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The Importance of Feedback in Improving Students' Writing Skills with the Assistance of New Technologies

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Abstract

Feedback is a crucial element of the learning and teaching cycle. Constructive feedback is central to high school students' learning. However, the effectiveness and efficiency of feedback provided through new technologies are relatively under-researched. Some examples of innovative approaches to delivering feedback to EFL learners include individualized audio-visual feedback using screencasting technology and feedback interviews with internet communication tools, such as messaging apps and social media platforms. This study examines how individual feedback provided via different modalities influences the learners' writing skills. It also offers insight into whether learners wish to be decide on the type of feedback they receive on formative assignments during their writing training. Students' writing samples were analyzed and student survey data was used to interpret the students' perceptions. Overall, the students had a positive attitude toward using different technology-based tools to provide and receive feedback.

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Our findings suggest that the majority of students benefit from feedback given with the use of certain modalities. The results indicate that technology could be integrated into teaching practices to support students' writing, engage them in writing tasks, and improve interactions between learners and feedback givers.

Keywords: feedback, writing competence, technology, screencasts, feedback interviews

Background

Feedback is regarded as essential to developing second language writing skills because of its potential for both learning and student motivation. In learner-centered, process-based teaching, it is a crucial developmental tool that moves learners toward effective self-expression. It is a vital element of the scaffolding provided by the teacher to build learners' confidence in writing. Over the past 20 years, changes in writing pedagogy and the development of new technologies have transformed feedback practices, with teacher-written comments now being combined with computer-delivered feedback. However, teachers tend to have a sense that they are not making use of their full potential. Many questions related to feedback are unanswered or only partially addressed. What is the best way to deliver feedback? Can technology play a more significant part in delivering feedback? What are the students' and teachers' perceptions of feedback? What influences the students' ability to use feedback effectively?

One of the main reasons for the focus on feedback is that it is widely recognized to be a crucial part of learning. However, educators resent the fact that although they put a great deal of time into generating feedback, students take very little notice of it. It seems that the ways to generate and deliver feedback to students need to be widely reconsidered.

Feedback is the mechanism that informs students whether they are successful in their work. It is a central part of their lives as learners. For teachers, it is a way to communicate what they value and do not value

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in their students' performance. It is a personal channel to communicate to students about something in which they have invested time and effort. Many learners care about their work and about how it will be judged. Feedback has nonetheless proven problematic for individual learners, teachers, and institutions.

There is no commonly accepted definition of feedback. It is used in an ordinary sense to refer to commenting on students' work. It is often seen as a helpful complement to grading, including instructions on how to improve their work and earn higher grades. Undeniably, this is a very teacher-centric view of feedback, as it focuses on the teacher's activities of writing comments, returning work, and discussing work verbally. It ignores the learner's activities, which include seeking information, responding to comments, and incorporating what is learned from them in future work. It is a matter of considering what may help transform a tired practice into one that could generate enthusiasm and meaningful action. It seems that an emphasis on what students are expected to do with feedback is the solution.

Boud and Molloy (2013) claim that feedback should be understood as a process in which learners obtain information about their work to appreciate the similarities and differences between the standards for given work and the work's qualities. The process should aim at improving students' learning. This concept suggests that feedback is not merely a one-way flow of information from a feedback giver to a passive feedback receiver. According to Boud and Molloy (2013), feedback should focus on the learners and what they do, rather than what teachers do.

If feedback is to enhance learning, we ought to move beyond a view of feedback processes as transmission and recognize the active role that students must play in them. Sadler (2010), for example, claims that "telling" students what is right and wrong in their work, as well as how it might be corrected, will not improve learning or develop stronger skills in the subject. Nicol (2010) argues that feedback should be seen as a dialogue rather than as a one-way transmission process and notes that, from this perspective, both the quality of feedback and students' responses to those inputs are essential for successful learning.

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To be effective, feedback needs to be more than a number or letter grade and must provide "qualitative information" about performance that is acted upon by the student or educator. Giving and receiving feedback is not effortless. Proper, adequate communication and timing are necessary for feedback to be effective. Offering feedback provides a well-timed opportunity for staff and students to gain insight into each other's experience and understanding of learning/teaching practice, as well as a means to help build staff–student relationships.

Even if both students and teachers acknowledge that there is an issue with feedback, it does not mean that they interpret it in the same way. Indeed, they can have quite different perceptions of what the process involves. As seen by teachers, this means that the student may not see changes as an improvement. Higgins (2000) argues that many students are openly unable to understand feedback or interpret it correctly. Feedback is generally delivered in an academic *discourse* to which students possibly do not have full access. What is meant by discourse is the language in which the tutor's comments are encoded. While tutors think they are giving extensive feedback and may spend many hours writing comments, the evidence shows that the feedback is often not understood or is not communicated in a way that helps students. Students report that they do not know what is expected of them or do not understand the tutor's language (MacLellan, 2001; Weaver, 2006).

Feedback Dialogues

The perspective of the students and staff that the feedback session is a two-way process, a dialogue, and undoubtedly not a one-way transfer of information can be seen in the studies of face-to-face feedback conducted by Blair and McGinty (2013), Crimmins et al. (2016), and Nicol (2010). Blair and McGinty (2013) identified limitations to this process. For example, the relationship between the marker and the student – in other words, expert and novice – may limit the dialogue's extent. Open discussions require a degree of maturity and confidence in the student. We may

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expect the relationship between the tutor and student to change with the stage of the study. Still, regardless of the stage, we need to understand the relationship between the marker and the student in order to develop efficient assessment practices. The nature of the relationship between student and teacher should be extended to support individual student learning, boost their confidence, and engage them with education.

Screencasts

When providing feedback using screencasting software tools, students traditionally receive detailed written feedback on their assignments in the form of annotations and corrections, as well as separate written comments summarizing their overall performance. For foreign-language speaking assignments, students also receive audio feedback in addition to written comments. The aim is to improve students' engagement with feedback on written assignments in distance learning environments. Also, it provides an opportunity for the tutor to engage specifically with an individual student's work, providing both feedback and feedforward. Students submit assignments through an electronic system and receive feedback in the same way. Screencasts are made with free software that also allows the recording of a minutes-long video of actions what is happening on a computer screen accompanied by a teacher's commentary to provide information on students' written assignments. It requires the teacher to download free software and to use a microphone to record commentary on their corrections. It may also require the use of a webcam, though this is not compulsory.

Middleton (2011) and Thompson and Lee (2012) point out that it is a personal, timely, and meaningful method of providing individualized feedback. Edwards et al. (2012) and West and Turner (2016) claim that audio-visual feedback improves understanding and engagement and promotes active listening.

Some benefits of spoken feedback in the form of screencasts over written feedback have emerged from several studies presented by Harper,

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Green, and Fernandez-Toro (2012). One benefit is that it is more engaging due to variations in tone of voice and expression. Also, it is easier to understand since it is more nuanced through intonation, allowing students to discern what is more important. It is more informative than written feedback because teachers can add more content. Notably, it is more personal and students feel as if the tutor is engaged with their work. Most importantly, it is less daunting than face-to-face feedback since the student receives it privately and does not feel embarrassed. Lastly, it increases the sense of tutor presence: students feel as if the tutor is there in the room, which might be significantly appreciated in situations of epidemics and school closures.

Written Feedback

Feedback on assignments and assessed work are predominantly presented in written form. It may be the only kind of feedback students receive in the majority of schools. It should be formative and evaluative; it should be returned to students within a specified period. However, schools usually do not endorse educational policies on feedback. Class sizes and grading loads have inevitably increased. Greater formality has been introduced with standardized grading procedures and external adjudication. Teachers have less time to write comments on students' work, and there are fewer opportunities for tutorial interactions between tutors and their students. Feedback/Feedforward is usually considered necessary in cases where a student's work is deficient in some way that affects their grades. Students may themselves be only dimly aware that some of the tutors' remarks are determined by externally imposed standards, such as graduation exam requirements. To save time, teachers are writing for more than one reader; feedback is not exclusively directed at a particular student. A lot of this feedback is copied now, so students receive a standardized format. Very often, teachers limit themselves just to giving a grade and treating grades as a form of feedback. Several scholars have examined the issue of written feedback. For example, Glover and

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Brown (2006) suggest that one key concern for teaching staff is that providing written feedback is a time-consuming process. Many educators feel that the time spent on feedback is wasted. There is a perception that students are only interested in grades and pay little – if any – attention to written feedback. Also, Bailey (2008) found that teachers experienced a conflict between their conceptions of the purpose of feedback, their intentions, and the system's requirements. Due to this conflict, Bailey suggests that educators might become more indifferent to the feedback they provide.

The Research Particulars

The main aim of the study was to check which type of feedback is the most effective in improving the writing skills of students of an IT/logistics technical college. It was hypothesized that students undervalue both the ability to write correctly and the ability to structure information logically, clearly, and concisely. Needless to say, for future professionals, writing in English in a professional setting is a necessary skill to have. Also, some research on the effectiveness of feedback (Cutumisu et al., 2018) indicates that students do not always benefit from the various types of feedback provided to improve their writing competence.

The researcher tried to investigate the effectiveness of synchronous feedback provided in one-to-one interviews in which the teacher elicited vocabulary, language forms, rules, and ideas. It allowed the teacher to collaborate with the learner on finding appropriate solutions. Another aspect of the study was checking the impact of asynchronous audio-visual feedback provided through screencasts in which the teacher gave comments on the students' work. These forms of feedback were contrasted with the effects of the traditional written feedback in which students are given corrections and a grade. The next aspect of the study to be investigated was connected with the student's perceptions of the type of feedback they received, including their comprehension of feedback, its compliance with their learning styles and self-perceived level of proficiency, and their engagement in improving their writing skills using the feedback they

received. It cannot be denied that providing good formative/corrective feedback is a time-consuming process for teachers. Yet, it is often accompanied by students' lack of understanding about the role it plays in their learning. The final aspect of the study was investigating which forms of delivering feedback to students about writing assignments are the most popular among teachers. Therefore, the following research questions were formed: 1) Is feedback provided synchronously more effective at improving students' writing skills? 2) Is asynchronous feedback more important in improving students' writing skills? 3) What are students' perceptions regarding the type of feedback they receive? 4) Does the level of English proficiency impact the student's ability to understand and use feedback to improve their writing skills? 5) Does the learning style have an impact on the student's ability to use feedback to improve their writing skills? 6) What forms of delivering feedback on written assignments are the most popular among EFL teachers?

The participants of the study were 44 students of an IT/logistics technical college, aged 18–19 years. All of them were native speakers of Polish and they had been studying English as a foreign language for 12 years. The vast majority of the participants were men; only eight students were women (18%). The three groups of students were chosen because they were all taught by the researcher and had a similar level of linguistic achievement. Two groups were randomly assigned to two experimental groups of 15 and 14 students, while the third became a control group of 15 students.

The Method

With the use of modern digital technologies such as Google Meet, Google Classroom, and Open Broadcaster Software, as well as a questionnaire, interviews, and a writing competence test, the author tried to answer the research questions listed above. Three research tools were used in the research: a test, a questionnaire, and interviews. Therefore, the research had two stages. In the first stage, a quasi-experiment was

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conducted, during which students studied the same material and wrote three essays over a period of 8 weeks. Pre- and post-tests of writing competence were administered as well. In the second stage, a detailed analysis of the questionnaire results and interview responses took place. The research, therefore, went in two directions – providing statistical and numerical data and qualitatively and quantitatively analyzing it.

1. **The Test of Writing Competence**

   As part of the research, writing competence tests were carried out. A pre-test and a post-test assessed students' writing ability in English. The tests were essays dealing with practical, social, and professional topics encountered in formal contexts. They measured the test-takers' ability to write persuasive essays and opinion essays according to the criteria of the national graduation exam ("*matura*") requirements. The participants' texts were assessed by criteria such as content and composition, logic and consistency, lexical and grammatical scope, and linguistic correctness.

2. **The Questionnaire**

   Along with the test, the students were asked to fill out a short questionnaire that investigated the aspects of students' perception of feedback that may have had an impact on the test results. Therefore, they were asked about their learning style, their self-perceived level of English, and the way they received feedback. The other part of the questionnaire, with a five-point Likert scale, determined the students' experiences and preferences regarding feedback in their classes writing in English. For each question, students were instructed to check the box that most closely matched their experience or preference.

3. **The Interviews**

   The researcher also intended to collect qualitative data to establish how other high school teachers provide feedback to their students. Therefore, ten teachers were interviewed about their experiences using technology and feedback, which provided an opportunity

to understand their perspectives and experiences. The interviews were conducted over the course of 2 weeks and the teachers were asked how they used technology in their classrooms, how they felt about using technology to give feedback, what worked and what did not work with technology-mediated feedback, how students responded to feedback, and whether they considered using screencasts or one-to-one feedback interviews with students. The researcher decided to apply asynchronous online interviewing to the data on this subject.

Procedure

The study was conducted during a period of national school closures due to the pandemic, which resulted in the students' being out of the classroom for several weeks. The learning was carried out on the digital platform Google Classroom; thus, the quasi-experimental study used a three-step process:

- Week 1 – A short learning period in which the students were instructed how to plan, write, and revise a persuasive essay and a pretest (an essay on a given topic) was given
- Weeks 2–9 – A learning period during which the students studied the same material and wrote three essays over the same period of 8 weeks, and in which the feedback process took place:

  a) Group 1 (Experimental A) received synchronous feedback from a teacher via Google Meet during one-to-one interviews.
  b) Group 2 (Experimental B) received synchronous audio-visual feedback from a teacher using screencast technology.
  c) Group 3 (Control) received feedback in the form of a grade and teacher's corrections and comments through the comment feature of Google Docs.

- Week 10 – Post-test (written essay) and student surveys

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The study required students to write essays of 200–250 words within a 90-minute time limit. The school used the Google Classroom platform, so the researcher and the students could use it during the whole procedure, both for teaching/learning and testing. Before the tests, the students were briefed about the topics and the criteria to be used in assessing their work. The marking scale which was implemented was the national graduation exam marking scale, with the following writing aspects: content and structure, logic and consistency, lexical and grammatical scope, and correctness. Each writing aspect received a given number of points (Table 1) with a maximum score of 13.

Table 1. Writing Scoring Rubric

Writing aspect	Points
Content and structural organization	5
Logic and consistency	2
Lexical and grammatical scope	3
Correctness in grammar and vocabulary	3

Source: Centralna Komisja Egzaminacyjna (2013)

As far as content and organization are concerned, both the content and form of a text are evaluated, as well as the quality of their implementation. The content of the text includes putting all of its elements in the appropriate places and dividing it into paragraphs. The logic and consistency assessment takes into account whether and to what extent the text functions as a whole thanks to clear connections within and between the text's sentences and paragraphs. When assessing the logic of a text, it is taken into account whether and to what extent it is clear. When assessing the scope of linguistic means, the differentiation and precision of lexis and grammar used in an essay are taken into consideration. Another analyzed issue is naturalness and phraseological diversity. When assessing the correctness of language, errors in grammar, lexis, spelling, and punctuation are taken into account.

Research Results and Analysis

1. Test of writing competence results

The writing competence test constructed for the study was meant to possess two qualities: content validity and reliability. The content validity of a writing test is how well it illustrates the variety of skills, knowledge, and abilities that students were supposed to acquire in the period covered by the exam. The reliability of the essay test was graded by the grading criteria provided by the Regional Examination Commission, with a total score of 13 points. One more aim was to create a writing test that would measure higher-level cognitive objectives. The test determined the students' ability to select content, organize and integrate it, and present it in logical prose. The essay test conducted for the study was also meant to provide a positive effect on students' learning. Therefore, the preparation for the test did not require memorizing facts. The students took their pre-tests in December 2020 and then, after an 8-week learning period, took their post-tests in March 2021. The overall results were subjected to statistical analysis. The data from the analysis of the student's scores in the pre-test and post-test in all three groups is presented in Table 2.

Table 2. Statistics for pre-tests and post-tests

		Group 1 (n=14) Experimental A	Group 2 (n=15) Experimental B	Group 3 (n=14) Control
Pre-test	mean	11.10	11.07	11.08
	SD	1.726	1.162	1.439
Post-test	mean	11.93	11.86	10.50
	SD	0.916	1.245	1.224

As can be seen from Table 2, all three groups had similar mean scores in the pre-test, but in the post-test, the experimental groups significantly outperformed the control group. The overall mean scores showed improvement in the post-test scores of the students who received asynchronous feedback in the form of screencasts (Experimental B). This agrees

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with Kim's (2018) findings suggesting that audio-visual feedback is motivating and engaging for students. The other experimental group (Experimental A) also improved their results in the post-test. Those students were provided with synchronous feedback in the form of one-to-one interviews with the teacher, which allowed for interaction and clarification as well as a focus on the individual needs of particular students. This significantly contributed to the improvement. Regarding the mean scores in the control group, the results were different. Interestingly, not only did the control group lack growth, but there was a decline. This finding was not expected. Additional analysis should be conducted to identify what led to the students' poor results in the control group and investigate whether the cause is related to the type of feedback or other independent reasons.

To check whether the difference between the mean scores was significant, an additional one-way analysis of variance (ANOVA) was conducted. In Table 3, we can see the results of this test.

Table 3 . ANOVA results for the test of writing competence

Result Details				
Source	*SS*	*df*	*MS*	
Between-treatments	18.4427	2	9.2214	$F = 7.07135$
Within-treatments	52.1619	40	1.304	
Total	70.6047	42		
The f-ratio value was 7.07135. The p-value was 0.002346. The result is significant at p<0.01.				

The analysis revealed that the difference between the scores was significant. Therefore, the null hypothesis that all the means are equal has to be rejected, and an alternative hypothesis, namely, that the means are different has to be accepted.

The levels of improvement in particular groups are presented in Table 4, represented by the differences between post- and pre-test mean scores.

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Table 4 . Comparison of the improvement between the pre-and post-tests

Group 1	Group 2	Group 3
0.69	0.86	-0.58

Individual students' results were analyzed for more detailed information in order to determine the importance of different types of feedback. The post-test results showed that 21.4% of the students in the Experimental A group and 6.6% of those in the Experimental B group had become higher performers. In the control group, moderate performers were raised from 35.71% (pre-test) to 57.14% (post-test), with an improvement of 7.1%. However, this is the result of fewer high performers. This finding suggests that the students in the control group were not attentive to the written comments and feedback and were thus unable to use it to improve their writing competence. Similar findings were reported by Cutumisu et al. (2018), suggesting that students tend to avoid applying feedback to their work if they lack the encouragement to do so. Table 5 presents the number of students depending on how well they performed in the post-test.

Table 5 . Students' pre-and post-test scores

Scores	Group 1 (n=14) Experimental A		Group 2 (n=15) Experimental B		Group 3 (n=14) Control	
	Pre-test scores	Post-test scores	Pre-test scores	Post-test scores	Pre-test scores	Post-test scores
≤6 points: low performers	0	0	0	0	0	0
7–10 points: moderate performers	4	1	4	3	5	6
≥11 points: high performers	10	13	11	12	9	8

This prospective study was conducted to see if the feedback provided to students in different forms during the learning period improved their writing performance in the subsequent post-test. The study was also used to assess the educational value of different forms of feedback delivery. It needs to be emphasized that all students who took part in the experiment

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had been given written comments and feedback, whereas screencasts and feedback interviews were a novelty to them. This fact might have contributed to the lack of improvement in the control group. The results revealed that two groups of students improved their writing skills, while one group did worse in the post-test than in the pre-test. The highest rise in mean scores was in the group of learners who received feedback asynchronously, whereas the largest increase in the number of higher performers was in Experimental Group A, where feedback dialogues were carried out. The study revealed no improvement in the group where written corrections and comments were provided via the Google Classroom platform.

2. Questionnaire results

The data was gathered from a total of 43 students taking part in the experiment. The survey was conducted after the learning period. What were the students' perceptions regarding the type of feedback they received? Table 6 presents some quantitative analysis of the qualitative categories.

Table 6. Students' perceptions of the value of feedback

Survey questions	Group 1 Experimental A		Group 2 Experimental B		Group 3 Control	
	Mean*	SD	Mean*	SD	Mean*	SD
Q1: To what degree do you want your teacher to provide feedback on your assignments?	4.5	0.650	3.86	0.833	3.71	0.913
Q2: To what degree do you read/listen to the feedback your teacher provides?	4.57	0.646	4.6	0.632	3.92	0.828
Q3: Is the feedback you receive clear and understandable?	4.57	0.513	4.8	0.414	4.5	0.650
Q4: When feedback is provided in English, to what degree do you understand it?	4.71	0.468	5	0	3.71	1.069
Q5: To what degree do you prefer feedback in English?	4.57	0.646	4.73	0.593	3.28	1.069
Q6: Does the feedback you receive help improve your writing?	4.21	0.699	3.66	0.816	3.78	1.050
Q7: To what degree do you take the feedback you receive from your teacher into consideration when writing another essay?	4.07	0.730	3.86	0.743	4.28	0.611

*5-point Likert scale: 1– never, 5 – always

The hypothesis that students want to receive feedback on their writing assignments was investigated to see whether they consider it essential for the growth of their writing competence. The highest mean score was in the group of students who were provided with feedback in interviews. The standard deviation in this group suggests that they were the most homogenous of the three concerning their willingness and openness to the teacher's feedback.

When it comes to reading or listening to the teacher's feedback, both experimental groups received similar results; the results were higher than those in the control group. Regarding the degree of understanding feedback, the differences that arose were relatively small, which means that all three groups generally have no difficulty understanding the feedback from the teacher. It should be noted, however, that Experimental Group B declared the highest comprehension.

In a very similar question of whether the students understand the feedback in English, the results in both experimental groups were significantly higher than in the control group. All the respondents in the group that received feedback in screencasts indicated that they always understand feedback in a foreign language.

Another question referred to the students' preference for receiving feedback in English over their mother tongue. Again, the control group indicated the lowest preference, whereas Experimental Group B (the screencast group) demonstrated the highest preference. Next, the students self-reported the degree to which feedback helps them improve their writing. The feedback interview group reported the highest contribution of feedback in their writing skills development, and the screencast group declared the lowest impact.

In terms of taking the previous feedback into account when working on the next writing assignment, surprisingly enough, the control group indicated the highest degree in their responses. However, it disagrees with the answers given by this group earlier, which suggested they do not read the feedback as often as other groups.

The difference between means' scores is also readily observable in Figure 1.

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**Figure 1. Comparative analysis of mean scores
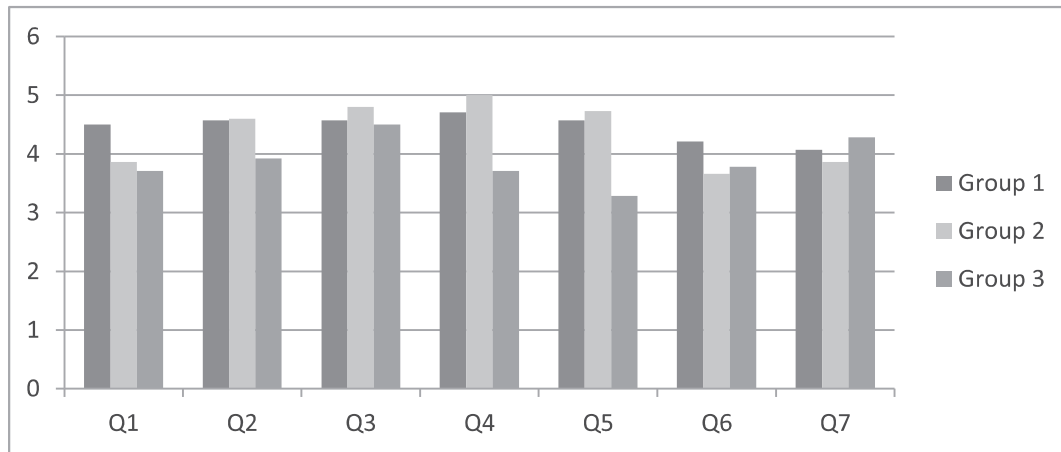to the survey questions, by group**

Figure 1 shows that the highest means were demonstrated by the screencast group (Experimental Group B), followed by the interview group (Experimental Group A). The control group expressed the highest preference only in one case and it had the lowest scores for five questions. This suggests that this group of students' engagement in feedback was relatively low and indicates that students do not find feedback in the form of written corrections and comments to be as attractive and motivating as the students who received it in other formats, whether synchronously or asynchronously. However, it must be stated that feedback in the form of written corrections and comments was what students had been exposed to before the intervention. In contrast, screencasts and feedback interviews were a novelty. The success of the experimental forms might be partly due to the fact that they brought something new and fresh to the learners' routine. It cannot be denied that motivation and positive feelings are of great importance in developing writing skills. It is therefore assumed that both screencasts and interviews proved their importance in developing the students' positive attitudes toward improving their writing competence.

Another analysis was conducted to establish whether the students' level of English impacted their ability to understand and use feedback to improve their writing skills. Therefore, a correlation between the self-perceived level of proficiency among students and their test scores should

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be investigated. Also, the correlation between the self-reported level of English and the self-reported ability to comprehend and apply feedback was analyzed. There were three categories of proficiency to choose from in the questionnaire: pre-intermediate, intermediate, and upper-intermediate.

According to the questionnaire, two students in Group A reported being at upper-intermediate level, 11 at intermediate, and one at pre-intermediate. In Group B, eight students reported being upper-inter-mediate and seven intermediate. Finally, in the control group, two were upper-intermediate, seven were intermediate, and five were pre-intermediate.

A similar analysis was undertaken to determine whether there is a relationship between the participants' self-reported learning style and their ability to use feedback to improve their writing. The chosen learning style is crucial for language learners to master all English skills, including writing. Brown (2000) defines a learning style as being able to indicate how learners perceive and process information in learning situations. Because feedback can be treated as information tailored to a learner, an awareness of preferred learning styles is essential. It has an impact on language learners' achievement in acquiring English. Therefore, it is the subject of an analysis carried out to answer the fifth research question, whether there is a correlation between a learning style and increased writing competence after being exposed to various types of feedback. The respondents were advised to indicate more than one learning style to enable them to demonstrate a mix of two or more learning styles they may have.

First of all, most learners in Experimental Group A reported being both visual and reading/writing learners. The students in this group were offered feedback interviews in which they could see their tasks with the problem areas indicated. However, the correction was elicited from the learners at the time of the interview. The auditory learning style seems the most necessary for this method, but despite this style being almost non-existent in this group, its members did very well in the post-tests. This means that the learning style does not significantly correlate with the effectiveness of feedback interviews.

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The results were different for the other experimental group. The most common learning styles was auditory, followed by visual. The group was provided with screencasts during the whole learning period and a close relationship was observed between the type of feedback they received and their preferred learning style. Since the group improved significantly in the post-tests, the research proves that there is a correlation between a learning style and the ability to use feedback to improve writing skills.

Surprisingly, the results obtained in the control group do not prove the existence of such a relationship. The students in this group were given feedback in the form of written corrections and comments. Even though most learners in this group reported being visual and reading/writing learners, it did not improve their writing, as presented in Table 4.

All in all, the results from all three groups do not seem to support the hypothesis that there is a relationship between the participants' learning styles and their ability to use feedback to improve their writing skills.

3. Interview Results

In order to supply explanatory information to validate and enhance the interpretation of the quantitative results, interviews with teachers of English were held. Ten interviews were conducted with teachers working in several secondary schools and one primary school, one of whom was male and nine were female. The interviewees were asked several questions in the form of asynchronous online interviews. The study results are sorted into six sections; each section addresses one of the interview questions.

- **How do you use technology in class?**
  All of the interviewees noted that they use technology in their teaching practice. Various applications and devices were mentioned. Only one teacher mentioned some insufficiency, which was exemplified in the following way: "I use a TV set connected to the classroom computer…. I also use my CD recorder for listening. I don't have much equipment in my classroom. I wish I had more…"

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- **How do you feel about using technology to give feedback on writing assignments?**

  Another theme that emerged from the responses is teachers' attitudes toward technology as a means of giving feedback on writing assignments. Half of them admitted to not using technology to provide feedback because it is time-consuming. They also mentioned not knowing how to use technology to give comments on students' writing. For example: "When it comes to feedback, I think that technology makes it easier. However, it is still time-consuming"; "I prefer the traditional form of feedback"; and "I don't know how to use technology to give feedback in writing assignments."

  Yet, those who responded positively mentioned that it saves time and is convenient. One teacher pointed to the fact that all assignments are held in one place and it is easy to go back to previous feedback to see how students have developed. "It gives a lot more possibilities to highlight and focus on a specific issue at a time"; "It's more engaging for students than traditional feedback methods."

- **What about technology-mediated feedback works with writing assignments?**

  A total of 80% of all comments showed an appreciation for technology-delivered feedback. Four respondents mentioned self-correction of errors and second drafting. The other three pointed to the immediate response and students' ability to ask questions in the process. One respondent indicated the possibility of generating a repository of comments which can facilitate the teacher's work. Also, two teachers noted that having their students receive feedback electronically allowed for more personalized and private comments.

- **What about technology-mediated feedback does not work with writing assignments?**

  Although most teachers highlighted the benefits of technology-mediated feedback in writing assignments, two of them indicated limited contact with the student and the lack of personal responses.

Three teachers reported the fact that it is very time-consuming to pre-pare comments in a digital form and they find it difficult to explain what they mean to students in detail. One respondent noted that the biggest problem with feedback is that students are not interested in receiving it: "What matters for my students is a grade. If there are too many comments, in their opinion, they ignore them."

- **How do students respond to the feedback you provide?**
  Over half (60%) of the responses suggested that students respond with engagement. One teacher stated that they do not respond un-less she asks them to. One teacher noted that some students do not implement feedback, which is frustrating for the teacher and makes the effort put into creating feedback useless. Another teacher stated that her students correct themselves quite eagerly and that some of them rewrite their work without being told to do so. One teacher declared that students ask questions when the feedback is unclear.

- **Would you consider using screencasts or one-to-one feedback in-terviews with students?**
  Most of the answers suggested that teachers do not regard screen-casts and feedback dialogues as very practical in their teaching prac-tice. Again, the fact that they are time-consuming was emphasized: "No, I wouldn't. My students are not interested in this form of feed-back. What's more, it would take me a lot of time to learn how to do it"; "not all students require an interview every time they write. I be-lieve interviews should be occasional and more summative, to be seen as a 'treat'"; "I've tried screencasts, but it takes me more time than using a comments bank. … One-on-one feedback interviews would be the most effective, but the most time-consuming at the same time. It's good in small groups (for example, in language schools), but diffi-cult to organize in traditional classes. I prefer online tools to save time."

However, these responses are in contrast to Kim's (2018) findings, which suggested that reviewing each student's assignment with a screencast tool

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is half as time-consuming as providing written comments. The reason might be that most teachers are not accustomed to this tool and therefore it is associated with effort and time.

Discussion

The analysis of the data gathered in the course of the research allows us to prove two of the four hypotheses created for the study. The highest growth in mean scores occurred in the group which received asynchronous feedback in the form of screencasts. Therefore, the hypothesis that synchronous feedback is more important in improving students' writing skills has not been validated. Another hypothesis predicted that asynchronous feedback would be more important in improving students' writing. However, the results confirmed this hypothesis only partially, as the two groups provided with such feedback returned contrasting results. One of the groups improved its mean score, whereas the other one scored lower in the post-test than in the pre-test. The first was provided with asynchronous feedback through screencasts and the success of this group should be attributed to the application of this specific type of feedback rather than it being asynchronous. The control group also received asynchronous feedback, though in the form of written corrections and comments, and did not demonstrate similar improvement of the students' writing competence. Also, there was a correlation between the students' level of English and their scores, suggesting that the level of language competence impacts the learners' ability to use certain types of feedback to improve their writing skills. Nonetheless, different learning styles do not necessarily impact the learners' ability to use feedback effectively.

Moreover, the analysis of the students' perceptions revealed that the participants expected their teacher to provide feedback on their writing assignments and that they did read or listen to it. The majority of the learners did not face problems when dealing with feedback, and they considered it clear and understandable. Most students, especially in

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the experimental groups, did not mind receiving it in English. Also, generally, they found feedback valuable and helpful in improving their writing. Most of the respondents declared using previous feedback when creating another piece of writing. Finally, the teachers' perceptions revealed that although technology is often used in class, applying it to provide feedback for writing assignments is considered time-consuming.

This study and the extensive work providing the theoretical framework underlying the research area of feedback prepared us to give some final remarks concerning the issue under study. When it comes to the first research question – "Is feedback provided synchronously more effective at improving students' writing skills?" – the answer is negative. It was observed that the study participants who received synchronous feedback improved their test scores, though not the most significantly. It has to be considered that the highest growth in writing skills was observed among the participants who were given asynchronous feedback. The answer to the second research question – "Is asynchronous feedback more important in improving students' writing skills?" – cannot be given clearly and definitively. The reason for it is that the control group also received asynchronous feedback and the results were lower in the post-tests than in the pre-tests. This group was given feedback in written corrections and comments via Google Classroom, which the students were already accustomed to. It might be concluded that whether the feedback is synchronous or not seems to not affect the students' results. Some other factor appears to have an impact on the results.

Another interesting aspect concerning the two first research questions is that the improvement was observed in the groups where the forms of feedback were new to the learners. It was only during the intervention that students were offered screencasts and feedback interviews. Before that, written corrections and comments provided either on paper or on the Google Classroom platform had been the standard form of feedback. It appears that the students did not find it engaging any longer. This may lead to the conclusion that using uninteresting types of feedback demoralizes learners. They may have high expectations that cannot be met by a single form of feedback being provided repetitively. These

observations agree with the findings of Mulder et al. (2009), who claim that feedback needs to make sense for students and only then can it advance students' learning. Also, Boud and Molloy (2013) and Dowden et al. (2013) emphasized that feedback cannot be effective unless it is more contextualized than written comments. Better knowledge and understanding of this phenomenon may become necessary as technological advances continue to become a part of regular teaching practice.

The control group's failure may have also stemmed from the fact that the form in which the feedback was provided did not involve their emotions. Writing comments did not include non-verbal behavior such as facial expressions, eye movement, or voice intonation to soften the directness of feedback, support the learner, or show appreciation. Moreover, several situations which occurred during the experiment suggested that some students had misunderstood the feedback, which the tutor could only realize after some time had passed. Such problems did not occur in the group where feedback dialogues were used. The teacher could begin with less direct feedback, encouraging the learners to self-correct before moving on, if necessary, to more direct comments. When it became clear to the teacher that the student did not comprehend the problem, more time was spent on either the problem area or a more detailed explanation. It was observed during the learning period that the students felt more confident when there was an opportunity to discuss their texts individually. It appeared beneficial to confirm their guesses about how to modify their knowledge, language production, or learning strategies. Also, the more actively they took part in such discussions, the more likely they seemed to benefit from it.

Furthermore, the other experimental group to which feedback was delivered in audio-video recordings did increase their writing competence. In their case, these recordings extended the range of possibilities. The use of audio feedback allowed for the more extensive feedback, and when accompanied by written notes, more clarity was achieved. An additional advantage was allowing the student to play back the screen capture multiple times, which offered more extensive listening and reading practice opportunities. It may have contributed to the higher performance in this

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group. It also allowed the teacher to appear more personalized and use non-verbal behavior to create a friendly atmosphere.

Another part of the study was the analysis of the learners' perceptions. Interestingly, the students in the feedback dialogue group were the ones who most reported being interested in receiving the tutor's feedback. It proves that this form of delivery is attractive to the participants. In contrast to this finding, the control group valued the feedback they were offered the least. When it comes to understanding feedback, the screencast group reported understanding it to the highest extent. It needs to be noted that the control group indicated the lowest level of understanding of the feedback, which confirms Boud's (1995) finding that written comments are challenging for students to understand clearly. Finally, the screencast group students perceived the feedback as the least useful in improving their writing. They also declared the lowest degree of implementing it in their writing practice. That might indicate that the use of multiple feedback modalities confused some students, perhaps because of cognitive overload. From the analysis, we can see that none of the forms of feedback delivery were perceived by the students as purely beneficial. Therefore, it seems sensible for teachers to use different modalities, both synchronous and asynchronous, to engage students and achieve better results.

The fourth and the fifth research questions investigated the correlation between the self-perceived level of proficiency and the test results and the correlation between the learning style and the test results; these were answered with the help of the questionnaire and the test. From the results in Figure 1, we can see a correlation between the level of English and the ability to deal with feedback to improve writing skills. The higher the students' perceived level, the better their scores on the test. To establish the level, the students were advised to reflect upon their English. No grammar or vocabulary test was given, but instead, the learners were to find their level by evaluating how comfortable they are watching videos and films, understanding recordings, speaking to somebody in English, discussing academic topics, reading texts, etc. They could also compare their level with the coursebook material, which is at the upper-intermediate

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level. All the students had the same length of learning the language, which was 11 years. The questionnaire remained anonymous, and the data gathered from the questionnaire can be considered reliable and used to assess the students' level of English proficiency. In this case, their answers and the level of assessment done by them seem to be reasonably realistic and therefore the correlation between their answers on the test and self-perceived English competence can be described as salient.

However, regarding a correlation was found between the learning style and the students' scores on the test in one out of the three groups, as shown in Figure 2. Therefore, it cannot be treated as salient. Both experimental groups improved their writing, but the respondents reported having different learning styles. Moreover, no connection was found between the declared learning styles and the type of feedback the students received. Appropriate learning styles were hypothesized to help the learners benefit from certain types of feedback and, consequently, improve the students' writing competence. Because no such correlation was observed, the hypothesis has to be rejected. These findings correspond with those of Tasdemir and Arslan (2018), who observed that learning styles do not explain the nature of feedback preferences.

The last part of the study regarded the most popular forms of feedback delivery among EFL teachers. The study aimed to explore ten teachers' perceptions of their practice of using technology to give feedback. The findings revealed that even though the majority of the participating teachers incorporate computer technologies in class, only half of them demonstrated a positive attitude toward using it for feedback delivery. It was emphasized that it is time-consuming and that teachers do not possess the skills to use it. Despite this, the interviewees are aware of the benefits it may bring and most admitted that their students respond with engagement. However, it might be concluded that what most teachers had in mind was feedback in the form of written corrections and comments. This became apparent when they were asked if they would consider using screencasts or one-to-one feedback interviews with students: most of the teachers refused to do so, and the amount of time required was indicated as the reason.

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Implications of the Study

Although providing feedback is still a controversial issue, it is commonly used in the classroom. However, most constructs were developed for the delivery of feedback in a face-to-face setting, which is significantly different from the online learning environment. Thus, it would be desirable to collect a larger sample size and conduct factor analysis to determine whether the constructs are proper in the online environment. It is crucial to continue investigating whether technology has further implications for creating more efficient feedback. There is an urgent need for more research on using different computer-mediated feedback techniques. The study proved that feedback was the most effective if students were given verbal feedback rather than relying entirely on written comments. Therefore, it is recommended to implement various modalities to engage students in improving their writing competence. For feedback to be effective, it is understood that it must consider an extensive range of linguistic, individual, and contextual variables, meaning that what works for one learner on one occasion may not work in another context. This also implies the need for further studies on how individual learners, not whole groups of students, as in this research, react to various computer-mediated feedback techniques. Applying different methodologies and research designs might also yield a correlation between a learning style, a type of feedback delivery, and the students' development of writing competence.

In light of the push toward more distance education, the need to deliver effective feedback is inevitable. Accordingly, teachers must be competent with computers as a prerequisite for deriving the benefits of different computer modalities. It may require training programs on how to provide feedback for writing, mainly using screen capture software or various modes of commenting and tracking. The importance of feedback cannot be denied. To teach means to give feedback. Consequently, experiments with feedback strategies are one of the most potent forms of teacher development.

The outcomes of this study have pointed the way for future studies. Future research could investigate what students can tell us about their

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writing experience along with more quantitative, survey-based methodologies to complement their accounts of writing experiences. The introduction of innovative technologies needs to be carefully evaluated to unpack the challenges involved in such experiences for students and teachers.

Limitations of the Research

The findings of this study should be interpreted with caution for the following reasons. Firstly, the study was conducted on a limited sample (43 students) over a limited period (ten weeks) and examined certain feedback types in a particular situation. Therefore, there is a need for other studies to be conducted on a larger group of learners over a more extended period. Finally, the researcher taught both the experimental and control groups, which is not ideal because the researcher's involvement in the teaching could introduce bias.

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