apparent as only 18 word types are shared among the fifty most frequent content words list. Out of this, 6 are nouns, 9 verbs, 2 adjectives, and 1 adverb. Figure 2 contains the list of the shared content words (among the top 50 content words) in Primary Education textbooks distributed according to word classes:

| Nouns | people, children, Robin, day, hood, story |
| :--- | :--- |
| Verbs | is, are, listen, go, play, say, see, was, read |
| Adjectives | big, new |
| Adverbs | Very |

Figure 2. Shared vocabulary in Primary Education textbooks
Quite a number of words are not shared in the top fifty content words of the two textbooks, or put it in another way, the Primary Education textbooks under analysis each contain a high number of exclusive words; specifically, 60 words make up the list of exclusive words, out of which, 31 are exclusive to Join In and 29 exclusive to Superbus. Figure 3 shows the non-shared content words for each textbook classified into word classes:

|  | Nouns | Verbs | Adjectives | Adverbs |
| :--- | :--- | :--- | :--- | :--- |
| Join <br> In | animals, castle, class, dreams, place, <br> school, teacher, trick, unit, world, sheriff | come, have, has, help, take, <br> treat, want, love, write, <br> live, lives, loves, think | beautiful, back, <br> English, favourite | again, <br> later, then |
| Super <br> Bus | book, bus, Christmas, page, monster, <br> soup, sports, stone, scientist, tramp, year, <br> water, London, Ness, Nessie | Look, were, put, know, <br> make, need, loved | great, good, long, <br> Olympic, old | here, now |

Figure 3. Non-shared content words in Primary Education Textbooks

ROSA Mª ${ }^{\text {a }}$ JIMÉNEZ CATALÁN - ROCÍO MANCEBO FRANCISCO

### 4.4. The fifty most frequent words contained in Secondary Education textbooks

The frequencies of the top 50 for Secondary Education textbooks are displayed in decreasing order in Table 3. The same pattern observed in Primary Education books appears, as most of the top 50 words are grammatical words. The distribution for each educational level is as follows: 37 grammatical words and 13 content words in Changes for ESO and 39 grammatical words and 11 content words in New Burlington. In the two textbooks, and unlike what occurred in Primary Education textbooks, is, are, be, have, do, had, can, will and were appear with higher frequency as auxiliary verbs than as lexical verbs or nouns. In New Burlington, this also occurs with will and can, which are more frequent as a future form and as a modal verb respectively than as nouns.

| Changes for ESO |  |  |  |  |  |  |  | New Burlington |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | Word | Frec | \% | R | Word | Frec | \% | R | Word | Frec | \% | R | Word | Frec | \% |
| 1 | The | 1654 | 5.13 | 26 | Do | 178 | 0.55 | 1 | The | 2265 | 5.60 | 26 | Do | 174 | 0.43 |
| 2 | To | 837 | 2.60 | 27 | For | 159 | 0.49 | 2 | To | 1072 | 2.65 | 27 | She | 171 | 0.42 |
| 3 | A | 723 | 2.24 | 28 | Will | 152 | 0.47 | 3 | A | 1009 | 2.49 | 28 | We | 160 | 0.40 |
| 4 | You | 670 | 2.08 | 29 | Grammar | 143 | 0.44 | 4 | In | 855 | 2.11 | 29 | As | 152 | 0.38 |
| 5 | I | 574 | 1.78 | 30 | On | 137 | 0.42 | 5 | And | 848 | 2.10 | 30 | An | 151 | 0.37 |
| 6 | And | 554 | 1.72 | 31 | My | 134 | 0.42 | 6 | Of | 652 | 1.61 | 31 | Or | 151 | 0.37 |
| 7 | In | 450 | 1.40 | 32 | Be | 130 | 0.4 | 7 | You | 627 | 1.55 | 32 | Had | 146 | 0.36 |
| 8 | Of | 392 | 1.22 | 33 | Go | 129 | 0.40 | 8 | I | 463 | 1.14 | 33 | Which | 142 | 0.35 |
| 9 | Is | 360 | 1.12 | 34 | Were | 124 | 0.38 | 9 | Is | 377 | 0'93 | 34 | Write | 140 | 0.35 |
| 10 | He | 282 | 0.87 | 35 | Can | 122 | 0.38 | 10 | He | 292 | 0.72 | 35 | Not | 138 | 0.34 |
| 11 | Have | 251 | 0.78 | 36 | Going | 117 | 0.36 | 11 | It | 292 | 0.72 | 36 | Her | 137 | 0.34 |
| 12 | Are | 232 | 0.72 | 37 | Use | 117 | 0.36 | 12 | That | 292 | 0.72 | 37 | When | 137 | 0.34 |
| 13 | We | 223 | 0.69 | 38 | People | 112 | 0.35 | 13 | About | 280 | 0.69 | 38 | Can | 136 | 0.34 |
| 14 | Not | 214 | 0.66 | 39 | This | 111 | 0.34 | 14 | Your | 277 | 0'68 | 39 | His | 135 | 0.33 |
| 15 | At | 213 | 0.66 | 40 | An | 99 | 0.31 | 15 | Was | 264 | 0.65 | 40 | This | 134 | 0.33 |
| 16 | That | 202 | 0.63 | 41 | When | 98 | 0.30 | 16 | Are | 250 | 0.62 | 41 | Then | 133 | 0.33 |
| 17 | They | 198 | 0'61 | 42 | Dave | 97 | 0.30 | 17 | With | 238 | 0.59 | 42 | If | 132 | 0.33 |
| 18 | Was | 195 | 0.60 | 43 | Laura | 96 | 0.30 | 18 | For | 232 | 0.57 | 43 | Will | 129 | 0.32 |
| 19 | What | 195 | 0.60 | 44 | No | 95 | 0.29 | 19 | At | 231 | 0.57 | 44 | Listen | 121 | 0.30 |
| 20 | She | 194 | 0.60 | 45 | Yes | 93 | 0.29 | 20 | Be | 224 | 0.55 | 45 | Out | 119 | 0.29 |
| 21 | With | 193 | 0.60 | 46 | Or | 92 | 0.29 | 21 | On | 195 | 0.48 | 46 | Time | 117 | 0.29 |
| 22 | It | 192 | 0.60 | 47 | Skills | 92 | 0.29 | 22 | Have | 193 | 0.48 | 47 | Them | 114 | 0.28 |
| 23 | About | 191 | 0.59 | 48 | But | 88 | 0.27 | 23 | They | 188 | 0.46 | 48 | Past | 112 | 0.28 |
| 24 | If | 191 | 0.59 | 49 | Don't | 88 | 0.27 | 24 | What | 188 | 0.46 | 49 | Were | 109 | 0.27 |
| 25 | Your | 189 | 0.59 | 50 | One | 86 | 0.27 | 25 | Use | 180 | 0.45 | 50 | Who | 108 | 0.27 |

Table 3. Secondary Education textbooks' 50 most frequent words
A closer look at Table 3 reveals that there are 34 shared words in both textbooks. Out of this figure, 33 are grammatical words and 1 content word. The common vocabulary comprises: the, a, an, and, or, if, in, to, of, with, for, at, on, about, I, you, it, he, she, we, they, your, can, will, is, are, was, do, this, that, what, when, be, use, and not. A Pearson correlation test was applied to the frequencies of all 34 common words finding a coefficient of 0.969 , which is significant at the $\mathrm{p}<0.001$ level.

As happened in Primary Education textbooks, differences appear in the frequency ranks of the two lists. The most remarkable is not, appearing in the $14^{\text {th }}$ position in Changes for ESO compared to the $35^{\text {th }}$ in New Burlington.

Regarding non-shared words, exclusive types in Changes for ESO are: but, my, don't, one, go, going, Dave, grammar, Laura, people, skills, whereas the exclusive types for New Burlington are: as, out, her, his, which, who, had, write, listen, time, past, them.

### 4.5. The top fifty content words contained in Secondary Education textbooks

The corresponding lists of the top fifty content words for each textbook are shown in Table 4. As we did for Primary Education textbooks, for each word we report the rank, occurrences, and percentages for each word.

| Changes for ESO |  |  |  |  |  |  |  | New Burlington |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | W | Fr. | \% | R | W | Fr. | \% | R | W | Fr. | \% | R | W | Fr. | \% |
| 1 | Grammar | 143 | 0.44 | 26 | Correct | 60 | 0.19 | 1 | Use | 180 | 0.45 | 26 | Subject | 66 | 0.16 |
| 2 | Go | 129 | 0.40 | 27 | Make | 60 | 0.19 | 2 | Write | 140 | 0.35 | 27 | Help | 63 | 0.16 |
| 3 | Use | 117 | 0.36 | 28 | Answer | 59 | 0.18 | 3 | Then | 133 | 0.33 | 28 | Answers | 62 | 0.15 |
| 4 | People | 112 | 0.35 | 29 | See | 59 | 0.18 | 4 | Listen | 121 | 0.30 | 29 | Look | 62 | 0.15 |
| 5 | Dave | 97 | 0.30 | 30 | Unit | 59 | 0.18 | 5 | Time | 117 | 0.29 | 30 | Again | 61 | 0.15 |
| 6 | Laura | 96 | 0.30 | 31 | Film | 57 | 0.18 | 6 | Past | 112 | 0.28 | 31 | Below | 60 | 0.15 |
| 7 | Skills | 92 | 0.29 | 32 | Present | 57 | 0.18 | 7 | Read | 107 | 0.26 | 32 | Talk | 60 | 0.15 |
| 8 | There | 86 | 0.27 | 33 | Talk | 57 | 0.18 | 8 | Page | 102 | 0.25 | 33 | There | 60 | 0.15 |
| 9 | Speaking | 80 | 0.25 | 34 | Think | 55 | 0.17 | 9 | Said | 101 | 0.25 | 34 | Up | 60 | 0.15 |
| 10 | Work | 76 | 0.24 | 35 | Very | 54 | 0.17 | 10 | Words | 101 | 0.25 | 35 | World | 60 | 0.15 |
| 11 | Said | 72 | 0.22 | 36 | Good | 53 | 0.16 | 11 | People | 98 | 0.24 | 36 | Go | 59 | 0.15 |
| 12 | Sentences | 72 | 0.22 | 37 | House | 52 | 0.16 | 12 | Paragraph | 89 | 0.22 | 37 | Learn | 59 | 0.15 |
| 13 | Read | 71 | 0.22 | 38 | Look | 52 | 0.16 | 13 | English | 88 | 0.22 | 38 | Sea | 59 | 0.15 |
| 14 | Time | 71 | 0.22 | 39 | Partner | 52 | 0.16 | 14 | Find | 88 | 0.22 | 39 | Word | 58 | 0.14 |
| 15 | Year | 66 | 0.20 | 40 | Buy | 50 | 0.16 | 15 | Form | 82 | 0.20 | 40 | Language | 57 | 0.14 |
| 16 | Now | 65 | 0.20 | 41 | Then | 50 | 0.16 | 16 | Very | 81 | 0.20 | 41 | Partner | 57 | 0.14 |
| 17 | Complete | 64 | 0.20 | 42 | Asked | 49 | 0.15 | 17 | Practise | 80 | 0.20 | 42 | Loud | 55 | 0.14 |
| 18 | Past | 64 | 0.20 | 43 | Great | 49 | 0.15 | 18 | Sentences | 80 | 0.20 | 43 | Friends | 54 | 0.13 |
| 19 | Listen | 63 | 0.20 | 44 | Play | 49 | 0.15 | 19 | Complete | 78 | 0.20 | 44 | See | 54 | 0.13 |
| 20 | Day | 62 | 0.19 | 45 | London | 48 | 0.15 | 20 | Make | 73 | 0.18 | 45 | Writing | 54 | 0.13 |
| 21 | Questions | 62 | 0.19 | 46 | New | 48 | 0.15 | 21 | Present | 70 | 0.17 | 46 | Children | 53 | 0.13 |
| 22 | Words | 62 | 0.19 | 47 | Things | 47 | 0.15 | 22 | Workbook | 69 | 0.17 | 47 | Think | 53 | 0.13 |
| 23 | Last | 61 | 0.19 | 48 | Write | 47 | 0.15 | 23 | Correct | 68 | 0.17 | 48 | Future | 52 | 0.13 |
| 24 | School | 61 | 0.19 | 49 | Want | 45 | 0.14 | 24 | Things | 68 | 0.17 | 49 | Know | 51 | 0.13 |
| 25 | Below | 60 | 0.19 | 50 | Get | 43 | 0.13 | 25 | Verb | 68 | 0.17 | 50 | Expressions | 50 | 0.12 |

Table 4. Secondary Education textbooks' 50 most frequent content words
Again, a similar word distribution to the one found in Primary textbooks is observed as the top fifty content word for Changes for ESO contains 20 nouns, 20 verbs, 4 adjectives, and 6 adverbs, and the list for New Burlington comprises 22 nouns, 18 verbs, 3 adjectives, and 6 adverbs. A chi-square test, with frequencies for adjectives and adverbs combined, gives a value of 0.24 , with a probability of 0.886 of getting this result merely by sampling variation, so the difference in distribution is non-significant.

Regarding shared and non-shared vocabulary, Table 4 illustrates that 25 of the top fifty are shared by the two textbooks. Out of this figure 6 are nouns, 12 are verbs, 3 adjectives, and 4 adverbs. The distribution of shared vocabulary according to word classes is displayed in Figure 4. We note that many of the common words are ones that refer to activities which the students are required to do in the classroom such as read, write, listen or complete, others have to do with metalanguage such past and present:

| Nouns | people, sentences, time, words, partner, things |
| :--- | :--- |
| Verbs | go, use, said, read, complete, listen, make, see, talk, think, look, write |
| Adjectives | past, correct, present, |
| Adverbs | there, below, very, then |

Figure 4. Shared vocabulary in Secondary Education textbooks

As occurred in Primary Education textbooks, there is a considerable number of words exclusive to each textbook. Figure 5 displays them classified into nouns, verbs, adjectives, and adverbs:

|  | Nouns | Verbs | Adjectives | Adverbs |
| :--- | :--- | :--- | :--- | :--- |
| Changes <br> for <br> ESO | Grammar, Dave, Laura, Skills, Year, Day, <br> Questions, School, Answer, Unit, Film, <br> House, London | Speaking, Work, Talk, <br> Look, Buy, Asked, <br> Play, Want, Get | Good, <br> Great, New | Now, <br> Last, Very |
| New <br> Burlington | Page, Paragraph, Form, Workbook, Practice, <br> Verb, Subject, Answers, World, Sea, <br> Language, Friends, Children, Future, <br> Expressions | Find, Help, Learn, <br> Writing, Know | English, <br> Loud | Again, Up |

Figure 5. Non-shared content words in Secondary Education Textbooks

## 5. Discussion

The study of the number of words contained in EFL textbooks and their frequency of occurrence can shed light on the vocabulary input learners are exposed to at different educational levels. Above all, it provides teachers and researchers with valuable information regarding the degree of agreement or disagreement on the number and kind of words contained in textbooks. As the present study has revealed, the textbooks analysed show important discrepancies concerning the number of words, their occurrence, and the word types that make up the specific vocabulary load of each textbook. Regarding the number of words, the results clearly point to the existence of differences among textbooks within the same educational level: in Primary Education the differences are of 38 types and 1,127 tokens, whereas in Secondary Education the differences increase sharply to 526 types and 8,198 tokens.

Such differences may have consequences for students since depending on the textbook they follow, they will be provided with different amount of vocabulary input. In practice, this involves more or fewer opportunities for vocabulary exposure. Several scholars have claimed that the number of words known by learners is one of the most important factors in predicting lexical competence in a foreign language, particularly in the first stages of L2 learning (Nation 1990; Meara 1996; Laufer 1998; Read 1988). We may doubt whether 38 types more in a textbook will cause students to emerge with richer
vocabularies at the end of Primary Education; however, we believe that 526 types and 8,998 tokens more is not a trivial thing. In the light of the findings of previous research we may venture that this difference of types and tokens may cause great disparities in students' vocabulary sizes at the end of secondary education. In a textbook, 526 types more involve a wider exposure to the language. If as, it is the case, the greater amount of types is accompanied by an increase of 8,998 tokens, there may be higher possibilities for some learners to become fully familiarized with the vocabulary presented. Clearly, they would be provided with a greater number of exposures to the same word.

The issue of how many encounters are needed to learn a word has been addressed by different scholars, although so far there is no agreement in this respect. Brown (1993) maintains that there is no correlation between the number of occurrences and word learning and that the type of text where the word is encountered may have a greater influence than the number of exposures. However, in both L1 and L2 vocabulary research, scholars have acknowledged the importance of encounters for word learning although they have disagreed on the exact number. As far as L1 is concerned, Nagy and Herman (1987) maintain that one encounter may be enough, but Jenkins and Dixon (1983) postulate between six and twelve encounters in order to learn an unfamiliar word. The same disparity of criteria is found concerning L2 vocabulary, since researchers advocate different numbers of encounters to learn the unfamiliar word: five (Bunker 1988), seven (Krachroo 1962), and nine encounters (Reyes 1999). Although there is no total agreement on the number of occurrences needed to learn a word, it seems as the greater number, the higher the possibilities of learning the word. Rott (1999) found that only two encounters with unfamiliar words had a significant effect on learners' vocabulary growth, but six exposures produced significantly more vocabulary growth. There is also evidence of the effect of word repetition and difficulty in text comprehension. In this respect, Bunker (1988) found a strong correlation between the percentage of words repeated and reading difficulty in L2, showing that those texts that repeated about 33 percent of their words more than five times were easier than those that repeated 20,19 , or 14 percent of their words at least five times. He also found that as the number of percent of words repeated at least five times in a text increased, the difficulty of learning words decreased.

As regards the top fifty words contained in the textbooks of each educational level, our data shows a high similarity concerning the distribution of grammatical and content words, the former being much more frequent than the latter in all textbooks. In Primary Education textbooks grammatical words comprise $60 \%$ of the total number of word tokens. In the case of the Secondary Education textbooks the percentage increases to $86 \%$ in Changes for ESO and to $88 \%$ in New Burlington. At first sight this percentage might be interpreted as a tendency on the part of textbook designers to focus on grammar relations rather than on communicative meaning; nevertheless, care should be taken with this interpretation as, in fact, such distribution echoes what occurs in English language and other languages where grammatical words are more frequent than content words. A quick look at the list of the ten most frequent words in English provided by the

COBUILD corpus word frequency list (the, of, and, to, $a$, in, that, $I$, it, was) and the comparison of this list to the word frequency lists shown above (Tables 1-4) will enable us to interpret the data more accurately: textbook designers agree in the selection of the top fifty words included in textbooks of both Primary and Secondary Education.

Concerning the characteristics of the fifty most frequent content words provided in textbooks we can claim several things. In the first place, they belong basically to two word classes: verbs and nouns, verbs being the most frequent and adjectives and adverbs the least frequent. This may explain some findings reported in the literature on nouns being acquired earlier than other word classes (Rodgers 1969; Ellis and Beaton 1993; Reyes 1999). It can also explain Spanish primary school students' propensity to produce a considerable higher number of nouns and verbs than adjectives and adverbs in English compositions (Jiménez Catalán and Ojeda Alba (forthcoming)). However, the present study cannot explain why nouns are overused by EFL learners in composition tasks, bearing in mind that in their textbooks, verbs are more frequent than nouns. It seems as if other factors different from frequency of word occurrence may be playing a role. Secondly, the top fifty content words in the textbooks analysed are short rather than long words. Research on memory provides evidence on the effect of repetition in learning as well as on the greater easiness of acquisition of short words compared to longer words (see Jiménez Catalán 1998 for a review). The findings in memory research are not corroborated by L2 vocabulary research. Singleton (1999) cites the studies conducted by Laufer (1991, 1993-94, 1997) who did not find conclusive results concerning word length and language learning.

As to whether textbooks of the same educational stage contain similar vocabulary input, our results do not corroborate similarity but indicate the existence of great differences. In Primary Education textbooks, $62 \%$ of the words are shared by both textbooks. To this should be added the existence of disparities concerning the frequency ranking of certain types in the two lists. Secondary Education textbooks present a different panorama, probably derived from the fact of belonging to the same publishing house. The common types represent $68 \%$ and there are small but significant differences as regards the difference in the position of the frequency rank. In the light of the findings obtained we can claim that at least as far as the top fifty content words is concerned, Primary Education textbooks differ more than Secondary textbooks. The fact that textbooks of the same educational level do not share the same vocabulary input may have educational consequences for language learners, as depending on the textbook adopted, students will be exposed to different vocabulary, and as a result, their lexicons may vary and their potential for communicating in the language may vary too. This situation is by no means satisfactory when dealing with textbooks officially approved by educational authorities. Our findings corroborate the lack of systematic criteria in vocabulary selection pointed out by previous research, in particular by the studies conducted by Takala (1984), Scholfield (1991), Kaszubsky (1998), and Benitez Pérez and Zebrowski (1993). This lack of systematic criteria is observed in the four textbooks analysed: whereas in Primary Education textbooks we find a slightly higher percentage

## VOCABULARY INPUT IN EFL TEXTBOOKS

of non-shared vocabulary than in Secondary Education textbooks, in the latter there is a great difference concerning the number of types and tokens contained in each textbook at this educational level.

Finally, we observe that, at least from a quantitative point of view, textbooks from different educational stages contain different vocabulary input. Word types and word tokens in textbooks of Secondary Education outnumber considerably the word types and word tokens contained in Primary Education textbooks. There is an increase of approximately 2,000 types from $6^{\text {th }}$ year of Primary Education to $4^{4 \mathrm{~h}}$ year of Secondary Education, depending on the combination of textbooks chosen. This means a rate of 500 unfamiliar word types throughout each grade of secondary education which would increase to 2,000 word types at the end of secondary education. Although at first sight this figure might be seem as reasonable, consideration of the fact that words were not lemmatised in the present study makes us think that that figure may indeed fall short of the true situation. The top lists for each textbook contain different word-forms of the same lexeme, which reduces considerably the number of totally unfamiliar words. Nation (1990) and Laufer (1992) place 3,000 word families as the lexical threshold of reading comprehension. If we consider that the total number of word types in Primary Education textbooks (between 1,291 and 1,268 ) and the total number of word types in Secondary Education textbooks (between 3,238 and 3,764 types) include word-forms of the same word type, we realize that an increase of 2,000 types is not much after four years of extensive study of English at Secondary Education. With such an increase 4 $4^{\text {th }}$ secondary school students would be far from a full understanding of general texts.

## 6. Conclusion

In the present study we have carried out a quantitative analysis on the vocabulary input in four textbooks from two educational levels. Although our sample is small, results are relevant as they point to lack of a common systematic approach to the selection of vocabulary contained in EFL textbooks. As far as the sample analysed is concerned, and in relation to the number of words learners are exposed to by means of textbooks and to the frequency of word occurrence, publishing houses do not show total agreement. Depending on the textbook assigned, students may be exposed to different numbers of words and to different types of vocabulary input. Even if these factors were constant, the different positions of words in the word frequency lists of the textbooks may lead to language learning differences. High positions of a word in the frequency rank imply a greater number of repetitions in the textbook, which in turn implies a greater number of exposures to the word.

Pedagogical and practical implications of our study can be drawn considering four different audiences: educational authorities, language textbook designers, teachers, and researchers. As far as educational authorities are concerned, our study has demonstrated the lack of systematic criteria in English L2 textbooks regarding the number of words
and the type of vocabulary contained in them. To some extent this may be due to the absence of explicit criteria with regard to the number and the type of words to be taught in each grade as well as the total number and the kind of word types to be acquired by the end of educational stage. According to the Spanish Ministry of Education, every pupil in Spain should be provided with a common training in foreign languages. However, in the documents put forward by Spanish educational authorities such as Diseño Curricular Base (DCB), or Ley de Educación 2003, Ley de Educación 2007 there is no explicit mention of the specific words that a learner should know at the end or Primary Education or at the end of Secondary Education. It is not surprising, then, that language textbooks of same educational stages contain neither the same number of words nor a high proportion of shared words. Ideally, this should make authorities reflect on the need to establish more concrete parameters as regards the vocabulary input available to students throughout textbooks. These parameters should be aimed, on the one hand, at specifying the kind of vocabulary that students should assimilate by the end of each school year, or, at least, by the end of each educational stage (i.e. Primary Education, Secondary Education. and Bachillerato), and on the other hand, at specifying the size of receptive and productive vocabulary that students should get at the end of each educational level.

Concerning language textbook designers, our study has provided an analysis of four textbooks, which, hopefully, should make teaching material designers reflect on the need to follow common objectives. Textbooks for the same educational grade should contain the same number of words, the same type of vocabulary input and similar criteria in vocabulary selection.

Regarding English L2 teachers, the results of this study have shed some light on the nature of the input that textbooks present. It is important to be aware of the fact that, at least regarding vocabulary, textbooks provide students with different kinds of input, and that this difference may have an effect on language learning. It seems necessary for teachers to find out what criteria was used in vocabulary selection, and what type of vocabulary input is included in their textbooks as well as the number of occurrences of the words contained in the textbook.

From a research perspective, we hope to have contributed to the field of second language acquisition and teaching with a description of the type of vocabulary contained in some current English language textbooks as representative of an important educational genre. Our study has provided evidence of the vocabulary input contained in a small sample of books and has given empirical evidence of the lack of common criteria regarding the number of words and the top fifty words contained in the textbooks analysed. However, further analyses of other EFL textbooks are needed in order to arrive at definite conclusions.

Finally, word frequency is an important dimension in EFL textbooks but by no means the only one. There are other aspects related to vocabulary input and lexical competence that require investigation such as the influence of the number of word encounters in word learning, or the effect of word length and word class in the acquisition of vocabulary. Other
aspects that need further investigation are the relationship between the vocabulary input provided by textbooks and learners' vocabulary output in each grade. In this regard, it is essential to control certain variables that may be having an effect on this relationship, such as teachers' treatment of the vocabulary contained in the textbook, or learners' strategies to retain and learn the unfamiliar words.

## Acknowledgements

* Correspondence to: Rosa M ${ }^{\text {a }}$ Jiménez Catalán, Universidad de La Rioja, Dpto. Filologías Modernas, c/ San José de Calasanz, s/n, 26004, Logroño (La Rioja), Spain. E-mail: rosa.jimenez@unirioja.es.

1. The present study is part of the research project El desarrollo de la competencia léxica en la adquisición del ingles como lengua extranjera carried out under the auspices of MEC and FEDER, Grant n ${ }^{\circ}$ HUM2006-09775-C02-02/FILO.
2. We would like to thank Professor Butler for his insightful comments and his assistance in the statistical analysis on the data. Any remaining errors are solely our responsibility.

## References

Asher. R.E. 1994. The Encyclopedia of Language and Linguistics. Exeter: Pergammon Press.
Beheydt, L. 1987. "The Semantization of Vocabulary in Foreign Language Learning". System 15 (1): 55-67.
Benitez, P. and Zebrowski, J. 1993. "El léxico español en los manuales polacos". Actas del tercer congreso nacional de ASELE. El español como lengua extranjera: de la teoría al aula. 223-230.
Blum-Kulka, S. 1981. "Learning to use words: acquiring semantic competence in a second language". Hebrew Teaching and Applied Linguistics. Ed. M. Nahir. New York: University Press of America. 243-51.
Brown, C. 1993. "Factors affecting the acquisition of vocabulary: Frequency and saliency of words". Second Language Reading and Vocabulary Learning. Eds. T. Hockin, M. Haynes, and J. Coady. Norwood, N.J.: Ablex. 263-286.
Bunker, E.L. 1988. Towards comprehensive guidelines for the preparation of material in English for EFL adults with limited education. M.A. Thesis, Linguistics Department, Brigham Young University. Provo, Utah.
Carter, R. 1998. Vocabulary. Applied Linguistic Perspectives. London: Routledge.
Cobuild Students's Dictionary and Grammar. 1994. London: HarperCollins Publishers LTD.
Day, S., M. Gant, and M.J. Páramo. 2002. Changes for ESO. Limassol: Burlington Books.
Ellis, N. C. y Beaton, A. "Psycholinguistic determinants of foreign language vocabulary learning". Language Learning 43: 559-617.
Field, P., J. Last, P. Muñoz, and M.J. Páramo. 2002. New Burlington Top Class for ESO. London: Burlington Books.
Flowerdew, J. 1996. "Concordancing as a tool in course design". System 21 (2): 231-244.

Gavioli. L. 1997. "Exploring texts through the concordancer: guiding the learner". Teaching and Language. Eds. A. Wichmann, S. Fligerlstone, T. McEnery, and G. Knowles. 83-99.
Gerngross, G. and H. Puchta. 2001. Join In 4. Cambridge: Cambridge University Press.
Harmer, J. 1991. The Practice of English Language Teaching. London: Longman.
Jenkins, J. and R. Dixon. 1983. "Vocabulary learning". Contemporary Educational Psychology 8: 237-260.
Jiménez Catalán, R. and J. Ojeda Alba. (in press). "The English vocabulary of girls and boys: evidence from a quantitative study". Theoretical and Methodological Approaches to Gender and Language Study. Eds. L. Litosseliti, H. Sauton, K. Harrington, and J. Sunderland. London: Palgrave Macmillan.
Jiménez Catalán, R. 2002. "El concepto de competencia léxica en los estudios de aprendizaje y enseñanza de segundas lenguas". ATLANTIS XXIV: 149-162.
Jiménez Catalán, R. 1997-1998. La memoria y el aprendizaje del inglés en el aula. CAUCE Revista de Filología y su Didáctica 20-21 (II): 797-811.
Johns, T. 1991. "Should you be persuaded- two samples of data-driven learning materials". ELR Journal 4: 1-13.
Kachroo, J.N. 1962. "Report on an investigation into the teaching of vocabulary in the first year of English". Bulletin of the Central Institute of English 2: 67-72.
Laufer, B. 1991. "Knowing a word: What is so difficult about it?" English Teachers' Journal 42: 82-88.
Laufer, B. 1997. Beyond (2000). A measure of productive lexicon in a second language. The Current State of Interlanguage. Eds. L. Eubank, L. Selinker, and M. Sharwood Smith. Amsterdam: John Benjamins. 265-272.
Laufer, B. 1998. "The development of passive and active vocabulary: same or different?" Applied Linguistics 19 (2): 251-271.
Leech, G. 1998. "Learner Corpora: what they are and what can be done with them", preface to Granger, S. Learner English on Computer. London: Longman. Preface xiv-xx.
Ljung, M. 1991. "Swedish TEFL meets reality." Computer Corpora: Selected Papers and Research Guide. Eds. S. Johansson and A.B. Stenström. Berlin: Mouton de Gruyter. 245-256.
Lobo, M.J. and P. Subirá. 2000. Super Bus 4. Oxford: MacMillan Heinemann.
Mancebo, R. 2005. "¿Hasta qué punto los libros de texto de primaria se adecuan a las directrices de enseñanza de vocabulario del marco común?". Paper presented in the commemoration of the European Day of Languages. University of Valladolid.
Martínez, B. 1999. The influence of language learning theories on the design of vocabulary activities in L2 (English) course books. University of La Rioja: Departamento de Filologías Modernas: Small thesis. Unpublished Manuscript.
Meara, P. 1996. "The Classical Research in L2 Vocabulary Acquisition. Words, Words, Words. The Translator and the Language Learner. Eds. G. Anderman and M. Rogers. Clevedon: Multilingual Matters. LTD. 28-37.
Miranda, A. 1990. "The vocabulary of the English Coursebooks: An Analysis". Revista Española de Lingüística Aplicada 6: 11-117.

Nagy and Herman. 1987. "Breadth and depth of vocabulary knowledge: Implications for acquisition and instruction. The Nature of Vocabulary Acquisition. Eds. M. McKeown and M. Curtis. Hilsdale, N.J.: Lawrence Arbaum Associates. 19-36.
Nation, P. and K. Wang. 1999. "Graded readers and vocabulary". Reading in Foreign Language 12 (2): 355-380.
Nation, P. 1990. Teaching and Learning Vocabulary. Massachussetts: Newbury House.
Ojeda, J. 2006. "Vocabulary of Success in EFL Text Books". Actas VIII Congreso de la Sociedad Española de la Lengua y la Literatura. Universidad de la Habana, Cuba. 974-983.
Read, J. 1998. "Measuring the vocabulary knowledge of second language learners". RELC Journal 19: 12-25.
Read, J. 2000. Assessing Vocabulary. Cambridge: Cambridge University Press.
Reyes, M.J. 1999. "Descripción de la incorporación del léxico nuevo por los alumnos de primero de BUP". REALE 12: 85-92.
Richards, J. and R. Schmidt. 2002. Longman Dictionary of Language Teaching and Applied Linguistics. Malaysia: Pearson Education Limited.
Richards, J. 1976. "The Role of Vocabulary Teaching". TESOL Quarterly 10 (1): 77-89.
Rodgers, T.S. 1969. "On measuring vocabulary difficulty: an analysis of item variables in learning Russian-English vocabulary pairs". International Review of Applied Linguistics 7: 327-43.
Rott, S. 1999. "The Effect of Exposure Frequency on Intermediate Language Learners' Incidental Vocabulary Acquisition and Retention through Reading". Studies in Second Language Acquisition 21 (4): 589-619.
Scholfield, P. 1991. Vocabulary rate in course books: living with an unstable lexical economy. Thessaloniki: Aristotle University.
Scott, M. 1998. WordSmith Tools. Oxford: Oxford University Press.
Sinclair, J.M. and A. Renouf. 1988. "A lexical syllabus for language learning". Vocabulary and Language Teaching. Eds. R. Carter and M. McCarthy. Longman: London.
Stevens, V. 1991. "Classroom concordancing: vocabulary materials derived from relevant authentic text." English for Specific Purposes 10: 35-46.
Sutarsyah, C., P. Nation, P., and G. Kennedy. 1994. "How useful is EAP vocabulary for ESP? A corpus based case study." RELC Journal 25 (2): 34-50.
Takala, S. 1984. Evaluation of Students' Knowledge of English Vocabulary in the Finnish Comprehensive School. Reports of the Institute of Educational Research, 350. Jyväkylä: Finland.

Thornbury, S. 2002. How to Teach Vocabulary. Harlow: Longman.
Tribble, C. 1990. "Concordancing and an EAP writing programme." CAELL Journal 1 (2): 10-15.

Wallace, M. 1982. Teaching Vocabulary. London: Heinemann.
Willis, J. and D. Willis. 1988. Collins COBUILD Coursebook Student's Book 1. London: Collins ELT.

