Spelling Errors among Online Learners in the Moderated Discussion Board: A Case Study of Virtual University of Pakistan

Muhammad Asif1*, Deng Zhiyong1, Anam Azhar2, Sameena Malik3
1School of Foreign Languages, Shanghai University, China; 2University of Narowal, Punjab, Pakistan; 3Huazhong University of Science and Technology, China

*Email: asifvu@t.shu.edu.cn
Tel.: +86-19802130085

Received for publication: 19 December 2018.
Accepted for publication: 25 February 2019.

Abstract
The study investigates the errors among online learners and their probable causes in the Moderated Discussion Board (MDB) of Virtual University of Pakistan (VUP). The main objective of the MDB is to invite comments from students on a given topic; students place their comments within a given time limit and get graded accordingly. Misspelling is a natural and common phenomenon among the second language (L2) learners. However, due to the availability of spell check software options, misspellings should get minimized in online discussions. For the present study, the spelling mistakes committed by the graduate students of Business English (ENG201) course were analyzed. The findings demonstrated many types of spelling mistakes including inconsistent rules, ambiguous words, vowel substitutions, consonant substitutions, space inaccuracy, inflectional endings, double consonants, consonant omissions, vowel omissions, tense mistakes and letter reversals. Some of the causes explored were quick and direct typing on the interface, keyboard adjacency and not using the spell check software. The results revealed that major spelling mistakes were due to the lack of inappropriate guidance, insufficient practice and lack of adequate awareness about inflectional morphology. Some recommendations to improve spelling mistakes either on students end or through teaching techniques have been suggested at the end.

Keywords: Errors, Misspelling, Moderated Discussion Board, Inflectional morphology, L2, L1

Introduction
Spelling is an extremely elaborate task that is the ability of learner to write a word accurately. To write spelling properly puts an emphasis on the quality of writing tasks. The studies that are carried out about spelling errors of learners shed light on understanding the learner’s reasons why they make spelling errors, their difficulties in writing and what kind of spelling errors are made for them. However, spelling is one of the several English writing complications that second language learners encounter. So, it is also observed that amongst all the writing mistakes produced by Pakistani learners, misspelling is the most common mistake. Although, the spelling is vital for L2 learners to write with correctness, very limited research is available on this matter in Pakistani context. Undeniably, understanding the reasons of spelling inaccuracy can lead to improvement in Pakistani learners’ spelling expertise. Therefore, the study elaborates that the participants have difficulty in spelling because of the fact that their carelessness and insufficient knowledge about the words they write. Moreover, some of them use their mother tongue while writing English words because some English words are similar to the ones they have in their mother tongue. For this reason they are confused and this leads them to make spelling errors.

Openly accessible at http://www.european-science.com
The study aims to help regarding spelling mistakes to Pakistani online students in general and the students of Virtual University of Pakistan (VUP) in particular. The common grammatical and spelling problems have been focused to improve writing expressions of the L2 learners. For this purpose, students’ short essays on Moderated Discussion Board (MDB) from Business English (ENG201) course of Virtual University of Pakistan were studied to identify and evaluate most commonly occurring spelling errors. Strategies for the virtual teachers as well as the students will be suggested to correct these errors to improve students’ written expressions in the virtual mode of education.

**Literature Review**

The theoretical background of the study focuses on error analysis of the spelling committed by the L2 learners. AbuJaber, Yagi, and Al-Ghadith (2012) conducted a research on the spelling errors made by Jordanian non-native English Speakers. Firstly, the history of graffiti was mentioned. Next, they observed the graffiti sentences written by Arab graffitists. In the light of the information obtained, they found that there were so many spelling errors made by Jordanian English speakers such as capitalization, contraction, vowel sequencing, noun compounding, mother tongue interference, and overgeneralization. Lastly, they suggested that Standard English spelling should be taught by EFL teachers.

Dehham and Mohammed (2011) studied spelling errors by university learners. The learners were tested to identify what kinds of errors they made and to figure out the reasons why they made these errors. The results showed that the rate of correct responses (40.32%) was lower than that of incorrect ones (59.68%). These errors were based on omission of letters, insertion of letters, and interchange one sound by another, unnecessary doubling of letters, transposition, etc. and also they found that there were two main reasons to make error. The first one is the interference of the first language and its spelling rules. The second one is the orthographic system of English. Lastly, they offered some suggestions to avoid spelling errors such as more attention, practice, exercises and emphasis on English spelling.

Fries (1945) and Lado (1957) argued that by investigating contrasts between native and target language, the problematic areas might be recognized. Corder (1967) detected that learners’ errors are a window into the learner’s linguistic competence and performance. Gass & Selinker (1994) recognize six steps to be followed in conducting an error analysis: “collecting data, identifying errors, classifying errors, quantifying errors, analyzing sources of errors, and remediation for errors”.

Spelling errors are a pervasive and belligerent feature of L2 learners’ written practices. Spelling inaccuracy is universal because in spite of training and drilling in elementary schools, colleges and universities, spelling inaccuracies still seem in abundance in the writings made by the students. Spelling errors are belligerent hence, stimulating, so they disclose the evidence about the language learning development.

Corder considers language learning as some sort of cognitive data processing and hypothesis-forming activity (Corder, 1974). He finds errors significant as they provide evidence of how language is learned and what strategies or procedures the learner employs in the discovery of the language. He proposes three steps of error analysis comprising data collection, description, and explanation while Ellis (1997) proposes a more detailed model of error analysis including selection of corpus of language, identification, classification and explanation of errors. Cook (1999) examines the most common types of error classified as omission, substitution, transposition, and insertion/addition. The results showed that substitution (few-vew) and omission (friend-frind) errors are
the most of the spelling errors with 74.41%. This study suggested to the researches leading studies that are beneficial for minimizing spelling errors.

Moats (1996) investigated the spelling mistakes in a free writing sample of adult learners with obstinate reading and spelling complications. James (1998) presented spelling errors within the framework of error analysis distinguishing between misspellings and mechanical errors in writing. However, James classifies both mechanical inaccuracies and misspellings as substance errors as they are concerned with the medium employed by the language users. He further argues that mechanical errors and misspellings are caused when a learner produces an encoding mistake through writing. So, James classifies four types of mechanical errors i.e. confusables, typographical errors, dyslexic errors and punctuation errors.

However, typographical errors are mainly due to mis-keyings made by typists and fluctuate from other spelling mistakes in that they are visible only in typed text or printed form. These ‘typos’ are sourced not by linguistic memory slips or ignorance, but rather by mechanical incompetence in operating a machine at speed. Therefore, James (1998) argues that majority of these errors are due to “a typist striking a key that is adjacent to the correct one on a QWERTY keyboard, e.g. ‘tge’ instead of ‘the’, and also include such common proofreader’s banes as reversals (‘adn’ for ‘and’), omissions (‘lenth’ for ‘length’) and anticipations (‘extexted’ instead of ‘extended’). There are a lot of words which create confusion between word pairs mainly because of having similar-sounding phoneme or morpheme, such as ‘divorce/devoice’, ‘discrete/discreet’ ‘course/coarse’. Carney (1994) considers the confusables errors as ‘phonetic near-misses’.

Gerber (2009) defines that spelling problems are predominantly pertinent for learners as poor writing skills not only have propositions for functioning in day-to-day tasks but may also influence the marks they obtain on written reports, which frequently form the basis of students performance assessments (Whitehurst & Lonigan, 1998).

### Research Questions

The paper explores the frequency of different types of spelling errors made by the graduate students of Virtual University of Pakistan (VUP) and the basic reasons of spelling inaccuracies found in MDB comments. Following research questions would be investigated:

1. What types of spelling errors were made by the graduate students of Virtual University?
2. What are the causes of misspelling?

### Methodology

Moderated Discussion Board (MDB) is used to grade short essays received from students based on a discussion oriented topic. Primary data of ninety samples out of 1000 posts in Business English (ENG201) course in the semester Fall 2017 were selected for the analysis of spelling mistakes. Simple random sampling technique was used to select 90 samples.

MDB posts were reviewed carefully and spelling errors were highlighted through the use of tables, charts and bar graphs. Frequency of errors was calculated, the percentages were drawn in the form of tables and bar graphs showing high frequency and percentage of students committing different spelling errors. Furthermore, the total number of students committing each spelling error were also drawn with the help of total population and represented through a table. On the other side, table and bar graph were also drawn for the students committing a number of errors. The mean was calculated to evaluate the data. The mean of the data was also calculated through using SPSS 20 version, t test was applied to the data and the result was compared with the other mean. It was found that the average result was significant and there was difference among the variables.

Openly accessible at [http://www.european-science.com](http://www.european-science.com)
Results
The results have been displayed in tabulated and bar charts. There are thirteen types of errors described in the given table, i.e. consonant substitutions, vowels, space inaccuracy, double consonants, inflectional endings, letter reversals, vowel omission, consonant omission, tense mistake, typing quickly, keyboard adjacency, inconsistent rules and ambiguous word breaking. The spelling mistakes of the students also have been mentioned in the table with correction.

Table 1: Types of Errors and Corrections

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Types</th>
<th>Learners’ Misspelling in GDB</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consonant substitutions</td>
<td>reconization, whatever,</td>
<td>Recognition, Whatever,</td>
</tr>
<tr>
<td>2</td>
<td>Vowel substitutions</td>
<td>Preception, knowledge, ther, permanently, village</td>
<td>Perception, Knowledge, There, Permanently, Village</td>
</tr>
<tr>
<td>3</td>
<td>Space inaccuracy</td>
<td>water, fresh fruits, etc. In life. Everywhere, honest everytime village, I .world. Modern forins-tance, computers it. We internet. Forexample; if wealth, power .when condition. my life. we lecturer. It per ciev-</td>
<td>Beautiful, Hopeful, Building, Habits, Actually, Across, Respectful, Helpful,</td>
</tr>
<tr>
<td>4</td>
<td>Inaccurate double consonants</td>
<td>Beautiful, hopfull, building, habbits, actuctaly, across, respectfull, helpfull</td>
<td>Beautiful, Hopeful, Building, Habits, Actually, Across, Respectful, Helpful,</td>
</tr>
<tr>
<td>5</td>
<td>Inflectional endings</td>
<td>seening, having</td>
<td>Seen, having</td>
</tr>
<tr>
<td>6</td>
<td>Letter reversals</td>
<td>Perception, percieving</td>
<td>Perception, Perceiving</td>
</tr>
<tr>
<td>7</td>
<td>Vowel omission</td>
<td>chang, knowledge, hopfull, something, experience, completely, colleagues, understod</td>
<td>Change, Knowledge, Hopeful, Something, Experience, Completely, Colleagues, Understood</td>
</tr>
<tr>
<td>8</td>
<td>Consonant omission</td>
<td>becaus, Accomodation, infomation, person, concered</td>
<td>Because, Accommodation, Information, Person, Concerned</td>
</tr>
<tr>
<td>9</td>
<td>Tense Mistake</td>
<td>thoght, happend, shoked</td>
<td>Thought, Happened, Shocked</td>
</tr>
<tr>
<td>10</td>
<td>Typing quickly</td>
<td>Worlb, ther, recognition.</td>
<td>World, There, Recognition</td>
</tr>
<tr>
<td>11</td>
<td>Keyboard adjacency</td>
<td>understandind</td>
<td>Understanding</td>
</tr>
<tr>
<td>12</td>
<td>Inconsistent rules</td>
<td>Percieving</td>
<td>Perceiving</td>
</tr>
<tr>
<td>13</td>
<td>Ambiguous word breaking</td>
<td>per cievng</td>
<td>Perceiving</td>
</tr>
</tbody>
</table>

The statistical results have been described in the second table that the spelling errors vary at different scales. Some spelling errors have the same result i.e. typing quickly, keyboard adjacency, consonant substitutions, vowel substitutions, double consonants, inflectional endings, vowel omission.
sion, consonant omission and letter reversals. On the other hand, some spelling errors did not have the same results and were considered highly significant, i.e. inconsistent rules, ambiguous words, space inaccuracy and tense mistakes.

**Table 2: Statistical Data Analysis**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test Value = 1</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typing Quickly</td>
<td>1.630</td>
<td>90</td>
</tr>
<tr>
<td>Keyboard Adjacency</td>
<td>-1.869</td>
<td>90</td>
</tr>
<tr>
<td>Inconsistent Rules</td>
<td>2.666</td>
<td>90</td>
</tr>
<tr>
<td>Ambiguous Words</td>
<td>-10.045</td>
<td>90</td>
</tr>
<tr>
<td>Consonant substitu-</td>
<td>1.693</td>
<td>90</td>
</tr>
<tr>
<td>tions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vowel Substitutions</td>
<td>1.716</td>
<td>90</td>
</tr>
<tr>
<td>Space Inaccuracy</td>
<td>3.090</td>
<td>90</td>
</tr>
<tr>
<td>Double Consonants</td>
<td>1.196</td>
<td>90</td>
</tr>
<tr>
<td>Inflectional End-</td>
<td>.747</td>
<td>90</td>
</tr>
<tr>
<td>ings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vowel Omission</td>
<td>.303</td>
<td>90</td>
</tr>
<tr>
<td>Consonant Omission</td>
<td>-1.191</td>
<td>90</td>
</tr>
<tr>
<td>Letter Reversals</td>
<td>.547</td>
<td>90</td>
</tr>
<tr>
<td>Tense Mistake</td>
<td>6.812</td>
<td>90</td>
</tr>
</tbody>
</table>

**Description of Spelling Errors by Bar Graphs**

![Figure 1: Responses of Spelling Error of Typing Quickly](image)

Out of a sample of 90, 33 students committed no spelling mistakes in typing quickly while 29 respondents committed just once in their MDB and 13 students committed twice.

Openly accessible at [http://www.european-science.com](http://www.european-science.com)
Figure 2: Responses of Spelling Error of Keyboard Adjacency

Out of a sample of 90, 43 students committed no spelling mistakes in keyboard adjacency while 29 respondents did just once in their MDB and 10 students committed twice.

Figure 3: Responses of Spelling Error of Inconsistent Rules

Out of a sample of 90, 31 students committed no spelling mistakes in inconsistent rules while 31 respondents did just once in their MDB and 28 students committed twice.

Figure 4: Responses of spelling error of ambiguous words

Openly accessible at http://www.european-science.com
Out of a sample of 90, 71 students committed no spelling mistakes in ambiguous words while 13 respondents did just once in their MDB and 4 students committed twice.

![Figure 5: Responses of spelling error of consonant substitutions](image)

Out of a sample of 90, 26 students committed no spelling mistakes in consonant substitutions while 41 respondents did just once in their MDB and 11 students committed twice.

![Figure 6: Responses of spelling error of vowel substitutions](image)

Out of a sample of 90, 39 students committed no spelling mistakes in vowel substitutions while 22 respondents did just once in their MDB and 12 students committed twice.

![Figure 7: Responses of spelling error of Space Inaccuracy](image)
Out of a sample of 90, 27 students committed no spelling mistakes in space inaccuracy while 25 respondents did just once in their MDB and 16 students committed twice.

Out of a sample of 90, 25 students committed no spelling mistakes in double consonants while 32 respondents did just once in their MDB and 21 students committed twice.

Out of a sample of 90, 39 students committed no spelling mistakes in inflectional endings while 21 respondents did just once in their MDB and 16 students committed twice.
Out of a sample of 90, 26 students committed no spelling mistakes in vowel omission while 20 respondents did just once in their MDB and 4 students committed twice.

Out of a sample of 90, 41 students committed no spelling mistakes in consonant omission while 35 respondents did just once in their MDB and 13 students committed twice.

Out of a sample of 90, 26 students committed no spelling mistakes in letter reversal while 46 respondents did just once in their MDB and 5 students committed twice.

**Discussion**

Spelling accuracy reflects the true image of good writings. Many students commit spelling errors that can distort the meaning of the sentences. The students fail to express their concepts clearly because they cannot spell words accurately.

Certainly, understanding the major causes of spelling errors is one of the skills to develop Pakistani students’ spelling expertise. Though, it may not be easy to find the causes that make learners of Virtual University of Pakistan commit spelling errors as there are a lot of options of auto spell checking i.e. MS Word and online spell checking software etc. Mostly students commit spelling errors by typing directly in MDB Interface as there is no spell checking option provided on MDB Interface.

The first spelling mistake observed on MDB was consonant substitutions. Inaccuracies in consonant substitution spelling errors occur due to the lack of knowledge about consonants. The da-
ta also reveals the basic cause of spelling errors in consonant substitutions among e-learners owing to the ignorance of the rules. The second spelling error was caused by vowel substitutions. Majority of the learners commit this kind of spelling error due to insufficient awareness about vowels and their usage.

Third important category of online spelling error frequently observed on MDB was space inaccuracy. This kind of spelling error was caused due to negligence and lack of practice. Spaces are employed only to isolate words, phrases and sentences. The space error mixes the words into other words and changes the sense of the sentence. The fourth category of spelling errors was detected to be inaccurate double consonants. Most of the e-learners were unfamiliar about the use of accurate double consonants. Nevertheless, double consonants illustrate that aforementioned vowels are either short or long. Obviously, this kind of spelling errors reveals the fact that the learners are unacquainted about the rules and appropriate usage.

The fifth kind of spelling errors noted was inflectional endings. In reality, the lack of proper consciousness of phonology and the deficiency of information about inflectional morphology are the basic grounds of their mistakes. The sixth type of spelling mistake was letter reversals.

The seventh type of spelling mistake was vowel omission. The basic reason behind this mistake was the limited knowledge of vowels. On the other hand, eighth spelling mistake i.e. consonant omission is also related to an orthographic error. However, this category of mistake, consonant omission may be due to their negligence as in ‘becaus’ and ‘information,’ or by their misperception of a double consonant as in ‘disapointed.’

The ninth type of spelling mistake was tense mistake. Mostly students committed this mistake because of their lack of command of grammatical rules regarding tenses e.g. –s third person present simple tense, -ed past tense and plural nouns as well. The tenth category of spelling mistakes was typing quickly. This cause of mistakes revealed that the learners add and drop letters unintentionally.

The eleventh mistake was keyboard adjacency i.e. hitting accidently and adjacency keyboard also named as fat-finger syndrome. There are some other reasons of this mistake, i.e. laziness, shortage of time and workload pressure. The twelfth category of the spelling errors was the inconsistent rules which were commonly displayed by e-learners. The last category of the spelling mistake was ambiguous word breaking as the learners generalize the spelling into ambiguous form e.g. per ciev ing.

The typographical errors are big challenge for e-learners and it requires practice to come up with accuracy. Moreover, learners should be given proper instructions in spelling learning because it is a neglected aspect in English courses at school, college and university level.

With reference to the data obtained from the learners’ spelling errors, some major reasons were observed. It is fascinating that most English phonemes match with Urdu alphabetic consonants, yet their orthographies are dissimilar. Additionally, it is noted that dissimilarities between Urdu (L1) and English (L2) orthographies may cause difficulty for Pakistani learners.

The findings further exposed some errors when omitting spaces as in ‘forinstance’. However, in Urdu, certain words are transcribed with no separation except when the writers would like to separate sentences. Numerous spelling errors occur as a consequence of phonological issues. Nevertheless, this form of spelling error is considered as interference error or articulation error which occurs as an outcome of spellers’ usage of specific pronunciation (Carney, 1994). Major discrepancy of correspondence between sounds and letters is problematic.

It is also identified that mistakes on inflectional endings are characterized as morphological spelling mistakes as suffixes –s, -ing and -ed are significant as they provide dissimilar meanings to
words. However, it is difficult to enhance those inflected words correctly without grammatical knowledge or linguistic competence. Thus, the reason why learners commit this type of mistakes is because of their lack of knowledge of morphological rules. Concerning to the data attained, learners made inaccuracies adding incorrect inflectional endings.

While tracing all the causes behind spelling mistakes in writing English as a second language, the most obvious point remains students’ careless attitude in not using spell checks provided in Microsoft Word. Spell checks may not make hundred percent corrections but can reasonably improve the overall orthographic mistakes. Why students do not make use of it remains questionable. Although this option of spell check is not available on MDB to check students’ original English spelling, however they do have the facility to copy from MS Word file and paste it in MDB interface. However, many of them do not use this facility and the number of orthographic mistakes is quite large which should not be the case in an online interface.

Conclusion
Spelling is an essential element for L2 students to write with precision. However, English spelling is more complicated than many other languages of the world. The current study explored the major and basic causes of spelling errors by the learners at university level particularly in an online mode. Although, it is a fact that the students of online mode are less likely to commit spelling errors due to auto spell check options but they often ignore the correct use of spelling in their academic writings. The main causes of spelling errors were the lack of adequate guidance and phonological and morphological knowledge. Although there is no spell check facility on MDB to monitor student’s original spellings, the students did not turn their spell checks on while writing on Microsoft Word for copy pasting in the interface. The spelling errors show a casual attitude towards improving performance in L2.

Recommendations
The researchers recommend some important points that may support e- moderators to assist learners to be good at spelling, i.e. clarify English orthographic rules to learners, monitor stages of spelling development, Drill on spelling, use of mnemonics to learn spellings, make learners explore sounds by developing phonemic awareness, making students learn sound by segmenting each sound, reinforcing strategies based on morphemic and phonemic connection visualization, use of dictionary for the improvement of spellings, use of analogy to spell unknown words by recalling familiar words, proper teaching of phonics to students even at university level, develop language courses consisting of integrated four skills by focusing spelling errors particularly, develop the habit of extensive reading among learners so that they may know how different words are spelt in diverse contexts and disable the option of copy pasting on MDB.

References
Openly accessible at http://www.european-science.com