Web-based and Collaborative Feedback: Less Dependency on the Teacher in L2 Writing

Afsar Rouhi, Hossein Vafadar
Payame Noor University, Islamic Azad University - Ardabil Branch (Iran)
Emails: afsar.rouhi@gmail.com, vafadar82@gmail.com

Abstract

This paper reports a quasi-experimental study that examined the effect of web-based and collaborative feedback on the use of English articles with the functions of the first mention and anaphoric reference in the written mode. Sixty four Iranian learners of English were placed in the web-based feedback (n = 20), the collaborative feedback (n = 22), and the comparison group (n = 22). The study followed a pretest, posttest, and delayed posttest design. The participating groups were assumed to be homogeneous based on their scores on a narrative story and a picture description task, an error correction test—which served as the pretest—and their performance on the proficiency test. During two treatment sessions, all participants were required to read two fables and narrate their accounts of reading them in a fixed time span. The targeted forms used incorrectly in the narration of the web-based corrective feedback (CF) group were specified and sent back to participants as a hyperlink to a concordance file designed for this study. Later, the group was required to exploit concordances for self-correction by using an online concordance website. Participants in the collaborative CF group were required to revise their narrations collaboratively. The comparison group, however, received no CF. Following the treatment all participants took the immediate and delayed posttests, which included the same package used in the pretest. Results of repeated measures ANOVAs revealed that although both the web-based and collaborative CF improved learners’ L2 writing in terms of English articles significantly, the web-based CF showed some superiority over the collaborative CF. The findings also suggested, though implicitly, that participants assumed more responsibility and independence in revising their own writing as a result of the CFs given in this study.

1. Web-based feedback on L2 writing

Web-based feedback, which primarily utilizes concordance software, enables students to have access to copious, authentic, and numerous instances of particular features on large collections of wordlists and texts. Web-based feedback is greatly empowered by a discovery-based approach which gives EFL novice writers a cognitive support to reach decisions about making appropriate choices of language rules [1]. Hyland [2] noted that the immediate online assistance can be extremely useful for raising students’ awareness, developing independent learning skills, and improving writing products. He suggested that if students submit their writing electronically, teachers can hyperlink errors directly to a concordance file where students can examine the contexts, examples, and collocation of the words they have misused.

2. Collaborative Feedback on L2 Writing

Collaborative feedback is now a salient characteristic of process-oriented writing instruction. It utilizes cooperative activities such as reading, reviewing, and providing feedback by students, both to procure immediate textual improvements over time and develop writing competence via a mutual scaffolding
Vygotsky's zone of proximal development (ZPD) stands as the theoretical base for the study of peer collaboration. The ZPD has been used in association with the concept of scaffolding by which an expert can help a novice learner achieve higher levels of control. The following research question was of particular interest in the present study:

Do web-based and collaborative feedbacks improve the accuracy of L2 students' writing English articles as they get engaged in self- and peer-correction with less dependency on the teacher?

3. Method

3.1. Participants

One hundred and ten Iranian learners of English participated in this study. Their mother tongue was Azari-Turkish. Sixty four participants were assigned to a web-based feedback (n = 20), a collaborative feedback (n = 22), and a comparison group (n = 22), homogeneous in terms of their proficiency, F(2, 61) = 1.50, p = .231. Furthermore, one-way ANOVAs run on the scores obtained from the pretest revealed no statistically significant difference among the three participating groups on the narrative story and picture description task, and the error correction test, F(2, 61) = .475, p = .624; F(2, 61) = 1.29, p = .284; F(2, 61) = .084, p = .919.

3.2. Materials

The study included a narrative story task, a picture description task, and an error correction test. The same package of testing instruments used for the pretest was administered as the immediate and delayed posttests. A proficiency test was also used to assess participants’ general knowledge of language.

The other instrument used in this study was concordance software 3.3. The concordance file was translated into HTML for publishing on a web server.

3.3. Procedures

On the first day, the pretest, which included an error correction test, a narrative story, and a picture description task, was administered to all participants in the three groups involved. The web-based feedback group received writing tasks for two sessions; in the first treatment session, participants were required to write at least 130 words in 20 minutes on a carbon copy. We distributed the story with the attached blank sheet of paper and asked them to read the fable silently. Having accomplished the reading, participants were required to return the stories. Then, the second researcher read the story loudly once while they were just listening. Afterwards, we asked participants to write the story in as much detail as they could remember. After 20 minutes, we collected the carbon copy of their narratives. Finally, students were required to transcribe the original version of their writing and send it from home via email.

After participants had emailed their writings to us, we provided feedback over target structures as a hyperlink to the concordance file that we prepared by the concordance software. We placed the concordance file in a sharing website (http://www.persiangig.com) to make its URL accessible to the participants in a given hyperlink. As participants moved the cursor on the given hyperlink, the type of error would appear and a click on the given hyperlink would lead them to the concordance file that showed the examples of correct usage.

Having provided feedback on each participant's writings, we sent them to participants via email to have them study the provided feedback, and revise their draft. Participants were required to email back the revised version of their writing prior to the next session of the treatment.
In the next session of the treatment, we just highlighted the errors, each with a tag that displayed the type of error on a given hyperlink to an online concordance website; participants were advised to search out concordances for the highlighted errors independently, by using the online concordance website. In week 5, the immediate posttest was administered, containing all the three testing instruments used as the pretest. The delayed posttest was given after three weeks; participants received the same testing instruments given in the pretest and posttest.

The collaborative feedback group in the study also received two treatment sessions in week 3 and 4. Participants were given a narrative task to write, following the same procedure used for the web-based feedback group. We assigned participants to groups of three. Upon completion of the writing by participants, they were given 15 minutes for the negotiation of possible errors and for providing feedback on their writing. Finally, we collected the revised version of their writings. In week 5, participants received the immediate posttest containing the same testing instruments used in the pretest. Three weeks later, we administered the delayed posttest, which included the same package of testing instruments used in the pretest and posttest.

The comparison group had only their own regular classes receiving no treatment and placebo. They only received the pretest, the immediate posttest, and the delayed posttest.

4. Results

4.1. Narrative story task

The scores obtained from the three testing occasions for the narrative story task were submitted to repeated measures ANOVA. This analysis yielded a significant main effect for time with a big effect size, $F = 62.62, p < .001, \eta_p^2 = .67$ and a main significant effect for CF treatment with a big effect size, $F = 6.52, p < .01, \eta_p^2 = .17$. Additionally, there was a significant interaction effect between time and CF treatment with a big effect size, $F = 6.18, p < .001, \eta_p^2 = .17$.

A closer inspection of these groups' performance through post-ANOVA analysis coupled with the pairwise mean comparisons revealed that the difference between the web-based and the collaborative group was not significant, $p = .065$. Neither was the difference between the collaborative and comparison group significant, $p = .081$. There was, however, a statistically significant difference between the web-based and the comparison group, $p < .001$.

The results pertaining to the post-ANOVA analysis (Bonferroni adjustment) comparing groups in the posttest 1 and 2, as shown in Table 1, revealed that the web-based group outperformed the collaborative and the comparison groups in the posttest 1 and 2, indicating a significant difference between the web-based and the comparison groups, $p < .05$ in both testing times. Additionally, the collaborative group performed better than the comparison group in the posttest 1 and 2 with a significant difference in the posttest 2, $p < .05$.

4.2. Picture description task

The repeated measures ANOVA run on the scores obtained from the three testing occasions for the picture description task revealed a main significant effect for time with a large effect size, $F = 29.24, p < .001, \eta_p^2 = .49$ and CF treatment with a large effect size, $F = 8.13, p < .001, \eta_p^2 = .21$. Moreover, the analysis manifested a significant interaction effect between time and CF treatment with a moderate effect size, $F = 3.51, p < .01, \eta_p^2 = .10$, suggesting that the groups’ performance was different over time.

The post-ANOVA analysis (Bonferroni adjustment) indicated that the difference between the web-based and collaborative group was significant, $p < .05$. Similarly, this significant difference appeared to hold true between the web-based and the comparison group, $p < .05$. Meanwhile, the difference
between the collaborative and the comparison groups was not significant, \( p = .440 \). Furthermore, the web-based group outperformed the collaborative and comparison groups significantly in the posttest 1 and 2, \( p < .05 \). Also, the collaborative group performed better than the comparison group in the posttest 1 and 2.

### 4.3. Error correction test

The repeated measures ANOVA performed on the scores obtained from the three testing times revealed a significant effect for time with a large effect size, \( F = 35.71, p < .001, \eta^2 = .54 \). There was a trend for the CF treatment, \( F = 2.85, p = .065, \eta^2 = .08 \), indicating that the effect for the CF treatment was a bit higher than the alpha level set at \( p < .05 \). Moreover, a significant interaction effect was observed between time and CF treatment with a small effect size, \( F = 5.92, p < .001, \eta^2 = .016 \).

The post-ANOVA analysis (Bonferroni adjustment) merged with the pairwise mean comparisons demonstrated no statistically significant difference between the web-based and the collaborative groups, \( p = .113 \), while a significant difference was found between the web-based and the comparison groups, \( p < .05 \). Additionally, no significant difference was observed between the collaborative and comparison groups, \( p = .450 \). More specifically, the web-based group outperformed the collaborative and comparison groups in the posttest 1 and 2, indicating a significant difference between the web-based and comparison groups. In addition, the collaborative group performed better than the comparison group in the posttest 1 and 2.

### 5. Discussion

The web-based group outperformed both the collaborative and comparison groups in the narrative task. Meanwhile, the web-based and collaborative groups significantly outperformed the comparison group. It can be argued that scaffolding through concordance activities actuates students' ZPD to focus on linguistic forms, helps students develop effective learning strategies, raises language awareness, and gives novice writers a cognitive support.

The results for the collaborative feedback suggest that the collaborative feedback fosters cooperative activity, mutual scaffolding, consciousness-raising, and social meaning-making process. Viewed from the cognitive perspective, the collaborative feedback allows learners to notice the gap between their erroneous language production and the input provided by the peer and enables them to restructure their linguistic information in the light of collaborative feedback to produce more correct grammatical structures. The collaborative feedback offers learners the opportunity to stretch their ability within their ZPD and makes them move from other-regulated to self-regulated activity.

The results for the picture description task revealed almost the same pattern observed in the narrative writing task, that is, the web-based group significantly outperformed the collaborative and comparison groups. This finding can be accounted for by discovery-based approach, Schmidt's [4] view of awareness in L2 acquisition, and scaffolding through concordance activities. The collaborative group outscored the comparison group in the picture description task. This finding can be justified by Swain and Lapkin's [5] cognitive perspective and Vygotsky's sociocultural theory.

Regarding the error correction test, the results obtained from the three testing occasions showed that the web-based group performed better than the collaborative and comparison group, indicating a significant difference between the web-based and comparison groups. All groups revealed a significant effect for time and a significant interaction effect between time and CF treatment. A significant effect for CF treatment was observed in the narrative writing and picture description tasks. All groups showed almost the same degrees of increase in the posttest 1 and 2. A possible explanation for this might be the resemblance of the narrative story and picture description tasks to the treatment given.
The present study also contributes to the literature of autonomy. Such a claim can be better justified by Littlewood's [6] framework of autonomy which identifies "autonomy as a learner" containing "(a) the ability to engage in independent work (e.g., self-directed learning); and (b) the ability to use appropriate learning strategies, both inside and outside the classroom" (p. 431). The framework depends on two main components: "ability" and "willingness". The former is comprised of "knowledge" and "skills"; the latter is subdivided into "motivation" and "confidence". The results indicated that the participants possessed the components of ability and willingness as well as their subcomponents. They were able to gain the knowledge (e.g., using concordance examples, collaborating and negotiating in groups) about the alternatives from which choices had to be made in self- and peer-correction and the necessary skills for applying the choices which seemed the most appropriate. Participants also possessed the motivation component because their motivation was fostered by clarifying its relation to their own needs and goals. Participants appeared confident in their self- and peer-correction by indicating a notable number of corrections, making decisions independently about choices both outside and inside the classroom that have traditionally belonged to teachers, creating a non-threatening atmosphere, and providing techniques for furthering participants' ability to self- and peer-correction. Overall, the participants demonstrated an ability to perform independently and a willingness to attempt for more accuracy in their writing. Littlewood [6] also made a distinction between "proactive" and "reactive" autonomy. The proactive autonomy is acquired when learners are able to take charge of their own learning, determine their own goals, select methods and techniques, and evaluate what has been acquired. As Little [7] argued, in this way they can "establish a personal agenda" for learning (p. 431), which confirms their individuality and sets up directions in a world which they themselves have partially created. Littlewood [8] describes reactive autonomy as the kind of autonomy which does not create its own directions, but once the direction has been initiated, enables learners to organize their resources autonomously in order to achieve their goal. Participants in the present study obtained both proactive and reactive requirements, that is, we set the direction for participants to work on tasks (e.g., by giving hyperlink to an already prepared concordance file, placing a guiding tag on errors, giving directions on how to work in group and negotiate errors collaboratively) and then they appeared to manage their own resources independently in order to reach their aim (e.g., searching out online concordances, giving and receiving feedback).

References