



## **An Assessment of the Vocabulary Knowledge of Students in the Final Year of Secondary Education. Is Their Vocabulary Extensive Enough?<sup>1</sup>**

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### **ABSTRACT**

Several research studies have proven a direct relationship between the amount of words known by a foreign language student and his/her language proficiency. Therefore, knowing the amount of words that our students are acquainted with would help teachers to predict their general ability in the foreign language. The aim of this study is to determine the vocabulary size of a group final year students in a High School in Murcia. The instrument used to measure students' vocabulary size was Nation's Vocabulary Levels Test. This test has been validated on successive occasions. A total number of 49 students sat the exam in the case of the first test containing the 1000 and 2000 levels; and 38 sat the second test. The results obtained were poorer than expected.

**KEYWORDS:** Vocabulary size, vocabulary teaching, reading comprehension.

### **RESUMEN**

Numerosas investigaciones han probado la existencia de una relación directa entre la cantidad de palabras que conoce el estudiante de idiomas y su fluidez en los mismos. Es por esto que conocer la cantidad de palabras que nuestros estudiantes conocen en la lengua que están estudiando nos ayudaría a poder predecir sus habilidades generales en el idioma. El objetivo de este estudio es determinar la cantidad de vocabulario que conocen un grupo de estudiantes de último año de bachillerato en un instituto de Murcia. El instrumento usado para medir el vocabulario que los estudiantes conocen es el examen de niveles desarrollado por Nation. Este test ha sido validado en varias ocasiones. Un total de 49 estudiantes hicieron el examen de los niveles 1000 y 2000 y 38 hicieron el segundo examen. Los resultados obtenidos están por debajo de lo que se esperaba.

**PALABRAS CLAVES:** vocabulario, enseñanza de vocabulario, comprensión lectora.

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## **I. CONTEXTUALIZATION**

Despite the fact that Spanish students spend at least eight years of their lives studying English as a compulsory subject within the Spanish school system, there is a striking difference between native speakers and non-native speakers in terms of the amount of lexis they have acquired during this period. Most students will never realise that their skills in the foreign language are too poor to perform well in most communicative contexts. Only those who devote their lives to the study of the language or those who use English as a necessary tool in their working environment will become aware of the fact that despite so many years of study the knowledge acquired is not sufficient to enable them to function as efficient language users. The Spanish education system and the royal decrees that regulate education at this level establish certain objectives that students have to reach by the end of Bachillerato (the final two years of Secondary Education in Spain). These objectives include the critical understanding and interpretation of oral texts, written texts and visuals used in common communicative situations and by the mass media. Students are also supposed to read different texts in the foreign language as a source of information, knowledge or enjoyment and leisure both comprehensively and at the same time in an autonomous way. Even the university authorities who prepare the university entrance exam assume that most students should have reached a level at which they are able to use the language autonomously at this point of their academic experience. This means that teachers and textbooks should provide students with the necessary tools to reach the objectives planned. However, it seems that most students do not reach such standards and that there is no general concern about the nature of either the input provided within classrooms or the level actually achieved by students. Many different reasons may account for this situation and vocabulary deficiency could be one of them.

### **I.1. Aims**

The aim of this research project is to assess the receptive vocabulary of Bachillerato 2nd Form students at the end of the academic year and to study the nature of the vocabulary included in a textbook designed to be used in Bachillerato 2<sup>nd</sup> Form, so as to determine whether there is or is not a correlation between the vocabulary they know and that which they are supposed to know.

### **I.2. The role of Vocabulary in Foreign Language Learning**

There are many studies that reinforce the key role of vocabulary size on reading and writing skills, especially on native speakers. Laufer (1998: 256) in an analysis of the vocabulary of Israeli students, established that a good vocabulary size was important for reading comprehension and for fluency in speech. Goulden et al. (1990: 342) claimed that “measures of vocabulary size -particularly the size of academic vocabulary- are important indicators of the ability of second language learners to achieve academic success”. Anderson and

Freebody (1981), cited in Read (2000: 76), found out that there was a high correlation between a good performance in a vocabulary test and reading comprehension.

On reflection, even if we knew all the grammatical rules of English we would never be able to use them without a knowledge of words. Vocabulary is the basic tool for shaping and transmitting meaning. A learner may learn that the first person pronoun in English is 'I', but if he does not know the denotation of this function word, he will never be capable of using it in real language usage. On the contrary, a learner who wants to buy something in a shop will probably be able to do it even if he only knows some words, such as *bread*, even if he is unable to build a sentence or even if he ignores the pragmatical issues that are involved in a commercial exchange. The reason why we teach English is to provide our students with the resources to understand and transmit ideas in another language. Thus, vocabulary should keep a central role in language learning. The fact that vocabulary keeps a central role in the learning of a foreign language makes it necessary to select meticulously the words that are to be taught and included in the input that our students are going to be exposed to. It needs to be taken into account that unlike native speakers, foreign language learners only have a limited exposure to the language and this language should include the most frequent forms. Studying the most frequent words allows our students to have more possibilities to use the vocabulary they have learnt in real life situations and gives them higher text coverage. We can find the figures explaining this idea in Nation and Waring (1977) cited in Schmitt and McCarthy (1997: 9) as shown in the following table.

<b>Vocabulary Size</b>	<b>Text Coverage</b>
15851	97.8%
6,000	89.9%
5,000	88.7%
4,000	86.8%
<b>3,000</b>	<b>84.0%</b>
2,000	79.7%
1,000	72.0%

Table 1

Frequency and corpus-based studies have reinforced the idea that there are certain words that are more useful than others. Nation (2002: 11-12) offers a categorisation of words based on frequency and communicative dimension that distinguishes between high-frequency, academic, technical and low-frequency words. The main purpose of Bachillerato

is to provide students with a general knowledge of the language and thus allow them to communicate and understand language in real life situations. Therefore, it makes sense that high-frequency words should be preferred while more specialised ones can be considered at a later stage, leaving specialisation for those who need it at university level. The problem is to determine exactly how many of these high-frequency words a learner needs to know. Laufer (1998) expected Israeli high school students to have learned between 3,500 and 4,000 word families, while a native speaker of the same age was supposed to know between 18,000 and 20,000 word families. In the same study a threshold level for minimal comprehension was established at 3,000 word families and a level of 5,000 word families was needed to be capable of reading for pleasure. Therefore, teachers in Spain should expect their students to reach at least the 3,000 threshold level.

### **I.3. Assessing Vocabulary**

Testing vocabulary is not very different to testing other areas of language knowledge. However, the construct of vocabulary is not a simple one and this complexity makes it necessary to assess vocabulary from multifarious perspectives. When we refer to vocabulary assessment we may mean different things. The assessment that teachers carry on in classes (to test whether students have learnt the words included in a particular unit) needs to be distinguished from the type of assessment that is done in an academic inquiry. Within the second type there are many diverse branches of vocabulary research. A very significant one was set within the context of native speakers and from that, other researchers started to wonder about the type of vocabulary used in foreign language contexts. Within the latter branch many studies have been related to the skill of reading. Their major concern was the effect of the type of vocabulary included in texts on learners' comprehension ability. There has also been a vast amount of research studies devoted to different techniques used for vocabulary learning, such as rote learning or the keyword method. The main objective of research studies such as the ones by Atkinson (1975), M.J. Lawson and D. Hogben (1998), Nuria Segarra and Mathew Alba (2006) has been to discover the most effective way to present vocabulary to students. The research project presented here belongs to a very different branch of research. We are not concerned about how students learn words but on which words they know at a very particular stage and which words are included in the input they are exposed to. Therefore, our research analyses the vocabulary students know at a particular moment in their learning path. One of the most important issues to bear in mind when assessing vocabulary is the goal of our test. The definition of the construct will determine the type of test which should be used. Laufer et al. (2004: 203) state "tests of lexical knowledge often focus on one sub-knowledge for example, comprehension of meaning, production of meaning, vocabulary use or word associations". In this particular project we shall be measuring "breadth of knowledge, namely the number of words for which a person knows at least some of the significant aspects of meaning" as defined by Anderson

and Freebody (1981) cited in Read (2000: 81). A very popular way of measuring vocabulary size is Nation's Vocabulary Levels Test. This test presents decontextualized words and expects students to match them with one of a similar meaning. Words are arranged into different frequency levels and distractors have been included. According to Read (2000:120) the assumption behind this test is that "words that occur more frequently in the language are more likely to be known by learners than less frequent words". Schmitt (1993) developed new improved versions of the original test and this test may now deserve international recognition as a means of measuring the breath of vocabulary knowledge.

## **II. OTHER RESEARCH STUDIES ON THE ISSUE**

There are many studies that were basically concerned with determining the words that native speakers know. These research studies were the basis for the development of others in a foreign language context. According to Read (2000: 74) "a great deal of the research has been done by experts on reading". He states that there is a well documented connection between good vocabulary knowledge and the ability to read. Anderson and Freebody (1981:78-80) cited in Read (2000:74) claimed that one of the most important findings in L1 reading was the correlation that existed between tests of vocabulary and reading comprehension. Years of research on native speakers' vocabulary and the development of many tests based on dictionary word lists facilitated the work of those carrying out research in a foreign language context. One of the most important researchers in this area of study is Nation. He has considerable experience in the assessment of vocabulary size, both in its receptive and productive dimensions. Since this study is concerned with receptive vocabulary, we will considerably rely on his work. There is not much agreement as far as figures are concerned. This lack of consensus is caused by differences in the understanding of what a word is as a construct. In fact this is one of the most complex, and at the same time most important elements to be taken into account when assessing vocabulary size. Nation developed the so called Vocabulary Levels Test, a tool that allows researchers to establish if learners know the form and meaning of the most frequent words. This test has been validated by many other researchers. Read (2000) in his book 'Assessing Vocabulary' also makes an exhaustive analysis and description of the theoretical and practical points which must be taken into account.

One way of interpreting research done in this area of study is to divide it into two main groups. On the one hand we find scholars that are mainly concerned with the development and validation of tools to measure vocabulary size. On the other, we find those who use the developed tools to measure the vocabulary of particular groups of students. We must start by commenting on those concerned with the creation and validation of different tests. Schmitt et al. (2001) used a range of analysing techniques to validate two new versions of the Vocabulary Levels Test, which has been widely used as a diagnostic test in its original form. They arrived at the following three conclusions: (1) that native speakers performed

well in these new versions; (2) that individual items worked well; and (3) that the test supplies highly scalable vocabulary. Furthermore, their factor analysis proved that the test is unidimensional and their personal interviews indicated that the test reflects testees' lexical knowledge. Goulden et al. (1990) also discuss all the aspects that researchers need to take into account when developing tools to measure receptive vocabulary. They are basically concerned with native speakers, but their conclusions can be applied to a second language context. In this article they reach the following conclusions: (1) "there are less than 58.000 base words to draw on for a vocabulary test"; (2) "the average native educated native speaker has a vocabulary of around 17.000 base words"; and (3) "if native speakers do in fact acquire vocabulary at this relatively slow rate, it would seem that for second language learners direct teaching and learning of vocabulary is a feasible proposition". Nation and Waring (1977) also deal with the theoretical foundations needed to do research on the area answering questions such as how many words there are in English? or how many words does a language user need to do basic things in the foreign language? Another interesting piece of work to be mentioned here is the one developed by J. Charles Anderson (2007) in which the researcher studies the frequency of the words included in the Vocabulary Size Placement Test developed by Meara and Buxton (1987/1988). This is a yes/no vocabulary test and test takers are supposed to distinguish real words from pseudo ones. In order to investigate the frequency of the words included in the original test, some educated native speakers were given the task of making a judgement on the frequency they thought that each word belonged to. The results proved that there was a limited correlation between the frequencies obtained by corpus studies and those proposed by the judges using different methods of analysis. Based on the results the authors concluded that "tests that aim to estimate vocabulary size on the basis of word frequency data are unlikely to be enhanced by incorporating subjective judgements of word frequency". This corroborated once more the leading role of corpus linguistics in the study and development of vocabulary tests.

We mentioned previously that there were a group of researchers that applied different tests to measure the vocabulary size of varied groups of students. Pérez (2005) used Schmitt et al. version 1 of the Vocabulary Levels Test to measure the vocabulary size of students of 5<sup>th</sup> year English Philology at the University of Granada. She found out that her students were not "completely at ease at the 5.000-word level and scored poorly at the 10.000-word level". Therefore, it is necessary to adopt effective remedial measures to extend students' vocabularies. She also proves the influence of cognates on receptive vocabulary in the academic level. Hazenberg and Hulstijn (1996) carried out a similar measure of vocabulary on students with a native language other than Dutch, so as to see how many words of the Dutch language they needed to know to be able to perform well during the 1<sup>st</sup> university year. Their findings pointed towards a required knowledge of ten thousand base words for those entering university. They also argue that selecting words to be learned must be done by taking into account both frequency counts and students' needs. Cameron

(2002) presented another measurement of vocabulary but this time it was carried out in a context of English as an additional language. Therefore, the testees were students living in England whose mother tongue was not English. In the author's words "the most important outcome of this study is the finding that the receptive vocabulary of EAL students who have been educated through English for 10 years has gaps in the most frequent words and serious problems at the 5K level". This is something we should take into account when establishing the levels to be reached for students of English as a foreign language, as their contact with the language is less extensive. Laufer and Nation (2001) developed a measure of vocabulary size related also to speed of recognition. The aim of the study was to know how vocabulary size is related to speed of meaning recognition. They found out that they were "moderately correlated, except for the less frequent vocabulary". They conclude that "increase in automaticity lags behind increase in size". They also found out that students respond more slowly to those words that are infrequent and that native and non-native speakers showed different patterns of response. The last study, developed by Batia Laufer, included a measure of vocabulary size that we would like to mention here. In her article 'The Development of Passive and Active Vocabulary in a Second Language: Same or Different?' she not only measured passive vocabulary size but also the size of active vocabulary. The sample includes graduates of Israeli high schools. The tool used to measure passive vocabulary size is once more Nation's Levels Test and it showed that students' vocabulary increased by 1600 word families in one year of school instruction in a school where students study English 5 hours a week. She concluded that "a large number of words can indeed be learnt even when the learning context is not natural". Active vocabulary did not evolve so much in comparison to passive vocabulary.

### **III. RATIONALE BEHIND**

#### **III.1. What Do we Understand by Vocabulary?**

It is not the main goal of this research project to offer a complete definition of what vocabulary is. Nevertheless the theoretical foundations behind this research study must be mentioned to foster understanding. Thus, in this particular section we shall explain how the concept of vocabulary has been understood for the elaboration of this research and the concrete aspects of this construct that have been taken into account and measured.

The vocabulary construct is most often understood as being made up of several subknowledges or abilities. This perspective on vocabulary learning helps the researcher to focus on particular aspects in order to measure and test each one of them. The most widely spread distinction is that of receptive and productive vocabulary; both concepts are very often used with those of passive and active vocabulary. Receptive vocabulary is defined in Nation (2001:24) as carrying "the idea that we receive language input from others through listening or reading and try to comprehend it". In other words, receptive vocabulary would involve reading or listening to a word and retrieving its meaning. On the contrary,

productive vocabulary conveys the idea of a learner wanting to express something through speaking or writing, retrieving the word and producing its appropriate spoken or written form. The fact that this distinction is a widely accepted one does not mean that it is free from controversy. In fact there are many researchers that argue that this distinction should not be understood as one with clear boundaries, as their definition may suggest, but as a continuum within the students interlanguage. Meara (1990) cited in Nation (2001:25) prefers to refer to these two concepts as passive and active vocabulary and as “being the result of different types of associations between words.” Following this view, active vocabulary may be activated by other words as it has many different connections with other words while passive vocabulary can only be activated by external stimuli, namely by hearing or seeing their forms. This associationist view of vocabulary has been criticised because vocabulary knowledge is not always associationally driven but meaning driven. In other words, a foreign language learner may be able to name an object in the L2 when he/she sees it and this does not have to favour associations with other L2 or L1 words. Others, such as Faerch, Haastrup, Phillipson or Palmberg, prefer to interpret this distinction between passive and active vocabulary as being a continuum consisting of several levels of knowledge. Nation (2001) offers a wider vision of the concept and explains that “the terms receptive and productive apply to a variety of kinds of language knowledge and use”; Nation (2001:26). This model of word knowledge will be fully discussed in the section devoted to what it means to know a word. It is worth mentioning that research carried out in the area of passive or receptive vocabulary has proved that this type of vocabulary is larger than an active or productive one. Following Laufer and Goldstein (2004: 408) “this means that many words are first acquired passively and that active knowledge is a more advanced degree of knowledge”.

The object of study of this research project is precisely passive or receptive vocabulary. In fact, no attention is paid to students’ productive skills and the tests administered to students measure what is called sight vocabulary, another label given to passive vocabulary knowledge. It needs to be mentioned that the focus of this project is therefore limited and further research would be needed to precisely establish the whole vocabulary knowledge of the sample. In fact, Laufer and Goldstein (2004:400) mention that the Vocabulary Levels Test has “been criticized for the superficial treatment of each item, which is, testing an item on one component of knowledge only”. Furthermore, these tests focus on the knowledge of a vocabulary item without context, focusing on the so called trait view of vocabulary knowledge. Obviously including the context in the test would give us a better picture of the amount of knowledge of the particular item tested. Despite all these disadvantages and following Laufer and Goldstein (2003:401) “tests of vocabulary size have been shown to predict success in reading, writing and general language proficiency as well as academic achievement, whereas other types of vocabulary tests as yet have not”. The measuring of the students’ ability on the recognition and matching of words with their



definitions will give us an idea about the autonomy that they enjoy when doing reading tasks. The better they perform on the test the better we can predict a good understanding of texts proposed in class and in the university entrance exam.

### III.2. What Does it Mean to Know a Word?

We would like to deal briefly with what it means to know a word, as a number of linguists have approached the issue. Many linguists have tried to categorise and explain what word knowledge implies.

In a fairly simplistic way we could say that knowing a word implies knowing its form, meaning and use (Nation: 2001: 35). This a very practical way of defining what knowing a word means but it is obviously a limited one. Following (Nation 2001:23) “words are not isolated units of language, but fit into many interlocking systems and levels, there are many things to know about any particular word and there are many degrees of knowing”. There are many models that explain and describe the different aspects of word knowledge. A fairly complete model is to be found in Nation (1990:31) cited in Read (2000: 26) as we can see in the following chart.

<b>FORM</b>		
Spoken form	R	What does the word sound like?
	P	How is the word pronounced?
Written form	R	What does the word look like?
	P	How is the word written or <u>spelt</u> ?
<b>POSITION</b>		
Grammatical patterns	R	In what patterns does the word occur?
	P	In what patterns must we use the word?
Collocations	R	What words or types of words can be expected before and after the word?
	P	What words or types of words must we use with this word?
<b>FUNCTION</b>		
Frequency	R	How common is the word?
	P	How often should the word be used?
Appropriateness	R	Where would we expect to meet this word?
	P	Where can this word be used?
<b>MEANING</b>		
Concept	R	What does this word mean?
	P	What word should be used to express this meaning?
Associations	R	What other words does this word make us think of?
	P	What other words could we use instead of this one?

Table 2

This model of vocabulary knowledge has been taken as the basis for the elaboration of this research study. It proposes a wide interpretation of the knowledge that is to be found behind the understanding and use of a word. Nevertheless, it needs to be mentioned that the type of word knowledge that is measured by this experiment is only a small part of the whole pattern. Nation's Vocabulary Levels Test tries to check whether students know or don't know what a word means. Thus, we shall be concerned with receptive vocabulary knowledge of a very specific type. In order to be able to complete the test correctly, students will have to be able to answer the questions: *What does the word look like? and what does this word mean?*

### **III.3. The Vocabulary Levels Test**

Although it has been a recurrent feature of this paper, as yet the Vocabulary Levels Test has not been fully explained. The Vocabulary Levels Tests has been widely used to delimit the vocabulary size of students of very different levels: "an instrument... designed to measure learners' vocabulary size as a trait without reference to any particular context of use" (Read and Chapelle 2001) cited in (Pérez, 2005:551). The basic assumption behind the elaboration of this test is that the performance in the test will be indicative of the general status of the students' skills. This test has been quite successful because it has proved to be a quick, reliable and effective tool for measuring the type and amount of vocabulary that students know. All these advantages should not blind us and make us think that the results obtained give us a complete picture of the learners' vocabulary. In fact, this test accounts for a very marginal aspect of the whole construct of vocabulary. This test is one that measures exclusively receptive vocabulary and not the depth of vocabulary knowledge. In fact, it focuses on the recognition of written words and the association with their meanings. Another assumption that lies in the foundations of this study is that those words which are more frequent in the English language have a smaller learning burden while those which are less frequent are more difficult for students because they are not very often in contact with them.

Once we have analysed the foundations of this test it is necessary to explain its structure. The test consists of 30 words per level to which 3 distractors per question have been included. Words are presented in groups of 6 words that are to be matched to 3 definitions. Students are expected to be able to distinguish which words are the ones to be matched and which ones are the ones to be ignored. After reading many different research studies in which this test has been applied, none of them mentioned the time that students are supposed to be given for the completion of each level. Therefore, we assume that half a minute per word is adequate. As far as the correction of the test is concerned each correct matching is to be given one mark and according to Read (2001:119) a student who scores at least 16 on a particular level is considered to know more or less all the words in that level. This may seem quite a generalization but different validations have been done using this test

both with native and non-native speakers and the results prove their reliability. We mentioned that the original test was developed by Nation but Norbert Schmitt developed two new versions of the original, in which he included new words and carried out a series of validation tests. These new versions are used by Pérez (2005) in her study of university students and they are also used in our investigation at high school level.

#### **IV. METHODOLOGY**

##### **IV.1. Test**

From all the levels available only the 1000, 2000, 3000 and 5000 levels were included in the test that students had to sit. Due to time constraints the test had to be divided in two parts and it was ensured that no classes were received between one and the next test. Besides, the test was administered once the whole textbook had been worked with the class. This provided us with a reliable sample of how students' vocabulary was at the end of this academic period.

Students were allowed 45 minutes to complete the 1000 and 2000 tests and 60 minutes for the 3000 and 5000 tests. It was calculated that half a minute per item was enough to perform the task. However, it is notable that most students finished the tests before this time ended, especially at the 3000 and 5000 levels where their knowledge was scarce. The test for the 1000 level was different to the rest. It tests sight vocabulary but instead of asking students to associate words with their definitions, they are expected to write whether sentences are true or false. In certain sentences drawings are included to aid understanding. This particular test includes 39 sentences in which one word is the key to prove understanding of the whole lexical structure.

On an extra page students were provided with an explanation in their mother tongue of how they had to complete the test and doubts were answered before the test started. Students were asked to write their age, sex and a random number that was assigned to them. Obviously, students were not warned in advance that they were going to be tested.

It needs to be borne in mind that students were not given an initial test because the main objective of this research study was testing their vocabulary size at the end of Bachillerato and not if an increase had taken place after some kind of teaching. It is assumed that English is a compulsory subject and that all students have been in contact with some teaching of the language.

##### **IV.2. Sample**

Students selected for this research study are finishing Bachillerato second form in a high school in Sangonera la Verde, a small town not very far from the city of Murcia (Spain). All students were required to do the exam so as to get a wider picture of the vocabulary size that students have by the end of this educational level. This level was especially interesting because from this moment onwards students are supposed to have reached enough autonomy

in the use of English language for independent communication in the most common situations. However, according to those who teach in secondary schools the reality may be far from what research and experts say.

A total number of 49 students sat the first test containing the 1000 and 2000 levels and 38 sat the second test. The sample consisted of students with a homogeneous background: they came from a similar local area and had received a similar type of education. This makes it a reliable study but at the same time gives it a very limited nature. Further research would be needed if we want to be able to make generalizations about students' vocabulary size in Murcia and in Spain but this sample will tell us at least if further research is to be done.

### **IV.3. Analysis of Test Results**

The first thing to be mentioned is how to establish that a student knows the words in a particular level. The traditional version of the test included 18 items at each level and a score of 16 was supposed to be indicative of the knowledge of that particular level. This meant that the student knew 88.9 % of the words in that category. The version used for this research study includes more words, so a different marking criterion had to be established. The 1000 level test includes 39 sentences and a score of 34 sentences was established as being indicative of having knowledge of the category. The 2000, 3000 and 5000 levels include 30 items and a score of 26 was accepted as indicative of enough word knowledge at that particular level. Students had to take all the tests independently of the score they obtained in each category. In the 1000 level test, apart from scoring those sentences that were answered correctly, students were also required to write a cross when they considered that the meaning of the sentence was unknown to them. This gives us an idea of which sentences students did not feel confident enough to answer.

Results are presented in two different ways. On the one hand, they are analysed taking into account the amount of students that took part in each particular level. On the other, the different scores and means are presented so as to see how near or far students are from the established standard. We should note that most research studies establish a minimum knowledge of 3000 words for being able to read authentic texts, a goal that Bachillerato students are supposed to have reached by this stage. Besides, correlations between each level were made in order to test the validity and correlation between one level and the following one. This will allow us to know if the test is reliable and a good tool for measuring vocabulary size with this type of students. Furthermore, a diagram with the tendency line between tests 1000 and 2000 was created to make it possible for us to predict the results of students.

## V. RESULTS

The analysis of the results of the Vocabulary levels test gave us an idea of the size of students' vocabulary and of possible future changes that could be introduced in the input they are exposed to.

The first thing that needs to be mentioned is related to the amount of students that go through each of the levels. It is notable that students at this level were expected to easily carry out at least the first two levels and that some of them, those with a better level of English, would pass the 3000 level. The 5000 level was included because we wanted to know if any of the students would pass it and to know how they would behave when having to fulfil this task. The results differed a lot from the initial expectations and indicated that the students' had a lack of vocabulary knowledge at this level. Test A containing levels 1 and 2 was sat by 49 students and only three students reached a score of 34, which was established as the minimum for the level. In addition, of those students who passed the K1 level only one passed the K2 level. This means that just one student out of 49 passed both levels and therefore, has a vocabulary size big enough for minimum reading comprehension. The mean score for level one was 26.51 and for level 2 it was 15.29. A score of 34 is necessary to pass the level 1 test and 26 for level 2. The average obtained in the analysis of individual scores is much lower than the expected results. This indicates that there must be some kind of dearth in students learning progression. The highest score for level 1 is 34 and the lowest one is 16. In level two the highest score is 26 and the lowest is 4. It can be seen that the lowest punctuation in test 1 is quite high, which means that students at least have a certain knowledge of the words at this level. However, the lowest mark in the K2 level proves that there are certain students whose knowledge of the level is almost non-existent. An analysis of the results in terms of percentages shows that most of the students reach a score between 29 and 26 for level 1. This score which is more than 5 points under the minimum quantity established for this level. The analysis is shown in the following figure (Figure 1).

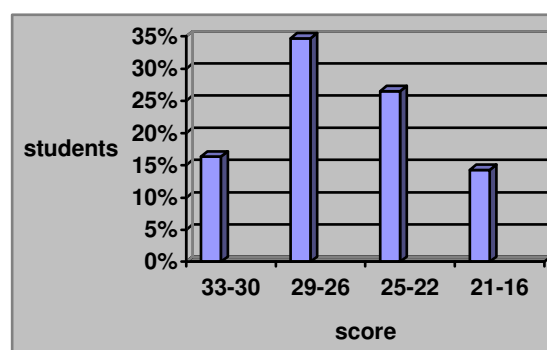


Figure 1 (Level 1000)

The same analysis was done for test K2 and it was found that most students scored between 19 and 14, while the percentage of students that came close to the score limit was just a 2.04%. These results are shown in Figure 2.

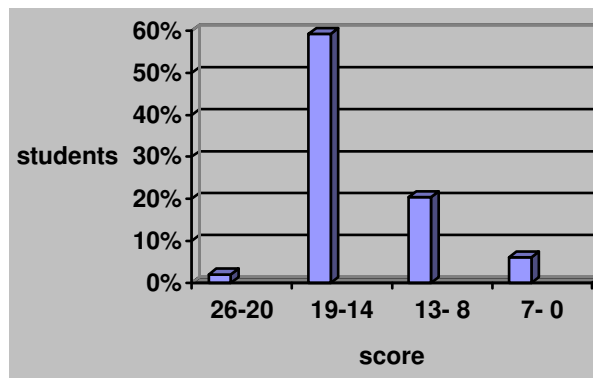


Figure 2 (level 2000)

At this level most of the students are placed between 7 and 12 points below the expected score. This means that most of them will come across problems for understanding texts because the most frequent 1000 words represent 72% of most texts and the most frequent 2000 words represent 79.7% of texts of a non-academic nature. Further research would be needed to test whether these students really present serious difficulties in reading comprehension tasks.

With regard to the results obtained in test B (levels K3 and K5) of the 38 students who sat the test, none of the students reached the minimum score of 26. These results were not surprising after seeing the poor marks obtained in the first test. The highest mark for the 3000 level test was 18 and the lowest was 6. The average in this test was 12.76 and the standard deviation was 3.08. Certain problems were detected with the 5000 level for Spanish speakers in this test, as some students obtained higher marks in this test than in the previous level. Of the 38 subjects who sat the test 5 of them obtained higher marks in the 5000 level test than in the 3000 test. After analysing the questions and observing those in which students tended to get positive marks, it can be said that this test contains some cognates that could increase some students' scores. A deeper analysis of the test format and a wider application of it with a bigger sample would be needed to clearly determine which questions present problems for its application with Spanish students. The highest mark at this level was 19, and three students reached it. The lowest one was 0, as there were some students who did not answer any question correctly. The average was 9.95, which was much lower than in the previous level, and the standard deviation was 5.01. The following figure shows the decreasing tendency of averages in the different tests.

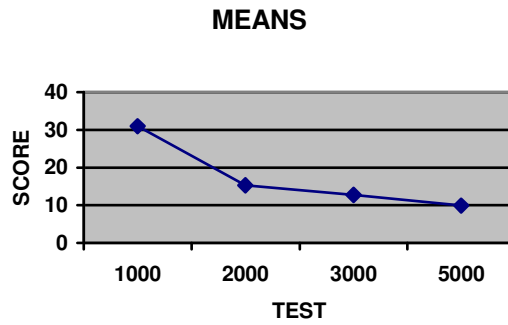


Figure 3

This decreasing progression is logical because the students' vocabulary knowledge decreases as the words included in the tests become less frequent. The following figures show students' results in the 3000 and 5000 level tests.

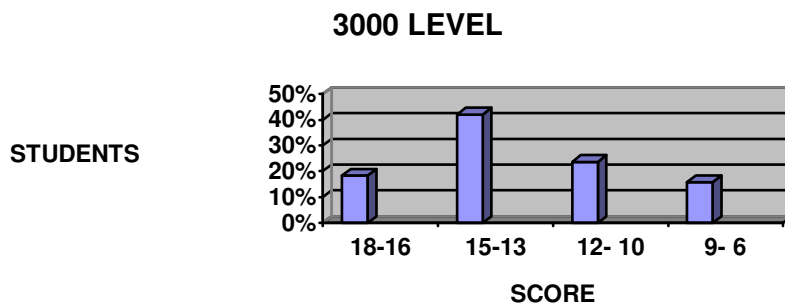


Figure 4

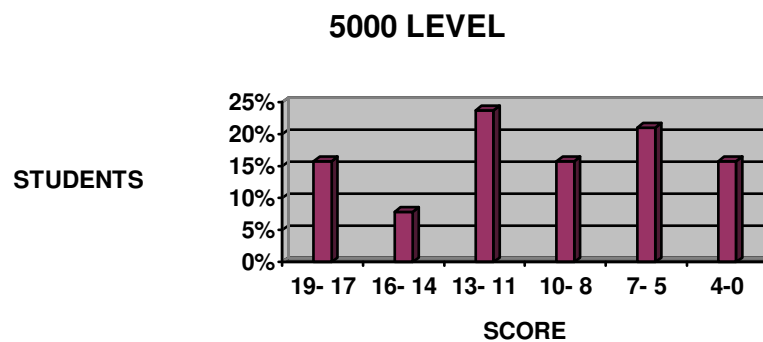


Figure 5

It is worth mentioning that while the 3000 level students can be grouped more easily in just four ranges of scores, the 5000 level needs to be divided into 6 ranges of scores. This may be indicative of the use of deduction on the part of students when trying to fulfil the task.

Besides, there are more students in the 5000 level who score less than 10, which proves their lack of knowledge. The normal procedure is not to test students at a particular level if they have not passed the previous test but it was considered interesting to see how high or low students could reach even if they had failed test A.

Apart from analysing students scores at the different levels different correlations were made to see if these were significant or not for the different levels. All the correlations were significant for all levels which prove the validity of this test as a tool for measuring students' vocabulary size. The results of the correlations are shown in the following table.

<b>CORRELATIONS</b>					
<b>1000*2000</b>	<b>1000*3000</b>	<b>1000*5000</b>	<b>2000*3000</b>	<b>2000*5000</b>	<b>3000*5000</b>
0,56954588	0,4023361	0,38691445	0,2716883	0,5893047	0,4060042
gl=49	gl=38	gl=38	gl=38	gl=38	gl=38
alfa=0,231	alfa=0,26	alfa=0,26	alfa=0,26	alfa=0,26	alfa=0,26
<b>SIGNIFICANT</b>	<b>SIGNIFICANT</b>	<b>SIGNIFICANT</b>	<b>SIGNIFICANT</b>	<b>SIGNIFICANT</b>	<b>SIGNIFICANT</b>

Table 3

The validity of the test had already been tested by several researchers, but in case this sample presented any special characteristics that could make the test invalid correlations were calculated. The analysis of results shows that even if some problems appeared with the 5000 level, the test is appropriate for Spanish students. Importantly, when analysing students' results in the different tests it is notable that very few of them passed the tests. It needs to be reminded that only three students can be said to have passed the 1000 level and only one of them also passed the 2000 level. In the case of the 3000 and 5000 levels no student reaches the minimum level needed to show that they know enough of the words included in these frequency ranges. This is something that should make us think about what is happening with Spanish students, who spend a lot of years studying a foreign language and are not able to reach the necessary level for becoming efficient speakers of English.

## **VI. CONCLUSION**

The results in the Vocabulary Levels Test show that the level of English vocabulary that is being taught and learnt in Spanish high schools does not reach the minimum standards established to make these students efficient language users. There should be certain changes in the input that is presented to students if we want them to enlarge their vocabulary size. In the introduction to this research study the role of vocabulary and its effects on all language skills were mentioned. Therefore, a small vocabulary size will also limit students' other language capacities. We are not saying that vocabulary is the only thing to be taught or to be improved but this research study proves that this is one area that needs at least some changes. These changes should involve not only teachers but also publishers, as both are



responsible for the type of input provided within the class and very often outside it. The type of input offered to students should contain a balanced mixture of all frequency levels, putting special emphasis on different frequency levels depending on students' age and academic stage they are at. Apart from improving the quantity and quality of vocabulary included in the input, results from other research fields should be incorporated to develop vocabulary teaching techniques to make learning more effective. Furthermore, vocabulary should recover its central role in foreign language teaching, given that at the level of Bachillerato emphasis is often put on grammar disregarding the importance of words as the basic tools to put grammar rules into practice.

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