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DEFINING IN ENGLISH: A TOOL TO MEASURE WRITING ABILITIES

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ABSTRACT. *Drawing conclusions, comparing and contrasting, defining, explaining reasons and purposes, speculating and verifying, inferring and implying and other patterns of writing organisation, are the very matter of communication, whether in the form of everyday conversation or more highly specialised uses of language. These functions of language could be used to measure foreign language students' capability in different skills, writing for instance. This paper deals with the ability to write definitions, as an alternative to essay writing, of the students of English Language in the 1st year of English Philology at the University of Murcia . They were asked to define 10 words accurately chosen from the vocabulary lists published by Nation (1999). The results obtained have been used as a parameter to measure their writing ability. Significant correlations have been found between the marks obtained in the Oxford Placement Test performed at the beginning of the semester and those in our test based on definitions. We propose that definitions be considered as a parameter to check the writing abilities of the students and as a complement to the Oxford Placement Test.*

Keywords: definitions, level of English as a foreign language, writing abilities.

1. INTRODUCTION

Definition as well as explanation, exemplification and classification, is one of the specialised uses of language commonly found in academic writing, and as such its practice is included in most of the books published in Britain in the last fifteen years (Jordan, 1997). In this sense, Wilkins states, 'definitions are obviously a feature of scientific and other academic forms of writing' (Wilkins

1985: 53). As a function of communication, definitions should be considered as important to be taught to students of a foreign language in the same way as any other language function. Moreover, recent publications, such as Doing Grammar (2002) include writing definition exercises as grammar practice. Furthermore, in the organisation of different English language courses (e.g. in the Language Centre of the Hong Kong University of Science and Technology, or in the University of Maryland, among others), defining, in both a general and an academic context, is used as one of the many tools to increase the students' competence in a foreign language. Considering that our informants are enrolled in English Studies, they should show a command of defining as a skill as well as of "academic" definitions.

Defining is probably the most important resource used to find out the meaning of a lexical unit. Definition is a technique of the expositive and the descriptive discourse. According to its Latin etymology, it means to put limits to (de, related to, and finis, limits). (Alcaraz 2000: 45). According to the Cambridge International Dictionary of English (1996: 359) a definition is 'a statement that explains the meaning of a word or phrase' and also 'a description of the features and limits of something'. Consequently, we have at least two universally recognised forms of defining something: (i) by explaining its meaning and (ii) by describing its features and limits.

We do not aim to discuss definitions from a lexicographical point of view, but from the approach of English language teachers. In general, to define something we need to name it, classify it, and state its most important (i.e. defining) characteristics. Defining concrete terms is usually relatively easy. Such concrete terms can usually be defined in the following ways (Hamp-Lyons and Heasley 1987: 27-28):

Concept + is a + form of + class + which + special feature
Class + who, which + special feature(s) is + called, known as (etc.) + concept

The first definition structure is known as formal definition and the second one as naming definition. Defining abstract concepts (words such as truth, beauty and justice) is harder than defining concrete objects. Often such concepts cannot be adequately defined in a simple, one-sentence definition.

Synonymy is not considered as a definition structure in text books. However, some authors (Rudska et al. 1982, 1985) state that there is a good deal of evidence to suggest that vocabulary is often best acquired by analogy, in other words, remembered as being similar in meaning to previously acquired items (Partington 1996). In addition, what we might term 'definition through synonym' is a central feature of most dictionary organisation (Ilson 1991).

For motives of stylistic variation, non-native learners and translators have a pressing need to find lexical alternatives to express a particular concept,

especially in writing. It should be stated that expected patterns such as formal/naming definitions are found to be commonly used by students in order to define any linguistic item. But, in doing so, when trying to define in a language different to their L1, students make attempts deviating from the structures expected. These attempts may lead to success, or to mistakes. According to Jordan (1996: 34) three types of mistakes may occur when a short definition is being written:

1. An example may be given rather than a definition. An example, may, of course, follow a definition but it should not take its place.
2. The general class, or the particular characteristics, may be omitted from the definition. It will then be incomplete.
3. The word to be defined, or another form of it, may be used in the definition itself. Clearly, if the reader does not already understand the word, he/she will not understand the repeated use of it.

Taking into account these considerations, definition is, indeed, an important means by which to know a person's ability to express ideas in his own or in a foreign language. For this reason, the ability to define might be used as a paramount tool to measure the students' ability to speak and write. To explore this possibility an experiment was carried out with students of English as a foreign language, in which the ability of the students to define some carefully selected terms was analysed. The aim of the experiment was threefold: to describe the possible pattern of definitions used by the students, to find out what kind of words are more difficult to define and to infer any possible correlation between the global mark of the Placement Test and the students' ability to write definitions. The results obtained after an accurate assessment of the definitions revealed that such ability can be used as a parameter to measure their writing skill and to establish relationships with the results of the Oxford Placement Test.

2. INFORMANTS AND METHODOLOGY

At the beginning of the semester a test and a questionnaire were distributed to a group of 71 students of 1st year English Philology with ages ranging between 18 and 20 years. Students enrolled in the compulsory subject, English Language, were informed that the starting level would be an intermediate one and that supplementary effort would be necessary for those students that have not yet reached that level. The test was the commercially available and scientifically validated Oxford Placement Test, consisting of two clear-cut parts, a listening test (100 items) and a grammar and lexical test (100 items). A points mark was given to each part and the sum allowed us to place each student in one of the five levels established by the Oxford Placement Test. The total score of the test was 200. Scores below 80 were unlikely to be

reliable. The highest mark obtained by our students was 172, and the lowest, 88. Hence, the data were considered valid and reliable.

As the Oxford Placement Test does not include a writing test and we had no marks of their writing skills we decided to supplement this questionnaire with ten words, to be defined. Definition is considered as a necessary and important step to academic writing (Jordan 1997). We carefully selected words in order to have at least one representative of the following grammatical categories: verb, concrete and abstract nouns, adjectives and adverbs. Our interest was not only to test their lexical knowledge (already done in the Placement Test), but mainly their ability to express in a few words some terms. We took most of the words from the lists published by Nation (1999), which considers three categories of words according to their frequency of use. The first group is formed by the most frequent 1000 words of English. The second type includes the 2nd most frequent 1000 words, and the third one words which are not in the first 2000 most frequent words of English but which are of frequent use in upper secondary school and university texts from a wide range of subjects. All of these base lists include the base forms of words and derived forms (for example, the first 1000 words thus consists of around 4000 forms).

From these lists we chose 10 words. The words Music, Sometimes and Discovery, pertaining to the first group, were selected, whereas the terms Health, Shop, Evil, Tomorrow and Information were chosen from the second group. From the third group only the word Maintain was included. Finally, a last word that did not appear in any of the above mentioned lists was included, Mainstream, to infer any possible correlations between words that did not appear in the basic 4000 words and marks obtained by the students.

Indeed, some different criteria (such as concrete vs abstract nouns, nouns vs. adjectives, verbs with and without preposition, two syllable vs. three-syllable words, etc.) could have been used to select the words.

All these terms can be broadly divided in two categories: concrete and abstract concepts or ideas. The former would comprise: Maintain, shop, mainstream, tomorrow and sometimes. The latter, the rest of the terms, that is: health, information, music, discovery and music. We are aware that both categories include different types of words, syntactically speaking. However, the meaning they convey corresponds to concrete or abstract concepts, this way ensuring a balance in our sample. Isolated words were provided to students in order to ensure freedom when answering.

The statistical treatment of data was performed using commercial software SPSS for Windows, version 10.0. To determine the existence of correlation, the Pearson coefficient was used. This coefficient measures a linear association between two variables, with values of the correlation ranging from –1 to 1. The sign of the coefficient indicates the direction of the relationship, and its absolute value indicates the strength , with larger absolute values indicating

stronger relationships. The use of a significance test associated to the Pearson coefficient indicates that the results are unlikely to have arisen by chance (Skehan 1989). Tables are available to check significance (Downie and Heath 1971: 336).

3. RESULTS AND DISCUSSION

Table 1 summarises the distribution of the Placement Test marks. An average mark of around 123 was obtained, which corresponds to the lower-intermediate to intermediate level.

Nº	Mark	%	Nº	Mark	%	Nº	Mark	%
1	102	30	25	129	20	49	134	50
2	110	40	26	111	10	50	154	50
3	134	80	27	144	50	51	131	30
4	140	30	28	128	0	52	120	30
5	124	20	29	138	0	53	130	50
6	115	30	30	118	70	54	136	30
7	106	30	31	139	60	55	132	20
8	147	80	32	120	40	56	135	30
9	101	70	33	121	50	57	135	40
10	131	30	34	172	90	58	124	60
11	131	40	35	124	40	59	141	50
12	104	40	36	136	20	60	110	40
13	111	30	37	131	40	61	113	30
14	132	20	38	136	30	62	131	30
15	115	30	39	110	20	63	108	40
16	131	70	40	132	10	64	113	0
17	121	60	41	119	10	65	112	60
18	114	50	42	123	60	66	118	40
19	122	70	43	115	40	67	127	70
20	114	40	44	132	30	68	98	30
21	120	0	45	124	40	69	115	30
22	130	0	46	142	50	70	107	30
23	102	20	47	98	10	71	88	0
24	111	50	48	110	40			

Table 1. Results of the placement Test and percentage of answer of the 71 students involved in the experiment. Column (Nº) refers to the student, column (Mark) refers to the mark obtained in the placement test by the correspondent student, and column (%) refers to the percentage of answer.

Figure 1 shows the same results grouped according to the five levels proposed by the Oxford Placement Test, i.e, 1:Elementary to Post-elementary; 2: Post-elementary to Lower-intermediate; 3: Lower-intermediate to Intermediate; 4: Intermediate to Upper-intermediate; and 5: Upper-intermediate to Advanced. This distribution shows a rather predictable regular pattern, with level 3 being the most commonly found among students.

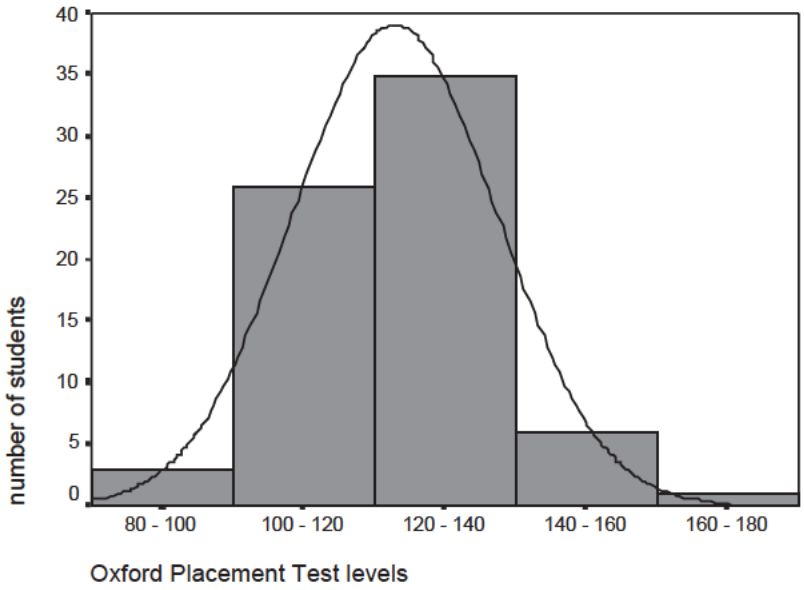

Figure 1: Histogram representing the different levels of the Placement Test. Ordinate values indicate the number of students included in each level.
The values shown in the X axis correspond to the five levels of the OPT. From left to right, the first column shows Level 1: elementary to post elementary; the second column shows Level 2: post elementary to lower intermediate; the third column shows Level 3: lower intermediate to intermediate; the fourth column shows Level 4: intermediate to upper intermediate: the fifth column shows Level 5: upper intermediate to advanced.

Students answered the definitions proposed according to their knowledge of English Language vocabulary. Figure 2 shows the behaviour found when answering: No indications were given to the students in order to define the terms proposed. Consequently, their answers registered many different patterns, which were organised according to the defining categories shown in Table 2.

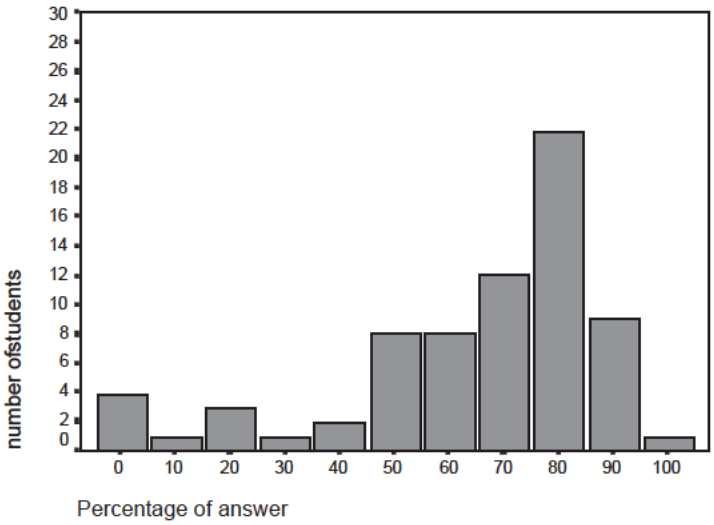

Figure 2: Percentage of answer, ranging from 0 to 100.

1	Naming definition: Class + who/which + special feature
2	Formal definition Concept + is a + class + which/who + special features e.g.: Music: it's an art that is produced by instruments
3	Synonym e.g. : Music: nice sound
4	Antonym e.g.: Health: it is the opposite of illness. You can have a good health or, on the contrary, having a bad health.
5	Explanation/paraphrase e.g.: Music: it's a hobby. Lots of people listen to all kind of music groups
6	Wh- explanations e.g.: Music: it is what we listen. It is what we like
7	Question e.g. : Mainstream: a river?
8	Example e.g.: Music: it's a song we listen in the radio
9	Type of word e.g.: Tomorrow: it's a time adverb

10	Definition with defined word e.g.: Information: without information you can say nothing about nothing
11	'use' explanation e.g.: Music: we use it for dancing
12	Verb explanation e.g.: Music: listen sings
13	Field explanation e.g.: Music: is word relation with: rock, dance,…
14	Made explanation e.g.: Music: is made by beautiful sounds
15	Translation e.g.: Music: música
16	No define/I don't know

Table 2. Patterns found in the students' definitions

As indicated, we found 16 different defining categories in the questionnaire completed by the students. However, we did not consider the adequacy of the answer in terms of meaning in a first stage of our research. Thus, we could find definitions that were lexically wrong and grammatically right, although this happened on very few occasions (mostly in the case of Mainstream, which was found to be the most difficult word to be defined; see below).

We considered as correct definitions those which followed patterns 1 and 2 (that is to say, naming and formal definitions, categories universally accepted as right according to Hamp-Lyons and Heasley 1995) and 3 and 4 (synonyms and antonyms, according to Ruska et al. 1982, 1985; Ilson 1991; Partington 1996). Many definitions proposed by the students, namely those of nouns, followed patterns 1 and 2. Synonyms and antonyms were mainly found in the case of verbs, adjectives and adverbs, as there is no way to fit such definitions as 'classes', 'special features', etc, as in the case of nouns. Pattern 5 was considered as a good attempt to create a definition, as partial information was included, such as the class, characteristics, etc. When students did not have a clear idea of the meaning of a word, they proposed alternative 'definitions' (see Table 2) trying to obtain the right set of required information. In this way, we found the rest of the patterns that appear in Table 2, which were considered to be incomplete or mistaken, since the information given was not clarifying enough to understand the word properly. In the case of pattern 15, the definitions of this type were not considered as an answer, because the students were asked to define in English, not to find an

equivalent into their L1. In terms of syntax, patterns 1 and 2 showed a clear and right disposition of the different elements of the sentence, in a correct arrangement. The rest of the patterns could offer a variable range of syntactic dispositions. Pattern 2 was found in all the words defined, but patterns 3 and 4 were mainly found in the case of Evil (adjective/abstract noun) which confirms our previous stance that abstract nouns or adjectives are more difficult to define and that synonyms or antonyms are frequently used in this situation. To a lesser extent, maintain, music, health, tomorrow and discovery also showed these patterns.

We then arranged the information obtained and classified the words according to the categories proposed by Nation (1999). The resulting data are shown in Table 3.

Categories of words	Tokens	Percentages of no answer
1	Music	18.4
	Sometimes	26.7
	Discovery	25.3
2	Health	21.1
	Shop	8.4
	Evil	32.4
	Tomorrow	12.6
	Information	25.3
3	Maintain	84.5
4	Mainstream	88.7

Table 3. Percentages of no answer

As indicated, Mainstream was unknown to most of the students (88.7%), which was to be expected, since this term is not included in the first 4000 words proposed by Nation (1999). In fact, those who answered this question misunderstood its meaning and defined main street instead of mainstream (definitions syntactically correct, but lexically wrong that students had the most trouble defining). Maintain is the next word less defined by the students followed by Evil, Sometimes, Discovery and Information, which can be considered as abstract concepts. The words Evil and Tomorrow were often defined as nouns, although students are used to considering them mainly as an adjective and an adverb, respectively.

According with our results, words which belonged to Nation's first category were the ones which showed the widest variety of used definitions (as in the case of Music and Discovery for which 9 and 7 different definition patterns were used, respectively). Less familiar words showed a more restricted range of patterns, as in the case of Maintain or Mainstream (4 each). However, Shop offered the narrowest range, with only 3 different patterns of definitions. This could be due to the fact that it is a concrete noun, and that students are more familiar with this type of word, as well as to the ease of defining such terms.

We furthermore decided to check the accuracy of the definition in terms of meaning and syntactic accuracy. For that purpose we compared the students' definitions with those proposed in a widely used dictionary, the Collins English Dictionary (1995 CD-ROM edition). The first entry of the term was chosen in all cases. The definitions used as reference are indicated in Table 4.

Maintain Verb	To continue or retain; keep in existence.
Health Abstract noun	The state of being bodily and mentally vigorous and free from disease.
Information Abstract noun	Knowledge acquired through experience or study.
Shop Concrete noun	a place, esp. a small building, for the retail sale of goods and services.
Mainstream Concrete noun	The main current (of a river, cultural trend, etc.)
Evil Adjective	Morally wrong or bad; wicked
Music Abstract noun	An art form consisting of sequences of sounds in time, esp. Tones of definite pitch organised melodically, harmonically, rhythmically and according to tone colour.
Tomorrow Adverb	On the day after today.
Sometimes Adverb	Now and then; from time to time; occasionally.
Discovery Abstract noun	The act, process, or an instance of discovering

Table 4. Definitions according to the Collins English Dictionary.

The definitions written by the students were compared with those obtained from the dictionary and the results obtained as to the number of right answers are shown in Table 5.

Tokens	%
Shop	80.3
Tomorrow	53.5
Evil	33.8
Discovery	16.9
Music	15.5
Sometimes	14.1
Information	9.9
Health	8.4
Maintain	5.6
Mainstream	0.0

Table 5: percentage of correct answers (meaning and syntactic structure)

As indicated, Shop and Tomorrow were again the words involved in the highest percentage of right answers, whereas Maintain and Mainstream proved to be the most difficult ones. Figure 3 shows the distribution of successful definition answers given by the students.

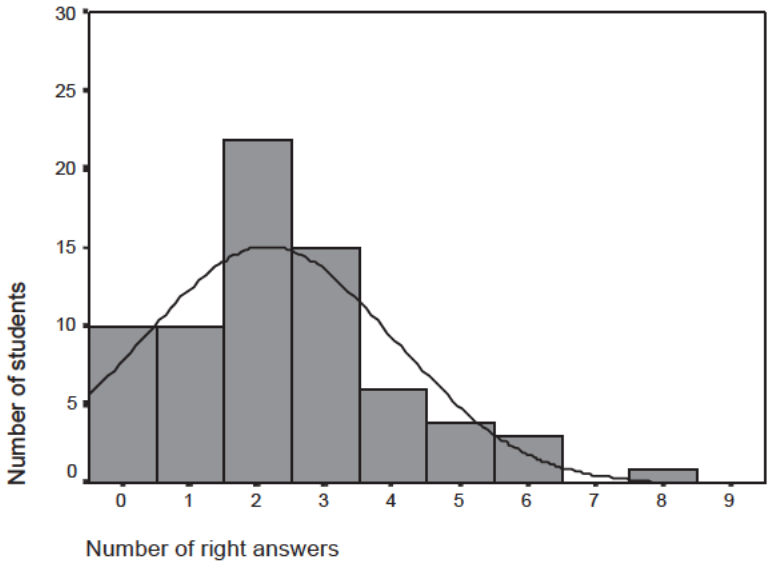

Figure 3. Frequency distribution of right answers (according to syntax and meaning).

Since we wanted to determine the existence of a possible correlation between the results obtained in the analysis of definitions and those of the Placement Test, we performed a statistical analysis of the data. To deal with more easy-to-use data, we grouped the marks of the Placement Test into ten intervals according to the number of definitions given by the students. We obtained the mean mark for each group and tried to relate these means with the corresponding percentage of definitions answered. To analyse if there was any possible correlation, a linear regression analysis of these two variables was performed, finding an R2 coefficient of 0.652, which indicates that the variables are linearly related. With this information, a further correlation analysis was performed, in order to obtain the Pearson correlation coefficient and its significance level. The percentage of answers and the corresponding mean on the Placement test marks were matched using the Pearson correlation. We found the results summarised in Table 6, which indicate that correlation is very strong in our case (0.807) and apparently not due to chance (significant at 0.01).

	Percentage of answer	Mean of test marks
Percentage Pearson correlation	1000	0.807
Sig. (bilateral)		0.005
N	10	10
Mean Pearson correlation	0.807	1.000
Sig. (bilateral)	0.005	
N	10	10

Correlation is significant at 0.01

Table 6: Pearson correlation: percentage of answer and mean of correspondent Placement test marks.

We performed a similar analysis using the mean marks of the Placement test and the corresponding percentage of lexically and syntactically successful answers. These variables showed linear relation (R2 = 0.6828).When we matched the correlated mean marks of the Placement Test and the percentage of lexical and syntactic success, we found the results shown in Table 7.

	Mean test marks	Percentage of lexical and syntactic success
Marks Pearson correlation	1.000	0.826
Sig. (bilateral)		0.011
N	10	10
Success Pearson correlation	0.826	1.000
Sig. (bilateral)	0.011	
N	10	10

Correlation is significant at 0.05

Table 7: Pearson correlation : percentage of syntactic and lexical successful answer and mean of correspondent Placement test marks.

In this case, the correlation was again strong and significant. The correlation results in both cases point out the reliability of the analysis.

4. CONCLUSIONS

From the results obtained, it could be concluded that:

1.- The definition patterns most widely used were those corresponding to naming and formal definitions, probably as a result of transfer of patterns from the L1 and experience in using dictionaries, since the students had not received previous training in defining in the L2. However, synonymy and antonymy were also found, as well as a wide range of patterns which were not considered correct. The students with the best marks in the Placement Test followed mostly patterns 1 and 2 (naming/formal) to define the terms proposed.

2.- The words which caused most definition problems were Mainstream and Maintain (in agreement with Nation's lists of words most frequently used). The difficulty was not only due to the knowledge/lack of knowledge of the words on the part of the students, but also in their syntactic structure and accuracy of meaning.

3.- Definitions could be considered as an illustrative pattern of the student's writing abilities, since we have found a representative correlation between the results obtained in the Placement Test and those found in the analysis of definitions. Statistical results show that those students with higher marks in the Placement Test have done better both following a synthactic pattern of definition and reflecting the precise meaning of the word.

In summary, on the basis of the above stated information, we propose that definitions can be considered as an alternative parameter with which to measure the writing ability of the students, and therefore as a beneficial complement of the Oxford Placement Test used.

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