

# AN APPRAISAL OF THE PERFORMANCE OF COMPUTER GRAMMAR CHECKER

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## **Abstract**

This study titled “An Appraisal of the Performance of Computer Grammar Checker” selected one hundred and twenty computer written essays. The study adopted quality approach; as such the written essays were taken as the primary data. The secondary data was collected from electronic and physical libraries by reading books and academic journals. The population of the study was one hundred and twenty students out of which seventy were taken as a sample and analysed by the researcher. This is the sampling technique adopted from Morgan and Crasie (1986) which allows the study to reduce the size of the population when there is need to do so. The subjects of the research were all senior secondary students with ability to use the computer to write essays in the school computer laboratory. All were instructed to write essays (each) on any desired topics in a period of one hour. Then the basic assumption was that all the grammatical errors should be underlined with the colour green by the grammar-checker. Conversely, all the computer written outputs contained some grammatical errors that were not detected by the computer software at the end of the study. This made the participants to feel disappointed. In this respect, the study concluded that there were still some grammatical errors that were not detected by the computer grammar checker. Therefore it recommends that, writers should pay attention to the grammatical rules in recommended text books and dictionaries and not rely heavily on the computers to produce clean written texts.

**Key Words:** Computer Laboratory, Computer Soft Ware, Computer Grammar-Check, First/Second Draft

**Introduction:**

All grammatical errors are assumed to be underlined by the grammar checkers that are automatically built in the computers. This assumption makes majority among the writers to believe in the computers as reliable tools used for writing in academic and other disciplines in this modern world. However, some errors still appear in computer written texts. In order to find out the cause, it needs to be given scholarly attention.

The computer works with automatic in-built rules which point out words and sentences, especially in English that are wrongly written or are not in the dictionary. Therefore it has relevance in this study for its role as an automatic grammar and spelling error proof machine. Thus, it underlines grammatical errors with green and spelling with red. This way, it guides the writers to produce clean written texts that are acceptable and can communicate meaning successfully. By acceptability, it means the degree which is considered “ok” by the native speakers (Algeo, 2010). For them to achieve that level of acceptability writers should acquire the skills required and which can develop gradually (Kamal, 2001).

Applied linguistics is a broad area that studies “the role of language” as human businesses. This may hold in classrooms, laboratories, workshops, courts of law and other institutions where language is used as a medium of interaction (Schmitt, 2010:1). In this respect, it applies linguistic methodologies and other techniques of analysis to examine the behaviour of linguistic items. Thus, the research findings are linguistic (Crystal 1974:59). This allows the study to examine computer written texts by some students in order to find out the extent of the role played by the machine to produce meaningful written essays (Orlich et al., 1990). In line with this view, Leech and Candlin, (1986) argue that using the computer is helpful for the writers

to reduce the difficulties attached to their work. This is by using it to write, edit and proofread the texts. In this way, common grammatical errors can be minimized and to achieve a “higher level of comfort and confidence” in writing (Morly and Parker, 2008).

Despite the fact that the computer is automatically built with grammar-checker, it is not enough. Therefore writers are required to understand the rules governing their target language as the computer cannot make appropriate choice of words in relation to context. For example, the two words, *rains* and *reigns* are different; as such, the two sentences below are of varying meanings:

1. Democracy is a system of government that *rains* in Nigeria from the year 1999 to date.
2. Democracy is a system of government that *reigns* in Nigeria from the year 1999 to date.

Conversely, writers with ability to manipulate the linguistic rules can do the choice appropriately (O’ Grady et al., 2011; cited in Abdulkadir, 2017). In this respect, this area of study has been drawing scholarly attention as researchers may approach it from different perspectives. As a result of a study, Kamal (2001) recommends that writers can produce good essays when they choose to use the computer. In the same way, Trench (1996) arrived at a conclusion that writing students will develop skills when they use the computer to write, send and receive feedback on their essays through the Internet. Despite the fact that grammatical errors can be avoided by using the computer, there are still bad essays, especially among the texts written by the students. This indicates that there is need to carry out more researches in this area.

### **Review of Related Literature:**

Writing is an activity of passing meaning in conventional graphical forms (Rivers, 1968 and O’ Grady, Archibald and Katamba, 2011). Thus, the word ‘conventional’ means the fundamental rules

governing the target language. These are the rules to be manipulated by L2 writers (Richards and Renandya, 2012). If successful, it makes their writing formally recognised (Kamal, 2010).

Writing is a skill acquired through continuous practice as such, writers need courage and determination, as in the way people learn building, farming, driving and so on. When it is mastered, the writers are able to produce meaningful texts (Langan, 2005). By reading other scholars, young writers generate more input, acquire more skills and enhance view. According to this view, wider and careful reading produce more output (Kamal, 2010).

The target of every piece of writing is to transmit information (Avuedoyah, 2017). When words are arranged systematically to form phrases, sentences and paragraphs the meaning will be communicated effectively. According to this view, writing is carried out through prewriting, composing and revision, or editing stages (Daiute, 1985). In line with this view, Langan (2005) and Preiffer (2008) opines that good writers use the prewriting stage to think about the topic, make plan for it and jot down relevant ideas. The composing stage is the level for first drafts production. Having the complete drafts, writers move on to the revision or editing stage in order to produce error-free texts by adding or making changes when necessary. This is referred to as “Beethovenian style”. By contrast, “Mozartian style” allows a writer to compose, and revise, or edit their works at the same time. When the two different styles are employed at the same time, writers can achieve very good results.

Feedback by peers and teachers adds more quality to every written essay (Strassman and D’Amore, 2002). The responses made in this way will reshape the ideas and language used by the writers (Richards and Renandya, 2012). It will also add credibility to the works. In this respect, writers should do so at earlier stage (Kamal, 2001).

Revision and editing exercises should be carried out beyond the surface level of written texts (Langan, 2005). Thus, it should check and recheck the text in order to eliminate spelling mistakes, grammatical inconsistencies and irrelevant ideas. It should consider choice of words, context and audience. It should also observe the relationship among the title, the introduction, the main body and the conclusion of the essay. In this way, writers achieve coherence and communicate meaning effectively (Langan, 2005). This is the mature level of revision and editing (Kamal, 2010).

Writers can achieve “clearest, most honest and most powerful work” when they adopt the habit of “proofreading” Kaye (1989). Thus, their works will be understood easily by the audience. Proofreading helps writers to rearrange ideas and opportunities to clarify the meaning of the work. It is a level where spellings, punctuations and grammar and general errors that may affect the meaning of the essay are corrected. At this level all unnecessary repetitions are deleted (Kaye, 1989). It is argued that writers are not bound to carry out the proofreading exercise by themselves. Thus, they are at liberty to employ editor assistants in order to improve the quality of their works (Kaye, 1989: 75-77).

### **Using Computers to Edit Written Texts:**

Revision and editing exercise is easier using computers than using pen and white paper (Armstrong and Casement 2000). It is more advanced than the old tradition where writers must write and rewrite the whole essay when there is need to make changes (Rowley and Meyer, 2003). One interesting nature of the computer is its inbuilt spell and grammar checkers and soft copies of dictionary (Daiute, 1985). Langan (2005) argues that writers find it easier to use the computer to change font faces, styles and sizes. They can easily adjust line spacing, set margins and insert page numbers and choose format (i.e. portrait or

landscape). It is also easier “to protect” their works (i.e. the soft copy) against reach of any uninvited user (Morly and Parker, 2008: 232).

Langan (2005) argues that writers enjoy the computer software application known as “Microsoft Word”. In this respect, they can easily save files of their works and make changes and print out multiple copies of it. Thus, computers help writers to produce texts with less sweat (Leech and Candline, 1986).

### **Methodology:**

This study is analytical. It examined computer written texts typed by some students of senior secondary school (S.S.S.III) of Ulul-Albab, Katsina. These made the research population one hundred and twenty in number. By adopting the sampling technique (Morgan and Cresie, 1986) the size was reduced to the minimum number as needed by the study. With the aid of the assistants at the school computer laboratory, each of the subjects of the research was able to use a computer system to type an essay in English, of not more than two hundred words, which was considered as a first draft. Then every participant produced a second draft of the essay through editing and proof reading. The entire first and the second round of the writing activities were done in an hour. This is the procedure adopted from Murray (1980) that good writers use about 85% of their time at the pre-writing stage, 2% at the composing period where 13% at the editing and proof reading stage. That was the method applied for data collection and each pair (i.e. the printout of every first and the second drafts) produced by each participant was considered as a data collection instrument by the study. This originality of the data made it reliable for the study.

When it was set for analysis, the data were categorised into two. The first category comprised the grammatical errors which were underlined by the computer grammar-check, while the second one

contained the type of errors that were not underlined in that way. In doing so, the data were selected by pairing the first and the second draft produced by each subject of the research. Then each couple was considered as an instrument of data collection. This means that each pair was examined beginning with the first through to the second draft. Since every sentence was considered as the maximum unit for the analysis, it was itemised using numbers. That is to say that extract one in the first draft was given sentence 1(a), while its counterpart in the second draft was considered as sentence 1 (b). Therefore the variation between each couple of the sentences was taken as the subject of discussion by the study. In this respect, the sentence elements that are underlined by the computer, as grammatical errors, were italicised by the researcher to ease description and explanation of it.

### **Data Presentation and Analysis:**

This is the section where data collected for the study were presented and analysed. Along the process, they were categorised into two: That is the grammatical errors that are underlined, green, by the computer grammar-check as opposed to those not underlined. In this respect, the two categories were examined, under two relevant headings, one after the other as in below:

### **The Grammatical Errors that are covered by the Computer Grammar-Check:**

This is the first category of the data with the heading under which the grammatical inconsistencies that are covered by the computer grammar-check are investigated. In other words, it means the grammatical errors that are being underlined, automatically, with the green colour, when the writer uses the computer to write texts in the Microsoft Word. In this respect, the underlined structure draws the writer's attention as to correct the grammatical errors within the

structure under question. In this way, these types of grammatical errors are presented and analysed under the sub-headings below:

### **Agreement between Subjects and Complements in Number:**

Concord means agreement among grammatical elements in sentence structures. According to this rule, the subject should agree with the complement in number and gender. The subject refers to the grammatical element which performs the action in sentences. In this respect, the complement is the series of the grammatical elements that completes the meaning of the sentence by providing information about the subject, or the action performed by the subject (Quirk and Green Baum, 1973). By considering this rule, the study analysed the extract below:

1. a. How *is your studies*?

This is considered as a wrong sentence structure in which the subject does not agree its complement in number as it is discovered by the analysis. The problem with the complement is that the verb “is” is singular while the noun “studies” is plural. In this respect, the complement is underlined by the computer. When it comes for proof reading, the sentence edited and the grammatical was corrected by changing the plural noun “studies” into singular. Then, the underlined green coloured disappeared automatically as in structure:

1. b. How *is your study*?

### **Agreement between Auxiliary and Main Verb in the Same Sentence:**

Verb is a grammatical element that indicates action in sentences. It is of many types as such a sentence structure may contain a main verb and an auxiliary one at the same time. When the two are used together in the same sentence, the former indicates action, while the latter shows the time in which the action takes place. In this respect, the error of this type was pointed out by the analysis in the structure below,



2. a. This subject *is consist* of many topics...

What is wrong with sentence two here is that, the verb “consist” is in simple present form which is followed by the auxiliary verb “is” in the structure. Also, the subject “this subject” is in place of third person singular that requires a verb in simple present form. In this case here, the verb “consist” attracts an -s inflection at its end in order to agree the subject in the sentence. In this context, there is no need to insert the auxiliary verb “is” between the subject and the main verb (Quirk and Green Baum, 1973). Going by this rule, the structure should be changed as in below,

2. b. This subject *consists* of many topics...

By this grammatical analysis, it is observed that the auxiliary verb (is) which has been inserted between the subject and the verb in the sentence has prevented the writer to achieve agreement between the two.

### **Agreement between Noun and its Modifier in Sentences:**

Pre-modifiers are grammatical elements that qualify nouns next to them in sentence structures. Going by the analysis, the underline green in structure below indicates something wrong,

3. a. The animals that feed on another animals are lion, tiger, hyena, crocodile and so on...

The grammatical unit under investigation here is that, “another animals” which is underlined by the computer. Therein, it is observed that, the word “animals” is a plural noun but is pre-modified by the word “another” which is singular. This contrasts the grammatical rules that singular nouns should be modified by singulars adjective. In the same way, plural modifiers should do with plural nouns (Quirk and Green Baum, 1973). The correct grammatical is applied while editing the sentence and the green line disappeared automatically as in the structure below:

3. b. The animals that feed on the other animals are lion, tiger, hyena, and crocodile and so on...

By examining the grammatical errors that are covered by the computer grammar-check, it is observed that, these type of errors are underlined when there is no agreement between subject and complement, auxiliary and main verb, or between noun and its modifier.

### **The Grammatical Inconsistencies that are not covered by the Grammar of the Computer:**

This is the second group of the data that were gathered under the heading and analysed as the sentence elements that are not being underlined by the computer when they are used wrongly. These are analysed one after the other as in below:

#### **The Use of Definite Article (the):**

Definite article is a determiner that occurs usually in noun phrase (NP) structures. It helps to distinguish “specific terms from generic references”. Definite articles are used before nouns when there is sharing knowledge among the participants in a particular situation. That is to say, when the nouns are known commonly between the speaker and the listener, or when the nouns are known universally (Quirk and Green Baum, 1973). In this respect, any noun which stands for a group or a class of entities, which are generally known around the world, should be used with definite articles. Therefore the analysis considers the structure below grammatically wrong,

4. a. The animals that feed on the forage crops are *elephant, zebra, wild sheep and wild goat* and so on.

The error attached with the sentence is that each of the mentioned wild animals stands for a universal class that is generally known with its nature and habit which makes it distinct from the classes of the other species. Therefore it is generic reference which should be used with definite article as in the structure below,

4. a. The animals that feed on the forage crops are *the elephants, the zebras, the wild sheep and the wild goats* and so on.

#### **The Use of Indefinite Article (a):**

Indefinite article is the opposite of definite article as such it is used with in noun phrases in situations where there is no common knowledge on a particular noun between the speaker and the listener. It is also used with indefinite generic reference where the noun does not refer to a specific object (Quirk and Green Baum, 1973). Therefore, the analysis considers the use of indefinite article (a) is wrong in the structure below:

5. a. *A wild* is a place where animals and forage crops are being naturally.

What is wrong here is that the indefinite article (a) is used with an unspecified noun. That is the noun “wild” which may refer to any other forest that accommodates wild animals in every part of the world. Thus, the correct grammatical rule detaches the determiner (a) from the noun phrase in order to make accepted as in the sentence below:

5. a. *Wild* is a place where animals and forage crops are being naturally.

#### **Tautology in a Sentence Structure:**

This means repetition of a part of a sentence that has similar meaning with a linguistic element that has been mentioned. Our case here is the phrase, or the post-modifier that modifies the nouns next to it in sentence below:

6. a. Bala is good to everyone *even the younger ones*.

What is observed here by the analysis is that, the post-modifier “even the younger ones” is an unnecessary repetition which should not be used in the sentence. Errors of this type should be corrected by the writer in order to make the meaning clearer (Kaye, 1989). In this respect, the structure of the sentence should be corrected as in below:

6. a. Bala is good to everyone *in the school*.

### **Incorrect Use of Adjective in Sentences:**

Adjective modifies noun in order to add meaning to it. Thus, it makes the subject of discussion clear for the listener. In this regard, its meaning can be determined by its relationship to the noun in the sentence (Quirk and Green Baum, 1973 and Collins and Hollo, 2010). Grammatically, adjective has its characteristics which make it different from the other elements in the sentence. In this respect, the use of adjective is wrong in the structure below:

7. a. My father is a gentle, *honesty* and truthful.

The error here is that, the word “honesty” is a noun but it is used here instead of the adjective “honest” in order to modify the subject of the sentence (i.e. my father). This is grammatically wrong. Therefore the modifier to the noun (i.e. the subject) should be changed to adjective by deleting the y-ending as in the corrected version below:

7. a. My father is a gentle, *honest* and truthful.

### **Incorrect Use of the Adverb in Sentences**

Adverb modifies verb. In other words, it tells us about the manner, the time and the place of an action in a sentence. It is distinguished from the other grammatical elements by its unique characteristics in sentences. It may occur as a single word, phrase or as a clause to add meaning in sentences when they are used correctly (Quirk and Green Baum, 1973 and Collins and Hollo, 2010). Going by the analysis, the adverbial phrase is wrong in the sentence below:

8. a. Our parents introduced us *ever since* we start doing everything together till we left the school.

The adverb phrase “ever since” used in the sentence is informal which makes it to sound colloquial. When the sentence was well edited the adverbial phrase was replaced with the most appropriate form of it (ever after). Thus, the sentence appears more formal as in below:

8. a. Our parents introduced themselves to each other and we started doing everything together *ever after*.

### **Incorrect Use of Preposition in Sentences:**

Preposition is a grammatical element that links words together in sentence structures. In other words it shows the relationship between the subject of the sentence and its complement. In some cases, preposition indicates the places where the subject is located. In this respect, it may change the meaning in sentence where it is used wrongly (Quirk and Green Baum, 1973 and Collins and Hollo, 2010). This is pointed out by the analysis in the example below:

9. a. Dad told me that ... I will be going to write an entrance examination *in* Katsina ...*for* a school called Ulul-Albab...

Going through the sentence the analysis observed two prepositions (“in” and “for”) are used wrongly. The error here is that Katsina is a very large city containing various academic institutions. In this respect, using the appropriate prepositions will indicate the right location where the exams take place in Katsina as in the corrected version of the sentence below:

9. a. Dad told me that ... I will be going *to* Katsina tomorrow morning to write an entrance examination taking place *at* Ulul-Albab...

### **Incorrect Use of Conjunctions:**

Conjunction is grammatical element that joins words, phrases and sentences together in order to make meaning. It is of different types and functions in sentences. Therefore when it is used wrongly the meaning of the sentence will be affected as it is observed by the analysis in the structure below:

10. a. He usually comes to our house *when* his parents travelled *because* he is their only son *and* they were both into business. *So* we are always together like twins.

By examining the sentence it is observed that the conjunctions (“when”, “because”, “and” and “So”) are used wrongly. Therefore the meaning of the sentence is not clear. In this respect, the formal meaning of the sentence could be achieved through editing and changing the conjunctions with the appropriate ones, when necessary as in the corrected structure below:

10. b. He comes to our house *when* his parents are on travel. He does not like sitting at home alone, *so* he comes to stay with me.

### **Use of Incomplete Sentence Structure:**

Sentence refers to complete unit of meaning; as such it may consist of only one word (e.g. “go”). Conversely, a single word may not enough serve the purpose in some situations. Therefore, it requires more words and orderly arrangement known as subject predicate (Chukuma and Otagburuagu, 1997). In this regard, the analysis considered the sentence below as incomplete:

11. a. Hope all is up and doing?

The sentence is grammatically incomplete because it has no subject. This makes it colloquial, or the sentence type that is formed by mixture of formal and informal linguistic elements (Kamal, 2010). It is only through editing and proof reading that the structure will change in the formal convention of writing essays as in below:

11. a. I hope everything is very well.

When the analysis is through with this second category, it is observed that incorrect use of definite and indefinite articles and tautology are not underlined. In the same way, adjectives, adverbs, prepositions, conjunctions and the use of incomplete sentence structure are not underlined also. In this regard, all are considered as the grammatical elements that are ignored by the computer by the computer grammar-check as it is observed by the analysis.

## Research Findings

Going by the analysis it was examined that the computer as a writing instrument has a capacity to point out some grammatical errors by an in-built grammar-check. This is commonly done by underlining the affected area in green, as a caution for the user to do the necessary correction. Contrary to this normality, the study finds that not all grammatical errors are covered by the computer soft wire. In this respect, the study distinguishes some grammatical elements such as concord between subject and its complement, in number, and agreement between auxiliary and its main verb in the same sentence. These are the component parts of the grammatical category that are easier to be corrected, by considering the green line being done at the bottom of the affected area by the computer grammar-check. On the other hand, definite and indefinite articles, adjectives (as pre and post modifiers), adverbs and prepositions are not underlined by the grammar-check when they are used wrongly in sentence constructions. In the same way the use of incomplete sentence structures are not being indicated in that regard. In this respect, the computer is not all reliable for the writers to make correction of grammatical errors in this category.

## Conclusion

Using computer to write essays is a new advancement in writing profession. This tends to be the cause of the common inherent perception among the users that it is all helpful in that regard. Conversely, the assumption is misleading; as such writers should use it with self-control. That is to say, writers should be controlled by the conventional grammatical rules and to apply them when necessary, not to allow the computer to be as whole guide for them.. In this respect, they should be using standard dictionaries and recommended text books (Collins and Hollo, 2010).

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