

VOCABULARY USED IN E-MAILS BY MIXED-ABILITY EFL SECONDARY SCHOOL STUDENTS¹

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ABSTRACT. *This paper aims at tracing the vocabulary profiles used by sixty secondary school Spanish students with different learning abilities to describe people of their same age and traditional festivals thanks to an e-mail tandem exchange with native speakers. Taking account of these texts, we aimed at (i) identifying the number of types and tokens used by the participants, (ii) classifying these tokens according to their lexical category, (iii) analysing if incidental vocabulary learning has taken place, and (iv) grading the types and tokens students produced according to the most frequent 1000 words of English (wordlist 1), the second 1000 most frequent words (wordlist 2), and words not included in the first 2000 words of English (wordlist 3). Our results indicate that (i) nouns are most frequently used by both groups, (ii) some incidental vocabulary has been learnt by students without learning difficulties related to festivals in England, (iii) most of the tokens students produced belong to wordlist 1, and (iv) students with learning difficulties slightly outperformed their partners without learning problems regarding the number of tokens and types included in wordlists 1 and 3.*

KEY WORDS. *e-mail tandem, different learning abilities, vocabulary, tokens, types.*

RESUMEN. *El objetivo de este artículo es trazar el perfil de vocabulario utilizado por sesenta alumnos españoles aprendices de inglés de educación secundaria de diferente capacidad para describir personas de su misma edad y fiestas tradicionales a partir de la información obtenida en un proyecto basado en el e-mail-tándem con hablantes nativos. Teniendo en cuenta estos textos, se pretende (i) identificar el número de ocurrencias y tipos utilizados por los participantes, (ii) clasificar dichas ocurrencias en función de su categoría léxica, (iii) analizar si se ha producido aprendizaje de vocabulario de forma incidental y, (iv) ordenar las ocurrencias y los tipos empleados por los estudiantes de acuerdo con las 1000 palabras más frecuentes del inglés (lista 1), las 2000 palabras más frecuentes del inglés (lista 2) y las palabras no incluidas en las listas 1 y 2 (lista 3). Los resultados indican que (i) los nombres son los más utilizados por ambos grupos; (ii) los alumnos sin dificultades de aprendizaje han aprendido de forma incidental vocabulario referido a las fiestas del Reino Unido, (iii)*

la mayor parte de las ocurrencias producidas por los estudiantes pertenecen a la lista I y (iv) los estudiantes con dificultades de aprendizaje superan ligeramente a sus compañeros sin dificultades de aprendizaje en lo que respecta al número de ocurrencias y tipos que se incluyen en las listas 1 y 3.

PALABRAS CLAVE. *e-mail tandem, diferente capacidad, vocabulario, ocurrencias, tipos, lista.*

1. INTRODUCTION

In recent decades, e-mail writing has become one of the main ways for personal and professional communication which allows millions of people from different socio-cultural backgrounds to keep in touch by means of this asynchronous digital device. As opposed to letter writing which follows the typical rules of written communication e.g.; brevity, adequate style (formal or informal), openings and closings (Jiménez Catalán and Ojeda Alba 2007b), e-mail messages are characterized by a distinctive combination of oral and written language (Biesenbach-Lucas and Weasenforth 2001; Danet 2002; Chi-Fen 2006; Biesenbach-Lucas 2007).

Since the 1980's, the advantage of using e-mails as a pedagogical tool in foreign language learning has been discussed (Wolff 1982; Rosanelli 1992, Brammerts and Little 1996; Little 1998; Appel 1999; Biesenbach Lucas and Weasenforth 2001; Vinagre 2005; Chi-Fen 2006; Biesenbach-Lucas 2007; Sasaki and Takeuchi 2010; Kabata and Edasawa 2011) as this asynchronous tool allows learners to keep in touch not only with the teacher but also with other learners. At the same time, it promotes collaborative learning among students with different mother tongues, favouring the development of writing skills, vocabulary learning as well as coming closer to the target language community by contacting native speakers.

Taking account of the potential power of e-mails in the foreign language classroom, the *International Tandem Network* was created in the academic year 1993-1994 funded by a *Lingua Project* from the European Union (Álvarez, Blanco, Ojanguren, Brammerts and Little 1996; Brammerts and Little 1996). This *network* aimed at establishing a communication network among universities belonging to several European countries. Its aim was to promote the use of e-mail tandem as a way of improving students' target language command. This approach to language learning enables students (primary, secondary or university) to keep in touch with native speakers of the language whose communicative competence (Byram 1997) they want to improve. These native speakers are also interested in improving their communicative competence in their tandem partner's mother tongue, as well as in learning several aspects about the target culture by benefitting from their partner's knowledge and experience.

E-mail tandem is based on two main principles: reciprocity and autonomy. Reciprocity means that "each partner brings certain skills and abilities which the other partner seeks to acquire and in which both partners support each other in their learning in such a way that both benefit as much as possible from their working together" (Brammerts 2003: 29). Autonomy implies that both partners are responsible for their

own learning, so they decide “*what* they want to learn, *how* and *when*, and what sort of help they need from their partner” (Brammerts 2003: 29).

This approach to language learning has three main goals: ability to communicate in the target language, ability to adapt and behave appropriately in a cultural environment which is not their own, and ability of self-reflection and mutual collaboration with the tandem partner. For the purpose of this study, *ability to communicate in the target language* becomes the most important of these three goals due to the fact that the input provided by the native speaker in their e-mail is expected to provide an environment for incidental vocabulary learning in the target language. Gass (1988) claimed that there are five levels for this incidental learning to take place: (a) apperceived (or noticed) input, (b) comprehended input, (c) intake, (d) integration, and (e) output. It should be noted that comprehended input (learners’ understanding of the meaning) becomes intake, but not all input which is comprehended becomes intake. Intake is viewed “as the process of assimilating linguistic material”, and in that sense, it is not merely a subset of input, but “a process of mental activity which mediates between input and grammars” (Gass 1988: 206). Within this framework, apperceived (or noticed) input plays a significant role at the initial stage of learning because without noticing there is no learning. The role of corrective input and negotiation, through which learners recognize their own errors or knowledge gaps, is equally important. Gass (1999) also stated that recognition “of a need to learn (i.e., a gap) is the first step in actual learning” (1999: 324), because only then is input made available for learning.

According to Webb (2008) context also plays a pivotal role in incidental vocabulary learning. Thus, with e-mail tandem being a meaning-focused exchange, it seems that the exchange of e-mails is useful in giving the learner a richer context in which the words are used. Therefore, it can be pedagogically efficient in that it enables two activities - vocabulary acquisition and reading- to occur at the same time, and more individualized and learner-based because the vocabulary being acquired is dependent on the input each learner finds in the received e-mail (Huckin and Coady 1999; Kabata and Edasawa 2011). Since learners incidentally gain knowledge of words in small increments, building upon their previous gains through repeated encounters until a word is known, incidental vocabulary learning can be a relatively slow process when there are long gaps between encounters. Nowadays, it is not clear how many encounters are needed to learn an unknown L2 word. Hulstijn, Hollander, and Greidanus (1996) found that there was little difference between encountering target words once or three times. Rott (1999) claimed that six encounters may be enough to learn a word. Horst, Cobb, and Meara (1998) pointed out that eight encounters are needed, Saragi, Nation, and Meister (1978) suggested 10 encounters, Webb (2007) supported that more than 10 encounters are needed, and Waring and Takaki (2003) reported that it may take more than 20 encounters to incidentally learn the meaning of a word. Therefore, we can conclude that the more the words are met repeatedly in students’ e-mails the better they will be learned, as will be shown with examples of our informants.

Finally, e-mail tandem is associated to socio-cultural theory (SCT) which views all learning as essentially social. Therefore, effective learning and in this case effective

vocabulary learning only takes place through social interaction (Vygotsky 1978; Vygotsky 1986; Block 2003; Lantolf 2000; Lantolf 2006; Cheon 2008; Lantolf and Poehner 2008), which leads participants in the e-mail exchange to imitate their tandem partners' model since they are the native speakers of the language they want to learn. Vygotsky (1978, 1986) considered this process of imitation to be indispensable in a child's mental development and distinguished conscious imitation from automatic copying, and proposed that children can imitate only that which resides in the individual's zone of proximal development (ZPD). Nevertheless, Sasaki and Takeuchi (2010) in a study carried out with EFL secondary students in Japan in non-native speaker-native speaker e-mail interactions concluded that imitation was not the only process involved in vocabulary learning but a combination of different cognitive activities (e.g. noticing, repeated retrieval, and generative use of vocabulary) in varied contexts (e.g. regular classes, independent study). In other words, learners acquire a foreign language by using that language in social interaction with native speakers.

In light of the reviewed literature on e-mail tandem, incidental vocabulary learning, and socio-cultural theory, this study attempts to trace the vocabulary profiles used by mixed-ability final grade secondary Spanish students (4th ESO) to describe people their same age as well as traditional festivals in England (Halloween and Guy Fawkes' Night) thanks to an e-mail tandem exchange with learners of Spanish as a foreign language belonging to a secondary school in the UK. Furthermore, this paper, by comparing the results obtained by these two groups of mixed-ability students, aims at identifying (i) the number of tokens and types used by each sample of students, considering *type* as a class of linguistic item, and *token* as an example of occurrence of a type (Nation 2001), (ii) classifying by lexical category (nouns, verbs, adjectives and adverbs) (Greenbaum and Quirk 1993) the tokens produced by students with and without learning difficulties, (iii) analysing if incidental vocabulary learning has taken place in both groups thanks to the input provided by the native speakers, and (iv) grading the tokens and types students are able to produce according to the most frequent 1,000 words of English (wordlist 1), the second 1,000 most frequent words (wordlist 2), and words not included in the first 2,000 words of English (wordlist 3) (<http://www.victoria.ac.nz/lals/staff/paul-nation.aspx>).

2. METHODOLOGY

2.1. *Participants*

The study was carried out in a school located in *Principado de Asturias* (North of Spain). It is based on a corpus of sixty e-mails written by Spanish EFL learners, sixteen of whom had remarkable learning difficulties². The sample was homogenous in the sense that all the informants were the same age (16-18), belonged to the same socio-cultural background, and shared Spanish as their mother tongue.

It is worth mentioning that the students with learning difficulties were included in a special programme called *Diversificación Curricular*³. *Diversificación Curricular*

Groups are formed by students who have significant learning difficulties and/or a lack of motivation towards formal learning. All the informants in this group had a lack of motivation towards formal learning and particularly to foreign language learning. Six of them showed significant learning difficulties regarding comprehension, understanding and writing⁴. There were also five pupils who had been out of school due to bad behaviour and finally one of them had psychological problems which affected their interaction with schoolmates and teachers. Furthermore, eight students had repeated two academic years in secondary education. Seven had repeated a course in primary and one secondary, while the remaining informant had repeated only once throughout their schooling but, as abovementioned, had serious psychological problems diagnosed by the educational authorities. The rest of the informants were unmotivated learners but they did not have any other behavioural or psychological problems.

For these reasons, the curriculum was adapted to their needs, so that they could attain the necessary goals and competencies to obtain their General Certificate of Secondary Education (GCSE). The rest of the informants did not present any outstanding feature regarding psychological or educational problems.

2.2. Procedures and instruments

The exchange of e-mails was done twice a month in the IT (Information Technology) room, with the students being asked to upload their messages to the school intranet. Once the activity was finished, e-mails were saved and emailed to the British school.

As shown in Table 1, topics were intended to promote authentic communication, so that each participant could make use of some of their knowledge derived from previous experience, ideas or opinions, and motivating to develop learners' work in tandem (Gläsmann and Calvert 2001). Thus, the students involved in the study worked on the following topics during the school year:

Personal Information
Personal description: personality, likes and dislikes:
Festivals in England
Christmas
My school
Holidays

Table 1. List of tasks

Since one of goals of this paper is to analyse and identify the number of types and tokens and the lexical category as well as the frequency of the words used by each informant during the first term i.e. personal information, personal description and festivals in England, no reference will be made to the last three topics mentioned in table 1.

At the end of the first term students were asked to e-mail the teacher according to the following command: *Describe your e-mail tandem and talk about festivals in England*. The text had to include a personal description of the partner and information about festivals in England. Nine students did not answer it so they were excluded from the sample, reducing it to fifty-one informants, twelve of whom had learning difficulties.

All the texts were digitalised, checked regarding spelling to avoid the electronic count on words which are not present in Contemporary English Dictionaries. Afterwards, they were analysed with the application *Frequency* (<http://www.victoria.ac.nz/lals/staff/paul-nation.aspx>) to obtain the number of tokens and types produced by each student as well as the overall results achieved by each of the groups. Finally, the list of tokens was classified according to their lexical category in order to establish the percentage of nouns, verbs, adjectives and adverbs used by each group of students (Greenbaum and Quirk 2003). Word tokens were also analysed according to their semantic field to establish the frequency of the tokens which referred to family, free time/hobbies, personal information, Halloween and Guy Fawkes' Night.

This classification allows us to compare our results with previous research on vocabulary with primary students conducted in the autonomous community of *La Rioja* in which students were evaluated by means of a letter they wrote to an imaginary British host family they were supposed to live with for some time (Agustín Llach and Barreras Gómez 2007; Jiménez Catalán and Ojeda Alba 2007a, 2008; Ojeda Alba 2010). These researchers used *Wordsmith Tools* (<http://www.lexterm.unb.br/documentos/WSHELL.pdf>) to obtain the word frequencies of the data elicited from their students but they followed the same methodology as the one applied in the current study. Another resemblance between these groups of primary and secondary school students is that they have a similar socio-cultural background and *La Rioja* and *Principado de Asturias* are monolingual communities, which apply the same methodology in the foreign language classroom.

The corpus of e-mails was also analysed by means of *Range* to create word lists based on frequency and range, and compare a text against vocabulary lists to see what words in the text are or are not on the lists, and to see what percentage of the items in the text are covered by the lists. The programme provides three baseword lists. The first (wordlist 1) includes the most frequent 1,000 words of English. The second (wordlist 2) includes the 2nd 1,000 most frequent words, and the third (wordlist 3) includes words not in the first 2,000 words of English but which are frequent 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. The first 1,000 words, thus, consists of around 4,000 forms or types. The sources of these lists are *A General Service List of English Words* by Michael West (1953) for the first 2,000 words, and *The Academic Word List* by Coxhead (2000) containing 570 word families (<http://www.victoria.ac.nz/lals/staff/paul-nation.aspx>).

In order to measure if incidental vocabulary learning has taken place in both groups thanks to the e-mail tandem exchange, we will take account of the input provided by English native speakers in their exchange of e-mails with our sample of informants. We will compare the words elicited from English native speakers with the words elicited

from our sample of Spanish EFL learners. Close attention will be paid to the words referring to festivals in England i.e. Halloween and Guy Fawkes since the words about the other topics worked in tandem during the period analysed in this study had been taught previously in the EFL classroom.

3. RESULTS

Once we analysed the corpus of e-mails with *Frequency* (see table 2), our data confirm that the students without learning difficulties (group 2) produced a higher number of tokens and types in their e-mails when compared to their classmates with learning difficulties (group 1).

	Group 1	Group 2
Tokens	615	3105
Means	51.25	79.62
Types	396	2086
Means	33	53.48

Table 2. Total number of types and tokens.

As regards the total number of nouns, verbs, adjectives and adverbs used in their e-mail exchanges (see table 3), our findings indicate that nouns are most frequently used by both groups of students, which coincides with the research carried out with primary students in La Rioja by analysing their written compositions in English (Agustín Llach and Barreras Gómez 2007; Jiménez Catalán and Ojeda Alba 2007a, 2008). It could be argued that primary and secondary students are different regarding age and exposure to English as a foreign language. Nonetheless, it is possible to compare both groups since there are no regulations by the Spanish Ministry of Education concerning the number of types and tokens students should acquire either at primary or secondary level which implies that textbooks can use different numbers of words and types of vocabulary at the same educational level and repeat the vocabulary referring to the same semantic field in primary and secondary education (Jiménez Catalán and Mancebo Francisco 2008). These arguments seem to imply, as will be shown in our results, that there will not be outstanding differences regarding the lexical category of the tokens and types used by primary and secondary school learners.

A deeper analysis of these data evinces that students with learning difficulties (group 1) produce a higher percentage of nouns and adjectives, whereas group 2 includes a higher rate of verbs and adverbs. These findings imply that the students with learning difficulties analysed in this study tend to use nouns in their speech since they are easier words to remember, but they also use more adjectives which are more difficult to retain (Rodgers 1969; Ellis and Beaton 1993; Reyes 2001). By contrast, their partners without

learning problems show a higher command of the language by including a higher percentage of verbs and adverbs in their e-mails although this rate is much lower if compared to the number of verbs and nouns they use in their writings.

Lexical Category	Group 1	Group 2
Nouns	58%	56%
Verbs	28%	32%
Adjectives	10%	2%
Adverbs	4%	10%

Table 3. Percentage of content words.

As far as tandem partners' descriptions are concerned, nouns can be classified in three different semantic fields: *family*, *free time/hobbies* and *personal information*. As regards *family*, both groups of students refer to the same four family members i.e. *brother*, *sister*, *father* and *mother*. As shown in table 4, *brother* is most frequently used by both groups whereas group 2 refers to *father* and *mother* more often than their classmates with learning difficulties do. It is noteworthy that none of the participants refers to other family members they are supposed to have a close relationship with, i.e. grandparents, aunts, uncles or cousins.

Token	Group 1		Group 2	
	Frequency	Percentage	Frequency	Percentage
Brother	9	75%	14	43.75%
Sister	5	41.7%	11	34.4%
Father	2	16.7%	9	28.13%
Mother	2	16.7%	9	28.13%

Table 4. Tokens about family members.

Group 1 students used tokens to refer to *free time* and *hobbies*, which can be subdivided into other related topics: *friends*, *music*, and *sports*. On the other hand, students without learning difficulties just refer to sports (*football*). Therefore, group 1 students seem to have a wider vocabulary on sports and free time than their partners', despite their learning problems.

Regarding *personal information*, word tokens can be classified into three groups: *general terms*, such as *name* or *people*; word tokens referring to *age*: *years* together with the adjective *old*, and, finally, terms about *physical description*: *eyes* and *hair* and two adjectives, *brown* and *blue*. Table 5 shows that the percentage of general terms (e.g. *name*, *people* or *years old*) is higher in students without learning difficulties whereas

tokens which refer to physical description (i.e. *hair* or *eyes*) are most frequently used by students with learning difficulties who seem to be more interested in physical appearance than their classmates without learning problems.

Token	Group 1		Group 2	
	Frequency	Percentage	Frequency	Percentage
Name	6	50%	27	84.4%
People	6	50%	35	100%
Years	7	58.3%	29	90.6%
Old	7	58.3%	29	90.6%
Eyes	6	50%	3	9.4%
Hair	6	50%	4	12.5%
Brown	7	58.3%	4	12.5%
Blue	2	16.7%	3	9.4%

Table 5. Tokens about family members.

Apart from these references to *hair* and *eyes*, few adjectives are found in the corpus analysed. Thus, group 1 students used the term *favourite* to refer to hobbies, as well as some adjectives relating to character e.g.: *friendly*, *funny*, *lazy*, *sociable*, and *talkative*. Regarding the use of nouns and adjectives, our results resemble those reported in several studies on primary EFL students' letters to an imaginary British family they were supposed to live with for a certain period of time, regarding the use of nouns and adjectives (Agustín Llach and Barreras Gómez 2007). These similarities seem to show that there are not big differences among primary and secondary EFL learners despite the fact that the students analysed in this study are at the end of their compulsory instruction (4th ESO) and their exposure to the target language has been longer. However, the fact that textbooks tend to include vocabulary referring to the same semantic field in primary and secondary education (Jiménez Catalán and Mancebo Francisco 2008) may influence the amount of words they are able to process and remember in the target language. It is also true that teenagers, as well as younger children, consider friendship as something very important (Jiménez Catalán and Ojeda Alba 2007a, 2008). This fact might explain why they resort to words that refer to the activities their tandem partners do in their spare time.

Incidental vocabulary learning, as stated in the introduction to this paper, does not seem to apply to this semantic field since all the words participants have used in their e-mails appeared in the textbooks used at earlier stages of their learning, which implies that these terms have been acquired through formal instruction and are used appropriately in the context of the e-mail tandem task.

As far as traditional festivals in the UK are concerned, group 1 only employs two word tokens about Halloween (*Halloween* and *sweets*) which shows that the participants

are not familiarised with Guy Fawkes' Night since there is no reference to this festival in their e-mails. This could be explained on two flanks. On the one hand, as shown in table 6, most of their tandem partners have provided them with very limited or no information at all on this topic, and those who have received it prefer to omit it since they show no interest in it.

Word Type	Frequency
Halloween	6
Bonfire	3
Fireworks	3
Sweets	3
Costumes	2
Guy	2
Fawkes	2
Trick	2
Treat	2
Blow	1
Bonfires	1
Candle	1
Celebrate	1
Celebrating	1
Celebration	1
Ghosts	1
Pumpkins	1
Scary	1
Spirits	1
Weird	1

Table 6. Group 1: Input provided by native speakers.

On the contrary, group 2 informants seem to have acquired more tokens about these two festivals (see table 7) *Halloween* being the most frequent. *Sweets*, *houses*, *trick*, and *treat*, together with *England* and *festival* are quite frequently used which indicates that their e-mail tandem partners have provided them with this input since no reference was made to these terms in class. However, most of them have not retrieved the word *pumpkin* since there are only two students who refer to it. The same behaviour is observed with Guy Fawkes' Night since the terms *Guy* and *Fawkes* come immediately

after *Halloween* in the list (see table 7). Furthermore, group 2 learners know the date of this event, which is why they include the word *November* in their e-mails. Nevertheless, the majority of the informants do not seem to be conscious of the reason why this festival is celebrated in England as only eight include the word *fireworks* in their texts, and terms such as *Bonfire* are mentioned just once.

Token	Frequency
Halloween	47
England	28
Guy	27
Fawkes	27
Sweets	17
Houses	15
November	15
Festival	14
Treat	14
Trick	14
Children	12
Night	12
October	12
Fireworks	8
Pumpkin	2

Table 7. Group 2: Tokens about *Halloween* and *Guy Fawkes' Night*.

These findings seem to show that learners from group 2 have incidentally learnt some specific vocabulary about these festivals thanks to the input provided by their tandem partners in the e-mail exchange (see table 8). These data, as stated by Saragi, Nation and Meister (1978), Horst, Cobb and Meara (1998), Rott (1999), Waring and Takaki (2003), and Webb (2007) also show that the more the words are encountered in students' e-mails, the better they will be learnt

Word Type	Frequency
Halloween	58
Guy	56
Fawkes	52
Trick	37
Sweets	32
Celebrate	26
Bonfire	26
Treat	25
Fireworks	25
Scary	21
Blow	17
Ghosts	14
Witches	12

Table 8. Group 2: Input provided by native speakers.

Contrariwise, students from group 1 do not seem to have acquired any vocabulary because some of them did not have the necessary input and those who had it decided not to include it in their e-mails. This absence of information may be based on their particular characteristics, mostly their lack of motivation towards formal learning and particularly to foreign language learning. These findings imply that vocabulary about this topic was not incidentally learnt with their e-mail tandem partners' support by students with learning difficulties.

Three types of verbs referring to state, possession and preferences are most frequently used by both groups of students in the corpus of e-mails analysed (see table 9). The verb *to be* is most frequently used in its third person singular form *is*. Possession is expressed by means of *to have* in its third person singular form *has*. *To like* is most frequently used to refer to preferences and it is usually followed by verbs of movement (*to go*) in the *-ing* form. Besides, participants consider important to refer to the place they live and that is why the verb *to live* is also used in most of their e-mails. These results might be explained on the grounds of the impact the topics dealt with in the e-mail exchange had in students' responses which favoured the use of these types of verbs. As shown in the literature, the types of composition, as well as the topic, have an effect on the words used by EFL learners (Linnarud 1986; Koda 1993; Agustín Llach, Moreno Espinosa and Fernández Fontecha 2005; Jiménez Catalán 2010).

Finally, it is worth mentioning that students from group 2 used the verb *to celebrate* in its simple present or simple past form to refer to Halloween and Guy Fawkes' Night. Therefore, it seems that incidental vocabulary learning regarding this

verb has taken place thanks to the e-mail tandem by imitating their tandem partners' usage (Sasaki & Takeuchi 2010) since this verb was present in the native speakers' output and is quite frequent in the productions of this group, and it was not present in Spanish EFL learners' textbooks. It could be argued that this verb is quite similar to the Spanish verb *celebrar*, so learners could directly translate from their mother tongue into English. Nevertheless, the fact that this verb is always used in the right tense in the sentence and followed by words related to Halloween or Guy Fawkes' Night together with its high frequency of usage by native speakers (see table 8), indicates that incidental vocabulary learning has taken place since students have been able to reproduce the whole grammatical structure. According to Gass (1999) this is a necessary condition to infer that incidental vocabulary learning has taken place, which would support our interpretation of the data.

Group 1		Group 2	
Word Type	Frequency	Word Type	Frequency
Is	29	Is	160
Has	18	Has	31
Likes	12	Likes	29
Got	11	Lives	27
Going	8	Go	20
Are	7	Got	20
Live	6	Are	17
Plays	6	Going	16
Asked	3	Celebrate	15
Speaks	3	Celebrated	15

Table 9. Verbs.

Adverbs are scarcely used by the informants in their e-mails. Students with learning difficulties (group 1) only wrote two terms related to this lexical category (*very* and *lot*) whereas in the e-mails written by the informants from group 2, five adverbs are found (*very, there, when, lot, and also*). This lack of adverbs could be explained on the fact that these words usually modify adjectives (Greenbaum and Quirk 1993) and, as it was abovementioned, adjectives are not very frequent in the corpus of e-mails analysed in this study. On the other hand, the lack of adverbs in students' productions may be influenced by the fact that native speakers rarely used adverbs in their e-mails which made incidental vocabulary learning very difficult for their Spanish partners. Likewise, previous research on vocabulary acquisition (Rodgers 1969; Ellis and Beaton 1993; Reyes 2001; Jiménez Catalán and Ojeda Alba 2010) proves that EFL learners acquire

adverbs later than nouns or verbs, which may explain the scarcity of tokens from this lexical category found in the present study.

Students' e-mails were also analysed by means of *Range* and the results shown in Table 10 indicate that all the participants made use of at least one token which belongs to the most frequent 1,000 words of English (wordlist 1). Students with learning difficulties (group 1) outperformed their classmates without learning difficulties regarding the number of tokens in wordlists 2 and 3. As far as wordlist 2 is concerned, all the students from group 1 were able to produce at least one token included in the list as opposed to 97.4% from group 2. The difference between both groups is more outstanding in wordlist 3 since 83.3% of the students with learning difficulties were able to write at least one token from this list whereas this figure decreases to 51.28% in group 2.

Wordlist	Group 1	Group 2
one	100%	100%
two	100%	97.4%
three	83.3%	51.28%

Table 10. Range results.

If we analyse the number of types and tokens included in the wordlists used by each group, the findings show (see table 11) that most of the tokens used by students with learning difficulties (88.6%) are part of wordlist 1, whereas 5.7% are included in the 2nd 1,000 most frequent words (wordlist 2), and 2.6% in wordlist 3. It is noteworthy that the percentage of types in wordlists 2 and 3 (7.8% and 4%, respectively) is higher than the number of tokens, which implies that those informants who use these terms do not repeat them, but employ different words belonging to these lists.

Word List	Tokens	Types
one	88.6%	84.5%
two	5.7%	7.8%
three	2.6%	4%

Table 11. Tokens and types Group 1.

As for students without learning difficulties (see table 12), 82.8% of their tokens are part of wordlist 1, 6.5% belong to wordlist 2, and 1% are included in wordlist 3. If we compare these data with the results obtained by group 1, students with learning difficulties slightly outperformed those without learning problems since they are able to use more tokens included in wordlist 1. The situation is very alike regarding types belonging to wordlist 3 as 4% of the tokens produced by the students with learning difficulties belong to this wordlist as opposed to 1.5% for those without learning

problems. However, students without learning difficulties obtained better results regarding wordlist 2 (8.4% as opposed to 7.8%).

Word List	Tokens	Types
one	82.8%	77.6%
two	6.5%	8.4%
three	1%	1.5%

Table 12. Tokens and types Group 2.

4. CONCLUSION

The data presented in this paper show that nouns are most frequently used by both groups of students when describing their e-mail tandem partners. They can be classified according to four semantic fields: family, free time/hobbies, personal information and festivals in the UK. Three types of verbs referring to state (*to be*), possession (*to have*) and preferences (*to like*) are frequently used by both groups of students. The findings also show that adjectives and adverbs are scarcely used by our sample of EFL learners. A possible justification for these results has to do with the specific characteristics of e-mail writing which combines features from oral and written language (Crystal, 2001; Biesenbach-Lucas and Weasenforth 2001; Danet 2002; Chi-Fen 2006; Biesenbach-Lucas 2007), with the oral features being emphasized in informal contexts such as the e-mail exchange between teenagers who try to avoid using a formal discourse which includes long descriptions, and, therefore, more adjectives and adverbs as pre-modifiers. Furthermore, the specific topics students dealt with in the e-mail tandem exchange as well as the characteristics of the e-mail as a genre (brevity, and combination of oral and written language) might explain the scarce presence of adjectives and adverbs in learners' production in this task. Finally, research conducted on vocabulary acquisition (Rodgers 1969; Ellis and Beaton 1993; Reyes 2001; Jiménez Catalán and Ojeda Alba 2008) has shown that nouns and verbs are acquired before adjectives or adverbs, which might also justify the lack of adjectives and adverbs found in the present study.

Our results resemble those obtained by Agustín Llach and Barreras Gómez (2007), Jiménez Catalán and Ojeda Alba (2007a, 2008), when analysing primary students' written compositions in English, which may imply that more time of exposure to foreign language learning does not necessarily entail that the informants are able to use more terms to refer to adjectives and adverbs.

As for incidental vocabulary learning (Hulstijn, Hollander and Greidanus 1996; Gass 1999; Huckin and Coady 1999; Kabata and Edasawa 2011) it seems that both groups have not learnt any new words about family, friends and hobbies thanks to the e-mail tandem exchange since all the terms they employ in their e-mails have been previously taught in the traditional EFL classroom. However, group 2 students seem to have incidentally learnt

new terms about festivals in the UK (Halloween and Guy Fawkes' Night). These results concur with Webb's (2007, 2008) since the input and context provided by their tandem partners could have benefitted new vocabulary learning. The fact that students could easily access their e-mails gave them the opportunity to have more encounters with the new terms and acquire them: it is widely acknowledged in academia that the more encounters you have with a word, the better you will retain it (Horst, Cobb and Meara 1998; Rott 1998; Waring and Takaki 2003; Webb 2007).

On the contrary, students with learning difficulties do not seem to have learnt any vocabulary regarding Halloween and Guy Fawkes' Night. The lack of vocabulary learning could be explained on two flanks. On the one hand, the input provided by the native speakers was limited, therefore, no word encounters related to those festivals were provided to this group of learners. On the other hand, most of the learners who were given information about these festivals decided not to mention it in their e-mails. The absence of information might be explained on the grounds of students' special characteristics and, as was previously stated, their lack of motivation towards foreign language learning. Nonetheless, this argument cannot be assured since we have not implemented any test on motivation as it was not an objective of the present study.

As for the third goal of this paper, most of the tokens and types the participants included in their e-mails belong to the most frequent 1,000 words of English, which concurs with the results achieved by Spanish primary students in previous studies. However, the percentage of types and tokens in word lists one and three is slightly higher in students with learning difficulties which seems to show that the e-mail tandem exchange has also been positive for students with learning difficulties, since they were able to widen their vocabulary size with their e-mail tandem partners' support.

These data seem to indicate e-mail tandem favours vocabulary learning regardless of students' abilities. As shown in this study, students without learning problems were able to acquire some new vocabulary about Halloween and Guy Fawkes' Night with the help of their tandem partners. *Diversificación Curricular* students also improved their vocabulary in English since they are able to use certain words which are included in wordlist 3. These findings seem to imply that learning problems are not a severe obstacle to improve and widen students' vocabulary profile.

In line with the assertions of socio-cultural theory which understands learning as essentially social (Lantolf 2000; Block 2003; Lantolf 2006; Cheon 2008; Lantolf and Poehner 2008; Sasaki and Takeuchi 2010), our research proves that e-mail tandem has favoured effective vocabulary learning through social interaction among the tandem partners. Social interaction leads participants in the e-mail exchange to imitate their tandem partners' model since they are the native speakers of the language they want to learn by incorporating the input provided in the e-mails to their own writings.

These results should be taken with caution and cannot be generalised; the number of informants in the sample being quite low since *Diversificación Curricular* Groups cannot include more than fifteen students, which makes it difficult to collect a bigger sample. Nevertheless, it provides relevant feedback on the vocabulary profiles students

with learning difficulties have after being exposed to the target language - not just following the guidelines of the curriculum in the traditional EFL classroom, but also thanks to an e-mail tandem exchange with students from the target language community. These data also evince that there are not great differences between students with or without learning problems regarding the lexical category of the words they use in their interactions, and the word lists they are included in, at least as far as the semantic fields and topics addressed in this study are concerned.

In order to test if these results could be more representative, further research needs to be carried out to trace the vocabulary profiles of a larger number of mixed-ability informants from different schools in the same area to analyse if this pedagogy based on e-mail tandem interactions favours effective vocabulary learning. Gender-based differences can also be analysed relating them to learning abilities to test if males outperform females or vice versa or, contrariwise, if there are no significant differences between both sexes.

NOTES

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2. Learning difficulty is understood as: “un término general que se refiere a un grupo heterogéneo de trastornos que se manifiestan por dificultades significativas en la adquisición y uso de la escucha, habla, lectura, escritura, razonamiento o habilidades matemáticas” (Miranda, Vidal and Soriano 2000: 44).
3. This programme is regulated by each Autonomous Community. In the case of *Principado de Asturias*, the regulation for the organization of this programme was passed in *Boletín Oficial del Principado de Asturias* (2008/06/26). Available at <<https://sede.asturias.es/bopa/2008/06/26/20080626.pdf>>. Later modified in *Boletín Oficial del Principado de Asturias* (2009/06/10). Available at <<http://www.asturias.es/bopa/2009/06/10/2009-13887.pdf>>.
4. These learning difficulties were diagnosed by the school psychological team after they had implemented several tests to assess students’ intelligence, their reading comprehension and writing capacities in their L1 and their ability to solve logical-mathematical problems.

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