Spelling Errors among EFL High-School Graduates

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Abstract

Patterns of spelling errors by EFL learners can reflect both intra- and inter-lingual influences. On the intra-lingual part, spelling errors may reflect poor linguistic competence on different levels, including phonological awareness, and knowledge of orthography, vocabulary, morphological and semantic relationships, and mental orthographic images (Apel & Masterson, 2001; Apel, Masterson, & Niessen, 2004). On the interlingual part, patterns of spelling errors can also manifest differences between the first language (L1) and the second language (L2) as research shows that previously acquired L1 literacy skills influence EFL word recognition (Akamatsu, 2003; Koda, 2005) and spelling skills (Figueredo, 2006). The present error analysis study aims to identify patterns of spelling errors among Saudi high-school female graduates who learn English as a foreign language. The participants were asked to compose a paragraph on a given topic, and spelling errors were identified and analyzed. Patterns of spelling errors were classified into seven categories; homophones/confusables, misrepresentation of vowel sounds, misrepresentation of consonant sounds, misapplication of spelling rules, silent letters, double letters and mispronunciation. The results are statistically analyzed and interpretations are made in terms of

intra- and interlingual influences. Implications for spelling instruction and EFL curriculum design are made.

Keywords

1.   Introduction

The English language has become the world's lingua franca; it is the main language for international communication in different fields including commerce, industry, politics and education. This is the main reason why millions of language learners all over the world are striving to improve their English language proficiency. An essential component of this proficiency is improving one's ability to communicate via writing since it is crucial to effective communication and essential to employment in today's world. One important factor to consider with writing competency is spelling as one single misspelled word can change a word and alter the whole meaning of the sentence. In general, good spelling is regarded as a sign of good education whereas poor spelling is considered ill (Fageberg, 2006).

In addition to looking ill, poor spelling can have drastic effects on reading and writing. As Shane Templeton and Darrel Morris put it, "Orthographic or spelling knowledge is the engine that drives efficient reading as well as efficient writing" (1999: 103). Good spelling knowledge is extremely important for effective word recognition, which can greatly enhance or hinder reading. As for writing, poor spelling can make writing a labored activity with regular interruptions to the thought process by excessive attention to spelling (Moats, 2000). Poor spelling also limits the writer's choice of words, which negatively impacts creativity and leads to short and sometimes incoherent pieces of writing. In addition, poor spellers often have low motivation to write (Sitton, 1995).

Despite its drastic effects, poor spelling is dramatically on the rise for different reasons (Gill & Scharer, 1993; Griffiths, 1998; Templeton & Morris, 1999). For one, there is a general belief that good spelling reflects an innate ability, not something to be acquired. Thus, a number of poor spellers do not try to improve their spelling or join remedial programs. Secondly, some schools do not follow a unified spelling program or curriculum (Griffiths, 1998; Marten, 2003; Schlagal, 2002). Griffiths (1998) reports that some schools have dropped spelling all together from their curricula as a result of the spread of the process writing approach which tries to "remove the constraint of correct spelling from children's writing attempt" and views spelling as a minor part of the editing process. Thirdly, a great deal of students nowadays rely on the spell checkers available on school and home computers. Despite the constant warning that spell checkers are not a substitute for proofreading, and the estimate that spell checkers are effective only 63% of the time (Masterson, Apel & Wasowicz, 2006), the frequent use of spell checkers is increasing in popularity every day. Finally, one must admit that the lack of proper preservice training for novice teachers is another main reason for the decline in spelling competency. Louisa Moats (2000) maintains that EFL teachers must have a solid background of language in order to deliver quality instruction.

In addition to the above mentioned reasons, the complexity of English spelling which lacks clear sound-to-grapheme rules adds to the problem. For example, the /k/ sound can be represented by k, c, ck, or ch, depending on where it occurs in the word. Another example is the graphemic sequence gh which has three different pronunciations as in though, enough and ghost and the /f/ sound which is represented by different letter combinations as in affair, enough and pharaoh. Besides, the English language has more phonemes than graphemes, such as the letter s which can

represent the sounds /s/ or /z/. Moreover, the context can greatly influence orthographic information. For instance, an e at the end of a one-syllable word lengthens the preceding vowel and double letters do not often appear at the beginning of words. It is also important to possess some fair morphological knowledge of words and derivatives to become an effective speller in English. The spelling of the suffixes ed for past or s for plural are good examples. Similarly, morphological knowledge helps discover the link between related words, such as 'signature' and 'sign' despite their formal dissimilarity. In brief, good English spelling requires a complex interaction between phonology, orthography and morphology (Treiman & Cassar, 1997).

Spelling competency becomes even more challenging for EFL Arab learners due to the dissimilarity between English and Arabic orthography. Modern Standard Arabic (MSA), the formal or literary form of Arabic used for all written texts, is written from right to left and letters within words should be combined when possible. MSA also uses an alphabetic orthography that consists of 28 letters. They mainly represent consonants but also include three letters that correspond to long-vowel phonemes. In addition, diacritics, that are marked above or below letters, represent different sounds, such as three short vowels, no vowel or vowel lengthening (Bauer, 1996; Fischer, 1998). Children initially learn to read and write a fully-vowelized Arabic orthography in which all the consonants and vowels are represented in the script, including the short-vowel diacritics. This orthography is very easy to phonologically decode because it is extremely reliable in terms of grapheme-to-phoneme correspondence rules. Only when diacritics are removed, as in all print materials in the mass media, including newspapers, magazines, books and textbooks, the orthography becomes less phonologically transparent inviting readers to depend on context to extract the meaning of ambiguous words.

Hence, Arab EFL learners have been generally found to manifest better and faster improvements with oral and aural proficiency than with English literacy skills (Fender, 2003; Milton & Hopkins, 2006; Ryan, 1997; Ryan and Meara, 1991). The anecdotal evidence shows that Arab EFL learners perform much better at the listening and speaking levels than at EFL reading and literacy skills partly due to difficulties with word recognition and spelling. The present paper is an attempt to explore the difficulties faced by Arab EFL learners with spelling competence. The paper focuses in particular on the spelling proficiency of Saudi high-school female graduates, in an attempt to identify patterns among their spelling errors that can help explain the difficulties they face with English spelling.

2.   Conceptual Background

Spelling errors in the second language can either be intra-lingually or inter-lingually motivated. On the one hand, second language learners may produce spelling errors due to their lack of familiarity with L2 systems, including phonological awareness, knowledge of orthography or morphological-semantic correspondences (Apel & Masterson, 2001; Apel, Masterson, & Niessen, 2004). Inter-lingually, on the other hand, spelling errors can reflect interference from the L1 literacy skills upon L2 processing (Akamatsu, 2003; Koda, 2005; Figueredo, 2006). This is most relevant in the context of the present paper since the participants in the study are native speakers of Arabic learning English as a foreign language.

The EFL spelling research conducted with children and adults shows that the first language (L1) spelling skills influence the development of those skills in the second language (L2) in two ways. The first involves the processing and acquisition of orthographic word forms. A relevant study in this respect is Wang and Geva (2003) who found that L1 Chinese children learning English performed much better than native English speaking children with spelling English words, but far worse when spelling pseudo words. This suggests that Chinese children have learned the English words as whole lexical or visual-orthographic forms rather than relying on grapheme-to-phoneme correspondence. Likewise, Holm and Dodd (1996) examined the English word recognition and spelling skills of EFL learners in Hong Kong. The results were extremely similar to Geva's study. Whereas children performed as well as other EFL groups when it comes to reading and spelling English words, they showed major difficulty coping with a pseudo word spelling task, again indicating difficulty in phoneme-level decoding and mapping skills. Both studies thus strongly indicate that many EFL learners with an L1 logographic orthography rely more on visual-orthographic information while reading and spelling English words and underutilize the grapheme-to-phoneme correspondences although the latter are more relevant in their L2 than in their L1. The relevant question in terms of Arabic here is; would the discrepancy between Arabic and English orthographies similarly hinder the Arab learners' acquisition of English spelling?

Another influence for the L1 on the L2 spelling is manifested in the transfer of phonological knowledge or the transfer of grapheme-to-phoneme correspondence rules. A number of spelling studies, for example, show that EFL learners with an L1 Roman alphabet, such as German and Spanish, transfer their familiarity with the Roman letters while learning to read and spell in

English, and also make use of their already acquired corresponding letter-to-sound mapping patterns (Figueredo, 2006; Muljani, Koda & Moates, 1998). In addition, there is a noted tendency among EFL learners to have difficulty with EFL phonemic segments and patterns that do not exist in their L1. This certainly hinders the development of their English spelling and thus word recognition skills. For instance, as Spanish has a smaller set of vowels, especially short vowels, than English, EFL Spanish learners experience difficulty learning short and long-vowel-spelling patterns at the early stages of language acquisition (Zutell & Allen, 1988). This is extremely interesting for the present study because Arabic is also considered an impoverished language in vowels in comparison to the rich English vowel system.

Among those who investigated possible sources for Arab learners' notoriously poor spelling in English are Randall and Meara (1988) and Ryan (1997). They first discovered that native speakers of English differ in their word recognition strategies than native speakers of Arabic. Whereas English speakers sample the string from left to right with three important points of emphasis – a strong one to the left, a less stronger one to the right and a weaker one in the middle in what is described as an M shape-, Arabic speakers recognize the string from the middle first with less attention to either side in what can be described as a U shape recognition pattern. This difference in recognition patterns is one possible source for Arab learners' poor spelling. Another possible source is related to the nature of the Arabic orthography. The basic meaning of Arabic words is attached to the consonant structure. Vowels, on the other hand, are only used to change the basic meaning to many other derived meanings. Besides, short vowels are often absent in MSA since they can only be represented through diacritics. This semantic strength of consonants and weakness of vowels results in learning difficulties for Arab learners whether in word

recognition, in reading or in writing. As Ryan (1997) puts it, Arabic-speakers develop "vowel blindness" in which they disregard "the presence of vowels when storing vocabulary" and make "indiscriminate choices as to which vowels to use when one is needed." (189)

Reviewing the EFL spelling literature, it was found that there is paucity in studies targeting Arab learners' spelling in English, especially at the level of secondary and post-secondary education. One relevant study, however, was conducted by Reima Al-Jarf (2008). The study aimed at investigating the phonological and orthographic problems that Saudi EFL freshmen students have in spelling English, their second language. With this aim in mind, the researcher asked 36 EFL freshmen students at the College of Languages and Translation, King Saud University, Riyadh, Saudi Arabia, to complete a listening spelling test which required them to fill out 100 blanks in a dialogue. The results showed that the participants exhibited serious spelling difficulty, especially at the phonological level that constituted 63% of the errors. Poor spellers had difficulty hearing and discriminating all or most of the phonemes in a word, hearing and discriminating vowel phonemes and hearing the final syllable or suffix. As for orthographic problems, they included vowel diagraphs, double consonants, silent vowels, consonants and homophones. Al-Jarf (2008) concluded that most of the participants' weaknesses in spelling English can be attributed to the interference of the mother tongue. In other words, the participants were transferring the Arabic spelling system into English, which led to different spelling errors.

Similar to Al-Jarf (2008)'s study, the present paper aims to investigate the patterns of spelling errors Saudi students at the first year of university education produce while writing in English. The importance of the current study, however, is that, unlike Al-Jarf (2008)'s research, the participants do not perform a listening spelling task, which may result in an overlap between the spelling and listening skills. Instead, the participants' spelling performance is analyzed through a more naturalistic approach. The researchers analyzed the spelling errors students made in their first paragraphs in their English writing classes at the college foundation year. The benefit of this method was twofold. On the one hand, the researchers examined the participants' spelling competence in isolation from listening. On the other hand, the researchers studied the natural spelling performance of the participants since permission to use the data for research purposes was only sought after the participants' submission of the paragraphs to their writing instructors.

3.   Body

One hundred and eight students participated in the present study. All participants were studying English at the first semester of the foundation year at the College for Women, Prince Sultan University, Riyadh, Saudi Arabia. The participants were female native speakers of Arabic who graduated from Saudi high schools with ages ranging between 17 and 20. As part of their course work, the participants were asked to write a diagnostic paragraph upon joining the foundation year in order to identify the areas of strength and weakness in their writing. The writing topics were all general in nature as specified below:

1) Write a paragraph introducing yourself and your family.

2) Write a paragraph explaining why you joined your department.

3) Write a paragraph about a person you love/respect a lot.

With the participants' and teachers' permission, the researchers took copies of the diagnostic paragraphs and analyzed the spelling errors made. The analysis was based on seven categories; (1) homophones and confusables, (2) mispronunciation, (3) misapplication of spelling rule, (4) misrepresentation of vowels, (5) misrepresentation of consonants, (6) silent letters, and (7) double consonants. The following table provides definitions and examples of these categories.

Category	Definition	Examples
Homophones/ Confusables	Words that have the same pronunciation, but different spelling, or words that can be easily confused due to minor spelling differences	Homophones: brake & break Confusables: well & will
Mispronunciation	Words that are pronounced in a wrong way	laboratory labtory
Misapplication of spelling rule	Words that exhibit a violation of a spelling rule	studying studing
Misrepresentation of vowels	The word exhibits a wrong spelling of a vowel	mother mather
Misrepresentation of consonants	The word exhibits a wrong spelling of a consonant	beautiful peautiful
Silent letters	The word misses the representation of a silent letter, whether vowels or consonants, or erroneously includes a silent letter	when wen
Double consonants	The word misses the representation of a double consonant or erroneously includes a double consonant	Until: untill

As the misspelt words were analyzed according to the previous categories, each word could represent more than one type of misspelling, and thus stood for more than one token of analysis. For example, the misspelling "possitve" for the word "positive" was analyzed under double consonants and misrepresentation of vowels. Similarly, the misspelling "dezain" for the word "design" fell under three categories; (1) misrepresentation of consonant, (2) misrepresentation of vowel and (3) silent letter. Likewise, the misspelling "putefol" for the word "beautiful" represented two categories of misspelling; (1) misrepresentation of consonants and (2) three incidences of misrepresentation of vowels.

The 108 paragraphs used for the study purpose included very short paragraphs (min. 14 words) to longer paragraphs (max. 176 words). The paragraphs included 392 misspelt words representing 454 tokens. The tokens represented the seven abovementioned categories. Below is a table showing the number of errors under each category and its percentage in comparison to the total number of errors.

Category	Number of errors	Percentage
Homophones/ Confusables	25	5.5%
Mispronunciation	34	7.48%
Misapplication of spelling rule	28	6.16%
Misrepresentation of vowels	197	43.39%
Misrepresentation of consonants	42	9.25%
Silent letters	89	19.6%
Double consonants	39	8.59%

As the table shows, the highest number of errors falls under the misrepresentation of vowels. Further analysis of this category revealed that the misrepresentation of short vowels dominates this category since the number of misspelt short vowels stood at 127 in comparison to 40 for long vowels and 30 for diphthongs. The second category is silent letters, whether of silent vowels or consonants. In this case, the erroneous spelling of silent vowels also dominated the scene with 71 misspellings in comparison to 18 misspellings of silent consonants. The third category is misrepresentation of consonants, which included the following consonants; /b/, /v/, /j/, /sh/, /s/, /z/, /k/ and /tsh/. The number of misspellings was 5 for /b/, 1 for /v/, 1 for /j/, 6 for /sh/, 11 for /s/, 4 for /z/, 8 for /k/ and 6 for /tsh/. Under the misrepresentation of consonants comes the category of double consonants which represented 8.59% of the errors. This was followed by the category "mispronunciation", which represented 7.48% of errors. Finally came the last two categories which are the spelling rules (6.16%) and homophones and confusables (5.5%). This was interesting because the latter categories are usually the target of a great deal of instruction at school.

4.   Conclusion

The present study clearly shows that Saudi EFL learners suffer from serious difficulties with their English spelling despite the earlier introduction of English in schools. Intensive school practice on the application of spelling rules (e.g., crossing the final 'e' in verbs before the addition of 'ing' or the change of the final 'y' after a consonant into an 'i' before the addition of 'ed' for past), and the handling of homophones (e.g., piece/peace and air/heir) and confusables

(e.g., 'soap'/ 'soup' and 'live' and 'leave') seems to have paid off, however, since the study participants performed at their best on these aspects.

The aspects that the participants are most challenged by have their inter-lingual origin. The most serious problem is handling vowels, especially short ones (43.39%). The participants have exhibited a great difficulty at representing vowels properly in their writing. This should not come as a surprise considering the nature of the Arabic orthography that mainly represents consonants, with the exception of three long vowels. The fact that the participants are trained to read and write in Arabic with such poor representation of vowels makes them unable to adequately represent the vowels they pronounce. This is the phenomenon that Ryan (1997) describes as the 'vowel blindness' of Arab English language learners.

Right after the vowels comes the problem of silent letters (19.6%), which could also be attributed to an inter-lingual influence. Silent letters are an English-restricted phenomenon in comparison with the Arabic language. In other words, the Arabic orthography does not include any silent letters; every letter is pronounceable. Thus, in addition to the normal difficulty silent letters in English can cause to all second language learners, they stand out as an additional difficulty for Arabic speakers. What could also be inter-lingually relevant is the difficulty of representing double consonants (8.59%). The Arabic orthography does not commonly include double consonants to represent single consonant sounds.

The last two problems relating to the misrepresentation of some consonants (9.25%) and the mispronunciation of some words (7.48%) do not seem to have a special interlingual motivation, except perhaps for the erroneous representation of /b/ and /v/. Regarding the /b/ consonant, the difference between the bilabial stops /p/ and /b/ is not functional in Arabic. Although these

sounds represent two distinct phonemes in English, they stand as different allomorphs of the same phoneme in Arabic. Similarly, the /v/ sound is non-existent in modern Standard Arabic. It is, however, slowly being introduced into the Arabic language through the borrowing of some words from other languages (e.g., villa).

In conclusion, L1 literacy seems to have a great influence on the acquisition of L2 orthography. This finding means that spelling programs at school need to target the special needs of the target population. Some training based on the special features of L2 orthography can cater for L2 learners as a whole, but still special training may need to be provided for every language community. Another important implication for spelling instruction is that teachers must focus on idiosyncrasies and individual words. It is not sufficient to train students solely on the application of spelling rules, and the use of the correct words from homophones and confusables. Students need focused, intensive training on spelling individual words and idiosyncratic letter combinations in the target language.

The researchers' roles

The first researcher (Dr. Dina El-Dakhs) is the principal author of the paper since the participation of the second researcher (Dr. Alia Mitchell) is limited to helping with the study design, the categorization of spelling errors and the paper review.

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