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SECCIÓN ESPECIAL

EL MAESTRO INVESTIGADOR

Spelling "Misteics"

MADE BY STUDENTS ACQUIRING ENGLISH AS A SECOND LANGUAGE: IMPROVEMENT THROUGH THE USE OF THE TABLET PC

Lillian Mendoza Acevedo & Richard Román Spicer

■ Introduction

When students engage in real writing during the process of acquiring English as a second language in Puerto Rico, they immediately face the dilemma concerning how to write words they are not completely sure how to spell. Throughout the course of many years, teachers have relied on various strategies when trying to address this issue, among them telling students how to spell individual words and instructing students to look words up in the dictionary. In addition, some teachers have also designed classroom practices considered to be less conventional and aimed at encouraging students to construct unknown words through invented spelling.

According to Clark (1988), attempts to introduce invented spelling to some classrooms have been met with skepticism and opposition from parents, teachers, and administrators. This author also states that this negative reaction is somewhat natural and predictable because the use such method raises troubling matters as to how will students move toward more conventional spellings of words if teachers accept their estimated spellings and if students will continue to use invented spellings beyond the primary grades. This situation also creates a true dilemma for teachers because they face a choice they have to make between using the traditional drill-and-practice approach or one based on invented spelling. As a result, teachers have attempted to reach a middle point between these two extremes of direct instruction and discovery learning. They must design an effective process that will help students acquire writing and spelling skills without the struggle associated with traditional drill-and-practice and the

overwhelming anxiety that is associated with spelling quizzes and testing.

While agreeing with Yule (1995) regarding the possibility for a reform of English spelling, it is also true that the English system of orthography is not as chaotic as many would believe. There is a strong assumption that there is only one way to spell—the right way. According to Yule, there is more than one way to spell a word in English and still obey the rules of English orthography. The changes in English spelling over the years and the use of variant spelling in advertising and the media attest to this fact. Many modern linguists consider that standard spelling is simply the spelling of a word that is accepted by a language community at any given period of time and that it is not static. It undergoes many changes over time.

Interestingly stated by Bean and Bouffler (1987), one of the most difficult misconceptions to counter is that language, and particularly spelling, is an absolute. This idea has definitely led to some unrealistic attitudes toward spelling, which also place impossible demands on writers, let alone young students and their teachers. According to these authors, all language is contextual, and context affects the way language is used. As an aspect of language, this is no less true of spelling (Bean & Bouffler, 1987). The way individuals spell when writing a shopping list or take notes in a lecture is not necessarily the way people spell when writing letters or proofreading an article. Clark (1988) indicates that the more someone writes the greater is the chance of misspelling—even if one is considered to be what is referred to as a good speller. On this behalf, Clark (1988) also states that learning to spell is a much more complex process than the traditional practice of memorizing lists of words would suggest due to the fact, among others, that students' limitations on long and short term memory may make deliberate memorization very difficult for them.

Recognizing the amount of invented spelling that is occurring among our own students of English as a second language and trying to find an effective manner to address this situation, we decided to take advantage of a project that had been recently adopted in our school. This project integrates the use of new technologies (in our case, the Tablet PC) into the curriculum. We

considered the use of the Tablet PC in the classroom would be an attractive way for students to develop the necessary strategies in order for them to improve their spelling skills. Nevertheless, as a result of conducting this research and analyzing our data, we came up with many interesting findings that led us to make valid inferences, reach strong conclusions, and share enlightening recommendations with other teachers who are interested in becoming acquainted with our work. Our task was difficult and time consuming, yet definitely worthwhile. This is why we would truly like to *share our story*.

■ Sharing our story

Having gained significant experience after many years of teaching English as a second language at the University of Puerto Rico Elementary School, we observed that our students constantly made use of invented spelling as a strategy when not sure of the standard spelling of a word. They began using invented spelling during their first school years and then have continued with this practice as they've moved on from one grade level to the next. This concerned us greatly, leading us to become engaged in the process of analyzing the situation. We began wondering about ways in which we could address our students' problem while not deviating from a priority we had set for ourselves. We wanted our students to continue being comfortable during their writing process and not develop any feelings of apprehension caused by our over-correction of their spelling errors. Needless to say, this was extremely important for us because we wished to remain faithful to our school's philosophy, which encourages students to be creative, curious, and reflective.

It was one particular day during a long conversation we had, that we spoke once more about the situation regarding our students' invented spelling. We committed to finding a way to address this issue, realizing that when they engaged in the process of writing, some were not fully aware of their errors. Another situation we realized was that some of the mistakes were usually carried on from one grade level to the next. After sharing our reflections, we decided to conduct a research project. We wanted to find out (1) what were the words our students most commonly

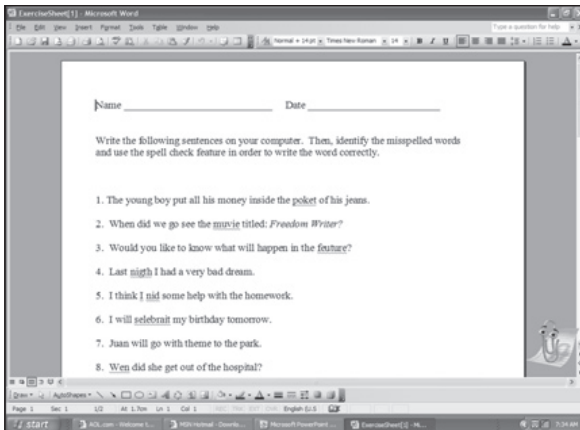
spelled incorrectly, (2) what made them aware of their spelling errors when using the Tablet PC, (3) what were the cognitive processes involved when our students corrected misspelled words while using the spell check feature on their Tablet PCs, and finally (4) what contribution did the use of the Tablet PC make to our students' writing process while acquiring English as a second language.

■ How we proceeded

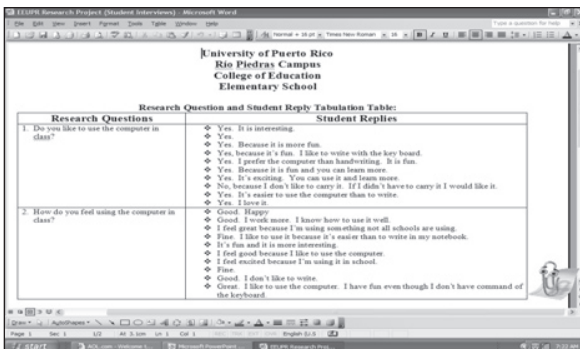
Taking a retrospective look at the processes we engaged in, we are able to identify different phases within our research project. During the first phase, our aim was to write a list of misspelled words relying on the fifth graders' journals. After writing the list of misspelled words, we calculated their frequencies and classified them using a word chart found in Powell and Hornsby (1993). Once the words were identified, tabulated, and classified, we proceeded to move on to a second phase. By this time, the fifth grade students had passed on to the sixth grade. For the purpose of this research, ten students were randomly selected from our two sixth grade groups. Five students were selected from one group and the remaining five were selected from the other group. During this phase, we designed a written exercise in which the students corrected a series of misspelled words within the context of sentences using the spell check feature on their Tablet PCs.

The following slides provide a sample of the exercise sheet we designed for students to work on correcting misspelled words. It consisted of ten sentences which the students received in printed form. Then, they were asked to write each sentence into a new Microsoft Word document. It is important to point out, once again, that the misspelled words used in this exercise were drawn from the journals students had written the previous school year. Simultaneously, as the students worked on the exercise sheet, the researchers interviewed them in order to identify and describe the strategies they relied on when correcting the misspellings within each sentence.

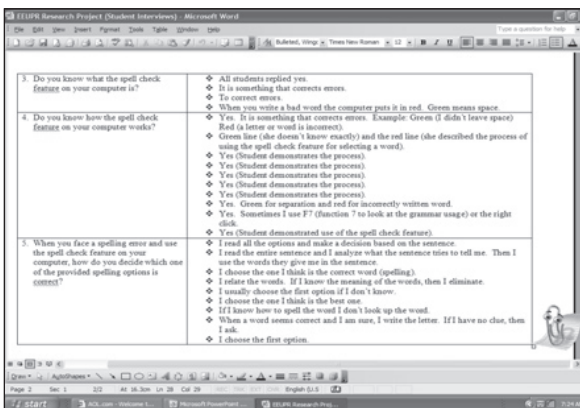
It was also during this second phase that we conducted a more thorough cognitive interview that allowed us to gain further insight as to the mental processes involved when students



Slide 1. Sample of student writing exercise sheet



Slide 2a. Cognitive interview questions and students' replies



Slide 2b. Cognitive interview questions and students' replies

corrected misspelled words using the spell check feature on their Tablet PCs. The following slides illustrate some of the questions the students were asked and a tabulation of their replies.

In order to make sure our data was reliable, we triangulated our data collection strategies by administering the writing exercise we had designed, conducting cognitive interviews while our students completed the writing exercise, and performing participant observations. We also followed Wolcott's Qualitative Data Analysis Model as a guide for performing our description, analysis, and interpretation of the data we had collected. Now, we would like to share what we believed to be truly interesting.

■ Our findings

After performing an analysis of the data we collected from our students' writing journals, we found there was a marked tendency among them to misspell words by inserting, deleting, transposing, and substituting letters. Nevertheless, it seemed obvious they were not aware of these misspellings because there was no evidence indicating efforts made to correct their errors. Moreover, we found that when using the spell check feature on their Tablet PCs, our students became aware of their misspellings because of the red underlining that appeared beneath each misspelled word. Another interesting finding was the fact that when the students used the spell check feature on their Tablet PCs in order to correct their errors, they usually selected the first option provided by the program. In addition, we also found that when some students did not know the correct spelling of a word, they selected an alternative provided by the spell check feature through the process of elimination. That is, they began by eliminating those words and grammatical structures they were familiar with in order to derive the spelling of an unfamiliar word.

The analysis of the data also revealed that:

- Our students relied on other personal strategies for *correcting* spelling errors when using the spell check feature on their Tablet PCs.
 - “When a word is incorrect, I play around with the letters until the red line goes away.”

- Our students relied on other personal strategies for *selecting* among the options provided by the spell check feature on their Tablet PCs.
 - “I read the sentence and analyze what the sentence tries to tell me.”
 - “I relate the words. If I know the meaning of the other words, I eliminate them [the words I know].”

Interestingly, we also found that some of our students relied on other computer resources when correcting misspelled words. These students, instead of using the spell check feature, used Function 7 (F-7). This function provided them with a useful tool which was handy when facing the task of correcting misspelled words.

■ Our conclusions

After having described, analyzed, and interpreted our data, we have reached several conclusions. Among these, we can mention that in our particular context, the use of the Tablet PC was a useful tool for aiding in the development of our students' spelling skills. Nevertheless, we must also express that it is inappropriate to infer that the absence of spelling errors on students' papers while using their Tablet PCs is an indicator of their command over spelling conventions. At times, the spell check feature will provide them with only one option, while at others the computer program will automatically make the spelling corrections for them.

Finally, we have wanted to finish this article with a partial list of some recommendations we strongly suggest to teachers who contemplate incorporating some sort of technological assistance into their teaching practices. These recommendations include the following:

- A more balanced approach to the teaching vocabulary and grammar should be considered (using inductive and deductive methodologies).
- Students should be exposed to more frequent use of the Tablet PC.
- Teachers should provide students with more writing exercises using their Tablet PCs.

- Students should be introduced to a variety of strategies that will aid them in the correct selection of options provided by the spell check feature (recognition of the part of speech, verb tense, person, etc.).
- Spelling drills and vocabulary exercises (in context) should be provided to students.
- Written exercises (paper and pencil) should be administered to the students as a way of confirming the acquisition of spelling skills and the effectiveness of the use of the Tablet PC.
- Students should be introduced to other resources and skills (peer correction) for correcting spelling errors.
- Additional research on the subject should be performed. This is why we strongly encourage you to join us some day and... share your story with us!

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