Teacher and Student Perceptions of CALL Feedback: Synchronous and Asynchronous Teacher Electronic Feedback in EFL-Writing at King Saud University

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Abstract

In the realm of education, feedback from peers and teachers is of critical importance. The rapid growth of electronic feedback (EF) has led to various innovations in feedback, particularly for teachers' EF (TEF) in the context of English as a foreign language (EFL). This study contributes to the literature on feedback by examining how teachers and students in EFL writing classes were influenced by TEF offered synchronously via online class discussion, and TEF offered asynchronously via Blackboard. This study focuses on both teachers' perceptions (elicited from interviews) and students' perceptions (elicited from surveys) regarding their respective experiences of TEF. The study uncovered three main findings; most of the TEF addressed the content, organization, and language structure of the students' EFL writing, and the teachers adjusted their TEF according to students' needs and course objectives; teachers and students considered TEF to be effective and accessible.

Abbreviations

TEF Teacher Electronic Feedback

CMC Computer Mediated Communication

CMF Computer-mediated Feedback

CF Corrective Feedback

SCF Synchronous Corrective feedback

ACF Asynchronous Corrective feedback

1. Introduction

1.1 Overview

Writing is considered an essential and dominant skill in this age of such advanced communication technologies as email and texting. Nevertheless, the productive skills of writing (and speaking) seem to be more difficult to apply than the receptive skills of reading and listening. Of these four categories of skills in the realm of English as a foreign language (EFL), writing is perceived as the most difficult, since writing in a foreign language requires both syntactic and semantic knowledge. According to Weigle (2002), the process of text formation, which amounts to the "translation" of one's ideas into a written form, may be hindered by the extensive appropriate lexical and syntactic choices that the "translator" must make in creating the text. In other words, a lack of linguistic knowledge has a detrimental effect on writing proficiency.

Writing has long been regarded as the most difficult skill to teach and to study. A writing teacher must devote significantly more time and effort to the development of students' writing skills than, for example, to the students' speaking skills. Language teachers frequently complain about their heavy workload, which results from their many writing-related duties, such as the linking of writing with reading and the provision of corrective feedback about students' writing. Watcharapunyawong and Usaha (2013) confirmed a variety of writing competencies that writing teachers should possess and that include the abilities to provide high-quality feedback regarding grammar,

organization, and vocabulary. Similarly, for many EFL students, writing in English without making errors is a major challenge because the students acquire their own extensive set of competencies in order to satisfy certain standards of writing. In response to these and other challenges, educators have made many attempts to help students improve their writing quality, which is the flipside of helping students decrease their writing errors. Many of these attempts address not only students' lack of linguistic knowledge, but also teachers' competencies, including feedback competencies.

Feedback plays a crucial role in any learning context, but especially in writing. According to Hyland and Hyland (2006a), feedback is considered "a central aspect of ESL/ EFL writing programs across the world" (p. 83). In the same context, Coffin etal. (2005) maintained that "the provision of feedback on students' writing is a central pedagogic practice" (p. 102). Moreover, owing to the significant benefits that accrue from raising a student's language performance in general and a student's L2 writing skills in particular, educators have given great emphasis to the importance of corrective feedback in L2 writing. Chandler (2003) demonstrated that when students corrected their own L2 writing errors after feedback from a teacher, their writing accuracy increased substantially more than when no such self-correction took place. From these findings, concrete steps contributing to the improvement of teacher-to-student feedback may significantly improve L2 instruction, especially in light of technological progress.

The digital-technology revolution has had a profound effect on humankind in general and on education in particular. In response to this progress, the rapid expansion of the educational system and the widespread use of educational platforms have created a slew of diverse modalities for learning. Ranging from online learning to blended learning, new computer-mediated methods of communication have enhanced teachers' electronic provision of feedback to students.

Providing feedback electronically to students has become a common practice, especially with the emergence of technology in L2 classrooms and the increase in the provision of distance courses. Of course, harnessing this technology has created a number of drawbacks for teachers, who must contend with the electronic feedback's lack of interactivity in comparison with the interactive immediacy and intimacy of face-to-face feedback. Nevertheless, electronic feedback has gained growing attention among EFL teachers and the need has arisen to expand research on feedback in EFL classrooms. In defining 'electronic feedback', Ene and Upton (2014) explained that it is "computer-facilitated feedback produced by either the teacher or student peers with the help of a computer and delivered electronically to the students" (p. 82).

Electronic feedback can be provided either synchronously or asynchronously. Synchronous electronic feedback can be provided through different computer-mediated tools including Zoom, WhatsApp, and Blackboard. On the other hand, in asynchronous electronic feedback, students not only submit their assignments electronically using a variety of techniques but also receive feedback via an equally impressive array of tools, including Word's Track Changes, Google Docs, and everyday e-mails. Cunningham (2018) listed the many types of computer-mediated communication (CMC) that serve teachers and students alike and that transcend emails and conventional texting to include chatrooms, discussion blogs, course-management systems, video chats, social-networking platforms, and interactive instructional videos. (Note 1)

Nowadays, there can be no doubt that some educational institutes have shifted partly or completely to distance learning and that teachers have needed to adapt to these sudden changes, especially in the pandemic-induced age of remote teaching. This pronounced shift toward remote teaching and distance learning has created many challenges for teachers and students. Of these challenges, providing asynchronous and synchronous feedback.

1.2 Statement of the Problem

EFL teachers of all skill levels must work hard to provide high-quality performance-related feedback to their students, who can then, it is hoped, achieve substantive progress in their writing. Writing teachers specifically devote much of their effort and time to reading, correcting, and providing feedback on students' papers. The teachers must shoulder this workload in conjunction with many other duties, such as developing teaching schedules and performing administrative tasks. Conventional feedback is time consuming and seems rather impractical even when adapted and adjust for blended learning, online learning, and indeed technology-infused face-to-face learning. In all three of these contexts, the integration of technology into teaching is crucial. Furthermore, according to a recent UNESCO report (2020), more than 1.9 billion students from around 190 countries were obliged to switch from conventional face-to-face education to online education as a result of emergency COVID-19 remote teaching. Online education affords teachers, as well as students, the flexibility of teaching and studying at any time and from any place at an unparalleled and staggering pace (Hodges et al., 2020). In sum, teachers have found themselves adapting to new modalities in the provision of feedback.

1.3 Research Objectives

In order to fill in the gaps in the literature, the present study aims to achieve three objectives:

1. Assess the focus of TEF delivered in computer-mediated synchronous and asynchronous modes.
2. Explore the perceptions that teachers have of providing TEF in EFL-writing program.
3. Examine the perceptions that students have of receiving TEF in EFL-writing program.

1.4 Research Questions

Guiding this study are the three following research questions:

1. What is the focus of computer-mediated synchronous and asynchronous TEF?
2. How do teachers perceive TEF in EFL-writing program?
3. How do students perceive TEF in EFL-writing pregame?

2. Literature Review

2.1 Corrective Feedback

Over the last several decades, scholars have made many attempts to capture the precise meaning of 'feedback'. For example, Ur (1996), who defined 'feedback' in general as "information that is given to the learner about his or her performance of the learning task, usually with the objective of improving their performance" (p. 242). In her definition, Ur focused on the main goal of providing feedback. Other scholars, however, have concentrated on the provider of the feedback. One example of this trend is Ai (2017), who defined 'corrective feedback' as "the practice whereby a teacher or peer provides formal or informal feedback to learners on performance that contains linguistic error" (p. 313). One definition of 'corrective feedback' imbues the term with a new conceptual dimension by citing computers as a main tool in the provision of feedback and by noting that computers, as well as teachers and classmates, can generate feedback (Cunningham, 2018).

Feedback has long been considered vital for the growth of L2 writing skills, both for its real potential for learning and for its clear enhancement of student motivation (Hyland & Hyland, 2006). The central function of written corrective feedback is to improve learners' writing skills by expanding their awareness, understanding, and critical thinking (Bitchener & Ferris, 2012). L2 teachers realize that learning how to write in a second language takes a great deal of time, and indeed, L1 learners themselves need considerable instructional assistance before they can revise their own writing along more formal and academic lines; thus, part of corrective feedback is imbuing students with the ability to improve their own writing skills simply because teachers are not always available or able to guide the students (Ferries & Hedgcock, 2013).

Feedback is categorized into two types: explicit (or direct) feedback and implicit (or indirect) feedback. According to Ferris (2003), the teacher provides direct corrective feedback to the student by, for example, identifying correct linguistic forms. This direct feedback might involve the removal of an unnecessary morpheme, word, or phrase, the insertion of a missing morpheme, word, or phrase, or the presentation of a written correction related to grammatical structure. In contrast, indirect corrective feedback is a suggestion, rather than an assertion, that somebody made a linguistic mistake: the nature of the mistake is not spelled out; it is just alluded to or hinted at (Ferris, 2003). This indirect feedback can be provided in one of several ways: by underlining, circling, or otherwise highlighting an error; by recording, in the margins of a document, the number of errors that exist on a specific line; and by using some other method of identifying either where an error occurred or what type of error it is (Ferris & Roberts, 2001).

Providing written corrective feedback is a controversial issue. There are contradictory views on the efficiency of written corrective feedback for L2 learners. For example, because this type of feedback may focus on several types of linguistics errors, including grammatical errors, it is not surprising that, while some researchers support focusing on grammar correction in writing, others forcefully oppose it. Truscott (1996) claimed that written corrective feedback as it applies to grammar is a "clear and dramatic failure," asserting that such corrections should have no place in any writing instruction and should be eliminated. He contended that written corrective feedback harms students by fueling their reluctance to accept their teacher's corrections; thus, the students will either continue to write as before or avoid the conflictive error in future writing. Firmly disagreeing with Truscott is Ferris (1999), who rejected the aforementioned claim and forcefully argued that educators' elimination of corrections is unacceptable in general. He added that, if combined with appropriate methods, error correction can improve students' future writing. According to a growing body of research, written corrective feedback indeed can improve writing accuracy, but these improvements are context dependent.

2.2 Errors in EFL Writing

Composing good writing is a challenging task for all language learners, including native speakers, because anyone performing the task must pass through many challenging phases. Writers must generate ideas, outline them, draft an initial manuscript, and revise and edit it. During each of these stages, writers can make errors. An important point to bear in mind is that making these errors is reasonable and acceptable for learners. After all, mistakes constitute an essential part of any type of learning, especially for a matter as complex as writing in a foreign language. Brannon and Knoblauch (1982) asserted that writing courses cannot and must not be about helping or expecting students to generate a text free of errors.

Errors and mistakes in L2 writing have been perceived from several vantage points. According to Ellis (1997), there is a subtle but important difference between errors and mistakes: errors reflect gaps in a learner's understanding that is, an error is generated because the learners cannot distinguish between what is correct and incorrect; a mistake, on the other hand, indicates the learners' poor performance; that is, the mistake occurs because the learners are unable to accurately do what they already know. In L2 writing, there are two especially noteworthy reasons as to why a writer has made errors.

According to Vásquez and Alberto (2008), the first reason for L2-writing errors is first-language interference, which Richards (1971) referred to as "interlingual errors." He defined them as "the errors caused by the interference of the native language" (p. 205). These errors tend to arise when a student attempts to immediately translate a sentence or part of a sentence into the target language without taking into account how a native speaker of the language would typically write it. The other reason for L2-writing errors is simply an inadequate understanding of the target language's rules, which leads to what are known as "intralingual errors" (Gass et al., 2008). Richards (1971) demonstrated that intralingual errors are referred to as "the errors that occur because of the ineffective traits of learning, such as faulty generalization, incomplete application of rules, and the failure to learn conditions under which rules apply" (p. 206).

In addition to the two main reasons for errors in L2 writing, we can explore the most common types of errors that arise in writing. In general, according to Watcharapunyawong and Usaha (2013), writing itself consists of three elements: organization, content, and language. Thus, if students make errors in their writing, the errors should reflect these three elements. Moreover, errors can be classified linguistically into grammatical categories covering tenses, non-tense verb forms, articles, and so on (Mustafa et al., 2017).

In a broader classification of errors, Ellis (1997) identified four types of language errors: omission, addition, selection, and misordering. In writing, as in speech, omission occurs when the language user leaves out an essential linguistic element, be it a phrase, a word, or a morpheme. Omissions are not deliberate but due to inadequate knowledge of the target language's rules. Dulay et al. (1982) divided morphemes into two kinds: "grammatical morphemes" (i.e., the parts of a sentence that have little semantic importance but a great deal of structural importance) and "content morphemes" (i.e., the parts of a sentence that have great semantic importance). In a well-known experiment, the aforementioned study found that L2 learners (specifically, EFL learners) tend to omit grammatical morphemes far more often than content morphemes. Thus, in the sentence "The man is driving a car," an L2 learner would be more likely to omit the grammatical morphemes 'the', 'is', and 'a' than the meaning-laden content morphemes 'man', 'driving', and 'car'. After all, the sentence "The is a" has no meaning, whereas "Man driving car" has considerable meaning. The second type of error identified by Ellis (1997) is addition, which is the use of redundant or other unnecessary words. One type of addition error is the combination of a modal verb and a full infinitive instead of a bare infinitive (e.g., "He should to study"). Ellis's third type of linguistic error is selection, which is also known as misformation, because this type of error involves the learner's use of incorrect form in a word. For example, in the sentence "I did not went to the store," the form of the verb 'went' is incorrect—an unintended duplication of the past tense of 'did'. The final type of error is misordering, which refers to the inaccurate sequence of words in a sentence (e.g., "I want well to write" instead of "I want to write well").

2.3 Computer-Mediated Communication (CMC) Feedback VS Conventional Feedback in L2 Learning

CMC feedback has grown into a prominent part of contemporary education. Cunningham (2018) asserted that, because "learning with technology has become second nature for many, it makes sense then that feedback in L2 writing also uses CMC" (p. 1). He also noted that many instructors are already frequently using CMC feedback in the form of written comments sent via a course-management system or email. Research has presented firm evidence that computers have a role to play in facilitating corrective feedback (Hyland & Hyland, 2006, p. 93). Saadi and Saadat (2015) demonstrated that, as technology has progressed, the need for teachers to engage in computer-assisted correction of learners' writing has increased dramatically. L2 learners who have composed a

text can receive CMC feedback from peers, teachers, or even computer programs, despite long distances between the giver and receiver of the feedback.

Owing to the importance of CMC feedback, researchers have tried to infuse the term with a succinct, comprehensive meaning. Bahari (2021) proposed the simplified term 'computer-mediated feedback' (CMF) and defined it as corrective information that teachers provide to learners regarding the latter's mistakes or weaknesses. In the context of language learning, such feedback can prove useful during computer-assisted language learning (CALL) interaction. He also commented that the delivery of CMF, when used to enhance L2 learning, can involve mobile devices, blogs, and virtual worlds (i.e., computer-simulated environments).

Teachers are constantly looking for a more effective tool with which they can provide high-quality corrective feedback. Few tools, if any, are more popular than computers, which have several advantages. Sain et al. (2013) confirmed that computer-based corrective feedback can help develop the writing skills of L2 learners in a time-efficient manner. Other researchers identified even more advantages to this use of computers. For example, Wresch (1984) stated that the main advantages of using computers in corrective feedback are their dynamism, flexibility, and promotion of personalized communications between teachers and students. Moreover, CMC feedback can accelerate the transmission of corrective feedback to students (Hyland & Hyland, 2006), can promote self-improvement in academic performance, and can generate in students a firm sense of support from both teachers and peers (Zhanga & Zhengb, 2018). CMC feedback's advantages and disadvantages (e.g., the lack of direct contact, the risk of misunderstanding) have prompted researchers to expand their studies on this topic.

Many studies have suggested that CMC feedback is effective and affords benefits similar to those associated with written ("pen-and-paper") feedback. The hand-written feedback that teachers leave on a student's paper-based text has a well-known parallel form on computers: MS Word's comments, which constitute an effective form of CMC feedback in L2 writing. Ene and Upton (2014), for example, argued that both the track changes and the digital comments on the developmental and composition course writings of undergraduate ESL engineering students resembled the handwritten comments one would normally expect on such documents. The researchers noted that, partly thanks to this familiarity of the track changes and digital comments, effective revision by the students was entirely possible. The researchers' conclusion was that electronic feedback can be effective and should not be ignored.

Although conventional written corrective feedback is effective, it has some distinct drawbacks for both teachers and students. Researches in this field have shown that the advantages of computer-mediated feedback can offset the conventional form's drawbacks. Sain et al. (2013) conducted a study comparing the effectiveness of traditional corrective feedback and the effectiveness of computer-mediated corrective feedback in academic-writing classes. According to the findings, students preferred receiving comments via email. The students also stated that the codes were simple to understand because they were identical to those in the textbooks. The students complained that conventional corrective feedback not only increased their anxiety but also exposed them to their teachers' illegible handwriting. In contrast, the students stated that computer-mediated feedback was more appropriate for them because it obviated the need to print papers and submit them, in person, to teachers. Furthermore, in praising computer-mediated feedback, the students noted that it enabled them to read their teachers' responses from any location and without the obstacle of illegible handwriting.

Despite all of these favorable findings on electronic feedback, it suffers from some of the same concerns found with handwritten feedback. For example, whether written by hand or on a computer, red corrections that lack praise can result in demotivating and seemingly aggressive feedback (Byrne, 2007).

Computer-communication feedback faces many challenges regarding training and feedback interpretation. Milton (2006) emphasized that learning environment, learner training, and learner motivation could all affect students' reaction to feedback. As a result, studies exploring the use of feedback have had to take into account a variety of contextual factors. Chen (2014) stated that in a networked educational setting, indirect interaction between teachers and students increases the challenge of reduced learner receptivity and of incorrectly interpreted feedback.

For L2-writing teachers, decisions regarding computer-mediated feedback are particularly complex. Milton (2006) stated that converting from conventional to electronic feedback systems requires a massive change for many instructors, particularly those accustomed to paper-based writing contexts. The resulting hesitancy can still be felt on the part of teachers, even though computer-mediated feedback features such as Track Changes in MS Word have been available since at least 1997, and even though the L2-writing literature has advocated the use of these MS Word features, characterizing them as superior to handwritten comments (Ferris, 2012; Rodina, 2008; Tafazoli, Nosratzadeh, & Hosseini, 2014).

Researchers have voiced diverse opinions regarding the use of CMC feedback. Elola and Oskoz (2016) proposed that scholars should expand their examination of CMC feedback's advantages and disadvantages because so many "different, technology-driven, and multimodal methods have not been thoroughly explored" (p. 71). Anson (2003) noted that new technical inventions can enrich and improve human corrective feedback, but not replace it. Other researchers added that teachers should provide their students with evaluations and other forms of feedback that are appropriate for the students' needs (Zhanga & Zhengb 2018, p. 11).

2.4 Teacher Electronic Feedback in L2 Writing

Both recent developments in writing pedagogy and related research findings have modified how educators conceive of feedback over the last two decades. As we have seen, feedback can come from a variety of sources, by the peers, teachers, or computers. As CMC has rapidly gained popularity owing to an increased interest in electronic feedback, the possible roles that teacher electronic feedback (TEF) can play in L2-writing classrooms remain ambiguous.

As noted above, CMC, including CMC feedback, can be delivered synchronously or asynchronously. In classrooms, synchronous CMC feedback (usually via online discussion or text-based chat) is a condition in which students can simultaneously perform a task and receive direction from their teacher (DiGiovanni & Nagaswami, 2001). The use of synchronous CMC feedback in the L2-writing classroom can enhance students' experience of presence, spontaneity, and even democracy (Blake & Zyzik, 2003; DiGiovanni & Nagaswami, 2001). Nevertheless, some noted that synchronous CMC may enhance the emphasis on vocabulary and grammar (Blake & Zyzik, 2003; Schultz, 2000). Furthermore, synchronous CMC might be time-consuming and inefficient for peer-review and essay revision (Schultz, 2000).

In contrast, asynchronous CMC feedback involves the dissemination to students of constructive feedback regarding previously submitted work. These communications usually involve email, discussion-board messages, and track changes in Microsoft Word. Asynchronous feedback offers a number of impressive benefits for L2 language development. Research on the efficacy of asynchronous peer feedback found that its improved grammar, spelling, and vocabulary, all of which can enhance L2 writing, in particular (Tolosa et al., 2013). Moreover, Tuzi (2004) discovered that asynchronous peer e-feedback provided via a website prompted more and deeper revisions than oral feedback from peers and teachers at the phrase, sentence, and paragraph levels. Despite these advantages, several researches have criticized asynchronous CMC and feedback for being slower and not stimulating interaction or extensive revisions (Guardado & Shi, 2007; Ho & Savignon, 2007; Martin- Beltran & Chen, 2013).

The majority of studies on TEF in L2 writing have involved asynchronous feedback using Microsoft Word comments and screencasts. Elola and Oskoz (2016) compared Microsoft Word comments to screencasts regarding their respective ability to provide TEF in the context of advanced Spanish narrative writing. The tools used by the teacher in their case study influenced the type of EF offered. The two asynchronous tools were comparable with each other regarding the number of TEF comments made on each one. The Word comments were shorter and more specifically focused on form, while screencast comments were longer and more focused on content and organization. Regardless of the tool used, learners responded to all or most of the teacher's feedback on design and content, and the feedback also contained equal amounts of corrections devoted to form. Despite their familiarity with Word comments, the learners considered the screencasts to be more natural. In a similar study, Ene and Upton (2014) focused on teacher feedback that teachers, using Word comments, recorded on electronic drafts in university-level English-as-a-second-language (ESL) composition courses. The researchers found out that the majority of the Word comments focused on content and resulted in students' effective uptake of feedback and students' revision of all elements of writing such as content, organization, grammar, and mechanics.

Ene and Upton (2018) expanded this line of research to include the effects of both synchronous and asynchronous TEF on university freshman-level ESL composition courses. The aim of their study was to investigate specifically the use, effectiveness, and perspectives associated with TEF that was delivered via online chats (synchronously) and via comments on electronically exchanged essay files (asynchronously). The findings revealed that, in the comments, there was considerably more TEF on the content of the papers than on the organization of the papers, whereas, in the chats, the TEF was quite balanced between content and organization. Furthermore, there was markedly less TEF on vocabulary, grammar, and mechanics in the essay files than in the online chats. In terms of effectiveness, both synchronous and asynchronous TEF were effective. The total number of TEF units that led to successful uptake was significantly higher for the essay files than for the online chats. The students reported that they considered the online chat sessions to be useful, with very few students stating that the TEF via online chats was a waste of time. From teachers' perspectives, the combination of asynchronous TEF followed by synchronous

TEF was efficient, especially for the motivated students who came to the chat sessions prepared to seek clarification or to discuss various options.

Shintani (2015) attempted to find how L2 writers varied in their use and uptake of synchronous and asynchronous computer-mediated feedback. The main difference between synchronous feedback SCF and asynchronous feedback is in the timing of the feedback, specifically whether it is immediate or delayed. In the this study, this difference led to a number of disparities in the writing process. The asynchronous feedback was completely reactive, similar to standard written CF, while the SCF was an interactive mechanism between the student and the teacher. In synchronous feedback, the three acquisition-related processes of internalization, alteration, and consolidation occurred concurrently in a cyclical manner. On the other hand, in the asynchronous-feedback condition, feedback was provided only after the learner had finished the composition. The revision session provided opportunities for internalization and modification, but the opportunity for consolidation was limited. In addition, in the synchronous-feedback condition, the emphasis on meaning and form occurred concurrently, while in the asynchronous-feedback condition, the focus on meaning and form occurred separately.

Aldamen (2020) in his research aimed to explore students' and teachers' perceptions of the effectiveness of asynchronous and synchronous TEF and the challenges faced by both the teachers and the students in this regard. According to the results, the teachers used a variety of feedback methods, including WhatsApp, e-mails, voice comments, the track changes tool in Google Docs, and screen recording. WhatsApp was found to be the most valuable tool for providing and receiving feedback. However, teachers acknowledged that WhatsApp would not be the best feedback tool because it had some drawbacks. Track changes in Google Docs, on the other hand, was the least effective and least favored tool among the students. They exhibited an inadequate understanding of how to read and respond to feedback provided on Google Docs. The study's findings also revealed that both teachers and students faced a number of difficulties, including a lack of internet access, a lack of technical training, and confusing instructions.

The majority of studies on computer-mediated feedback in L2-writing contexts have involved asynchronous feedback, and most of them have addressed peer feedback on collaborative writing, with only the rare study devoted to TEF in synchronous and asynchronous modes. The current study, thus, fills this gap in the literature by examining how synchronous and asynchronous modes of TEF can complement each other. To this end, the current study examines, in the context of King Saud University (1) the TEF that the students receive synchronously and asynchronously, and (2) the perceptions that students and teachers have of TEF in English-writing courses.

3. Methodology

3.1 Research Method

In this survey study, the researcher used a mixed-methods approach to extract data from a combination of questionnaires (for students) and interviews (for teachers) addressing the perceptions that these individuals had of using synchronous and asynchronous TEF in English-language writing programs. A mixed-methods approach, according to Tashakkori and Creswell (2007, p. 4), enables researchers to gather and analyze both qualitative and quantitative data for the formulation and interpretation of findings in individual studies.

3.2 Participants

This study rests on a convenience sample of 130 individuals drawn from the establishment where the researcher has been working (the College of Applied Studies and Community Services at King Saud University, in Riyadh, Saudi Arabia). The sample itself was divided into two groups: 127 non-native English-speaking female students who, though pursuing different majors, were in blended learning due to the COVID-19 epidemic; and 3 faculty members who were teaching courses related to the English language.

3.3 Setting

All the participants were associated with an English-writing program held during the first semester of the 2021–2022 academic year, at King Saud University, Saudi Arabia, Riyadh.

3.4 Instruments

3.4.1 The Interview

Van Maanen (1983) defined 'qualitative methods' as a research approach that focuses on meaning rather than on numbers regarding "phenomena in the social world" (p. 9). In-depth interviews and observations are two of the most frequently used qualitative methods.

Mid-way through the semester, the researcher of the present study conducted semi-structured interviews with the three teachers about three topics: the teachers' focus areas in the English-writing program, the teachers' specific

approaches to providing online oral (synchronous) feedback and electronic text-based (asynchronous) feedback to students regarding their submitted papers; and the teachers' perceptions regarding the effectiveness of TEF.

To evaluate the content validity of the interview questions, the researcher had three experts review the questions. They made recommendations for improving the content validity of this study's interview process (see Appendix 1).

3.4.2 Questionnaire

The researcher used a 5-point Likert scale (strongly agree - agree - neutral – disagree - strongly disagree), to gauge the students' perceptions of the synchronous and asynchronous feedback that they received from the teachers. The aim of the questionnaire was to accumulate- on the basis of the students' positive and negative perceptions-pertinent information on the degree to which TEF is effective. The researcher distributed the questionnaire to the participants by creating a link to it on Google Forms.

The researcher calculated the questionnaire's reliability by using Cronbach's alpha, which specifically measures the stability of a study's instrument. In fact, the scale is reliable, with a Cronbach's alpha coefficient of 0.806. Seen from another perspective, the scale has a high level of internal consistency vis-à-vis the data. To evaluate the questionnaire's content validity, the researcher asked three experts to review the text and to present recommendations for enhancing the validity (see Appendix 3). The researcher translated the questionnaire from English to the students first language, Arabic. This step was crucial to confirming the validity of the eventual responses (see Appendix 4).

3.5 Procedure

The current study passed through nine stages. In the first stage, the researcher reviewed the related literature and, on the basis of the review, formulated the study's objectives and research questions. In the second stage, in order to achieve the aforementioned objectives and answer the research questions, the researcher developed a mixed-methods approach involving interviews and questionnaires. Also, upon designing the interview questions and the questionnaire, the researcher and her supervisor reviewed and modified them. In the third stage, the modified copies of the questionnaires and the interview questions were given to referees who, because they possessed expertise in the area of the research topic, were able to suggest how these instruments might be further improved. In the fourth stage, the researcher obtained approval from King Saud University's Standing Committee for Research Ethics to access potential participants at the College of Applied Studies and Community Services (see Appendix 6). In the fifth stage, the researcher met the teachers responsible for the relevant English-writing classes. At the meeting, the researcher acquainted herself with the English-writing curriculum and its objectives. To this end, she skimmed the classes' textbook to get a good sense of its writing activities and assignments and to ensure that they were consistent with the study's objectives. The three classes participated in this study were involved in blended learning. In the sixth stage, the participating students filled out the questionnaires. Ultimately, a total of 127 questionnaires were collected. In the seventh stage, the researcher interviewed the three teachers about their perceptions of synchronous and asynchronous TEF. In the eighth stage, the researcher used pertinent statistical techniques such as statistical packages, descriptive statistics, means, and standard deviations in order to analyze the student-questionnaire data, which were then modified in the form of frequencies and percentages and organized in tables. Regarding the interviews with the teachers, the researcher used a thematic approach to coding the qualitative data. In the ninth-and last-stage, the researcher assessed the broader implications of the results and developed recommendations for current TEF practices and for future research.

3.6 Data Analysis

3.6.1 Analyzing the Qualitative Data (Interviews)

The teacher interviews were the source of the current study's qualitative data about how the three teachers had experienced their TEF tasks. The researcher interviewed the three teachers by means of WhatsApp voice messages, which subsequently helped the researcher return to the records and interpret the data. The researcher listened to the recorded interviews several times while transcribing them, and in order to increase the reliability of the analysis, the researcher adopted a thematic approach to coding the interview data (see Appendix 5).

3.6.2 Analyzing the Quantitative Data (Questionnaire)

By using Google Forms, the researcher created a link to the questionnaire for the student's participants. The researcher performed (1) statistical analyses with SPSS V. 24.0 (IBM, Armonk, NY, USA) and (2) a reliability test with the Cronbach's alpha test. Moreover, with descriptive statistics (means and SDs), the researcher explored the students' questionnaire responses regarding synchronous and asynchronous TEF, and students' perception of their experiences receiving TEF related to EFL writing.

To enhance the external validity of the present study, the researcher had the questionnaire evaluated by several experts (the "referees") from King Saud University and other universities. These referees kindly presented their views on the questionnaire in terms of its content, item clarity, and item suitability. The researcher modified the final copy of the questionnaire according to these experts' recommendations

In addition, the researcher tested the internal validity of the questionnaire by measuring the correlation coefficients between each item and the whole field (see Table 1).

Table 1. Results of the Pearson's correlation test for the student questionnaire

No.	Items	R	Sig.
	Section 1 is about perceptions of synchronous TEF via online classes.		
1	I received useful feedback via online classes.	0.651**	0.00
2	Through online-class feedback, I noticed not only my own mistakes but also the mistakes of other students.	0.676**	0.00
3	While discussing assignment-related mistakes online, I had the opportunity to correct the mistakes I made in my drafts.	0.740**	0.00
4	chatting with the teacher about my writing online while other students were listening didn't make me feel embarrassed.	0.725**	0.00
5	I found that the electronic feedback in the online class is not a waste of time	0.675**	0.00
	Section 2 is about perceptions of asynchronous TEF via online classes.		
6	I received useful comments from my teacher about my submitted assignments.	0.731**	0.00
7	I understand the teacher's electronic comments on my submitted assignments.	0.599**	0.00
8	The teacher states that there is a mistake and explains how the errors can be corrected.	0.771**	0.00
9	The teacher uses a code or a mark to identify that there is a mistake	0.737**	0.00
10	It is easy to use Blackboard to receive electronic feedback on my submitted assignments.	0.691**	0.00

** Statistically significant at the 0.01 level.

As Table 1 shows, the correlation coefficients are significant at the 0.01 level, where the probability value of each item is less than 0.01. Therefore, it can be said that the questionnaire items are consistent and valid as measures of the given variable.

Regarding reliability, the Cronbach's alpha test determined whether or not the Likert scale was reliable. A value equal to or greater than 0.70 is said to indicate reliability (Griethuijsen et al., 2014). According to Table 2, the alpha value for items about synchronous feedback is 0.726, the alpha value for items about asynchronous feedback is 0.748, and the alpha value for all items is 0.806. These numbers indicate that the scale has a high level of internal consistency.

Table 2. Results of the Cronbach's alpha tests regarding the reliability of the study's scale

Scale	Cronbach's alpha	No. of items
Synchronous scale	0.726	5
Asynchronous scale	0.748	5
Total Scale	0.806	10

3.7 Ethical Dimension

As mentioned earlier, this study's questionnaire was approved by the Standing Committee for Research Ethics on Scientific Studies before the distribution of the questionnaire (see Appendix 6). And before the participants began responding to the questionnaire, they received written notification about both the goals and the voluntary nature of the study (see Appendix 2).

Finally, regarding the recoded interviews with the three teachers, the researcher (1) asked the teachers for permission to interview them prior to the interviews, and (2) notified the teachers that the interviews would be recorded, but only for data-analysis purposes.

4. Results

4.1 The Focus of Teachers' Electronic Feedback

The first interview question addressed the content of TEF: what is the focus of your synchronous and asynchronous computer-mediated feedback in relation to English writing skills. In general, as is shown in Appendix 5, the three teachers had highly similar responses: the teachers' computer-mediated feedback focused on the three writing elements of content, organization, and language structure. This result indicates that the teachers' electronic feedback prioritized the major conventional elements of good writing.

In response to the first interview question, the teachers made several additional comments referring to other areas of feedback. Major errors were a fourth focus of synchronous feedback, although Teacher 2 noted that the focus "varies according to students' work." Interestingly, the asynchronous TEF of the three teachers tended to focus on the same three elements, but Teacher 3 pointed out that "in asynchronous feedback, my feedback relies on the course objectives, and sometimes I provide linguistic feedback on students' weak writing."

The responses to the first interview question reveal, overall, that synchronous and asynchronous electronic feedback, when computer mediated, revolved around the three major elements of content, organization, and language structure, but that the teachers could adjust TEF according to the students' needs and the course objectives.

4.2 Teacher Perceptions of TEF

The study's second research question concerns perceptions: how do teachers perceive their own electronic feedback. The remaining three questions in the interview addressed this topic. Because the three questions were varied, they not only broadly surveyed the teachers' attitudes toward TEF but also narrowly investigated the teachers' specific approaches to TEF and the teachers' specific long-term goals for TEF. As is shown in Appendix 5, the researcher used a thematic approach to coding the interview data.

To begin with, the teachers responded to the second interview question: how do you perceive the efficiency and accessibility of your own electronic feedback? It is obvious from the teachers' responses, as seen in Appendix 5, that all three teachers who participated in the interview conveyed a generally positive attitude toward synchronous and asynchronous TEF. Teacher 3 said, "I am amazed at how I can deliver feedback anytime, anywhere and how the delivery benefits from different tools." In a similar vein, Teacher 1 commented that "feedback is easier with Track Changes, Comments, rubric-bolstered assignments, and so on," adding that "even if I have a campus lecture, I ask my students to submit their assignments via Blackboard because the aforementioned tools are useful." Teacher 2 noted that "teacher electronic feedback is improving every semester." In sum, all three teachers stated that TEF is a highly efficient, accessible way to keep records of students' progress, with two major pluses of TEF being cited: its highly effective delivery tools and its "anytime, anywhere" flexibility.

Next, the teachers responded to the third interview question: what are your specific strategies for providing direct and indirect TEF, and which of the two TEF modes (synchronous or asynchronous) is more effective. The teachers were quite familiar with the differences between corrective synchronous (online oral discussion) feedback and the corrective asynchronous (digital text-based) feedback. On the whole, the teachers indicated that they adjusted their TEF according to individual circumstances (e.g., students' needs, types of errors) by flexibly combining direct and indirect corrective feedback of a synchronous or asynchronous nature. In synchronous feedback, the teachers tended mainly to be indirect, as they highlighted errors and asked students a variety of thought-provoking questions. For example, Teacher 3 commented, "I usually use indirect feedback, as when I encourage my students to think out loud and to find a correct answer by themselves." By contrast, Teacher 3 stated that, in asynchronous TEF, "I use a combination of direct and indirect feedback, I highlight or circle errors, and I write explanatory comments, but I think that direct feedback is more dominant in asynchronous feedback than in synchronous feedback." Teacher 1 noted, "In the early assignments, I tend to be very direct, but as we go on, I progressively use indirect feedback. Thus, I just identify the types of errors, not the correct form."

When asked about which mode of TEF is more effective (i.e., the second half of the third interview question), the teachers gave varied answers. The teachers confirmed that combinations of synchronous and asynchronous TEF is more effective than just one or the other used separately. Moreover, the teachers found that a specific sequential combination was extremely effective. Teacher 2 succinctly explained this point: "I use asynchronous feedback followed by synchronous feedback because the latter reinforces the former, but if I have to choose, I'll go for asynchronous feedback." Teacher 1, however, offered an alternative perspective: "I think that synchronous electronic feedback is more effective than asynchronous feedback." She continued, "synchronous feedback allows me to explain more "stating that asynchronous feedback "creates difficulties for explaining errors related to

organisation and content." In sum, the teachers clearly preferred combinations of synchronous and asynchronous TEF to just one TEF mode. The teachers also clearly regarded synchronous feedback as most suitable for content and organization issues whereas asynchronous feedback was thought to be best for grammar and vocabulary improvement.

When answering the fourth interview question what are your long-term goals for the delivery of electronic feedback about English writing skills, the three teachers agreed that, broadly speaking, there is little difference between these long-term goals and those related to conventional feedback. The main long-term goal is to foster students who can appreciate their own strengths and weaknesses and who can identify and then correct their own mistakes. Each teacher stated that her feedback to students was intended to nurture their growth as independent writers; that is, these young writers should eventually know how to craft grammatically sound sentences and well-organized texts in preparation for, among other things, future jobs that require proficiency in written English. Perhaps Teacher 1 best summarized this approach to instruction: "I help [my students] write according to the precepts of English, not Arabic… [the students] learn to separate sentences with periods, not dots!".

4.3. Student Perceptions of TEF

This part considers the third research question, which is oriented toward students: how do students perceive TEF. To answer this question, the researcher developed a questionnaire consisting of two sections. The first section, consisting of five items, addresses how students perceived the *synchronous* TEF that they had received from their teachers. The second section, consisting of five items, addresses the same issue, but with regard to *asynchronous* TEF. In assessing the students' responses, the researcher calculated the relevant frequencies, percentages, means, and standard deviations. The responses were measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The results of the first section are discussed below.

Table 3. Students' questionnaire responses regarding perceptions of synchronous TEF

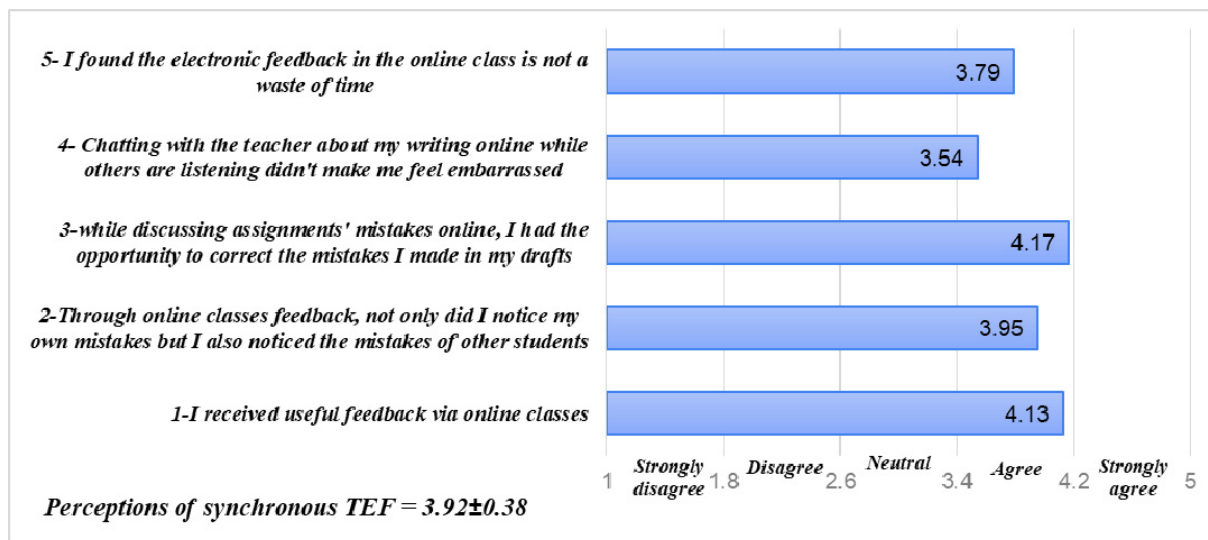| Items		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean±SD	response
(1) I received useful feedback via online classes.	No.	0	0	25	60	42	4.13±0.72	Agree
	%	0	0	19.7	47.2	33.1		
(2) Through online-class feedback, I noticed not only my own mistakes but also the mistakes of other students.	No.	0	11	24	52	40	3.95±0.92	Agree
	%	0	8.7	18.9	40.9	31.5		
(3) While discussing assignment-related mistakes with online, I had the opportunity to correct the mistakes I made in my drafts.	No.	0	3	26	44	54	4.17±0.84	Agree
	%	0	2.4	20.5	34.6	42.5		
(4) Chatting with the teachers about my writing online while others are listening didn't make me feel embarrassed.	No.	0	21	45	33	28	3.54±1.01	Agree
	%	0	16.5	35.4	26.0	22.0		
(5) I found that the electronic feedback in the online class is not a waste of time.	No.	0	7	40	53	27	3.79±0.84	Agree
	%	0	5.5	31.5	41.7	21.3		
Total mean response score for students' perceptions of synchronous TEF							3.92±0.38	Agree

Figure 1. Mean response scores for students' perceptions of synchronous TEF

Table 3 and Figure 1 show that student responses to the questionnaire items reflect a generally positive perception of synchronous TEF, with the total mean response score (3.92±0.38) being in the "agree" range of the Likert scale. Indeed, each of the five items in this section of the questionnaire has an average mean score within the "agree" range. Of the five items, Item 3 (" while discussing assignments' mistakes online, I had the opportunity to correct the mistakes I made in my drafts") ranked first among them with a had the highest mean response score (4.17±0.84). This result indicates that the students were strongly of the opinion that synchronous TEF cultivated in them an ability to identify and correct their own mistakes. Item 1 ("I received useful feedback via online classes") had the second-highest mean response score (4.13±0.72). This result further reinforces the finding that the students had developed a distinctly positive view of synchronous TEF. The lowest mean score (3.54±1.01) corresponded to Item 4 ("Chatting with the teachers about my writing online while others are listening didn't make me feel embarrassed"). However, as we can see, the difference between the lowest mean score (Item 4) and the highest mean score (Item 3) is rather small, further reinforcing the finding that the students had a generally positive perception of synchronous TEF. One noteworthy point is that one of the items (Item 4, which had the lowest mean response score) had a standard deviation greater than 1. This result indicates that public synchronous TEF might cause embarrassment for some students.

As with the first section of the student questionnaire, the researcher calculated frequencies, percentages, means, and standard deviations for the second section, which addresses perceptions of asynchronous TEF. The results are discussed below.

Table 4. Students' questionnaire responses regarding perceptions of asynchronous TEF

| Items		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean±SD	
(6) I received useful comments from my teacher about my submitted assignments.	No.	0	0	18	66	43	4.2±0.67	Agree
	%	0	0	14.2	52.0	33.9		
(7) I understand teachers' electronic comments on my submitted assignments	No.	0	0	41	65	21	3.84±0.68	Agree
	%	0	0	32.3	51.2	16.5		
(8) The teacher states that there is a mistake and explains how the errors can be corrected.	No.	0	0	27	53	47	4.16±0.75	Agree
	%	0	0	21.3	41.7	37		
(9) The teacher uses a code or a mark to identify that there is a mistake	No.	0	0	30	52	45	4.12±0.76	Agree
	%	0	0	23.6	40.9	35.4		
(10) It is easy to use the Blackboard to receive electronic feedback about my submitted assignments.	No.	0	0	11	70	46	4.28±0.61	Strongly agree
	%	0	0	8.7	55.1	36.2		
Total mean response score for students' perceptions of asynchronous TEF							4.12±0.28	Agree
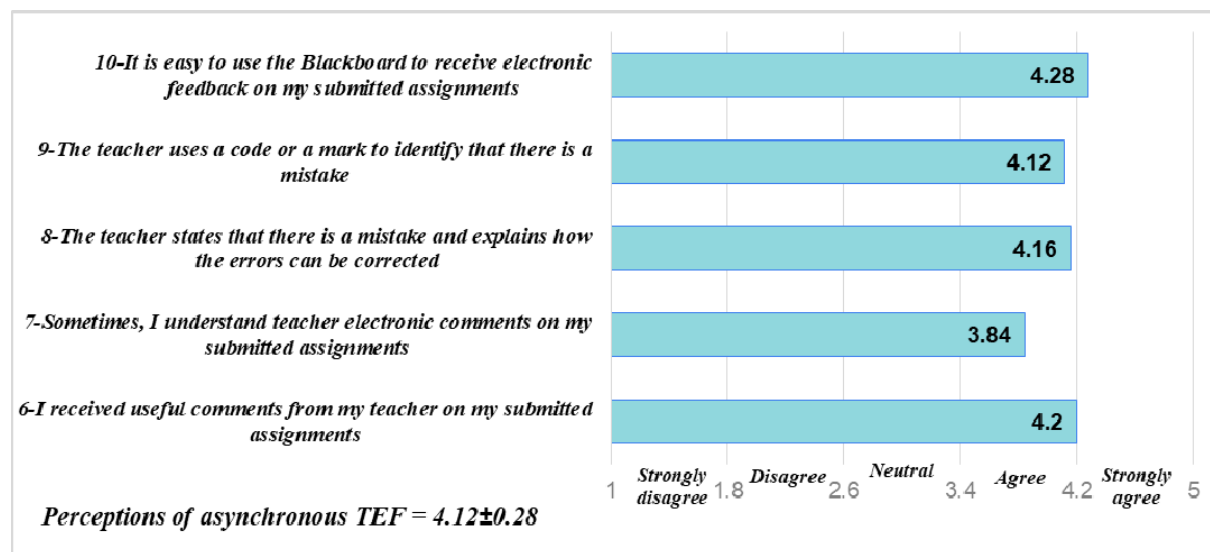
Figure 2. Mean response scores for students' perceptions of asynchronous TEF

Table 4 and Figure 2 show that student responses to the questionnaire items reflect a generally positive perception of asynchronous TEF, with the total mean response score (4.12±0.28) being in the "agree" range of the Likert scale. Like the first section, the second section contains five items, each of which—with one exception—has an average mean score within the "agree" range. The exception (Item 10, "It is easy to use Blackboard to receive electronic feedback about my submitted assignments") had an average mean score within the "strongly agree" range. Thus, Item "10" obviously had the highest mean response score (4.28±0.61). This result points to the students' strong perception that their computer-mediated receipt of communication to receive TEF was noticeably easy. Item 6 ("I received useful comments from my teacher on my submitted assignments") had the second-highest mean response score (4.2±0.67). This result further reinforces the finding that the students had developed a distinctly positive view of the delivered TEF. As for the lowest mean response score (3.84±0.68), that distinction goes to Item 7 ("I understand the teacher's electronic comments about my submitted

assignments"). However, a quick review of the highest and lowest mean response scores reveals that the gap between them is not particularly wide. This fact, coupled with the impressive total mean response score, further reinforces the finding that the students had a generally positive perception of asynchronous TEF and of TEF delivery in general.

Computer-mediated feedback (CM F) used to enhance L2 learning

has been discussed by a variety of terms and platforms: mobile-

mediated feedback, blog-mediated fee dback, vir tual worl ds feed-

back, game-mediated feedback, written feedback, oral feedback,

etc.He also demonstrat

5. Discussion

5.1 The Focus of Teachers' Electronic Feedback

In the first research question what is the focus of computer-mediated synchronous and asynchronous TEF. On the focus of the two modes of TEF provided in this study, the present study's findings reveal that the focus of both synchronous and asynchronous electronic feedback was three-fold: content, organization, and language structure. A more specific focus was grammar. Interestingly, the results reveal that teachers adjusted their TEF to meet students' needs and the course objectives. These findings are consistent with prevailing pedagogical philosophy and with previous research findings, both of which prioritize content and other higher-order concerns for assessments of students' L2 writing. Specifically, the research prioritizes content for TEF (Ene & Upton, 2014; Ene & Upton, 2018), hand-written feedback (Ferris, 1997; Hyland & Hyland, 2001), and peer electronic feedback (Schultz, 2000). In sum, the current study has concluded that the focus of TEF is similar to the focus of other common types of feedback such as peer electronic feedback, conventional teacher handwritten feedback.

5.2 Teacher Perceptions of TEF

Regarding the second research question how do teachers perceive TEF in EFL-writing, the researcher investigated teachers' perceptions of TEF around three main axes. The first axis of investigation consisted of the opinions of three Saudi EFL teachers. In brief, teachers' perceptions of TEF were positive, with the most common perceptions concerning TEF's practicality: this form of feedback is a highly efficient manner of preserving records for student development, involves a set of highly effective delivery tools, and permits anytime-anywhere delivery. Previous research uncovered similar perceived advantages of CMC feedback (Wresch, 1984; Hayland & Hayland, 2006), which included its dynamism, flexibility, rapidity, and promotion of personalized communication between teachers and students.

The second axis of investigation addressed the teachers' perceptions of any relevant differences in the types of corrective TEF. In general, teachers tend to use a combination of direct and indirect corrective feedback in both synchronous and asynchronous TEF. The type of TEF that a teacher uses is normally a reflection of students' needs, the types of errors being discussed, and general classroom objectives. Teachers using synchronous feedback are more likely to be indirect than direct, whereas, when using asynchronous TEF, teachers tend to use a mix of direct and indirect feedback. In indirect TEF, teachers highlight errors, ask questions, and encourage students to think independently and correct mistakes independently. Studies, including Bitchener and Ferris (2012), argue that the overall purpose of corrective feedback is for students to develop skills by increasing awareness, competence, and critical thinking. The current study's findings about indirect corrective TEF are in keeping with these general views and furthermore confirm the impressive efficiency of CMC feedback, which rests largely on the benefits of digital tools that have long been absent in conventional feedback.

In addition to direct and indirect feedback, the current study's findings reveal the importance of synchronous TEF (delivered in online discussions) and asynchronous TEF (delivered on assignments via Blackboard). A central finding is that combinations of these two forms are more effective than just one or the other used separately. Another central finding is that, in the context of EFL-writing classes, synchronous feedback is most suitable for content and organization issues, whereas asynchronous feedback lends itself to grammar correction and vocabulary improvement. These findings align with previous findings showing that combinations of the two EF-delivery modes result in complementary, mutually enhancing instructional methods that maximize teachers' use of EF. For example, in studying how teachers use combinations of asynchronous Microsoft Word comments and synchronous text-based online chats (i.e., instant messaging), Ene and Upton (2018) found that this use led to successful feedback on the major elements of writing. The findings of this study support the present study's findings, which indicate that asynchronous TEF improves linguistic accuracy and that synchronous TEF

improves content and organization. Similarly, Elola and Oskos (2016) observed that Microsoft Word comments (i.e., asynchronous TEF) tended to focus on form in writing, and that screencasts (i.e., oral TEF in the form of recording a video of your computer screen and mainly associated with voice comments) tended to focus on content and organization, this confirmed the benefits obtained from the combining between two of EF-delivery tools whether they are both synchronous or asynchronous.

We should note that, in this study, the participating teachers discussed the sequence of these two delivery modes: asynchronous TEF followed by synchronous TEF. The teachers posited that this sequence strengthened both the depth of students' own revisions and students' uptake of TEF information. Ene and Upton (2018) also observed evidence of this preference for a particular sequence: their study's participating teachers used a combination of asynchronous TEF, harnessed first, and synchronous TEF, harnessed second. Incidentally, these results also confirm the idea that synchronous feedback enhances students' uptake of TEF related to EFL writing.

When asked which mode is more effective, a teacher in the present study noted clearly that synchronous feedback "allows me to explain more" and that "asynchronous feedback creates difficulties in explaining errors related to organization and content". This facet of oral TEF conforms with the study's finding that the oral synchronous CMC feedback for L2 writing can enhance students' experience of presence, spontaneity, and indeed democracy in electronic feedback settings (Blake & Zyzik, 2003; DiGiovanni & Nagaswami, 2001)". Elola and Oskos (2016), in contrast to the study's findings, observed that screencasts (i.e., asynchronous TEF) enabled teachers to provide a greater number of lengthier comments than was possible with asynchronous written TEF via Microsoft Word comments, and this result indicated that the EF-delivery tools create the difference and affects the nature of the provided TEF. Casting a small shadow over this praise of synchronous feedback is the finding that synchronous CMC feedback can be quite time consuming (Schultz, 2000). Overall, however, findings of shintani (2015) about synchronous and asynchronous TEF accord with one another: synchronous CMC feedback hinges on an interactive mechanism between students and teachers, whereas asynchronous CMC feedback is almost completely reactive, similar to standard written CF, the teachers in this study refers to the flexibility and the space found in the synchronous TEF to feel free in providing extensive explanations in their feedback.

The third axis of investigation targeted the perceptions of the current study's participating teachers with regard to their long-term TEF goals. A major finding of this study is that the main long-term TEF goal of the teachers was for them to nurture the growth of their students as independent writers so that the students would eventually land highly desirable jobs requiring proficiency in written English. Curiously, a similar long-term goal was reported by Ene and Upton (2018): the study's participating teachers wanted to help their students become independent, critical thinkers who would be prepared for university classes and, presumably, for subsequent vocational demands. The present study's findings suggest that, in general, English-writing teachers who use TEF are aiming to foster students who can appreciate their own strengths and weaknesses and who can identify and then correct their own mistakes. This generalization closely resembles the semi-philosophical principle proposed by Ferris (2010), who suggests that the long-term role of feedback, specifically of indirect feedback, is to engage learners in "guided problem solving" (p.190). According to English-writing teachers, their use of TEF has the central aim of helping young people become independent learners, critical thinkers, and problem-solving enthusiasts.

5.3 Student Perceptions of TEF

Finally, regarding the third research question how do students perceive TEF in online EFL-writing classrooms, the researcher sought to shed light on students' perceptions of synchronous and asynchronous TEF. All the participating students in the present study had a generally positive perception of their TEF experiences. In the first section of the questionnaire regarding synchronous TEF, all the students agreed that they had been receiving useful synchronous TEF in online classes. However, when responding to certain items (item 4) , some students expressed neutrality toward synchronous TEF. This occasional reticence was observed in Ene and Upton (2018): students who experienced synchronous TEF (online text-based chats) might experience some emotional discomfort and stress. Efforts to reduce this negativity could improve the usefulness of the chats. The same issue was also discussed by Goldstein (2005), when he noted that the success of feedback depends on a variety of elements that affect both teachers and students regarding their behavior, personalities, competency, and motivation. Most students in the present study expressed a strong perception that their computer-mediated receipt of teacher feedback was easy via Blackboard. This finding is consistent with findings reported by Elola and Oskoz (2016) indicating that the tool used for delivery of feedback affects the quantity and quality of the given teacher's comments. Hence, teachers should be eminently aware of the feedback delivery tool that they use when trying to convey TEF to their students.

One last point of interest is that the students' responses to Items 8 and 9 of the questionnaires reflect the students' combinatory use of direct and indirect feedback, in parallel way in the received asynchronous TEF, and thus demonstrated that L2 writing instructions can engage indirect feedback successfully even if it is provided electronically on papers via Blackboard and even in the absence of direct interaction (i.e., in the presence of asynchronously delivered feedback), due to the several benefits of indirect feedback suggested by many researchers such as Knoch (2010) asserted that indirect feedback can both engage learners in reflective problem-solving activity and improve their writing.

6. Conclusion

The attempt to redefine feedback along digital-mediated lines is essential for 21st-century pedagogy, particularly in regard to L2 writing. As Elola and Oskos (2016) note, although educators increasingly rely on technology-driven feedback that manifests itself in various forms, these topics have received only occasional attention in the research field. The present study represents one small effort to fill this gap in the research. The study's findings address the focus of TEF and teachers' and students' perceptions of TEF. The electronic feedback from the Saudi EFL writing teachers participating in this study tended to focus on three major elements of writing: content, organization, and language structure. Moreover, the study revealed that this tripartite focus tended to align itself with students' needs and with course objectives. Another set of findings in the current study show that teachers and students held a positive attitude toward their experience of TEF. Teachers, in particular, conveyed that both modes (synchronous and asynchronous TEF) are important, that each mode has its own strengths, and that, when together, the modes complement each other synergistically: for example, while synchronous feedback is preferable for content and organization revisions, asynchronous feedback stands out for its effectiveness in promoting overall language improvement. The teachers also emphasized how electronic tools make the delivery of feedback possible, easy, and enjoyable, regardless of whether the delivery is direct or indirect. As for the participating students in the present study, they expressed positive attitudes toward TEF in both of its modes, as well. The findings also show that students' uptake of TEF was successful, again in both of its modes. All in all, these findings support the proposition that CMC feedback has never been more appealing or innovative as it is now and that it holds great promise as a means of enriching the academic journey of our students, particularly of those studying L2 writing.

6.1 Limitations of the Study

No study is perfect, and thus, the current study has its limitations. The four main ones are discussed in what follows:

1. Because this study was conducted after a year and a half of mandatory online learning due to COVID-19, both the participating students and the participating teachers had spent a great deal of time familiarizing themselves with TEF. The resulting competence that they possessed and exhibited might have generated results that are significantly more positive than would be the case in other circumstances (e.g., no pandemic) and other settings.

2. The sudden integration of TEF into the education systems of countries worldwide after the COVID-19 lockdowns in early 2020 was the central motivation underlying this study's selection of the examined topic. However, given the newness of pandemic-oriented TEF, there was- and remains- very little literature on TEF in its synchronous mode and not much more on its asynchronous mode. The paucity of literature directly related to the current study's topic has been a double-edged sword: on the one hand, it makes the current study rare and thus somewhat precious; on the other hand, it has left the current study very few opportunities to compare findings with other studies. This latter point limits the current study to a certain extent.

3. Because of the small scale of the current study, the researcher was forced to limit its questionnaire design to items on a five-point Likert scale. And because none of the survey items were akin to open-ended questions, which can yield deep and complex answers, the researcher's interpretations of the students' perceptions were necessarily limited in terms of depth and complexity.

4. While the current study devoted a substantial amount of time to asynchronous feedback, less time was devoted to synchronous feedback for various reasons outside the control of the researcher. This somewhat lopsided approach to the two modes of TEF may have limited the study's findings.

6.2 Recommendations of the Study and Future Research Directions

This study's findings have several potentially important implications for educators and students.

1. The findings indicate that the TEF in the Saudi EFL context herein focused mainly on three elements of writing: content, organization, and language structure. The teachers tried to tailor their TEF to students'

needs and to course objectives. Teachers who are helming an English-writing class should explain to their students both the concept of TEF and the criteria for generating TEF. Moreover, teachers might give their students a self-assessment rubric or a writing checklist that complements the TEF. This kind of consistency breeds coherence, which in turn should elevate students' level of independence, which, in this case, can benefit their writing skills. These issues merit the attention of scholars in the TEF field: the more we learn about integrating TEF into the broader context of classroom activities, the better able we will be to finetune the consistency and coherence of these contextual links.

2. Another implication of the findings concerns the importance of TEF training. The teachers in this study had an exceptionally positive attitude toward TEF, but the teachers confirmed implicitly that their TEF had been markedly improving every semester. Such improvement can be the result only of experience and training in TEF. Therefore, if they want to enjoy it and excel in it, teachers who provide TEF likely must be familiar with and trained in various technologies and in TEF itself. Without this experience, teachers' use of TEF stands a good chance of failing or even backfiring. Future research would do well to explore this topic in various settings and with larger samples than what was available to the current study.

3. This study's results depend heavily on the tools that the teachers used in order to deliver TEF to students. The platform Blackboard, for example, played a major role in the study. Thus, we can reasonably assert that the choice of tool for TEF can have significant implications for teachers and their students. This important topic remains a relatively underexplored one that researchers should study, particularly with regard to the efficiency of different combinations of tools for the synchronous provision of TEF in English-writing classes. The more varied the literature on this topic is with regard to tools and geographical areas, the more generalizable the combined findings will be.

4. Teachers should ensure that students understand how they can best use TEF.

5. Future research should examine the effectiveness of direct and indirect CF in TEF contexts.

6. Teachers should be able to better regulate the sometimes-unavoidable messiness of synchronous feedback in online chat. Only if it is properly regulated can online chat in TEF contexts avoid fatal misunderstanding amongst users.

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Note

Note 1. The topic of synchronous and asynchronous electronic feedback is discussed at length in Section 2.4.

Appendix 1: Interview questions for teachers

Degree:

Years of experience:

Question (1): What does teacher Synchronous (Blackboard or zoom) and / Asynchronous (Word track changes/ Email) computer-mediated feedback in English writing skill focus on?

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Question (2): How do teachers perceive teachers' electronic feedback in terms of efficiency and accessibility

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Question (3): And What are your specific strategies in providing direct/ indirect electronic feedback in English writing skill, and which mode is more effective??

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Question (4): What are your broad goals of providing electronic feedback in English writing skill?

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Appendix 2: The cover page of the questionnaire

Dear students at the college of applied studies and community services,

This questionnaire developed to survey students' perceptions toward their experience of receiving teachers' electronic feedback (TEF) in EFL writing. The information and data will be analyzed under strict confidentiality for research purposes only. Thanks for your participation and your time in answering this questionnaire.

عزيزتي الطالبة في كلية الدراسات التطبيقية وخدمة المجتمع، صُمم هذا الاستبيان لاستطلاع توجهات الطالبات تجاه تجربتهم في تلقي التغذية الراجعة الإلكترونية من قِبل الأستاذة في مقرر الكتابة باللغة الإنجليزية. سيتم تحليل البيانات بسرية تامة ولن تستخدم إلا لأغراض البحث العلمي، شكرًا لمشاركتك في تعبئة هذا الاستبيان.

The researcher,

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Appendix 3: Questionnaire schedule for students (English version)

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Student Perceptions of Synchronous TEF via Online classes (e.g online discussion)					
1. I received useful feedback via online classes.					
2. Through online classes feedback, not only did I notice my own mistakes but I also noticed the mistakes of other students					
3. while discussing assignments-related mistakes online, I had the opportunity to correct the mistakes I made in my drafts.					
4. Chatting with the teacher about my writing online while others are listening didn't make me feel embarrassed					
5. I found the electronic feedback in the online class is not a waste of time					
Student Perceptions of Asynchronous TEF on their submitted papers (e.g., through Word track changes or Backboard)					
6 I received useful comments from my teacher about my submitted assignments.					
7. I understand the teacher's electronic comments on my submitted assignments.					
8. The teacher states that there is a mistake and explains how the errors can be corrected.					
9. The teacher uses a code or a mark to identify that there is a mistake.					
10. It is easy to use the Blackboard to receive electronic feedback on my submitted assignments.					

Appendix 4: Questionnaire schedule for students (Arabic version)

موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة	الفقرة
					اتجاهات الطالبات في التغذية الراجعة الالكترونية التزامنية من قبل الأستاذة (مناقشة الواجبات عبر منصة البلاك بورد)
					1- أتلقى تغذية راجعة مفيدة مباشرة من الأستاذة عن أخطائي في الكتابة خلال النقاش في المحاضرة عبر البلاك بورد
					2- من خلال التغذية الراجعة التي تقدمها الأستاذة عند مناقشة الواجبات في المحاضرات عن بعد، لاحظت أخطاء زميلاتي في الكتابة بالإضافة إلى أخطائي
					3- عندما تناقش الأستاذة أخطاء الكتابة في المحاضرة عبر البلاك بورد يكون لدي فرصة لتدارك الأخطاء وتصحيحها قبل إرسال الواجب.
					4- لا أشعر بالحرج عندما تناقش الأستاذة أخطائي في الكتابة أمام زميلاتي في المحاضرة عبر منصة البلاك بورد
					5- أعتقد أن التغذية الراجعة الشفهية للأخطاء في المحاضرة عن بعد عبر منصة البلاك بورد ليست مضيعة للوقت
					اتجاهات الطالبات في التغذية الراجعة الإلكترونية اللاتزامنية من قبل الأستاذة على الواجبات التي تم رفعها عبر منصة البلاك بورد (على سبيل المثال استخدام تعقب التغييرات في برنامج الوورد، منصة البلاك بورد)
					6- أتلقى تغذية راجعة مفيدة من الأستاذة على الواجبات التي تم رفعها عبر منصة البلاك بورد
					7- التغذية الراجعة التي أتلقاها من الأستاذة (كتابة الملاحظات على الواجبات عبر البلاك بورد) تتسم بالوضوح.
					8- في الواجبات، تشير الأستاذة إلى وجود خطأ في الكتابة وتزودني بالإجابة الصحيحة.
					9- تُشير الأستاذة إلى وجود خطأ ما باستخدام العلامات أو الاختصارات (دائرة، وضع خط تحت الخطأ).
					10- من السهل استخدام منصة بلاك بورد لتلقي تغذية راجعة الكترونية على الواجبات.

Appendix 5: Examples of this study's thematic approach to interview coding

Themes		Teacher Statements	Codes and Keywords
Teachers' electronic feedback	Teachers' synchronous electronic feedback	T1: "It allows me to explain more." T2: "It varies according to students' work." T3: "With it, I can focus on major errors."	content, organization, language structure, major errors, according to students' work, Arabic writing style
	Teachers' asynchronous electronic feedback	T1: "It creates difficulties for explaining errors related to organisation and content." T3: "In asynchronous feedback, my feedback relies on the course objectives, and sometimes I provide linguistic feedback on students' weak writing."	content, organization, language structure, course-related objectives
The effectiveness of teachers' electronic feedback	The effectiveness of teachers' synchronous electronic feedback	T1: "I think that synchronous electronic feedback is more effective than asynchronous feedback."	more effective
	The effectiveness of teachers' asynchronous electronic feedback	T2: "I believe that the two approaches are important. Their complementariness yields many benefits." "I use asynchronous feedback followed by synchronous feedback because the latter reinforces the former, but if I have to choose, I'll go for asynchronous feedback." T2: "Asynchronous feedback leads to improvements in grammar and vocabulary, and to the good use of grammar rules." T3: "I think that combining both types of electronic feedback are more effective than using them singly."	synergy, more effective together, asynchronous followed by synchronous feedback
The goals for teachers' delivery of electronic feedback	The goals for teachers' delivery of electronic feedback about English-writing skills	T1: "I focus on how students should organize their English-language paragraphs." T1: "We should aim to create independent writers who can express themselves in easy, simple English." T2: "We should let students identify their own strengths and weaknesses." T3: "Independent writers can identify their own mistakes and correct them."	independent writers, English-style writing, self-correction, future vocational competence based on high-quality English writing
Teachers' approaches to delivering electronic feedback	Teachers' approaches to delivering synchronous electronic feedback	T1: "I just highlight errors, ask some questions, and offer some suggestions for improvement." T3: "I usually use indirect feedback, as when I encourage my students to think out loud and to find a correct answer by themselves."	indirect corrective feedback

	Teachers' approaches to delivering asynchronous electronic feedback	T1: "In the early assignments, I tend to be very direct, but as we go on, I progressively use indirect feedback. Thus, I just identify the types of errors, not the correct form."	direct feedback, indirect feedback, the predominance of direct feedback
		T2: "I use direct and indirect feedback, and actually provide a code sheet to students so they can know what I mean."	
		T3: "I use a combination of direct and indirect feedback, I highlight or circle errors, and I write explanatory comments, but I think that direct feedback is more dominant in asynchronous feedback than in synchronous feedback."	
	The efficiency and accessibility of electronic feedback	T1: "Feedback is easier with Track Changes, Comments, rubric-bolstered assignments, and so on. Even if I have a campus lecture, I ask my students to submit their assignments via Blackboard because the aforementioned tools are useful."	very efficient, accessible record-keeping method for students' progress, effective feedback tools
		T2: "Teacher electronic feedback is improving every semester."	
		T3: "I am amazed at how I can deliver feedback anytime, anywhere and how the delivery benefits from different tools."	

Appendix 6: The approval model of the Standing Committee for Research Ethics on Scientific Studies

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