

## Review of Studies on Computer-based Feedback on Writing

**Marjan Abtahi**

M.A. in TEFL, Department of English  
Language & Literature, University of  
Mazandaran, Babolsar, Iran

[marjan.abtahi@gmail.com](mailto:marjan.abtahi@gmail.com)

### Abstract

Computer has been used in educational context to improve students' learning. This paper presents a narrative review of studies on four computer-based applications as assistant resources for providing feedback on writing in distant learning environment: a) Word processor, b) Wiki, c) Blog, and d) MY Access. Data bases of the current survey are: Google, Google Scholars and Science Direct. Among 40 articles found, the researcher selected 28 most related studies to examine computer-based applications for providing feedback on writing. The selected studies were conducted between 1990 to 2020. Computer-based feedback on writing helps students to improve the writing skill in a collaborative and authentic environment without the need to being present in the classrooms.

**Keywords:** Computer-based Feedback, Collaborative Writing, Peer-Peer Feedback

### 1. Introduction

In academic context, writing is considered as a major gate keeping role (Leki, 2003). In many writing courses, students are expected to write well without providing them effective learning strategy (Cerbin, 2001). Actually, students are not able to improve their writing skills without receiving feedback in their composing processes (Elashri, 2013). "Writing is a personal process where motivation and self-confidence of the students

as writers may expand or contract depending on the type and amount of comments incorporated in the feedback" (Lee, 2009, p.131). Feedback in writing is the input which reader provides to the writer for revising the text (Keh, 1990). In writing classrooms, feedback can be provided from three sources: teacher feedback, peer feedback, and computer-based feedback. Teachers are often the main providers of feedback in writing courses (Hyland and Hyland, 2001). Provision of feedback, however, might be challenging for teachers in writing classrooms; as they have not enough time to provide feedback to all EFL students (Abtahi et al, 2020). In addition, teachers are mainly the providers of feedback and students are just recipients (Ferris, 2003). Therefore, in many writing courses, peer-peer feedback and computer-based feedback are implemented beside the teacher feedback. Peer- peer feedback creates an authentic context for students which are nonjudgmental (Hyland, 2003). Implementing peer-peer feedback also improves the critical thinking skills which students need in analyzing and revising their own writing (Leki, 1990). Meanwhile, EFL students might experience some difficulties during the feedback provision due to their insufficient knowledge of the foreign language. In these opportunities, computer-assisted language learning (CALL) can play an effective role. Computer-based feedback is as a facilitative CALL activity contributes to the improvement of EFL students' writing through better text organization, revision, correction, editing, and other modifications (AbuSeileek and Abualshar, 2014). The use of computer in educational context is increasing in the previous decades. One of the main advantages of applying computer-based tools in education is providing immediate feedback (Mason and Bruning, 2001). When computer

is utilized as a writing instrument, it “can help foster those writing habits that have proven beneficial to experienced writers – habits such as revision, real revision not just editing minor surface details” (Etchison, 1989, p. 23). Applying computer-based feedback in writing assists both writers and reviewers to notice errors relating to the form and content of the text in a collaborative writing environment without the need to being present in the classrooms. Considering the present situation in which face to face interaction in the classroom is limited, the present survey attempts to introduce some computer-based applications as effective instruments which can be implemented to enhance the writing skill of students in distant learning environments. Informing teachers and others in this field can create opportunities for implementing e-learning instruction such as computer-based feedback as a beneficial resource for improving writing skill of the students. Hence, this survey presents four computer-based applications which might be beneficial in distant writing contexts: a) Word processor, b) Wiki, c) Blog, and d) MY Access.

## 2. Methodology

The present study is written based on the narrative review surveys. The researcher used Google, Google Scholars and Science Direct as data bases for searching. To obtain the related definitions and articles, key words such as: “Narrative Review article(s)”, “Review article(s)”, “narrative review”, “Computer-based peer review feedback”,

“English writing”, “Word processor”, “Wiki”, “Blog”, and “MY Access” were utilized. More than 40 articles were found. To examine articles relating to the impact of computer-based feedback on writing, the researcher reviewed them and after that chose 28 most related studies. The selected studies were conducted between 1990 to 2020. The related definitions of computer applications presented in this article are mainly obtained from online sources: [Dictionary \(2020\)](#), Vantage Learning (2019 and 2020), and Wikipedia (2020). Then, they were presented in four categories as follows: a) Word processor, b) Wiki, c) Blog, and d) MY Access.

## 3. Findings

The use of computer programs serves the aim of both assistance and autonomy in the writing process (Williams, 2005).

### 3-1. Word processor

Word processor is one of the beneficial computer tools which include applications such as: Track change, New comment, Dictionary, Grammar and spell check (Brierley and Kemble, 1991). Track change is in the review section of the word processor toolbar. After activating this tool, students select the error and then the error is automatically crossed out by a red line. Therefore, students are able to write the correct form of that word beside it underlined in a red font (Table 1).

**Table 1. Provision of Feedback by using Track Change**

I'm ~~totally-totally~~ against the fact that the children are given to their fathers rather than their mothers just because they can support them financially.

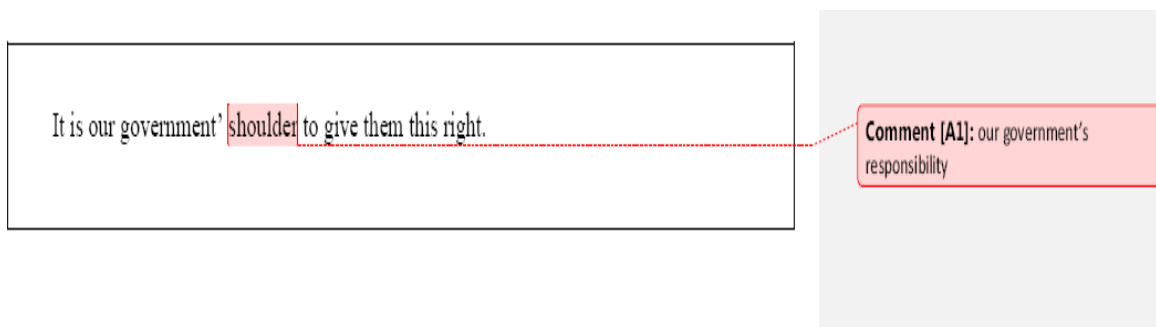
Track-change assist students in writing performance in terms of “content, structural organization (text level), structural organization (sentence level), grammatical accuracy, lexical appropriateness,

punctuation, and spelling” (AbuSeileek and Abualshar, 2014, p.81). New comment is another tool of the word processor which is also in the review section of the toolbar. When using comment in peer review

feedback, students should first choose the error and after activating the new comment selection, the error is automatically selected in a red color and also a red line which is

horizontally shown in the right side of that page would appear. In this part, students can type their comments (Table 2).

**Table 2. Provision of Feedback by using New Comment**



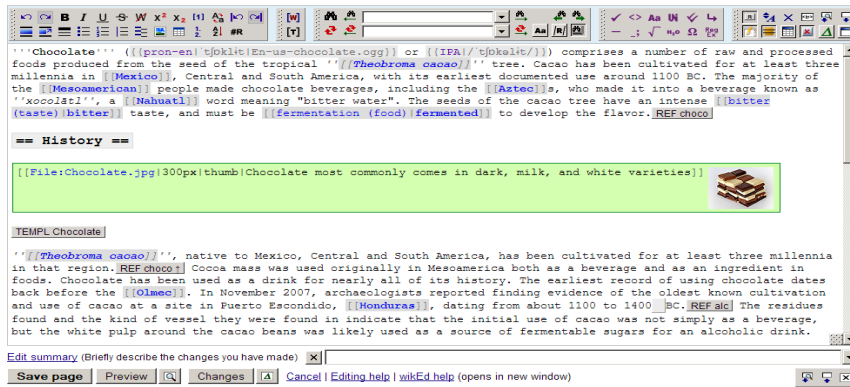
Another word processor application facilitating students' writing process is Spelling and grammar which focus on certain aspects of writing such as word choice, grammar and organization (Brierley and Kemble, 1991). Spelling and grammar is in the review section of the word processor toolbar as well. After activating, it automatically selects the errors which are related to spelling and grammar in a blue color and suggests their correct forms in a table, which appears in the right side of the page. Therefore, students are able to select the correct form of the word or ignore it by choosing the ignore section. Word processor also contains Dictionary as an effective tool in writing process. When students type an incorrect word, the error is automatically underlined by a red color. In this occasion, students can right click on the error and then, Dictionary suggests the related probable correct words. After choosing the correct word, the error is automatically replaced by the correct word.

When students use word processor in the writing process, it “helps reduce the mechanical difficulty involved in changing texts and offer a fluid and easily transformed communication, users might create longer compositions and do more revisions of their writing than they would do with pen and paper” (Li and Cumming, 2001, p.128).

### 3-2. Wiki

Wiki is a web site which enables its users to modify or edit the content (Ebersbach et al, 2008). Wikipedia is an example of a successful wiki, the open online encyclopedia (Wang, 2012). Wiki contains features and affordances for collaborative work (Kwan and Yunus, 2015); actually was created specifically for collaboration (Augar et al, 2004). The process of collaborative writing using Wiki may begin with writing a topic. After that a student shares a written text on Wiki, others can provide feedback to their peers' written text (Table 3).

Table 3.Screenshot of Wiki



In this web based system, there is a table specified for editing. In the editing table, students can change the words, add or edit the punctuation marks (Wikipedia, 2020); making it a better text in terms of quality. Moreover, this online program offers an environment for students to share knowledge and goals (Coniam and Lee, 2008), leading to an authentic writing platform (Chong et al, 2011). Another advantage of Wiki is that it is a hypertext web site which enables students to gain additional information about the highlighted concepts just by joining to the related links (Wikipedia, 2020). Therefore, Wiki is a new technology which is beneficial for both writers and reviewers. That means, it provides peer feedback for writers and increases content knowledge as a hypertext web site for reviewers in a collaborative and authentic writing

environment without need to face to face interaction.

### 3-3. Blog

Blog is a website or web page that is regularly updated, usually run by one person or a small group (Dictionary, 2020). It is an online web site which presents the latest posts of its author allowing visitors to leave online comments (Wikipedia, 2020). Blog is a web page that enables its users to share their written texts, digital images, commentaries and hyperlinks (Armstrong and Retterer, 2008). The main advantage of this technological web site in EFL writing is that it provides an online collaborative environment for both writers and reviewers. The process of writing using Blog might begin with the writer who shares his/her writing composition on the web page (Table 4).

Table 4. Sample of a Blog Post



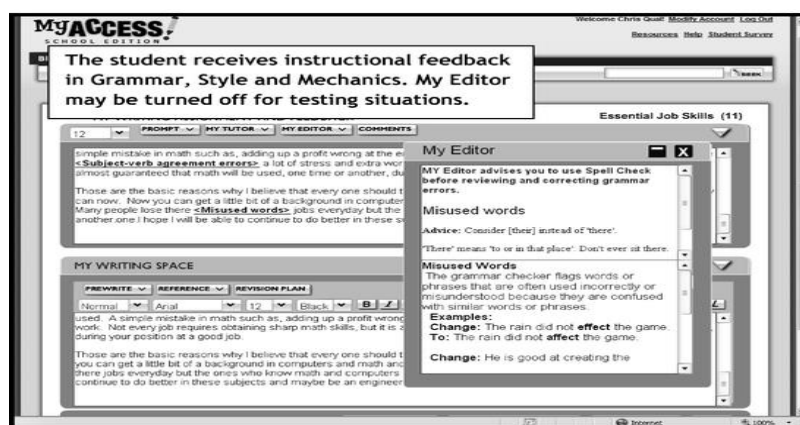
After that, other students as reviewers read the written text and leave comments on the writer's web site. More interestingly, the reviewers can also view other students' comments and gain knowledge from their higher level classmates. That means, not only writers can benefit from the comments and revise their written texts on the web page, reviewers are also able to observe the higher level students' comments and interact with other commenters (Alsamadani, 2018).

### 3-4. MY Access

MY Access is an online writing program designed to instruct and assess students' writing proficiency (Vantage Learning, 2020). This web-based computer application consists of tools which provide immediate scores and adaptive, prescriptive feedback and editing suggestions (Vantage Learning, 2020). When students are in the writing process, they can receive the

prescriptive feedback available on the top of the tool bar. Reference and Tools is one of the applications located on the feedback window which contains several prewriting tools such as access to Writer's Guide, rubrics, graphic organizers, writer's models, the Word Bank, and checklists (Vantage Learning, 2020). There are also three types of tools in the feedback window: a) MY Tutor, b) MY Editor and c) Comments which provide feedback while students are writing essays (Vantage Learning, 2020). MY Tutor is one of the tools in MY Access that provides feedback throughout the writing process in terms of: language use, focus and meaning, mechanics and conventions, organization, voice and style, and content and development (Vantage Learning, 2020). MY Editor is another tool available in MY Access tool bar which identifies language errors, style, grammar and returns instructional feedback in several languages (Table 5).

**Table 5. Sample of MY Editor as one of MY Access Tools**





Comments displays teacher's comments while students are revising their writing assignments. There is another effective application namely as Revision Plan which assist students to revise their essays. Revision Plan is an individualized plan consists of a list of suggestions with examples for revising an essay (Vantage Learning, 2020). MY Access is designed to preserve students' writing assignments. If students click MY Portfolio bottom, they can observe all of the completed writing assignments, feedback and scores (Vantage Learning, 2020). In addition, students can observe writing of their higher level classmates in Writer's Models. My Access creates a collaborative writing environment between teacher and students in which students are able to respond in real-time to teacher comments (Vantage Learning, 2019). This provides opportunity for clarification of misconceptions, discussion, and goal setting (Vantage Learning, 2019). Distance learning can be as rewarding as face to face classroom learning as a result of using My Access writing collaborative program (Vantage Learning, 2019).

#### 4. Conclusions and Implications

This survey presented some computer-based applications as assistant resources for providing feedback on writing in distant learning environment. As previous researches indicate, computer-based feedback is effective on writing quality of EFL students. I suggest instructors to consider the advantages of applying these computer-based programs and apply them in the writing courses. There is a limitation in the present survey which I need to acknowledge. Among those articles found, studies which mentioned attitude of participants toward using computer-mediated feedback were not selected in the review. Students' attitude may be one of the main factors which influence the technological learning. Thus, further surveys need to consider students' attitude toward utilizing computer-based applications in writing courses.

#### 5. Acknowledgments

I appreciate all those authors whose studies have been utilized in the present paper

#### References

1. Leki, I. (2003). A challenge to second language writing professionals: Is writing overrated? In B. Kroll (Ed.). *Exploring the dynamics of second language writing*. New York: Cambridge University Press.
2. Cerbin, W. (2001). Course portfolios: to preserve and refine good teaching ideas. *The Teaching Professor*, 15(7).
3. Elashri, I. (2013). The impact of the direct teacher feedback strategy on the EFL secondary stage students' writing performance. *Faculty of Education, Mansoura University, Egypt*.
4. Lee, N.S.C. (2009). Written peer feedback by EFL students: praise, criticism and suggestion. *Komaba Journal of English education*, 129-139.
5. Keh, C. (1990). Feedback in the writing process: a model and methods for implementation. *ELT Journal*, 44(4), 294-304.
6. Hyland, F., & Hyland, K. (2001). Sugaring the pill: Praise and criticism in written feedback. *Journal of Second Language Writing*, 10, 185-212.
7. Abtahi, M., Abadikhah, S. & Dehqan, M. (2020). The influence of computer-based and collaborative handwritten peer feedback on the writing performance of EFL learners. *Journal of Modern Research in English Language Studies*, 7(3), 95-113.
8. Ferris, D. (2003). *Response to student writing: Implications for second language students*. Mahwah, NJ: Lawrence Erlbaum.
9. Hyland, F. (2003). Focusing on form: Student engagement with teacher feedback. *System*, 31(2), 217-230.
10. Leki, I. (1990). Potential problems with peer responding in ESL writing classes. *CATESOL Journal*, 3(1), 5-19.

11. AbuSeileek, A., & Abualsha'r, A. (2014). Using peer computer-mediated corrective feedback to support EFL learners' writing. *Language Learning & Technology*, 18(1), 76-95.
12. Masonm, B., J & Bruning, R., H (2001). Providing feedback in computer-based instruction: What the research tells us, CLASS Research Report No. 9. Center for Instructional Innovation, University of Nebraska-Lincoln.
13. Etchison, C. (1989). Word Processing: A helpful tool for basic writers. *Computers and Composition*, 6(2), 33-43.
14. Blog. (2020). In Dictionary.com. Retrieved from <https://www.dictionary.com/>
15. Vantage Learning. (2019). Retrieved from <https://www.myaccess.com/>
16. Vantage Learning. (2020). Retrieved from <https://www.myaccess.com/>
17. Wiki. (2020). In Wikipedia. Retrieved from <https://en.wikipedia.org/wiki/Wiki>
18. Williams, J. (2005). *Teaching Writing in Second and foreign Language classrooms*. Boston: McGraw Hill.
19. Brierley, B., & Kemble, I. (1991). *Computers as a tool in language teaching*. New York: Ellis Horwood.
20. Li, J. & Cumming, A. (2001). Word processing and second language writing: A longitudinal case study. *International Journal of English Studies*, 1(2), 127-152.
21. Ebersbach, A., Glaser, M., Heigl, R., & Warta, A. (2008). *Wiki: Web Collaboration* (2nd ed.). Berlin, Germany, Springer.
22. Wang, C. M. (2012). An investigation of using wikis as a collaborative tool for teaching in a non-western tertiary education classroom. *Journal of Educational Technology Development and Exchange*, 5(1), 63-76. Retrieved from <http://www.sicet.org/>
23. Kwan, L.S.L. & Yunus, M. M. (2015). Group participation and interaction in ESL Wiki collaborative writing among Malaysian gifted students. *Asian Social Science*, 11(2), 59-68.
24. Augar, N., Raitman, R., & Zhou, W. (2004). Teaching and learning online with wikis. *Proceedings of ASCILITE 2004*. Retrieved from <http://ascilite.org.au/html>
25. Coniam, D., & Lee, M. W. K. (2008). Incorporating wikis into the teaching of English writing. *Hong Kong Teachers' Centre Journal*, 7, 52-67.
26. Chong, M. L., Tan, B. H., & Abdullah, M. H. (2011). Wiki for co-writing a science dictionary. *GEMA Online Journal of Language Studies*, 11(3), 109-128.
27. Armstrong, K. & Retterer, O. (2008). Blogging as L2 Writing: A Case Study. *AACE Journal*, 16(3), 233-251.
28. Alsamadani, H., A. (2018). The effectiveness of using online blogging for students' individual and group writing. *International Education Studies*, 11(1), 44-51.