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Grammar Software Ready for EFL Writers?

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Most of us have grown accustomed to having our software tell us what to do. From auto-completing our texts and correcting our spelling, to alerting us to software updates, to pocket-dialing people we don't actually want to talk to on our smart phones, we have come to accept a certain amount of intrusion from technology. For good or ill, it is simply the way we live—or at least, the way we live online. And to live online is to write online. As Chatfield (2013), a prominent technology theorist recently pointed out, "...for the first time ever we live not only in an era of mass literacy, but also; thanks to the act of typing onto screens; in one of mass participation in written culture."

One of the challenges facing EFL teachers is getting students to participate in this global, written English-language culture. It is a natural extension of inclass writing and can provide students with opportunities for authentic secondlanguage interaction. Part of this challenge is helping students use the spelling and grammar checking technology that is already embedded in many writing interfaces. We can only expect these functions to become more ubiquitous and powerful in the coming years. As EFL instructors, we need to understand how these applications intersect with our students, and, more importantly, we need to make our peace with them. This study attempts determine which grammar check software is most suitable for L2 writers. The study then looks at students' attitudes towards a grammar check application called Ginger.

Writing in an online environment is a popular approach used to improve second language writers' fluency. Participating in the online writing community through blogs, forums, and Wikis has been shown to significantly improve students' writing proficiency (Sun, 2010; Lavin & Beaufait, 2003) and encourage self-directed learning (Godwin-Jones, 2011). When writing for real audiences, fluency as well as complexity and accuracy become important. But there is much debate on the extent of grammar instruction and correction in ESL/EFL composition (Semke, 1984). Frodensen and Holten (2003) examine the role of explicit grammar instruction in the ESL composition class. They strongly advocate for an interventionist stance, but one aimed at helping students learn to become self-editors.

Research on grammar correction has also shed light on what kinds of error feedback are most effective for L2 writers. Ferris and Roberts (2001) suggest that feedback is both desired by students and necessary for effective revision. What is interesting is that they found that simply calling attention to an error is often as effective as analyzing the error type, even though students may prefer the second. Also, it is clear that students often want teachers to do more than just mark English errors and many would prefer that instructors just go ahead and correct their errors. In an EFL setting, Lee (2004) found that both instructors and learners favored extensive error feedback but often the teacher's corrections of student writing were inaccurate. This is an interesting point as we often think of computerized grammar checkers as inaccurate, but rarely question instructor feedback.

There is certainly growing support among researchers on the benefits of grammar and spelling tools (Shane-Joyce, 1989; Macarthur, 1999). Stapleton and Radia (2010) include improvements in student writing, motivation, and abilities to efficiently process writing feedback. Potter and Fuller (2008) suggest that grammar checkers, in an L1 junior high composition class, can be useful to bring errors to the attention of the writer but they also point out the limitations of software to actually teach grammar. McAlexander (2000) suggests that grammar

checkers can also aid in the learning process by introducing grammatical terms and rules to the writer. While there is growing support for spelling and grammar checking tools, limitations do exist. These tools are often prone to missing errors, providing incorrect suggestions to accurate writing, and providing feedback that is too complex for L2 writers (Macarthur, 1999).

Microsoft Office Word has long been the viewed as an indispensable application for drafting and revising documents. While Microsoft Office is a proprietary application, and rather expensive (approximately 24,000 JPY), it is the predominant word processing application installed on institutional computers and most learners have access to Microsoft Office on campus. Until recently, there were not many alternatives to the Microsoft Office spell check for students to use during the writing process. With the release of Microsoft Office 2013, it appears that Microsoft's spell and edit checking tool development remains stagnant. In response to its lack of advanced English usage and grammar checks, a number of alternative and innovative spelling and grammar tools are appearing.

Grammarly is one such web-based spelling and grammar application. It is available from any browser, with no download required. Grammarly integrates seamlessly with the Microsoft Office Suite, including Word and Outlook. This plugin is quite expensive. A subscription to use Grammarly costs approximately 3,600 JPY a month or 1,440 JPY a month if paying annually. It offers a free 7-day trial, but you must first provide a credit card number and remember to cancel your subscription before the trial period ends. Grammarly checks for spelling errors, provides a list of synonyms and offers feedback to users on their mistakes. The software developers claim that the plug-in is able to check 250 grammar rules including subject-verb agreement, article usage and modifier placement, preposition use, and quantifiers. Their website offers a grammar and writing discussion area for student writers to ask questions. The software also offers plagiarism checking and provides suggestions on how to fix instances of plagiarism.

A recent addition to the field of free, online grammar/spelling checkers is Ginger a cross-platform browser extension. Ginger employs a Natural Language Processing (NLP) technology that tries to guess the semantic meaning and context of text input by comparing it to similar text found on the web. The developers offer a free version as well as paid versions that range from 7,000-10,000 JPY a year. The paid versions offer additional tools such as a sentence re-phraser, a text reader and a personal trainer.

How useful are these three writing tools at the moment? This article evaluates three online spelling and grammar tools, Grammarly, Ginger as well as Microsoft Word's spelling and grammar checking tool, to determine to what extent these tools might aid in the student writing process. The article then summarizes student feedback on their experiences using the online writing tool Ginger as an aid in writing. The purpose of this research was to answer the following questions. Is grammar-checking software developed enough to be a useful tool for the EFL composition classroom? And, is Ginger accurate and useful enough for students to take the trouble to learn how to use it and incorporate it into their daily writing assignments?

Methods

In order to compare the robustness of the three spelling and grammar tools, an authentic student writing sample was run through Microsoft Word, Grammarly, and Ginger as shown in Figures 1-3.

Then the most useful tool was selected (Ginger) and student writers were encouraged to make use of it during the writing process. Students were then given a questionnaire to determine to what extent the tools were useful to complete their writing assignments.

Twelve students from an intensive English program at Kochi National University were selected to participate in a trial. The participants, ten females and two males were all second-year, native Japanese students whose English proficiencies ranged from Eiken Second to Pre-first levels. All students had basic English typing skills with some experience using Microsoft Word and PowerPoint although none were regular writers in English.

Results

Microsoft Word was able to identify most spelling and spacing errors, with the exception of spelling mistakes that also contained punctuation mistakes (see Table 1 and Figure 1). Word also made suggestions on article usage, but offered incorrect advice regarding fragments, and provided little help with usage or grammar mistakes.

Grammarly was able to identify the missing spaces after the periods and the spelling mistakes, including the proper noun and provided several alternative possibilities for the misspelled words (see Table 1 and Figure 2). It also identified fragments and offered advice on verb form, although often no suggested corrections were presented and explanations were complex.

Ginger was comparable to Grammarly in identifying spelling and punctuation mistakes, and it outperformed Microsoft Word, especially in the case of misspelled proper nouns and the simultaneous occurrence of misspelled words and punctuation mistakes (see Table 1 and Figure 3). Most importantly Ginger offered the most robust grammar check out of the three.

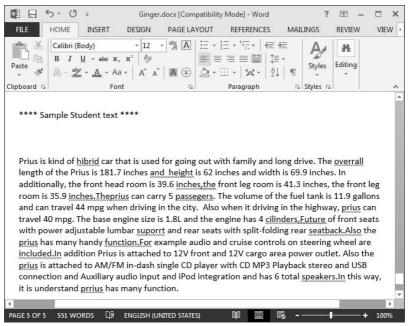


Figure 1. Example of errors in a sample or a student's composition in Microsoft Word.

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Figure 2. Example of errors in a sample or a student's composition in Grammerly.

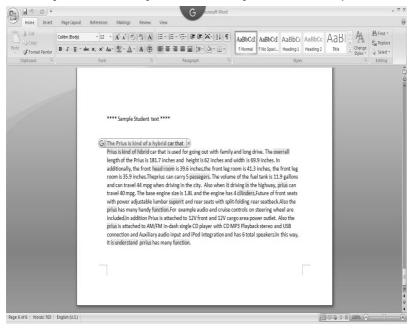


Figure 3. Example of errors in a sample or a student's composition in Ginger.

Error types	MS Word	Grammarly	Ginger
spelling errors	fair	good	good
punctuation errors	fair	good	good
spelling & punctuation errors occurring together	poor	fair	good
proper noun errors	poor	fair	fair
word use errors	poor	fair	fair
common grammar errors (i.e., articles, agreement, tense)	poor	fair	good
error feedback for user generated by software	Little feedback provided & tended to be nonspecific. Often feedback was incorrect.	Often identified errors but didn't provide corrections. Feedback tended to be too complex for L2 learners.	Identified the most errors & offered corrections to the learner.

Table 1Software Evaluation by Authors

After an in-depth review of the three spell and grammar checkers, Ginger was selected not only because it was free, but also because it had an intuitive and simple user interface. It also provided weaker writers with a "corrected version" of an error rather than lengthy grammar explanations and it corrected the most grammar errors (see Table 2). For these reasons, students were encouraged to use Ginger over the course of a 15-week semester to determine to what extent this technology aided students in their writing process.

Discussion

The purpose of this research was to determine if widely available English grammar checking software might be useful in an L2 composition class, and if so, whether students would take to it or not. The answers are "yes" and "maybe." Students were first introduced to Ginger, shown how to install the plug in, and then given

Table 2	
Sample Grammar Mistakes and Corrections	

Original text	MS Word correction	Grammarly correction	Ginger correction
when it driving in the highway	no correction	no correction	<i>when it's driving</i> on the highway
has many handy function	no correction	has many handy function s	has many handy function s
Prius is kind of hibrid car	Prius is kind of hybrid car	Prius is kind of hybrid car	<i>Prius is kind of a</i> hybrid car that
it is understand	no correction	it is understood	it is understood

a writing assignment to try the software out. Afterwards, they answered a few questions about the experience.

Initially many were somewhat skeptical and made comments such as:

"I think, when we use these tools, we need to check again by our own eyes." Student D

"I should not rely on this web site and software." Student K

However a few students seemed more open to using the software:

"Ginger is also good. When I make sentences, I made so many small mistakes. (For example, forget to put "the", "s", "of", etc....) It might help me to write collect (sic) sentence." Student J

"The best way of using like this software is using only the time when you need to help or check because it's not perfect." Student K

Five weeks and several writing assignments later, learners were given an online survey to find out if they were still using the software, and if so, what they thought about it after extensive experience with it. Results were mixed. Five students had stopped using the software for various reasons, including the inappropriateness of suggested corrections and the inability to use the software off-line. It is important to note that Ginger sells a standalone application for Microsoft Windows; however, students who can't afford Internet access at home are unlikely to be able to afford such software. Also, students expressed frustration with its somewhat cumbersome functionality. However, seven of the twelve students were still using that software five weeks later. They found it helpful especially for catching small grammatical errors (such as article errors) and spelling mistakes that they never would have noticed otherwise.

"I can use the grammar check function for free. Usually, I make a lot of spelling mistakes, so Ginger helps me to find them. In addition, it can point out grammar mistakes." Student D

"When I write a long sentence in English, I make some small mistakes like "a" " the" "to" etc... Ginger improves the mistake and check automatically." Student K

But even students who continued to use Ginger were wary of depending on it too much and feared that it might interfere with their own progress in English proficiency:

"Sometimes I become lazy because I don't have to fix by myself. Except for that, there is no problem!" Student K

"I think it makes me lazy because if I depend on Ginger too much, I would forget grammar and it's not a good way of writing English." Student F

Conclusion

At present, there are serious limitations to using such software, especially for students who either do not have enough English to recognize software-generated errors or who are not particularly technologically savvy. It seems likely, however, that such software will continue to develop both its accuracy in grammatical error correction and in ease-of-use through improved user interface. Many students (and teachers!) already rely on the built-in grammar and spell checker in dedicated writing software such as Word. As cloud computing continues to grow more common, such grammar and spell checking applications are likely to become standard features of text editing interfaces. This may be how the majority of writing will be done from now on and it will be important for all writers, perhaps especially L2 writers, to learn how to use these features effectively to become more independent self-editors.

Ginger and its competitors may also point to a future where ESL composition instructors are freer to spend more time with larger concerns, such as the conventions of a specific genre, and less time worrying over important, though often idiosyncratic and instruction-resistant, grammar errors. We have already ceded spelling to the computer, after all. Why not let software do what it can-when it can-to help us all become better writers?

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Recieved: September 16, 2015 Accepted: November 15, 2015