

SPELLING PERFORMANCE BY SPANISH PRIMARY STUDENTS USING ENGLISH AS A SECOND LANGUAGE: ANALYSIS OF THE MOST COMMON MISTAKES

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Abstract

This article reports upon findings drawn from a research project involving undergraduate student-teachers from Villanueva University Centre and a group of third-year primary school students, undertaken from March to December 2017. Learning to write in English is an emerging skill at this age, one which is influenced by various factors: the child's reading and writing skills in their mother tongue and their oral competence in the English language. As a result, a strictly phonetic Spanish orthography conflicts with the irregularity and complexity of English spelling.

The aims of the project were to enhance the writing skills in English of third-year primary school students, analyse their most common spelling mistakes, and delve into their origins. With this in mind, a taxonomy of mistakes was elaborated, divided into the five most common errors: letter omission, letter addition, phonetic spelling, L1 interferences and miscellaneous. This taxonomy was applied to 135 children's writings on a sentence level. The results may have promising pedagogical implications. Two more types of errors were discovered: a changed grapheme order and a mistake in compound word separation. We concluded that an incorrect phonetic spelling was the most frequent cause for these types of errors, followed by L1 interferences. Finally, a list of most frequently misspelt words was elaborated.

Keywords: writing, spelling mistake, Mistakes Taxonomy, etymology, phonetics, grapheme-phoneme correspondence, L1 interference.

1 PROJECT DESCRIPTION

The main objective of this research project was to analyse the most common written mistakes made by Spanish children aged 8 to 9, and to study the origin of these mistakes. Our area of research is included within the area of English Language Learning (ELL) and English Language Teaching (ELT). The secondary objective was to create an authentic learning experience for future teachers of the English language under the supervision of University professors, on the one side, and English language schoolteachers, on the other side.

The participants of this project included a group of 21 third-year undergraduate student-teachers of Primary Education at Centro Universitario Villanueva, enrolled in the English as a Second Language (ESL) speciality (later referred to as Group A), and a group of 30 students from third of primary from a private boys' school in Madrid, Spain (later referred to as Group B).

The project consisted of two parts: the first part was carried out from March to May 2017. During their English class the children worked on a sentence level by answering simple questions that their teacher asked them in writing. The second part was done on a paragraph level the following academic year when the same students were in 4th of primary, from October to December 2017.

As such, the content of the project was divided according to two different levels: sentence level and paragraph level. Both levels were assessed through writings guided by questions in written form. The sentence level, which is the one we focus on in this article, was worked upon in five different writings. The content of these writings is specified in Table 1:

Table 1. Topics of the writings on a sentence and paragraph level.

	Sentence Level	Paragraph Level
Writing 1	Morning routines	Write about yourself
Writing 2	Friends and sports	The Seasons
Writing 3	Animals, breakfast and free time activities	The Sports Dome
Writing 4	Dinner, afternoon activities, transport and the house	
Writing 5	The town	

The choice of the topics was influenced by the children's previous knowledge of the English language. All the questions were elaborated with the help of the English teacher at school. Initially our interest lay in all the possible mistakes that the children could make; therefore, we applied the following tool of analysis:

Table 2. Topics of the writings in a sentence and text level.

Type of Mistake	Abbreviation	Example
Spelling Mistake	Sp.	"Vecause" instead of "Because".
Subject Omission	S.O.	"Is raining" instead of "It is raining".
Singular/Plural form	N.	"The people is happy" instead of "The people are happy".
Verb form	V.F.	"She have got" instead of "She has got".
Pronoun	Pro.	"Your clever" instead of "You are clever".
Article	Art.	"A apple" instead of "An apple".
Preposition	Prep.	"On summer" instead of "In summer".
Word Order	W.O.	"I do start?" instead of "Do I start?".
Adjective Form	Adj. F.	"Beautifuls clothes" instead of "Beautiful clothes".
Adjective Order	Adj. O.	"She has eyes blue" instead of "She has blue eyes".
Capitalization	Cap.	"i go swimming" instead of "I go swimming".
Punctuation	P.	"I live in Madrid" instead of "I live in Madrid."

Having analysed 135 writings, we corrected altogether 720 mistakes, distributed in the following categories:

Table 3. Frequency of Mistakes.

Type of Mistake	Number of Mistakes	Percentage of total
Sp.	452	63%
V. F.	83	12%
S.O.	75	10%
Prep.	45	7%
Art.	27	4%
N.	16	2%
W.O.	11	2%
Pro.	7	1%
Adj. O.	4	1%
Adj. F.	0	0%

Spelling mistakes were by far the most frequent type of mistake the children made. Moreover, these results led our research into the field of types of spelling mistakes, commonly misspelt grapheme-phoneme correspondences (later referred to as GPC), and high frequency words spelling.

2 THEORETICAL IMPLICATIONS

Spelling can be defined as “a complex process that stimulates cognitive capacities and motor skills” [1] and its performance is decreasing with second language learners, due to the fact that spelling in the English language is irregular and is considered to be a complex process which relies on the development of skills at phonemic, morphological, and orthographic levels.

The English language presents a special difficulty for Spanish children because of its complexity of orthography in comparison to the Spanish spelling system. According to Campion [1] the English language has a deep alphabetic representation, which means that its alphabet is composed of morphemes (smallest unit of word that contains meaning) and phonemes (smallest unit of oral language); whereas the Spanish language is considered to have shallow alphabets, which are merely composed of phonemes. Furthermore, Wang and Geva [2] defend that there are differences between these two languages in terms of orthography due to the phoneme-grapheme relationship. In Spanish, there is a simple grapheme-phoneme correspondence that consists of the direct correspondence between a letter and a sound, thus a shallow orthography. Research has demonstrated that writers of a shallow orthography have an advantage in terms of phonological awareness, that is, the ability to recognize that words are made up of phonemes that can also be segmented into syllables and sounds, which provides the basis for the phoneme-grapheme correspondence [2]. Nevertheless, the knowledge of a stable relationship between phoneme and grapheme (1 sound stands for 1 letter) obviously creates an obstacle when the children start writing in the English language.

The English language, contrary to the Spanish language, has a more complex correspondence between phonemes and graphemes. There are 26 graphemes and 44+ phonemes, which means that one letter within a word can give us up to five or even more sounds. Besides, we have to take into account the morphemic rules which change the pronunciation of the words given. In terms of morphology, there is clear evidence of the different ways in which a sound can be spelled and the different ways in which a letter can be pronounced in words in the English language, for example, the vowel sound [i:] can be spelled differently, as in: “sheep”, “meat”, “emu”, “concrete”, “key”, “chief” or “sardines”, and the letter “c” can give us the consonant sounds [k] or [s] depending on which letter follows it, for instance “cake” and “cent”. Consequently, GPC complexity may lead to mistakes when writing in the English language.

Spanish students first start learning the English language orally in Kindergarten at the age of 3, and only later, in primary, are they taught phoneme-grapheme associations. Taking into consideration that children start acquiring reading and writing skills in their mother tongue in primary school, mother tongue interferences are inevitable. In the initial stages of writing in the English language, the children apply the rules of the shallow orthography of the Spanish language to their decoding of the English phonemes in writing. As Spanish orthography is mainly phonetic, native users will have difficulties when writing in a second language.

Ünal and Quentin [3] consider that orthographic processing consists of translating sounds into letters, that is phonemes into graphemes, by following a variety of orthographic rules. Research demonstrates that the most common mistakes Spanish speaking natives make are those predictable by their language rules. This is owing to the application of the first language knowledge to second language writing development [3]. Second language learners tend to translate words from the second language to their first language to comprehend what they are reading or writing. Thus, phonetic spelling is a recurring spelling mistake.

Phonetic spelling implies a writer reproducing the sound of a word on a letter-by-letter basis. This means one letter is written for each separate spoken sound, for example writing “matha” for “mother”. Student’s knowledge about the relationship between sounds and letters is shown with this kind of spelling. Some possible causes that Jan Roberts [4] presents include: (1) students do not understand that words are not always spelled with single letters representing sounds; (2) students do not write the sounds phonically because they may have difficulties in cognitive, auditory and/or visual processing.

Regarding the creation of a spelling error taxonomy, Roberts [4] proposes the following types of mistakes:

- 1 High Frequency words (e.g. blue, eight, favourite)
- 2 Irregular or difficult spelling (e.g. friend, eye)
- 3 Phonetic spelling (“gou”, instead of ‘go’)
- 4 Incorrect choice of letter pattern or homophone (e.g. “rouph” for “rough”)
- 5 Incorrect use of spelling rule or convention (e.g. “tapping” for “taping”)
- 6 Incorrect use of apostrophes (“the boys’ ball” instead of “the boy’s ball”)
- 7 Morphemic or etymological errors (e.g. “hopet” for “hoped”)
- 8 Incorrect order of graphemes (e.g. “form” instead of “from”)
- 9 Grapheme/s omission (e.g. “Austria” instead of “Australia”)
- 10 Grapheme/s addition (e.g. “whitch” instead of ‘which’)
- 11 Limited phonetic approximants (e.g. “berful” instead of “beautiful”)

The mistakes taxonomy stated above is applied to the writings of native English-speaking adults and children, thus it does not take into consideration developmental characteristics and cognitive progression as far as writing as a skill is concerned. Besides, L1 speakers normally do not make pronunciation mistakes and are exposed to rich lexical variety in their language. Consequently, spelling mistakes are related to lack of knowledge of grapheme-phoneme correspondences. Therefore, our task was to select the types of mistakes which we can use to analyse the writings on sentence level of native Spanish speaking children.

3 METHODOLOGY AND PROCEDURES

Taking into consideration the theoretical implications in the difference between English and Spanish spelling, as well as Roberts’ taxonomy of spelling errors, children’s previous L2 knowledge and their developmental characteristics, we elaborated a list of possible spelling mistakes which may be made by Spanish learners, aged 8-9:

Table 4. Age-Oriented Taxonomy of the Most Common Spelling Mistakes and their examples.

Letter Omission	Letter Addition	Phonetic Spelling	L1 Interferences	Miscellaneous
“chese” (cheese) “roms” (rooms)	“schooll” (school) “whatch” (watch)	“trausers” (trousers) “gou” (go)	“de” (the)	“wape” (wake) “teeht” (teeth) “buther” (butter)

Further on, 452 spelling mistakes (out of a total of 720 mistakes) were analysed and classified according to the taxonomy proposed. On the one hand, a quantitative analysis was carried out, and, on the other hand, we attempted to trace the most frequently misspelt GPCs and elaborate the list of commonly misspelt words, thus we performed qualitative analysis.

The procedure of the analysis was the following: each student-teacher from group A was assigned one or two pupils from group B. The student-teachers then diagnosed the mistakes made by the children and suggested activities for improvement. Every week the English language schoolteacher gave the Villanueva coordinator a week’s worth of writings from the 3rd year class. The following week, the writings were distributed to the assigned student-teacher. The age-oriented taxonomy of the most common spelling mistakes (see Table 4) was applied to each writing. All the writings were organised in the following way:

- Writing 1(later abbreviated as W1):
 - What do you do when you wake up in the morning?
- Writing 2 (later abbreviated as W2) :
 - 2a: Tell me about your best friend.
 - 2b: Tell me about your favourite sport.
- Writing 3(later abbreviated as W3):

- 3a: Tell me about your favourite animal.
- 3b: What do you have for breakfast?
- 3c: What do you do in your free time?
- Writing 4 (later abbreviated as W4) :
 - 4a: What do you usually have for dinner?
 - 4b: What do you do in the afternoon?
 - 4c: How do you go to school?
 - 4d: How big is the house you live in?
- Writing 5 (later abbreviated as W5):
 - Describe your town.

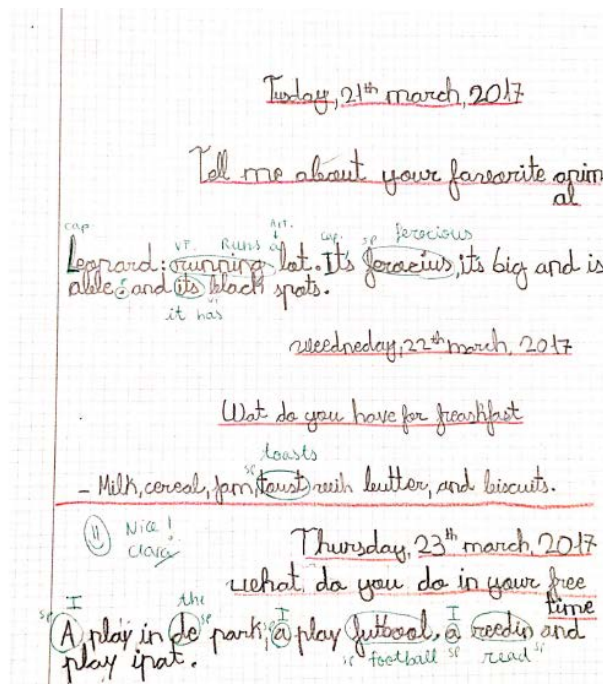


Figure 1. An example of Writing 3a (with the corrections)

Initially the analysis of the spelling mistakes was carried out on an individual level. We elaborated 30 tables with all the spelling mistakes the children made:

Table 5. An Example of the Analysis of Spelling Mistakes on an Individual Level.

W1	W2	W3	W4	W5	Total
"haf" (have)	"hokay" (hockey)	"fauborite" (favourite)	"chool" (school) "may" (my)	"scholl" (school)	14
"geiting" (getting)	"chusday" (Tuesday)	"vicaos" (because)			
"sawer" (shower)	"ai" (I)	"soufa" (sofa) "tu" (to)			
"tu" (to)					

Further on all the spelling mistakes were classified according to the tool of analysis proposed (see Table 4). For example, "chool" in W4 is classified as letter omission; "soufa" in W3 is phonetic spelling; "sawer" in W1 is an interesting case of a combination of two types of mistakes: phonetic spelling and letter omission. The mistakes which rejected classification were placed into Miscellaneous.

Finally, we analysed the most common type of spelling mistake and elaborated the list of the most complex GPCs and frequently misspelt words.

4 RESULTS

Having analysed 452 spelling mistakes and classified them according to their type, we arrived at the following results:

Table 6. Percentage of Spelling Mistakes according to their Typology.

Type of Spelling Mistake	Number of Mistakes	Percentage
Phonetic Spelling	231	51%
Letter Omission	84	19%
L1 Interferences	45	10%
Miscellaneous	63	4%

As can be seen in Table 6 phonetic spelling is by far the most frequent mistake (51%), followed by letter omission (19%). As we mentioned before, the Spanish language has shallow orthography and Spanish students learn to write in an aural way in their mother tongue. Therefore, their English writings are the direct representation of what they hear according to the Spanish grapheme-phoneme correspondences. Some examples of this type of mistakes are “tu” instead of “to”, “smol” instead of “small”, “litel” instead of “little” and “meny” instead of “many”.

At the same time, the pupils’ writing may be affected by the incorrect pronunciation of the words when learning them, for example: “moder” and “fader” instead of “mother” and “father”. These spelling mistakes are produced because of the L1 interferences and, even though there are not many, they are very common. Therefore, the L1 Interferences affect their writing. As we can see in the previous examples, voiced dental sound /ð/ does not exist in the Spanish language, so the children substitute it with another similar and easier sound, which exists in their mother tongue - voiced palato-alveolar /d/. And this substitution directly affects their writing, since grapheme “d” is written instead of “th”.

Another example of mistakes on a GPC level caused by L1 interference is omitting the “h” grapheme in its initial position (e.g. “ot” instead of “hot”) or substituting it by grapheme “j” (“jomework” instead of “homework”). The reason is obvious: the initial sound /h/ is not pronounced in Spanish words but is pronounced and written in the English language. Another very common mistake on a GPC level is when the students substitute the letter “v” for the letter “b”. In their mother tongue there is no distinction between /b/ and /v/ sounds, the “v” grapheme is always pronounced like a /b/. And obviously when writing in English children tend to substitute “v” for “b” (e.g. “berri” instead of “very”).

Other mistakes on a GPC level include:

- 1 GPC /u:/ especially represented by “oo”, for example in the words like “good”, “rooms”, “football”, “school”, “afternoon”, “bathroom”, where we can see that the students write literally what they hear, in this case a “u”.
- 2 GPC /ɔ:/ that has 13 different GPCs which are: “or”, “oar”, “oor”, “ore”, “our”, “aw”, “au”, “al”, “war”, “quar”, “augh” and “ough”. Some examples of the errors are in words like “sausages”, “because” or “awesome”.
- 3 GPC /ai/ has also proved to be difficult for students when it comes to an open syllable, where they write “y” or “i” which is a direct interference from their mother tongue, for example instead of writing “my” children they write “mi” because they associate it with what they already know.
- 4 GPC /k/ as it can correspond to either “k” or “ck” grapheme correspondences. This confuses the children and they sometimes write “milck” instead of “milk” or “blak” instead of “black”.
- 5 GPC /i:/, which may be represented in writing by 6 different grapheme correspondences: “ee”, “ea”, “e”, “e-e”, “ey” and “ie”. The children tend to substitute this sound by the single grapheme “i” as in the words “it” instead of “eat”, “si” instead of “see” and “slip” instead of “sleep”.

The phonemes which presented special difficulty in writing due to their pronunciation are the following:

- 1 Phoneme /ʌ/ when referring to the grapheme “u” appearing in words like “brother” and “mother” where pupils write “mader” and “brader”.
- 2 Phoneme /au/ children tend to associate it with the grapheme “au” and write “shauer” or “hause”.
- 3 Initial phoneme /h/ which does not exist in the Spanish language so the students tend to pronounce the voiced velar /h/ sound as in the word “jamon” or simply omit this initial grapheme. For example, the students write “jomework” instead of “homework, and “hice” instead of “ice”, or “ave” instead of “have”.
- 4 Phoneme /ə/ which does not exist in the Spanish language, so the students write it as they hear it. For example, “walka” instead of “walker” or “moda” instead of “mother”.

As we mentioned before, we wrote in the column “Miscellaneous” those mistakes that correspond to errors without a concrete cause. Once we have analysed these errors we suggest adding two more types of spelling mistakes. These are “changed letter order”, for example in “righ” instead of “right” or “wath” in place of “what”, and “compound word separation mistake” like “some time” instead of “sometimes” or “home work” instead of “homework”.

Stepping in at the word level we have noticed some words which are misspelled by almost every student and which we need to take very seriously. Some of these words should be thought of as high frequency words (later referred as HFW). These words are the following:

Table 7. The List of Commonly Misspelt Words with their Incorrect Spellings.

Word	Misspelt versions
Very	“veri”, “verry”, “berly”, “verria”, “berry”, “bearri”, “beabre”, “veary”
Favourite	“feverit”, “favoarite”, “faborite”, “favortie”, “favorite”, “fauvorite”, “fauborite”, “faberit”, “forurite”, “feiber”, “farvorit”
Teeth	“teeht”, “teeh”, “theeth”, “tidsh”, “teth”, “tets”
Father	“fader”, “padre”
Football	“fotball”, “futbol”, “footboal”, “footbaal”, “football”, “fotboll”, “futball”, “futebol”, “futbool”
Usually	“usuali”, “usully”, “usally”, “ursuli”
Kitchen	“kichen”, “kitechen”
Because	“becease”, “vicaus”, “vecause”, “vicaos”, “becouse”
Home	“hom”, “hamwork”, “jomework”, “homo”
Friend	“frient”, “frend”, “frind”
School	“chool”, “school”, “scool”, “stcooll”, “scholl”, “schoo”, “shcol”, “shool”, “schul”
Dinner	“diner” (repeatedly)
Are	“ar” (repeatedly)
Watch	“wach” “wuachin”, “whatch”, “what”, “wath”
Sometimes	“some time”, “same times”, “sometames”

As it can be seen from Table 7, some of the words from the children’s writings have up to 9 different versions of spelling (e.g. the word “football”), nevertheless there are two words from this list that are repeatedly misspelt in the same way (“diner” and “ar”). Although the type of mistake is phonetic spelling, L1 interferences may also be traced in the misspelling of these words. The same consonant is never doubled in the Spanish language (“dinner”) and, as one phoneme is represented by one grapheme in the Spanish language, the auxiliary verb “are” definitely presents extra difficulty to the Spanish learners, since one phoneme [a:] gives three graphemes in this word.

We have also observed that a letter omission mistake can be made due to the similarity of two letters that are next to each other, or because the letter is not pronounced, even when two words are written

alike, students might confuse them and misspell a word (for example, “with” instead of “white”, or “diner” instead of “dinner”).

Finally, to conclude this analysis of the spelling mistakes, we want to state that the type of mistake which occurs less is letter addition. These kinds of mistakes occur mainly when the students have learned words by heart but then become confused when they have to write them, for example the words “what” and “watch”, many pupils have written “whatch” because they have blended both. It usually means that their previous knowledge of GPCs is interfering in their learning.

5 CONCLUSIONS

The main objective of our research project was to find out and analyse the most common mistakes in the English language made by Spanish Primary students. This research has a very important purpose within the Spanish Educational System when learning a second language, in this case English, due to the emphasis that must be given to literacy teaching at an early age, and, therefore, phonological awareness in the English language. Thus, a thorough analysis was carried out in order to determine which types of mistakes were the most common among primary students. Writing on a sentence level presented a great difficulty to the children, as they were doing it for the first time. We have also seen that young learners who already have difficulties in their mother tongue will have even more problems with a second language and will probably carry those errors over to their L2.

Throughout the first part of this project, which lasted from March to May 2017, we have seen some very common types of mistakes which have already been stated by other authors, but we suggest adding two more types of errors to that list, namely, “changed grapheme order” and “compound word separation mistake”.

As the spelling errors represent 63% of the written mistakes the students made (see Table 3), we carried out a more exhaustive analysis of this kind of error. We conclude that phonetic spelling was the highest cause for committing this type of error (51%), as more than half of the spelling mistakes are produced due to this reason (see Table 6). Furthermore, pronunciation mistakes influence writing in L2 since the children encode the word on a 1 phoneme–1 grapheme basis. So there is a mixture of phonetic spelling and L1 interference mistakes in writing. Thus we propose systematic teaching of correct pronunciation and GPCs from a very early age. Building phonological awareness in L2 is crucial to improving reading/writing skills.

On a word level, the list of 15 frequently misspelt words was elaborated. These include: “very”, “favourite”, “teeth”, “father”, “football”, “usually”, “kitchen”, “because”, “home”, “school”, “friend”, “dinner”, “are”, “watch” and “sometimes”. The majority of these words have irregular spelling and belong to HFW. Since all of these words are common words used on a daily basis, we propose to include their teaching, in a classroom routine, as well as to have the list of these words as classroom wall posters.

Finally, this research had several limitations. One of which was the type of school and the gender of the sample, as the research was carried out at a private boys’ school. Thus, we propose as further lines of investigation that a similar study be carried out with other gender groups from different school environments.

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