

## Formative Multimodal E-Feedback in Second Language Writing Virtual Learning Spaces

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Article information	
<b>Abstract</b>	In the digital era, writing experience usually comes in the form of digital writing in virtual spaces. Social network sites are the ubiquitous platforms where authentic communication makes writing meaningful in our daily life. In addition, the outbreak of the COVID-19 pandemic encouraged all human activities to be done online. In the academic realm, particularly second language writing pedagogy, digital tools have been used to support digital learning and improve students' writing performance online. Moreover, as feedback is a crucial learning tool in writing pedagogy to help enhance students' writing development in campus-based settings, e-feedback takes on this role in virtual learning environments (VLE) in second language writing pedagogy. This article aims to introduce multimodal e-feedback that can be formatively employed in the writing process in second language writing virtual learning environments. Some practical pedagogical implications are also presented.
<b>Keywords</b>	e-feedback, multimodal e-feedback, formative multimodal e-feedback, second language writing (SLW), virtual learning environment (VLE)
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## Introduction

The COVID-19 pandemic has led to significant challenges in digital learning (Dahlström, 2019). Teaching and learning activities had had to be adapted to those digitally available to compensate for the effects of the COVID-19 pandemic, especially in higher education institutions (Penland et al., 2019). In the virtual learning environment, four elements must be taken into account: interactive presence, online learning community, computer mediated communication, and personalized but social blended learning (Penland et al., 2019). That is, teaching and learning in the virtual learning environment requires active two-way communication of both teachers and learners to establish an online learning community where not only personalized but also social blended learning can take place through the use of technology. Unquestionably, this learning platform has rapidly gained academic appeal across the globe due to the pandemic. Writing pedagogy, including second language writing pedagogy, is no exception.

Feedback is recognized as having a central role in assessment, especially formative assessment (Brookhart, 2017). It produces diverse positive effects on writing, writing process, and writers (Liu & Yu, 2022). In either traditional or digital writing pedagogy, different types of feedback from diverse feedback sources through various means can be employed to improve the students' writing performance. Although conventional feedback like written comments on paper is time-consuming and hard work for teachers, it is even more challenging in digital learning environments (Cavanaugh & Song, 2014). Peer review is another learning tool that fosters writing improvement apart from self-reflection or self-assessment on one's own work. In virtual learning environments, on the other hand, virtual peer review plays a key role. Even though it has a shorter record than traditional alternatives, it shares most characteristics, except for the integration of technology (Breuch, 2004). That is, virtual peer review utilizes technology to develop students' writing performance (Breuch, 2004). Finally, teacher feedback, students' most preferred feedback, is an additional but critical feedback source for students' writing development. To gain the most efficacy of teacher electronic feedback in virtual learning environments, asynchronous electronic teacher feedback should be supported by synchronous electronic teacher feedback (Ene & Upton, 2018).

Since the outbreak of COVID-19, the concept of “a new normal” has inevitably been employed in every single part of human life. This concept can also be found in all writing steps of the writing process, especially the feedback process in writing pedagogy. Like those in other writing stages, this is performed in virtual learning environments to create dialogic and interactive feedback on digital platforms. It is called e-feedback or online feedback. E-feedback can be delivered synchronously and asynchronously to support learning and skill development, yet synchronous e-feedback is found to promote more student engagement and writing improvement (Ahmed et al., 2021). There are multiple types of e-feedback, each of which has its own distinctive characteristics that foster learning and writing skill development. Some, nevertheless, work in particular circumstances, while others can be regarded as great challenges and can only be accomplished under specific situations or certain conditions. However, not all previous studies have affirmed effective and constructive impacts of feedback being (Brookhart, 2017). Most importantly, no preceding studies have examined multimodal e-feedback and its implementation in the writing process of virtual second language writing environments. Hence, this paper aimed to examine multimodal e-feedback formatively utilized in the writing process of a virtual second language writing environment.

### **E-feedback**

In higher education, e-feedback (electronic feedback) is popularly playing its prominent role in the area of assessment (Helfaya & O’Neill, 2019). This format of feedback meets both teachers and students’ teaching and learning styles, particularly in the digital era (Helfaya & O’Neill, 2019) though the virtual learning environment is still found to be challenging for students, specifically EFL students these days (Mosquera, 2017). E-feedback can be automatically generated and taken from software systems, or delivered through technology where humans run the process (Ware & Warschauer, 2006). However, when generated by software, it is usually considered supplementary feedback type in traditional writing classes. However, it is central to the writing process in virtual learning environments where cognitive writing skills, affective factors, and social interactions can be developed. Such feedback, initiated by humans, is time-consuming as it is always a daunting task evaluating students’ work and providing feedback either by the traditional pen and paper way or via virtual learning environments.

## **Second Language Writing (SLW) in Virtual Learning Environments (VLE)**

Virtual learning environments are a digital platform where technology is utilized to support learning systems in either higher or vocational education (Müller, 2013). They embrace various types of technology enhanced learning systems, such as blended learning systems, distance education systems, adaptive learning environments, e-learning services, digital libraries, etc. (Müller, 2013). Recently, the establishment of virtual learning environments has become ubiquitous in higher education (HE) (Hyland, 2019). Various online platforms are being utilized to support teaching and learning. A sudden increase in its usage across the world was triggered by the COVID-19 pandemic. This marked and far-reaching change can be noticed not only in second language writing pedagogy but also in foreign language writing pedagogy. According to a previous study, EFL students had positive attitudes toward virtual learning environments although it was regarded as both a challenging and interesting learning mode because the implementation of digital tools like computers in digital classrooms and Internet access were still important issues for teachers and students in this generation (Mosquera, 2017). In addition, such technology enhanced learning systems promoted independent learning, and student motivation was increased according to a study by Barker and Gossman (2013). In ESL process-based writing pedagogy, peer assessment was done in virtual learning environments to develop student writing performance and to establish an enjoyable learning atmosphere where student mindsets toward formative assessment could be shaped (Ramasamy & Aziz, 2018). In short, when virtual learning environments are well-designed, they can effectively support learning and assessment (Hyland, 2019).

## **Multimodal E-feedback in the Virtual Learning Environment (VLE)**

In conventional writing pedagogy, feedback can be produced in diverse forms. Similarly, e-feedback can be found in various modes in virtual learning environments (VLE) as displayed in Figure 1.

**Figure 1**

*Multimodal E-Feedback: An Integration of Various Feedback Modes into One*



In writing pedagogy, varied types of feedback can be delivered in different stages of the writing process to enhance students' writing performance not only in traditional classrooms but also in virtual learning environments. Conventionally, all types of feedback illustrated in Figure 1 except synchronous and automated feedback can be provided in writing pedagogy. To carry out a simulation of the feedback process in face-to-face settings, the use of multimodal e-feedback in virtual learning environments is able to embrace manifold types of feedback, including the two exceptions previously mentioned in each stage of the writing process. Students can virtually gain feedback via self-assessment, peer assessment, or group assessment. Particularly, when multimodal e-feedback is formatively integrated into the writing process in second language writing virtual learning environments, its efficacy can be empirically valued.

## **Multimodal E-Feedback in Second Language Writing Virtual Learning Environments**

In order to create virtual second language writing environment where students' writing skills and performance are effectively developed, technology can be employed to facilitate learning and writing performance development (Hyland, 2019). One of the writing processes that supports writing improvement is the process of giving feedback. Even the choice of feedback types teachers make is based on their teaching styles and beliefs (Hamid et al., 2018), multimodal e-feedback is significant option in digital writing pedagogy where various modes of e-feedback can be utilized to facilitate student writing improvement. Ten modes of e-feedback can be described as follows:

### **1. A Word Processor**

In the virtual learning environment, various online word processing tools are popular, especially in writing pedagogy either in the face-to-face learning context or in the digital learning context. Based on a previous study, through word processing software, students' writing performance was enhanced; moreover, their attitudes toward writing were positively developed (Yilmaz & Erkol, 2015). Grammar checkers and word counters helped produce two considerable positive effects. Apart from grammar checks, spellchecks, and vocabulary expanders such as thesaurus were common software tools students used to get feedback and polish their writing (Bailey & Withers, 2018). With green and red squiggly lines, indirect but real-time feedback on spelling or grammar could be recognized to promote self-correction with the simple right click or by themselves (Bailey & Withers, 2018). Furthermore, the word processor could be used as a digital learning tool to support interactions and knowledge consolidation in peer-assessment and self-editing activities, according to a study by Kwok (2016). In other words, the use of word processor helps polish the final products which represents the way technology is used to improve language learning, especially second language writing (Hyland, 2019). To derive such benefits, however, technological skills are required. That is, students need to be trained to use a word processor. Otherwise, it may become a technological burden instead of a learning tool to help them improve their writing.

## **2. Color Highlighting**

Color highlighting is another way word processors can provide indirect corrective feedback. This kind of feedback is usually used to raise students' awareness of grammatical errors, specifically mechanical and morphological errors to encourage self-correction to improve their writing performance in terms of accuracy based on the noticing hypothesis (Hamid et al., 2018). However, as it is indirect feedback, it probably works best with students who have a certain language proficiency. For those with limited language proficiency, color highlighting should be provided with some teacher feedback as a further clue. This is so important so such students have some guidance on how to deal with this kind of indirect feedback.

## **3. Comments in Apps**

The comment function in various platforms is commonly used in the ESL/EFL writing pedagogy to give real-time e-feedback in collaborative writing. Through a sharing function in such platforms, writers can collaboratively view, leave real-time comments, or even edit their work. Both teachers and students can also use this function. This supports a virtual learning environment where peer feedback, a form of formative assessment, is virtually employed to foster collaborative writing (Damayanti et al., 2021). Both feedback givers and feedback receivers should be trained to use this function, so the real-time commenting and replying can create dialogic and interactive feedback that fosters students' writing development (Saeed & Qunayeer, 2022).

## **4. Screen Captures**

Screen captures can be called screenshot, screen recording, or screencast. In the feedback process, screen captures of students' writing tasks and their writing processes can help teachers track their students' writing progress and their meaning-making process where online resources are gathered and studied to give them some constructive feedback on their writing (Hort, 2020) to foster students' writing performance. Besides, with students' permission, their screen captures can be used as a tutorial instructional tool to give feedback online in virtual learning conferences (Bailey & Withers, 2018). Nonetheless, this kind of feedback is quite personalized since it is based on individuals' writing process. However, if teachers want to use it as an instructional tool to provide open feedback on a particular

aspect of writing for a class, the student's permission is required as this is a potentially face-threatening situation that teachers should be aware of in some cultural contexts.

### **5. E-mail**

E-mail can be not only an asynchronous communication tool but also a feedback tool that can be integrated into learning (Huett, 2004). Direct or indirect feedback on students' writing, can be delivered via e-mail. It can be used as an asynchronous feedback source to support synchronous feedback. Such e-feedback via e-mail can focus on form, content, organization, or any writing features. According to a study by Yoke et al. (2013), online corrective feedback via e-mail helps improve students' writing performance, especially in the ESL writing context. Via e-mail, various types of writing feedback can be delivered. However, it must be noted that too much feedback on multiple writing aspects can be overwhelming for students. Therefore, certain limited areas of feedback should be given to help students focus on some specific features to develop their writing performance.

### **6. Audio**

Audio feedback is personalized feedback that supports written feedback. Audio recording software can be employed to attach audio files that provide supplementary feedback (Ruefman, 2016). Even though students may have positive attitudes toward audio feedback, they still prefer written feedback (Morris & Chikwa, 2016). Nevertheless, this type of e-feedback could be regarded as students' most preferred feedback source (Cavanaugh & Song, 2014; Morris & Chikwa, 2016). Additionally, a greater amount of feedback can be given via audio than in written format (Morris & Chikwa, 2016). However, teachers should be professionally trained to give this type of feedback; otherwise, students could develop a negative attitude toward it (Cavanaugh & Song, 2014).

### **7. Video**

Video feedback can be utilized to augment written feedback in order to explain such feedback in detail (Ruefman, 2016). The benefits of video feedback surpass its obstacles in the way that it is more accessible and friendly as it is a holistic feedback activity that embraces both the writing product and writing



process (Armağan et al., 2016). In addition, it overcomes certain limitations like time and space (Armağan et al., 2016). As personalized feedback, it works well in writing classes that have a small number of students. For teachers whose classes have many students; however, it is time-consuming to record a video to give feedback to each student. In such cases, video feedback can be used as a supplementary open feedback source to support individual written feedback.

### **8. Conferences**

Real-time feedback conferences can be held using numerous applications. Various forms of feedback can be given via this e-feedback format, such as evaluation, correction, instructions for writing performance improvement, critical remarks, and so forth, but whatever the format, it should be delivered in a friendly and positive yet constructive way since this digital feedback format tends to be considered face-threatening interaction by students (Shvidko, 2018). With this e-feedback tool, it is possible for both teachers and students to make face-to-face conversation in virtual learning environments. A friendly and facilitative digital learning atmosphere can be established through feedback conferences that build a strong positive relationship as this affective feature has a considerable influence on the students' writing performance development (Shvidko, 2018). Based on a study by Alfalagg (2020), such teacher-student e-feedback conferences could promote students' writing performance in terms of organization, particularly cohesion.

### **9. Social Media**

Social media used in everyday life can be employed as digital platforms to develop students' writing performance. Social media can be used as a writing platform and an e-feedback source. In some cases, e-portfolios can be developed by students who learn from writing about authentic meaningful experiences and from reflecting on any feedback (Barrot, 2016). In addition, the use of such platforms promotes synchronous and asynchronous interactions, so this can overcome limits of time and place on students' writing development (Lirola, 2022). Nonetheless, although social media is a part of their life, students need to be trained to use it for educational purposes to ensure effectiveness.

## **10. Messaging Applications**

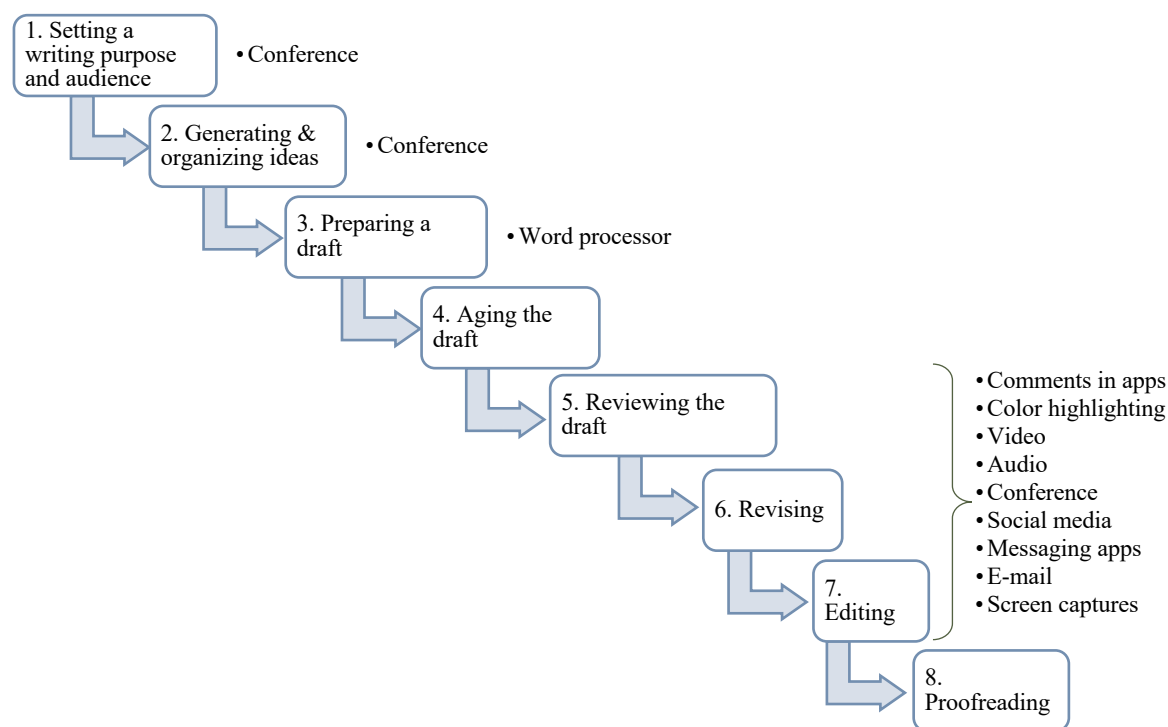
Messaging applications (Messaging apps) on smartphones and tablets or Mobile Instant Messaging (MIM) can be integrated into ESL writing pedagogy for academic purposes: to boost students' motivation for learning how to write, to foster the writing process, and to improve students' writing performance in digital learning environments (Winet, 2016). Apart from writing practice through these applications, e-feedback on any aspect of writing can be delivered by either texts or voice in which correction or knowledge solidification and expansion can be included (Winet, 2016). The e-feedback from teachers or peers comes in the form of immediate responses where an ongoing conversation via these applications promotes meaningful two-way communication of writing (Winet, 2016). This active social community on these applications enhances both social and cognitive skills which are significant for writing performance improvement. The use of MIM was empirically proved to augment accuracy, including grammatical, lexical, and mechanical features, particularly in ESL writing a study by Andujar (2016). As with social media, training students to use messaging applications for academic purposes can help facilitate successful use of application-assisted language learning and skill development.

### **Multimodal E-Feedback: From Theory and Reviews to Formative and Practical Pedagogical Implications in the Writing Process in Virtual Second Language Writing Environment**

Multimodal e-feedback can be formatively integrated into virtual second language writing environment in a number of ways. How this is best achieved depends on teachers' belief, teaching styles, and students' learning styles. Based on the process-based writing approach in second language writing, multimodal e-feedback can be formatively applied at various stages of the writing process in virtual learning environments as shown in Figure 2.

## Figure 2

### *A Formative Integration of Multimodal E-Feedback into the Writing Process of the Virtual Second Language Writing Environment*



According to the process-based writing approach, attention needs to be paid to every stage of the writing process in order to develop a good writing product (Kirchhoff, 2018). However, Hatcher and Goddard (2005) maintain that multimodal e-feedback can be formatively integrated into certain stages of the writing process in virtual second language writing environments as displayed in Figure 2. At the beginning, the feedback can be formatively given to students when they set their writing purpose and audience through a conference on a meeting platform. In the conference, formative e-feedback can be given by teachers or among students themselves on writing topics, even in the second step when students have to brainstorm their ideas and organize how to draw up their drafts. While the drafts are being prepared using a word processor by students in the third step, they can receive formative e-feedback from word processors or cloud-based writing tools. After this step, students need to take some time, at least one night, in order to forget what they have just written for the benefit of reviewing thereafter. For the next three steps, namely reviewing, revising, and editing drafts, formative e-

feedback can be taken from comments in apps, color highlighting, videos, audio, conferences, social media, messaging apps, e-mails, or screen captures. Students can get this formative multimodal e-feedback from their teacher or their peers individually, in pairs, in groups, or as a whole class. However, it is interesting to note that personalized multimodal e-feedback encourages more engagement from students to polish their writing.

Multimodal e-feedback can be formatively employed in the writing process of virtual second language writing environments to reach its full potential to develop students' writing performance. However, the strength of this far-reaching implication varies since it relies on the nature of virtual learning environments in second language writing contexts across the world, teachers' teaching styles and students' e-feedback preferences which include their capability to access e-feedback sources, when they receive e-feedback, and clear communication in which comprehensible messages can be conveyed. Access to the Internet, which is commonly regarded as students' major obstacle and concern in digital writing classes, can be overcome due to the efficacy of formative multimodal e-feedback, which can be asynchronously delivered to support synchronous e-feedback and comes from different modes and platforms (Erkan, 2022). Nevertheless, one real challenge that can be faced with such formative implementation is that multimodal e-feedback is possibly overwhelming to not only teachers but also students because it comes in diverse modes with different points of writing addressed by both teachers and students. The practical solution to this issue is negotiation between teachers and students on mutually convenient modes of e-feedback and which writing aspects the e-feedback will address. Otherwise, it will turn out to be an overly time-consuming and complex task for teachers and students may also feel overwhelmed and dismiss the e-feedback. Last but not least, teachers themselves should be trained to provide multimodal e-feedback with different digital assistants, so they can have certain academic technology strength to support their professional growth and their students' writing performance in virtual second language writing environments.

## Conclusion

In our digital age with technology playing a significant role in every single aspect of life, it is unsurprising that technology has been integrated into academic learning contexts despite the challenges it presents both teachers and students with around the world. Writing feedback virtually and formatively integrated into second language writing processes, supported by well-trained teachers and students, has significant potential to help enhance students' writing performance and teachers' professional growth.

## About the Author

Watcharee Kulprasit received her master's degree in Teaching English as an International Language with distinction and won the honorary thesis award from Prince of Songkla University, Hatyai Campus, Thailand. Currently, she is working as a lecturer at Thaksin University, Songkhla Campus, Thailand. Her research interests embrace second language writing and writing assessment.

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