



THE ROLE OF TEXTBOOKS IN SHAPING EFL LEARNERS' CULTURAL MENTAL LEXICON

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ABSTRACT: This study aims to: (i) explore the number and lexical category of cultural words in an EFL textbook used by 44 4th ESO students; (ii) analyse the number of types produced by these informants in response to a task based on three culturally framed stimulus words (Culture, Traditions, Celebrations); and (iii) investigate the relationship between textbook input and students' word production at the start and end of the academic year. Results show alignment between student responses and textbook content, with increased production of cultural words by the end of the year. These findings suggest that their EFL textbooks and instruction influence learners' cultural knowledge.

KEYWORDS: EFL textbooks, lexical availability, culture, traditions, celebrations, mental lexicon

El papel de los libros de texto para moldear el léxico cultural mental de los aprendices de inglés como lengua extranjera

RESUMEN: Este estudio tiene como objetivos: (i) explorar el número y la categoría de las palabras culturales que aparecen en un libro de texto de inglés utilizado por 44 estudiantes de 4.º de ESO; (ii) analizar el número de tipos producidos en respuesta a una tarea basada en tres palabras estímulo culturales (Cultura, Tradiciones, Celebraciones); (iii) investigar la relación entre el contenido del libro y la producción de palabras al inicio y al final del curso. Los resultados muestran una alineación entre las respuestas de los estudiantes y el contenido del libro, aumentando la producción de palabras culturales al final del año. Estos hallazgos sugieren que los libros de texto y la instrucción influyen en el conocimiento cultural de los estudiantes.

PALABRAS CLAVE: libros de texto de ILE, disponibilidad léxica, cultura, tradiciones, celebraciones, léxico mental

Le rôle des manuels dans la formation du lexique culturel mental des apprenants d'anglais langue étrangère

RÉSUMÉ : Cette étude vise à : (i) explorer le nombre et la catégorie lexicale des mots culturels dans un manuel d'ALE utilisé par 44 étudiants du 4^e Cours de la ESO (Éducation Secondaire Obligatoire) ; (ii) analyser le nombre de types produits par ces informateurs en réponse à une tâche PdLex basée sur des mots stimulus culturellement encadrés (Culture, Traditions, Célébrations) ; et (iii) étudier la relation entre l'apport des manuels scolaires et la production de mots des étudiants au début et à la fin de l'année scolaire. Les résultats montrent un alignement entre les réponses des élèves et le contenu des manuels scolaires, avec une augmentation de la production des mots culturels à la fin de l'année. Ces résultats suggèrent que les manuels et l'enseignement influencent les connaissances culturelles des apprenants.

MOTS-CLÉS : manuels d'ALE, disponibilité lexicale, culture, traditions, célébrations, lexique mental

1. INTRODUCTION

Intercultural competence (Byram, 1991, 1997) has gained importance in EFL teaching programmes in Spanish compulsory education. The integration of cultural dimensions into language teaching has been widely acknowledged for its role in fostering students' linguistic proficiency and cultural awareness. In this regard, vocabulary also plays a decisive role in the acquisition of intercultural competence since words are responsible for shaping people's understanding of the world as they are inherently cultural and encode cultural conceptual systems (Liddicoat & Scarino, 2013; Wierzbicka, 1997). Consequently, research on the words associated in response to semantic categories may be essential for understanding how bilingual and monolingual EFL learners categorise vocabulary (Pavlenko, 2009).

Despite the emphasis on cultural competence in EFL teaching programs and its strong link to vocabulary, research on ELT textbooks has proved that the inclusion of cultural words is still superficial (Canga Alonso, 2021; Canga Alonso & Cifone Ponte, 2016; Cifone Ponte, 2019). To our knowledge, nothing has been published about the cultural words included in 4th year of Compulsory Secondary Education (10th grade) EFL textbooks, and the cultural vocabulary students at this level can elicit in response to a PdLex task based on three cultural stimulus words: culture, traditions and celebrations. This study addresses this gap by analysing the cultural words present in the textbook used by a group of 44 4th-year of Compulsory Secondary Education EFL learners and their responses to a PdLex task focused on three cultural stimulus words: *culture*, *traditions* and *celebrations*. These cue words are defined in the curriculum of La Rioja (Decree 5/2011), the *CEFR* (2001) and the *CEFR Companion Volume* (2020) as relevant topics for the development of students' cultural awareness.

This paper comprises five sections. The first section provides an overview of the evolving concept of culture within the field of education, emphasising the connection between culture and vocabulary and their representation in EFL textbooks. In the second section, the research methodology is detailed, giving information about the data collection instruments, participants and data analysis procedures. Following this, the third section describes the principal findings of the study. The fourth section offers the examination and interpretation of its results. Finally, the concluding section contains the main conclusions and some educational implications.

2. LITERATURE REVIEW

This section will explore the evolution of the notion of culture in education, the relationship between culture and the mental lexicon and its representation in EFL textbooks.

2.1. The evolution of the notion of culture in education

The relationship between language and culture has been emphasised by multiple disciplines since the eighteenth century (Sharifian, 2014). In fact, these two notions are intricately intertwined and constitute inherent components within the practices, values and beliefs of a given community (Sapir, 1921). Their influence on each other is reciprocal, with language not only shaping culture but also being affected by sociocultural factors (Byram, 1991). However, their connection in the context of foreign language teaching (FLT) is a rather recent approach and it has evolved significantly in the past 50 years. In the 1970s, the notion of culture was adopted in the domain of language teaching (Lo Bianco et al., 1999). During this decade, sociocultural aspects were approached as an independent entity in foreign language syllabi, and special attention was given to factual information about the target culture (e. g., geography and literature) (Lo Bianco et al., 1999). In the next decade, the focus of culture in foreign language teaching changed to practice, values and beliefs. Although this shift meant a far-reaching change in how the target culture was approached in the EFL classrooms, the ultimate goal remained rooted in understanding the target culture (Lange & Paige, 2003). In the 1990s, English as a Lingua Franca (ELF) became increasingly popular in international encounters (Chang, 2014). The efficacy of speakers ceased to rely solely on their fluency level and linguistic proficiency. Rather, success was found in the ability to navigate and mitigate misunderstandings arising from linguistic conventions, interaction management, lexis, and politeness considerations (Lustig & Koester, 2010). In this regard, different approaches emerged in response. According to Liddicoat and Scarino (2013), there was a critical distinction between cultural perspective and intercultural perspective. They argued that the former focused on a culture external to the learner, while the latter integrated learners' own culture in the learning process. This distinction remains vital for ELT contexts and for our study as we are approaching our data from an intercultural perspective since we

expect participants' responses to account for how different cultures coexist in their mental lexicon.

In the late 90s, intercultural competence emerged as a requirement for learners to succeed in interaction, having a sensitive control of their own linguistic and cultural nuances and those of the L2 (Halverson, 1985). Its role has been more emphasised in today's globalised world where a globally *competent* speaker is considered to be equipped with the cultural knowledge and skills to behave in different cultural contexts and relate to people from different cultural and ethnic backgrounds (Deardorff, 2006). This competence is implicit in several disciplines (see: business, human resources, health care); however, in the last two decades, it has become relevant in the field of foreign language teaching (Deardorff, 2006). The concept draws from the notions of *savoirs* (*savoir-apprendre*, *savoir-comprendre*, *savoir-faire*, *savoir être* and *savoir-s'engager*) (Byram, 1997) and its process of development requires the student to revise their own cultural identity and to challenge their own attitudes, values and beliefs (Berry et al., 1992; Byram, 1997). The concept also emphasises the coexistence of different cultures in the EFL classrooms. In this vein, Cortazzi and Jin (1999) suggested a classification of the notion of culture into three types: the target culture (TC), the source culture (SC) and international cultures (IC).

Once analysed the evolution of the notion of culture, we move to discuss the relationship between culture and the mental lexicon.

2.2. Culture and the mental lexicon

The relationship between culture and lexicon has already been emphasised by linguists (Goddard & Wierzbicka, 2014; Wierzbicka, 1992). In this regard, Goddard and Wierzbicka (2014) account for the relevance of words in human interaction, human knowledge, and in some cultural systems such as religion, beliefs and values. Therefore, words contribute to shaping people's understanding of the world as they are inherently cultural and encode cultural conceptual systems (Liddicoat & Scarino, 2013; Wierzbicka, 1997).

In every language, there are key words which contain culture-specific features (Byram, 2007; Newmark, 1988). These words, also referred to as keywords or cultural words, are terms used "for special kinds of "things", "events" or "customs" [...] that cannot be translated literally, because translation will distort their meaning" (Hapsari & Setyaningsih, 2013, p. 76). What is more, words carry significant meaning and connotations in different cultures, their misuse or lack of understanding may also result in misunderstandings and communication breakdowns (Dimitrijevic, 1977). To expose the relevance of vocabulary in intercultural encounters, Bush (2007) provided examples of French words that require familiarity with French culture for full comprehension:

Consider a few other examples. A French *pâtisserie* in no way resembles a typical American iced cake. Nor does a small *hôtel* in Paris look like a Holiday Inn. And almost no French

fromage is like cheddar or even close to mozzarella, the closest that most American students have come to “foreign” cheese. (2007, p. 730)

In this sense, each learner's mind works with its own system of cultural conceptualizations. These conceptualizations are “units of conceptual knowledge such as schemas, categories, and conceptual metaphors that emerge from the interactions between the members of a cultural group” (Sharifian, 2009, p. 242). Cultural conceptualizations are negotiated across time and places; they are usually shared by individuals coming from the same cultural background but are not homogeneously present across the minds of a cultural group. In this sense, cultural schemas and categories are strongly connected with the lexicon and its inclusion in EFL instruction may facilitate the development of learners' cultural understanding (Cifone Ponte, 2023).

To examine learners' mental lexicon, lexical availability tasks have been widely used. However, little has been published about mental lexicon and culture. Lexical availability (LA) studies aim to bring to the surface the words available for immediate use by a given speaker, or a specific group of speakers (Gougenheim, Michéa, Rivenc & Sauvageot, 1964), so that they could be understood as the vocabulary flow usable in a given communicative situation (Jiménez Catalán & Fitzpatrick, 2014). To our knowledge, only two studies have employed a lexical availability task to analyse EFL learners' cultural responses (Canga Alonso, 2021; Canga Alonso & Cifone Ponte, 2016). Canga Alonso and Cifone Ponte (2016) examined undergraduate's responses to the prompt ‘food and drink’; findings indicated a great predominance of international references. Similarly, Canga Alonso (2021) focused on the available lexicon of 12th graders to the semantic categories ‘countryside’ and ‘food and drink’. He also reported that most responses belonged to international cultures.

2.3. Culture in EFL textbooks

The incorporation of culture within EFL textbooks has significant implications for language teaching and learning. Byram and Risager (1999) stressed that language is not just a means of communication but a transporter of culture, depicting the values, norms, and ways of life of its users. Thus, EFL textbooks serve as windows through which learners perceive and understand the cultural context embedded within the language they are studying. The multifaceted role of textbooks has already been underlined in literature (Cortazzi & Jin, 1999). These materials are not only repositories of linguistic knowledge but also representations of multiple societies and their values. Consequently, textbooks also convey a global understanding of group norms, and their content becomes key in shaping students' perceptions and understanding of different cultures (Schissler, 1990).

However, the integration of culture in EFL materials poses some challenges (Kramsch, 1993). Cultural content in these materials is usually focused on the target culture while students' cultural background (or source culture) and international cultures are often overlooked (Shin, Eslami & Chen, 2011; Gómez Rodríguez, 2015; Canga Alonso y Cifone

Ponte, 2016; Canga Alonso, 2021). This tendency may reflect the market influence on the production of textbooks, which originate from English-speaking countries. Nevertheless, this biased representation of the target culture may, in turn, lead to undesirable comparisons and the emergence of stereotypes, especially in contexts where cultural differences between the target and the source cultures are more obvious (Sercu et al., 2005). Furthermore, Sercu et al. (2005) also critique EFL textbooks for their rigidity in representing foreign languages, particularly noticing deficiencies in the coursebooks employed in the Spanish EFL classrooms. Students are usually given general information while controversial topics are avoided (Gray, 2010). Although this approach may minimise potential discomfort, it risks presenting a superficial treatment of cultural aspects that may be hindering learners' acquisition of cultural understanding (Halverson, 1985). On the other hand, Brown (2011) shows how form, meaning and grammatical functions are the most important aspects of vocabulary representation in textbooks. This may mean that cultural words and cultural connotations may be usually neglected by EFL textbooks.

To the best of our knowledge, ours is the first attempt to investigate how the sociocultural content in EFL textbooks may be shaping learners' cultural mental lexicon. By analysing the 10th graders EFL learners' cultural word elicitation in response to a PdLex task based on three cultural stimulus words ('culture', 'celebrations' and 'traditions') and the cultural input provided in their textbook, this study seeks to contribute to narrowing this gap, and intends find answers to the following research questions:

RQ1: What is the number and lexical category of the cultural words included in our informants' EFL textbook?

RQ2: What is the number and type of our EFL learners' responses to three cultural prompts? Is there an increase in the number of cultural words elicited from the beginning to the end of an academic year?

RQ3: Can we establish connections between students' responses and the cultural input provided by their textbook?

3. METHODOLOGY

3.1. Informants

The sample comprised 44 informants from a Public high school located in the capital city of a region located in the north of Spain, but seven were discarded because they did not perform the second task. The participants were enrolled in the 4th grade of Compulsory Secondary Education (10th Grade). At the time of the data collection, they were 15-16 years old, and their mother tongue was Spanish. These data were extracted from a questionnaire they had to fill in on the same day of the data collection.

High school headmasters signed consent forms so that the tasks could have been administered. They also informed students' parents and tutors. The students whose families did not consent for their children to take part in the investigation moved to another room while the tasks were implemented.

3.2. Procedure and instruments

A PdLex task was employed to elicit word production from participants. These tasks are commonly used to establish the structure of semantic representation and association within a given semantic category (Agustín-Llach, 2023). Learners were given two minutes to write as many words or phrases that came to their mind during that period of time (Jiménez Catalán, 2014; Bartol Hernández, 2006). They were asked to respond to six prompts from a PdLex task: *Culture*, *Traditions*, *Celebrations*, *Happy*, *Fear* and *Surprise*.

Two members of our research team moved to each school to administer the tasks to students in their classrooms, in the presence of their teachers. Students answered the questionnaire in the first place. Then, they were asked to complete the PdLex task. The total time allowed for the PdLex task was twelve minutes (3 prompts and 2 minutes per prompt). Clear instructions were given both orally and in written form in students' L1 to clarify what they were required to do during the implementation of the task. Data were collected at two different times during the academic year 2021-2022 (October 2021 and May 2022).

This paper focuses on three stimulus words *Culture*, *Traditions* and *Celebrations* since its main aim is to explore students' cultural word elicitation and these three terms are culturally rooted. In order to compare students' answers with the vocabulary input included in their textbook, a deep analysis of *Think Ahead: ESO 4* (Marks & Scott, 2019) was conducted.

3.3. Data analysis

Answers were codified and students' identity preserved. The unit of analysis was the cultural word, defined as a term used "for special kinds of "things", "events" or "customs" [...] that cannot be translated literally, because translation will distort its meaning" (Hapsari & Setyaningsih, 2013, p. 76).

The edition of word responses was based on previous studies in the field (Canga Alonso, 2021; Jiménez Catalán & Agustín Llach, 2017; Fernández Orío & Jiménez Catalán, 2015; Jiménez Catalán & Ojeda Alba, 2009). Thus, the following criteria were applied: (i) spelling mistakes were corrected, (ii) repetitions of the same word within the same prompt were counted once, (iii) regular plurals were lemmatised to singular, (iv) unintelligible words were discarded, (v) in case of verbs, -ing and -ed suffixes were replaced by their corresponding infinitive, with the exception of those words with separate entries in dictionaries (Cambridge Online Dictionary and wordreference.com). In order to determine if a word could be considered cultural, they were all checked in the *Longman Dictionary of English Language and Culture* (Longman, 2005).

The edited responses per prompt and per student were, then, introduced in a Microsoft Excel© file in order to run quantitative analysis (mean values). Wordsmith Tools version 8.0 was used in order to identify the number of tokens (i. e., examples of occurrences of a type), types (i. e., a class of linguistic items) (Nation, 2001), as well as the alphabetic and frequency ranks of the cultural words elicited by our informants. Words were discarded if they were not elicited by the 10% of the participants which corresponded with 5 occurrences. Finally, the textbook was scanned to extract all its lexical content and analysed following the same procedure to list all the words included as well as their frequencies.

4. RESULTS

As for our first research question (*what is the number and type of cultural words included in our informants' EFL textbook (Marks & Scott, 2019)?*), our findings reveal that *Think Ahead 4* contains 3275 types, 637 of which are cultural. Thus, cultural words constitute 19.45% which is nearly one-fifth of the total number of words included in the book. As for the lexical category, most of the words either cultural or general terms are nouns.

Regarding RQ2 (*what is the number and type of our EFL learners' responses to three cultural prompts? Is there an increase in the number of cultural words elicited in the second data collection?*), our informants elicited 1143 cultural words in the first data collection and this figure increased slightly in our second test since they produced 1291 cultural occurrences. As shown in Table 1, *Celebrations* was the most productive prompt in both data gathering (413-480) whereas *Traditions* obtained the lowest results (323-384). As for mean values, they were slightly higher in favour of *Culture* in Test 1 (9.25 vs. 9 in *Celebrations*), but in Test 2 *Celebrations* was further ahead (10.91 vs. 9.7). It is also outstanding that the mean values for *Traditions* were lower in both testing times (7.34 and 8.73). Table 1 also points out an increase in word production in the three stimulus words analysed in the present research. This augment in word retrieval is particularly outstanding in *Celebrations* since our informants retrieved 67 words more than in Test 1.

| | Culture | | Traditions | | Celebrations | |
|-------|---------|--------|------------|--------|--------------|--------|
| | Test 1 | Test 2 | Test 1 | Test 2 | Test 1 | Test 2 |
| Types | 407 | 427 | 323 | 384 | 413 | 480 |
| Mean | 9.25 | 9.7 | 7.34 | 8.73 | 9 | 10.91 |
| Max | 25 | 19 | 16 | 16 | 22 | 24 |
| Min | 0 | 2 | 0 | 1 | 2 | 2 |
| SD | 4.48 | 7.07 | 4.88 | 3.71 | 3.41 | 5.05 |

Table 1. Cultural words per prompt in the PdLex task

The close inspection of percentages reveals that in the first gathering, 45% of the informants were above the means in *Culture*, 47.73% in *Traditions* and nearly 57% in *Celebrations*. The responses to this last prompt in Test 1 seem to show that this cue word is quite familiar among the sample as 25 informants were above the means. The findings of Test 2 showed an increase in the mean values in all the cue words surveyed which was particularly higher in *Celebrations* (1.91%) and *Traditions* (1.42%). However, the number of participants above the means only grew in *Culture* (2.27%) whereas there was a decrease in *Traditions* (6.74%) and *Celebrations* (6.82%). Table 2 displays these outcomes.

| | Test 1 | Test 2 |
|--------------|-------------|-------------|
| Culture | 20 (45.45%) | 21 (47.72%) |
| Traditions | 21 (47.73%) | 18 (40.99%) |
| Celebrations | 25 (56.82%) | 22 (50%) |

Table 2. Distribution and comparison of the number and percentage of informants below and above the means

In order to answer our third research question, we compared the students' responses with the cultural input provided by their textbook. Table 3 reveals that there is a close relationship between the cultural input provided by *Think Ahead 4* and our informants responses to the PdLex task. As shown in Table 3, half of the twenty most frequent words are included in the textbook, and five of them (*family, food, friend, country* and *culture*) are among the ten most frequent ones. It is also outstanding that most of the CWs that have 30-50 encounters in the TB and are produced by the informants in their 20 most frequent responses to the task.

| Pdlex | | | Think Ahead 4 | |
|-------|-----------|-----------|---------------|-----------|
| | Word | Frequency | Word | Frequency |
| 1 | Christmas | 53 | People | 260 |
| 2 | Birthday | 48 | World | 88 |
| 3 | Family | 39 | School | 80 |
| 4 | Food | 38 | Travel | 67 |
| 5 | Party | 34 | Family | 63 |
| 6 | Tradition | 29 | Food | 55 |
| 7 | Country | 27 | Friend | 55 |
| 8 | Friend | 26 | Culture | 48 |

| | | | | |
|----|-----------|----|------------|----|
| 9 | Culture | 21 | Music | 44 |
| 10 | Halloween | 20 | Country | 41 |
| 11 | Language | 19 | Old | 39 |
| 12 | Dance | 17 | History | 38 |
| 13 | Holiday | 17 | Person | 38 |
| 14 | Music | 16 | Restaurant | 34 |
| 15 | Religion | 16 | Language | 32 |
| 16 | Clothes | 14 | Expression | 30 |
| 17 | Easter | 14 | Festival | 29 |
| 18 | History | 13 | Town | 29 |
| 19 | Newyear | 12 | Clothes | 28 |
| 20 | People | 12 | Popular | 24 |

Table 3. Cultural words in PdLex and textbook Think Ahead 4 (TA4)

After a deep analysis into our informants' word production per prompt, we can state that all the words reported in *Culture* but two (monument and bull) are in the textbook and appear between 30 and 50 times. Table 4 illustrates these findings.

| 1st Data Collection | | | | 2nd Data Collection | | |
|---------------------|-----------|-----------|-----|---------------------|-----------|-----|
| | | Frequency | TA4 | | Frequency | TA4 |
| 1 | Language | 19 | 32 | Food | 20 | 55 |
| 2 | Country | 16 | 41 | Tradition | 18 | 9 |
| 3 | Museum | 16 | 33 | Country | 17 | 41 |
| 4 | Food | 13 | 55 | Language | 17 | 32 |
| 5 | History | 11 | 48 | Religion | 11 | 1 |
| 6 | Religion | 11 | 1 | Music | 10 | 44 |
| 7 | Book | 9 | 50 | Church | 8 | 2 |
| 8 | Art | 8 | 6 | Clothes | 8 | 28 |
| 9 | Monument | 8 | 0 | Dance | 8 | 9 |
| 10 | City | 7 | 51 | History | 8 | 48 |
| 11 | Tradition | 7 | 9 | Bull | 7 | 0 |
| 12 | Knowledge | 6 | 4 | People | 7 | 260 |

| | | | | | | |
|----|---------|---|-----|-------------|---|----|
| 13 | Music | 6 | 44 | Family | 6 | 63 |
| 14 | People | 6 | 260 | God | 6 | 2 |
| 15 | School | 6 | 80 | Sport | 6 | 23 |
| 16 | Ancient | 5 | 2 | Celebration | 5 | 10 |
| 17 | Clothes | 5 | 28 | Holiday | 5 | 27 |
| 18 | | | | Monument | 5 | 0 |
| 19 | | | | Museum | 5 | 33 |
| 20 | | | | Party | 5 | 22 |
| 21 | | | | Picture | 5 | 43 |
| 22 | | | | Sculpture | 5 | 1 |

Table 4. Comparison of responses to Culture in both data collections and their frequency in the textbook (TA4)

The same tendency is found in *Traditions* since all the words appear in their textbook between 1 and 63 times (see Table 5).

| 1st Data Collection | | | | 2nd Data Collection | | |
|---------------------|--------------|-----------|-----|---------------------|-----------|----------|
| | | Frequency | TA4 | | Frequency | TA4 |
| 1 | Christmas | 18 | 9 | Christmas | 25 | 9 |
| 2 | Family | 14 | 63 | Birthday | 14 | 7 |
| 3 | Food | 13 | 55 | Culture | 13 | 48 |
| 4 | Culture | 12 | 48 | Family | 12 | 63 |
| 5 | Halloween | 12 | 4 | Food | 12 | 55 |
| 6 | Country | 8 | 41 | Party | 12 | 5 |
| 7 | Thanksgiving | 7 | 2 | Country | 8 | 41 |
| 8 | Birthday | 6 | 7 | Halloween | 8 | 4 |
| 9 | Religion | 6 | 6 | Easter | 6 | 5 |
| 10 | Music | 5 | 5 | Clothes | 5 | 28 |
| 11 | Party | 5 | 5 | Dance | 5 | 9 |
| 12 | | | | FRIEND | 5 | 55 |
| 13 | | | | RELIGION | 5 | 1 |

Table 5. Comparison of responses to Traditions in both data collections and their frequency in the textbook (TA4)

As for *Celebrations* (see Table 6), we find more words that are not included in the textbook, but refer to a local festivity (*San Mateo*), the end of the school year and their 10th grade graduation (graduation and prom). It is also noteworthy that certain words (e. g., birthday, Christmas, family, friend or party) are repeated in various stimulus words.

| 1st Data Collection | | | | 2nd Data Collection | | |
|---------------------|--------------|-----------|-----|---------------------|-----------|-----|
| | | Frequency | TA4 | | Frequency | TA4 |
| 1 | Birthday | 33 | 7 | Birthday | 34 | 7 |
| 2 | Christmas | 27 | 9 | Christmas | 27 | 9 |
| 3 | Party | 23 | 5 | Family | 21 | 63 |
| 4 | Friend | 18 | 55 | Friend | 20 | 55 |
| 5 | Family | 17 | 63 | Party | 17 | 5 |
| 6 | Halloween | 17 | 4 | Halloween | 12 | 4 |
| 7 | Happy | 12 | 5 | Tradition | 11 | 9 |
| 8 | Food | 10 | 55 | Graduation | 9 | 0 |
| 9 | Thanksgiving | 9 | 2 | Holiday | 9 | 27 |
| 10 | Newyear | 7 | 1 | Culture | 8 | 48 |
| 11 | Present | 7 | 92 | Easter | 8 | 5 |
| 12 | Tradition | 6 | 9 | Gift | 8 | 11 |
| 13 | Cake | 5 | 0 | Newyear | 8 | 1 |
| 14 | | | | Present | 8 | 92 |
| 15 | | | | Food | 6 | 55 |
| 16 | | | | Happy | 6 | 5 |
| 17 | | | | Prom | 6 | 0 |
| 18 | | | | Wedding | 6 | 3 |
| 19 | | | | San Mateo | 5 | 0 |
| 20 | | | | Special | 5 | 20 |
| 21 | | | | St Patrick's day | 5 | 2 |
| 22 | | | | Summer | 5 | 25 |

Table 6. Comparison of responses to Celebrations in both data collections and their frequency in the textbook (TA4)

5. DISCUSSION

The first research question sought to establish the total number of lexical types present in the EFL textbooks used by our informants and the number of these types classified as cultural words. The analysis of the textbook revealed a total of 3275 types; with 19.45% identified as cultural words (637). To the best of our knowledge, this study represents the first attempt to consider the entire lexical input of the textbook to determine the percentage of cultural words over the total. However, we believe that almost 20% of cultural words constitute a good quantity, supporting the assertion that the textbook used by the participants addresses intercultural competence effectively by including cultural vocabulary in its content.

Regarding the second research question (*what is the number and type of our EFL learners' responses to three cultural prompts? Is there an increase in the number of cultural words elicited in the second data collection?*), our results show a positive trend in cultural word production among our EFL learners, suggesting a potential improvement in their cultural vocabulary over time. Specifically, our data suggests an increase in cultural word production across all the stimulus words by the end of the academic year (from 1143 to 1211). This could be due to our informants' exposure to the foreign language. It is noteworthy that by the end of May, when the second data collection took place, students had completed most of the tuition hours for the academic year. Although the correlation between learners' vocabulary input and output has not been widely investigated, prior studies (e. g., Duin & Graves, 1983) have suggested that explicit vocabulary instruction enhances learners' awareness of the appropriate contextual word usage, thus improving their word selection in written production. Likewise, Lee (2003) reported empirical support for the improvement of vocabulary production after explicit vocabulary instruction. On the contrary, exposure to a second language has been linked to the improvement of learners' vocabulary knowledge and the development of a more native-like mental lexicon (El-Dakhs, 2017).

Our findings also reveal that the activation of the cultural mental lexicon depends on the prompt employed. Remarkably, *Celebrations* emerged as the most productive prompt during both data collection sessions, while *Traditions* displayed the lowest productivity. These outcomes align with prior research focused on classical prompts, which has reported differences in prompt productivity (see Akbarian, Farajollahi & Jiménez Catalán, 2020; Martínez-Adrián & Gallardo-del-Puerto, 2016). In a study investigating cultural word retrieval among 12th graders using the classical prompt *Food and Drink*, Canga Alonso (2021) also observed a dominance of words related to celebrations and festivities in the target culture. The great presence of celebrations in the lexicon of EFL learners may be attributed, in part, to the curricula requirements outlined in the Spanish educational framework at the time of data collection. Specifically, as outlined in Decree 42/2022, the integration of celebrations from the target culture into the EFL curriculum was stressed as a fundamental aspect of cultural knowledge in language learning.

Regarding the third research question, the comparison between students' responses and the cultural input of their textbook, as outlined in Table 4, yields significant insights into the relationship between EFL materials and learners' performance on the PdLex task. The results indicate a striking alignment between the cultural vocabulary presented in the textbook and our participants' responses.

A more in-depth examination of word production per prompt reveals a solid correlation between the cultural words reported under the stimulus words: *Culture* and *Traditions* and those found in the textbook. With the exception of two terms in *Culture* (i. e., monument and bull), all the cultural words produced by the informants are present in the textbook. In contrast, *Celebrations* appears to be the least influenced category by the textbook, with several responses having limited or no presence in the EFL material (e. g., graduation, prom, *San Mateo*). These references strongly reflect the students' personal experiences. However, this may also indicate that learners' word knowledge is influenced by the EFL textbook since the responses that are not present in the texts are either cognates (e. g., graduation) or proper nouns (e. g. *San Mateo*). Also, despite previous research on EFL textbooks showing a predominance of the target culture in their content and vocabulary input (Canga Alonso, 2021; Cifone Ponte, 2019; Canga Alonso & Cifone Ponte, 2016), most words retrieved by the participants in the three categories are general and do not refer to specific cultures. Some references to the target culture were observed, such as 'Halloween' (4), 'Thanksgiving' (2) and 'St. Patrick's Day' (2) in *Celebrations*. Nonetheless, these responses seem not to be affected by their frequency in the textbook (see frequency in brackets). Indeed, the rigidity in EFL materials concerning cultural aspects (Cifone Ponte, 2019; Sercu et al., 2005; Hilliard, 2014) may be also observed in learners' responses, characterised by dictionary-like definition answers where their cultural repertoire and experiences are completely missing.

Our data also showed that some words are repeated across the three prompts (see, for instance, food, family and party) which may be attributed to the fact that students' cultural lexicon is interconnected so they relate the three prompts. Moreover, as Labov (2004) claims, some categories have more blurry boundaries as they are more difficult to define. In this regard, we could see a closer link between *Traditions* and *Celebrations* where students include festivities (e. g., Christmas, Halloween) and typical behaviours and events within celebrations (e. g., party).

It is also noteworthy that the terms 'birthday' and 'Christmas' emerge as the most frequently occurring words in response to the *Traditions* and *Celebrations* prompts. These findings align with those of Palapanidi and Agustín Llach (2018), who, in their comparison of the available lexicon of a group of Greek L1 speakers learning Spanish as their L2 and a group of Spanish native speakers, identified 'Navidad' (Christmas) and 'cumpleaños' (birthday) to be the most common responses to the prompt *Celebraciones y Fiestas* (*Celebrations and Festivities*). This similarity between their study and ours could be attributed to the prototype theory, which suggests that certain members within a category are more representative than others (Rosch & Mervis, 1975). The prevalence of such celebrations across the globe and the fact that they meet most criteria within the semantic categories of *Celebrations* and

Traditions, may account for their prevalence in the students' responses in different languages and with different cultural backgrounds when encountering a Pdlex task.

6. CONCLUSION AND PEDAGOGICAL IMPLICATIONS

Our main goal was to establish the effects of the use of an EFL textbook in the mental lexicon of EFL learners. We have accomplished this by analysing the number of cultural words included in an EFL textbook used by a sample of 44 4th year of ESO students and their answers to a PdLex task to determine if their production of cultural words is influenced by the textbook input.

Our results suggest an overlap between the cultural input provided by the textbook and the responses elicited from the participants. Additionally, we observed a positive trend in cultural word production among EFL learners over time, indicating a potential for improvement in their cultural vocabulary due to the use of EFL materials. The major implication of this finding is that the use of vocabulary found in the EFL textbook by learners may mean that well-designed instructional materials can play a crucial role in facilitating learners' engagement with and understanding of cultural concepts and vocabulary. However, our results reported rigid responses in two of the three prompts where the students' perspectives and cultural backgrounds were almost absent. This rigidity seems to be influenced by the word input found in the textbook. Although students are learning vocabulary from these materials, the words they are acquiring are not facilitating intercultural communication as students may be not able to talk about their own experiences or understand others'. This may lead to a disassociation from the foreign language as learners find it distant from their realities which may, in turn, cause students' rejection of the learning process.

These findings have implications for curriculum design and instructional practices aimed at enhancing learners' cultural competence and language proficiency in EFL contexts. Our primary outcomes suggest that cultural competence can be enhanced through instruction, and it may be affected by the language contained in the textbooks of election. Further research might benefit from a wider sample of textbooks and participants from different cultural backgrounds to establish whether the same trends are observed across textbooks and proficiency levels.

REFERENCES

- AGUSTÍN-LLACH, M.^a P. (2023). Foreign language semantic categorization: Evidence from the semantic network and word connections. *Journal of Research in Applied Linguistics*, 14(1), 205-222. <https://doi.org/10.22055/RALS.2023.18077>.
- AKBARIAN, I., FARAJOLLAHI, F., & JIMÉNEZ CATALÁN, R. M.^a (2020). EFL learners' lexical availability: Exploring frequency, exposure, and vocabulary level. *System*, 91, 1-12. <https://doi.org/10.1016/j.system.2020.102261>.

- BARTOL HERNÁNDEZ, J. A. (2006). La disponibilidad léxica. *Revista española de Lingüística*, 36(1), 379-384.
- BERRY, J. W., POORTINGA, Y., SEGALL, M. H., & DASEN, P. R. (1992). *Cross-cultural psychology: Research and applications*. Cambridge University.
- BROWN, D. (2011). What aspects of vocabulary knowledge do textbooks give attention to? *Language Teaching Research*, 15(1), 83-97. <https://doi.org/10.1177/1362168810383345>.
- BUSH, M. D. (2007). Facilitating the integration of culture and vocabulary learning: The categorization and use of pictures in the classroom. *Foreign Language Annals*, 40(4), 727-745. <https://doi.org/10.1111/j.1944-9720.2007.tb02890.x>.
- BYRAM, M. (1991). Teaching culture and language: Towards an integrated model. In D. Buttjes & M. Byram (Eds.), *Mediating languages and cultures* (pp. 17-30). Multilingual Matters.
- BYRAM, M. (1997). *Teaching and assessing intercultural communicative competence*. Multilingual Matters.
- BYRAM, M. (2007). 'Cultural awareness' as vocabulary learning. *Language Learning Journal*, 16(1), 51-57. <https://doi.org/10.1080/09571739785200291>.
- BYRAM, M., & RISAGER, K. (1999). *Language teachers, politics and cultures*. Multilingual Matters.
- CANGA ALONSO, A., & CIFONE PONTE, M. D. (2016). An analysis of cultural vocabulary in ELT textbooks. *Odisea*, (16), 83-96. <https://doi.org/10.25115/odisea.voi16.298>.
- CANGA ALONSO, A. (2021). The representation of culture in EFL learners' available lexicon. *Onomázein*, (54), 20-40. <https://doi.org/10.7764/onomazein.54.02>.
- CHANG, Y. J. (2014). Learning English today: What can world Englishes teach college students in Taiwan? *English Today*, 30(1), 21-27. <https://doi.org/10.1017/S0266078413000527>.
- CIFONE PONTE, M.^a D. (2019). A quantitative and qualitative analysis of cultural vocabulary in second baccalaureate EFL textbooks. [Doctoral dissertation]. Universidad de La Rioja. Dialnet. <https://dialnet.unirioja.es/servlet/tesis?codigo=237525>.
- CIFONE PONTE, M.^a D. (2023). Fostering cultural understanding Through vocabulary: The case of graded readers. *International Journal of TESOL Studies*, 5(2), 33-48. <https://doi.org/10.58304/ijts.20230204>.
- CORTAZZI, M., & JIN, L. (1999). Cultural mirrors. In E. Hinkel (Ed.), *Culture in second language teaching and learning* (pp. 196-219). Cambridge. University.
- CEFR = *Common European framework of reference for languages: Learning, teaching, assessment*. (2001). Cambridge University.
- CEFR COMPANION VOLUME = *Common European framework of reference for languages: Learning, teaching, assessment. Companion volume with new descriptors*. (2020). <https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989>.
- Decreto 5/2011, de 28 de enero, por el que se establece el Currículo de la Educación Secundaria Obligatoria de la Comunidad Autónoma de La Rioja. https://ias1.larioja.org/boletin/boletin/bor_mostrar_anuncio.jsp?referencia=948836-1-HTML-452519-X.
- Decreto 42/2022, de 13 de julio, por el que se establece el currículo de la Educación Secundaria Obligatoria y se regulan determinados aspectos sobre su organización, evaluación, promoción y titulación en la Comunidad Autónoma de La Rioja. <https://www.larioja.org/larioja-client/cm/edu-orden-academica/images?idMmedia=1417778>.

- DEARDORFF, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalisation. *Journal of Studies in International Education*, 10(3), 241-266. <https://doi.org/10.1177/1028315306287002>.
- DIMITRIJEVIC, N. R. (1977). Problems and implications of contrastive analysis of vocabulary and culture. *Poznan Studies in Contemporary Linguistics*, 7, 133-144.
- DUIN, A. H., & GRAVES, M. F. (1987). Intensive vocabulary instruction as a prewriting technique. *Reading Research Quarterly*, 22(3), 311-330. <https://doi.org/10.2307/747971>.
- EL-DAKHS, D. A. (2017). The effect of language exposure and word characteristics on the Arab EFL learners' Word Associations. *Journal of Psycholinguistic Research* 46(4), 1033-1052. <https://doi.org/10.1007/s10936-017-9477-z>.
- FERNÁNDEZ ORÍO, S., & JIMÉNEZ CATALÁN, R. M^a. (2015). Lexical availability of EFL Learners at the end of secondary education: The effect of language and prompt. *ES Revista de Filología Inglesa*, (36), 103-128. <https://revistas.uva.es/index.php/esreview/article/view/741/720>.
- GODDARD, C., & WIERZBICKA, A. (2014). *Words and meanings: Lexical semantics across domains, languages and cultures*. Oxford University.
- GÓMEZ RODRÍGUEZ, L. F. (2015). The cultural content in EFL textbooks and what teachers need to do about it. *Profile*, 17(2), 167-187. <https://dialnet.unirioja.es/servlet/articulo?codigo=5139510>.
- GOUGENHEIM, G., MICHÉA, R., RIVENC, P., & SAUVAGEOT, A. (1964). *L'élaboration du français fondamental 1er degré. Étude sur l'élaboration d'un vocabulaire et d'un grammaire de base*. Didier.
- GRAY, J. (2010). *The construction of English: Culture, consumerism and promotion in the ELT global coursebook*. Palgrave Macmillan.
- HALVERSON, R. J. (1985). Culture and vocabulary acquisition: a proposal. *Foreign Language Annals*, 18(4), 327-33. <https://doi.org/10.1111/j.1944-9720.1985.tb01810.x>.
- HAPSARI, N. D., & SETYANINGSIH, R. W. (2013). Cultural words and the translation in Twilight. *Anglicist*, 2(2), 75-81. <https://journal.unair.ac.id/download-fullpapers-anglicistd056474059full.pdf>.
- HILLIARD, A. (2014). A critical examination of representation and culture in four English language textbooks. *Language Education in Asia*, 5(2), 238-252. <https://dx.doi.org/10.5746/LEiA/14/V5/I2/A06/Hilliard>.
- JIMÉNEZ CATALÁN, R. M^a. (2014). *Lexical availability in English and Spanish as a second language*. Springer.
- JIMÉNEZ CATALÁN, R. M^a, & AGUSTÍN LLACH, M. P. (2017). CLIL or time? Lexical profiles of CLIL and non-CLIL EFL learners. *System*, 66, 87-99. <https://doi.org/10.1016/j.system.2017.03.016>.
- JIMÉNEZ CATALÁN, R. M^a, & FITZPATRICK, T. (2014). Frequency profiles of EFL learners' lexical availability. In R. M^a Jiménez Catalán (Ed.), *Lexical availability in English and Spanish as a second language* (pp. 83-100). Springer. https://doi.org/10.1007/978-94-007-7158-1_6.
- JIMÉNEZ CATALÁN, R. M^a, & OJEDA ALBA, J. (2009). Girls' and boys' lexical availability in EFL. *ITL Journal of Applied Linguistics*, 158(1), 57-76. <https://doi.org/10.2143/ITL.158.0.2046920>.
- KRAMSCH, C. (1993). *Context and cultural in language teaching*. Oxford University.

- LABOV, W. (2004). Ordinary events. In C. Fought (Ed.), *Sociolinguistic variation: Critical reflections* (pp. 31-43). Oxford University.
- LANGE, D. L., & PAIGE, M. (2003). *Culture as the core: Perspectives on culture in second language learning*. Information Age.
- LEE, S. H. (2003). ESL learners' vocabulary use in writing and the effects of explicit vocabulary instruction. *System*, 31(4), 537-561. <http://dx.doi.org/10.1016/j.system.2003.02.004>.
- LIDDICOAT, A. J., & SCARINO, A. (2013). *Intercultural language teaching and learning*. John Wiley & Sons.
- LO BIANCO, J., LIDDICOAT, A. J., & CROZET, CH. (1999). *Striving for the third place. Intercultural competence: From language policy to language education*. Language Australia.
- LONGMAN. (2005). *Longman Dictionary of English language and culture* (2nd ed.). Pearson Education Limited.
- LUSTIG, M. L., & KOESTER, J. (Eds.). (2010). *Intercultural competence: Interpersonal communication across cultures*. Pearson.
- MARKS, L., & SCOTT, A. (2015). *Think ahead 4*. Burlington Books.
- MARTÍNEZ-ADRIÁN, M., & GALLARDO-DEL-PUERTO, F. (2016). The effects of language typology on L2 lexical availability and spelling accuracy. *International Journal of English Studies*, 17(2), 63-79. <https://doi.org/10.6018/ijes/2017/2/256411>.
- NATION, P. (2001). *Learning vocabulary in another language*. Cambridge University.
- NEWMARK, P. (1988). *A textbook of translation*. TiceHall.
- PALAPANIDI, K., & AGUSTÍN LLACH, M^a. P. (2018). La disponibilidad léxica como medida de diferencias culturales en el vocabulario de aprendices griegos de ELE y hablantes nativos. In M.^a Bargalló Escrivá, E. Forgas Berdet & A. Nomdedeu Rull (Eds.), *Léxico y cultura en ELE/L2: Corpus y diccionarios* (pp. 569-578). Asociación para la Enseñanza del Español como Lengua Extranjera. https://cvc.cervantes.es/ensenanza/biblioteca_ele/asele/pdf/28/28_0054.pdf.
- PAVLENKO, A. (Ed.). (2009). *The bilingual mental lexicon: Interdisciplinary approaches*. Multilingual Matters. <https://doi.org/10.21832/9781847691262>.
- ROSCH, E., & MERVIS, C. B. (1975). Family resemblances: Studies in the internal structure of categories. *Cognitive Psychology*, 7(4), 573-605. [https://doi.org/10.1016/0010-0285\(75\)90024-9](https://doi.org/10.1016/0010-0285(75)90024-9).
- SAPIR, E. (1921). *Language: An introduction to the study of speech*. Harcourt.
- SCHISLER, H. (1990). Limitations and priorities for international social studies textbook research. *International Journal of Social Education*, 4(3), 81-89.
- SERCU, L., BANDURA, E., CASTRO, P., DAVCHEVA, L., LASKARIDOU, CH., LUNDGREN, U., MÉNDEZ GARCÍA, M.^a DEL C., & RYAN, P. (2005). *Foreign language teachers and intercultural competence: An international investigation*. Multilingual Matters.
- SHARIFIAN, F. (2014). *The Routledge handbook of language and culture*. Routledge.
- SHARIFIAN, F. (Ed.). (2009). *English as an international language: Perspectives and pedagogical issues*. Multilingual Matters.
- SHIN, J., ESLAMI, Z. R., & CHEN, W.-C. (2011). Presentation of local and international culture in current international English-language teaching textbooks. *Language, Culture and Curriculum*, 24(3), 253-268. <https://doi.org/10.1080/07908318.2011.614694>.

- SU, Y.-CH. (2014). The international status of English for intercultural understanding in Taiwan's high school EFL textbooks. *Asia Pacific Journal of Education*, 36(3), 390-408. <https://doi.org/10.1080/02188791.2014.959469>.
- WIERZBICKA, A. (1992). *Semantics, culture and cognition*. Oxford University.
- WIERZBICKA, A. (1997). *Understanding cultures through their key words: English, Russian, Polish, German, and Japanese*. Oxford University.

ACKNOWLEDGMENT

This research has been funded by ERDF/Ministry of Science, Innovation and Universities of the Government of Spain and the State Research Agency (PGC2018-095260-B-100).

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