

Wikis: the effects of corrective feedback on EFL learners' written accuracy

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Abstract: This pilot study aims to explore the effect of corrective feedback on learners' written productions by looking at two types of feedback on verb and preposition errors taking place on wikis. Corrective feedback types include recasts (reformulations of incorrect forms) and metalinguistic clues (explanations for linguistic errors). Thirteen English as a foreign language (EFL) learners participated in this study. They were randomly assigned into the three conditions, namely, recasts, metalinguistic clues, and no feedback. The preliminary results derived from the posttest writing suggest that those who received corrective feedback outperformed those who did not; the metalinguistic clues group had a greater number of correct targeted items than did the recast group. Furthermore, all participants of the three groups agreed that corrective feedback was necessary to enhance writing abilities in English. This study concludes with the pedagogical implications and suggestions for future studies.

Keywords: Recasts, metalinguistic clues, corrective feedback, computer mediated communication (CMC), second or foreign language (L2/FL)

1. Introduction

Corrective feedback refers to “any feedback provided to a learner, from any source, that contains evidence to learner error of language form” (Russell & Spada, 2006: 134) assuming that corrective feedback on errors may improve and acquire the linguistic forms in their L2 writing (Bitchener & Knoch, 2009). It has been well documented that group or pair learners working on written assignments collaboratively scaffold each other's knowledge in the target language (Wigglesworth & Storch, 2012). Therefore, corrective feedback has resulted in a substantial body of research in both face-to-face and computer- or technology-assisted learning environments (e.g., Lyster, 1998, Yang & Meng, 2013, Yang & Lyster, 2010, Yeh & Lo, 2009, and Bower & Kawaguchi, 2011).

A central notion of corrective feedback is that it facilitates awareness of how learners pay attention to their verbal or written errors so that they then process the information in L2 (Schmidt, 2010). One important characteristic of noticing states that attention directed to focused rather than unfocused linguistic input is likely to improve the knowledge of the focused linguistic input (Schmidt, 2010). Such a notion applied to L2 writing can mean focusing on a certain linguistic element, say, the simple past tense in a given piece of writing. Because levels of attention differ from individual to individual, some may be more capable than others of noticing the errors occurring in their output, and this highlights the collaborative efforts with their peers, who provide the learners with feedback to resolve communication breakdowns that are triggered by their linguistic errors. That is, the socially modified negotiation plays an important role in the cognitive developmental process (e.g., memorizing new words), which places an emphasis on the sociocultural theory (Vygotsky, 1978; Lantolf & Thorne, 2006).

Various types of corrective feedback can be distinguished, including direct and indirect feedback, recasts, and metalinguistic clues. In this current study, the types of metalinguistic clues and recasts were adopted in accordance with Shintani and Ellis (2013); the former provides learners with metalinguistic explanations for errors, whereas recasts, or as termed by those researchers, direct corrective feedback,

refers to the provision of correct forms of errors. Whether the type of corrective feedback has an impact on learning outcomes (e.g., learner responses or uptake) has been increasingly investigated. The results of such studies suggest that compared to recasts, metalinguistic clues, which require learners to self-initiate repair moves on their errors, are more effective for their learning outcomes. AbuSeileek and Abualsha'r (2014) attempted to determine the effectiveness of corrective feedback types on L2 learners' corrective written output in English via the use of Microsoft Office 2010. Four conditions were examined, namely, recasts (the provision of the correct form), metalinguistic clues (giving comments, such as subject-verb agreement), track changes (e.g., marking added and deleted text), and no feedback. Their findings suggest that all the experimental groups performed significantly better than the control group in the posttest essay; the track changes group outperformed the other three groups and the recasts group performed better than the metalinguistic group in terms of the linguistic aspects, such as grammatical accuracy and spelling.

Lee (2004) found that both teachers and learners in a classroom setting had preference for all the errors rather than just some errors being corrected. On the other hand, the majority of teachers believed that how the students' errors were corrected affected their writing; indirect corrective feedback rather than direct feedback might result in more effective writing development. Interestingly, in that study, more than half of the teachers considered that some students had made progress regarding the accuracy of their writing due to the corrective feedback, whilst less than half of the students thought that they had made an improvement in their writing. The teachers were found to prefer direct feedback to indirect feedback.

Kessler, Bikowski, and Boggs (2012) investigated collaborative writing using Google Docs and found that their participants were likely to engage in meaning-focused rather than form-focused interaction and to make changes in spelling or punctuation rather than in grammatical errors (e.g., verb tenses). Their results suggest that using the web-based tool not only improved the accuracy in the writing but also demonstrated a willingness to engage in collaborative writing.

This pilot study extended the attempts of previous research to investigate particular sets of linguistic features, namely, verb tenses and preposition errors, by employing wikis, whereby EFL learners are allowed to provide corrective feedback to their peers. In particular, it examined the effects of recasts and metalinguistic clues on the knowledge gain in L2 and the collaborators' perception of corrective feedback.

2. Research Questions

Three research questions are explored in this study:

1. Does the corrective feedback have an impact on the accurate uses of the targeted linguistic items?
2. Do types of corrective feedback (recasts and metalinguistic clues) influence the accurate uses of the targeted linguistic items (verbs and prepositions)?
3. What is the learners' perception of corrective feedback taking place on the wikis?

3. Methodology

3.1 Participants

Participants in this pilot study were thirteen EFL learners, all of whom spoke Mandarin Chinese or Taiwanese as their first language and who were studying at the chosen university. They had previously studied English as a school subject for more than seven years. All the participants were randomly assigned into three conditions, namely, recasts, metalinguistic clues, and no corrective feedback; this resulted in five learners in the recast group, four in the metalinguistic group, and four in the control group.

3.2 Instruments

There were six writing topics in total. Of these, two were chosen for further analysis and were reported in this pilot study. In order to compare the differences in an increase of form accuracy, one was taken from the learners' initial compositions and used as the pretest whereas the other was taken from their final compositions and utilized as the posttest. The pretest, consisting of picture compositions, was administered to the participants. The posttest contained a set of six pictures derived from Heaton (1975); the pictures illustrate two boys playing ping pong, who found that the ping pong table was much taller than one of them, and so they decided to make the table shorter by sawing off the table legs. Similarly, in the posttest, there was a picture composition comprising four pictures taken from Hsieh (2014, p. 74) describing a careless mother who went shopping with her baby sitting in a pushchair, which rolled away because she forgot to apply the pushchair's parking brake when she came cross a top that she liked.

3.3 Online interviews

The online interviews were conducted individually via text chat on Facebook. The purpose of the interviews was to elicit how the individuals perceived the corrective feedback on their linguistic errors. There were four questions for the online interviews regarding learners' perception of corrective feedback, such as "Is corrective feedback useful to improve your writing in English?" and "Do you notice errors occurring in other members' writing on wikis?"

3.4 Coding

A coding scheme based on the two types of corrective feedback adopted in this study focused mainly on the errors of tenses and prepositions in English. A recast normally used by the teacher in a classroom setting refers to the reformulation of students' erroneous utterances that contain past tense errors (Sheen, 2007; Yang & Lyster, 2010). However, in this study, corrective feedback was initiated by peers or group members on wikis where a recast was an explicit correction or a correct form supplied by others. Unlike recast corrective feedback, a metalinguistic clue provides a learner with an explanation of an error without supplying a correct form of the error (Shintani & Ellis, 2013) as this encourages learners to self-repair their own errors (Yang & Lyster, 2010). Examples of those are illustrated as follows:

Verbs

Tom a good boy.

Recasts: Tom [is] a good boy.

Metalinguistic clues: this sentence requires a singular verb

Prepositions

She moved out on July.

Recasts: She moved out [in] July.

Metalinguistic clues: The preposition is incorrect. You should use the one for during a certain period of time.

3.5 Procedure

Two weeks prior to the data collection, the first researcher of this study invited 50 students online via the text chat on Facebook, but only 13 learners agreed to participate in this study. In order to obtain their permission to conduct this research, the participants were informed about the brief remit and duration of this research; however, they were not told whether they were in the recasts, metalinguistic clues, or control group. In the second week, introductory sessions were set up whereby all the participants were contacted individually online and instructed to sign up for wiki accounts and to familiarize themselves with the tools provided on wikis, such as sending and replying to a message. Immediately after this, the participants were taught how to provide feedback to their peers. The recasts group was introduced to the basic principles in providing their peers with the correct forms without explaining the rules of the forms, the metalinguistic clues group was told not to give their peers correct forms but only explanations of the

incorrect forms, and the control group was not given any instructions regarding feedback. Importantly, the researcher drew learners' attention to the forms of verbs and prepositions in the feedback groups of the recasts and metalinguistic clues. All group members were told to complete each composition using 300 words in no more than 20 minutes; they were allowed to use dictionaries or to ask the researcher about vocabulary they did not know. It is worth noting that the collaborative corrective feedback took place in an asynchronous manner, which means that the students worked on the wikis at different times. Apart from the control group, the students in the other two groups accessed the platform three or four times a week to provide their comments on their peers' written work. During the third and sixth weeks, the students completed a piece of written work and revised their work based on the corrective feedback or without feedback each week. In the final week, each participant was asked to compose the final written text and was then interviewed online, which took about 40 minutes.

4. Results and Discussion

This pilot study aimed to explore whether the corrective feedback influenced the accurate use of verbs and prepositions in English and how learners perceived the corrective feedback provided by their peers when collaborating with others on wikis. Three research questions are answered in this section. The first addressed the issue of whether the corrective feedback had an impact on the accurate uses of the targeted linguistic items. The results obtained from the Wilcoxon Signed Rank test as shown in Table 1 suggest that the mean scores of the accuracy in verbs and prepositions differed significantly in the pretest/posttests between the feedback and the control groups. In the feedback groups, the mean scores of verbs demonstrated a statistical significance between the pretest ($M=24.11$, $SD=3.26$) and the posttest [$M=35.00$, $SD=5.98$, $p < .011$]. Likewise, the mean scores of prepositions reached a significant level between the pretest [$M=17.78$, $SD=3.27$] and the posttest [$M=22.11$, $SD=2.76$, $p < .018$]. Noticeably, the impact of corrective feedback on the increase of verb accuracy was greater than that on the prepositions. In contrast, the mean scores of accurate verbs and prepositions for the control groups did not differ significantly, as the p values were greater than .05.

Table 1. Differences in the pretest and posttest between feedback and control groups

		Feedback groups			Control group		
		Mean	SD	p	Mean	SD	p
Verbs	Pretest	24.11	3.26	.011	24.00	1.16	.257
	Posttest	35.00	5.98		25.25	2.99	
Prepositions	Pretest	17.78	3.27	.018	19.75	2.99	.458
	Posttest	22.11	2.76		19.25	2.63	

The above results indicate the effect of written corrective feedback on accuracy in the targeted forms (verbs and prepositions) is in line with that of written feedback studies, e.g., AbuSeileek and Abualsha'r (2013).

The second research question asked whether types of corrective feedback influenced the accurate use of the targeted items. In Table 2, the pretest and posttest were measured in terms of the accuracy in the use of verbs and prepositions by using the Mann-Whitney U test. Results indicate that there was no significant difference in the accuracy of verbs and prepositions in the pretest between the recasts and the metalinguistic clues group ($p > .05$). In the posttest, the mean scores of the verbs differed significantly between the recasts ($M=30.60$, $SD=3.98$) and the metalinguistic clues group [$M=40.50$, $SD=1.29$, $p < .016$]. However, there was no significant difference between the mean scores of accurate prepositions in the posttest of the groups, as the p value was greater than .05. Thus, the metalinguistic clues had a greater impact on accuracy than did the recasts.

Table 2. Summary of Mann-Whitney U test

	Recasts group (N=5)	Metalinguistic clues group (N=4)
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		Mean	SD	Mean	SD	<i>p</i>
Pretest	Verbs	24.40	2.70	23.75	4.27	.712
	Prepositions	17.40	3.36	18.25	3.59	.459
Posttest	Verbs	30.60	3.98	40.50	1.29	.016
	Prepositions	20.60	1.14	24.00	3.16	.111

To some extent, our study, which investigated peer-peer collaborative feedback, provided consistent results with studies investigating teacher-students corrective feedback to suggest that metalinguistic clues are more likely than recasts to influence accuracy in the targeted items; such studies include Shintani and Ellis (2013), who investigated accurate use of the indefinite article (a/an) in revised written work. Such results assumed that feedback such as metalinguistic clues is more likely to push learners' output or self-repair than recasts feedback.

The last research question was regarding the extent to which the participants perceived corrective feedback on their written work taking place on wikis. All the participants (N=13, 100%) agreed that corrective feedback would not only enhance their writing skills but would also improve their overall English abilities. They wished all of their linguistic errors could be corrected in order to write competently. Most of them (N=10, 77%) stated that they were unable to focus on grammar when they were concentrating on composing their written work. More than half of them (N=8, 62%) recounted that, although they could notice the errors that their peers had made, they did not feel comfortable giving comments or feedback on the errors due to their own lack of ability to apply metalinguistic knowledge (e.g., explaining particular forms).

Several limitations to this study need to be addressed, as they may affect the interpretation of the research results. First, there were only 13 learners participating in this study, and thus the sample size was too small to represent other learners in the target population. Second, written rather than oral corrective feedback was closely examined in this study. Hence, it is suggested that oral corrective feedback is needed, particularly for those who are low proficiency learners due to their difficulty in reading metalinguistic clues provided by high proficiency learners. Finally, this study focused only on the accuracy in verbs and prepositions irrespective of some other forms, such as indefinite articles. The pedagogical implications are that teachers should foster learners' metalinguistic knowledge by collaborating with others to comment on others' language use.

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