Investigating the Effect of Video-Based Feedback on Perceived Feedback Quality[1]

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Abstract

This study aims to examine the effect of video-based feedback on perceived feedback quality and determine students' opinions about the video feedback practice. This study was carried out for 10 weeks with 38 undergraduate students from Computer Education and Instructional Technology department in a public university in the "Information Security and Ethics" course. A convergent parallel mixed-methods study design was adopted in this study. In the first 6 weeks of the study, students in the experimental group received video feedback on three weekly written assignments while those in the control group received text feedback. Students were applied to the "Formative Feedback Perception Scale" after each week's assignment to determine their perceived feedback quality. During the 6-8 weeks of the study, experimental and control groups were switched in terms of the feedback format so that all students could experience video and text feedback. Meanwhile, students were given two additional assignments. Quantitative findings of the study revealed that video feedback had a statistically significant effect on perceived feedback quality and its "development, understandability, and encouragement" sub-factors. Qualitative findings also showed that video feedback was often found to be more advantageous than text feedback in terms of perceived feedback quality. Based on the results of the study, it is recommended to consider the use of videos in the feedback practices.
Keywords: Feedback, video feedback, text feedback, perceived feedback quality, university students.

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Introduction

Providing feedback to students on assessment is an essential element of promoting learning. In the instructional context, feedback is defined as information directed to students about the performance displayed during a learning process (Nicol & Macfarlane-Dick, 2006). This information includes instructional comments on whether students' performance in learning tasks is at the expected level and, if not, what is required to increase this performance to the desired level (Hattie & Timperley, 2007). Feedback functions mainly to inform the learners about the correctness of their answers, close the learning gap, and eliminate possible misconceptions (Vasilyeva, Pechenizkiy, & De Bra, 2008). In this context, the main objective of the feedback is not only to state that the answers given by the learners in the learning tasks are correct or wrong (Boud & Malloy, 2013), but to provide ways of how the learning tasks can be made better and more complete (Bonnel, 2008; Shute, 2008).

Furthermore, feedback is a fundamental component of assessment and evaluation processes and contributes to academic outcomes (Bloxham & Boyd, 2007). In a meta-analysis study, it has been revealed that feedback is one of the most important variables that have a significant effect on learning (ES = 0.73) (Hattie, 2009). Similarly, the results obtained in the relevant literature studies suggest that the use of feedback increases academic achievement, supports learning retention, and enhances learner motivation (Kang, McDermott, & Roediger, 2007; Rowe, 2011).

As stated, the feedback has an educative potential for providing significant contributions within the academic context. However, the success of the feedback practices depends on the learners' consideration and use of the feedback given to them (van der Kleij, 2019). In other words, feedback will not effectively promote student learning if students do not engage with feedback, do not value the feedback, ignore the feedback, or become dissatisfied with the feedback process (Mutch, 2003). These factors that play an important role in the effectiveness of feedback are closely related to how learners perceive feedback (van der Kleij, 2019). If learners have a positive perception of the feedback in terms of quality, they become more likely to value it, engage with it, and eventually be willing to use it to revise their learning tasks. On the other hand, when learners have a low perception about the quality of feedback given to them, they do not value and care about the feedback, and they become unwilling and demotivated to improve their learning tasks by using the feedback (Lunt & Curran, 2010; West & Turner, 2016). At this point, research consistently demonstrated that

students have low levels of overall perceived feedback quality (Lunt & Curran, 2010; Nicol, 2010; West & Turner, 2016). For this reason, it can be claimed that educational practices are needed to increase the perceived feedback quality of the learners to enable them to benefit from the feedback more effectively and to make the feedback processes more efficient.

Recent literature suggests that digital technologies can be used to improve students' perception of feedback quality (Mahoney, Macfarlane, & Ajjawi, 2019; Silva, 2012). In this context, video technologies are considered as effective tools for preparing feedback and delivering it to students. This is because videos hold the potential due to its affordances over texts in attracting students' interest and attention and addressing today's learner characteristics (Mathisen, 2012; Mayhew, 2017). The relevant literature implies that video feedback is more effective than text feedback in enabling the feedback to be understandable, to help students develop and revise learning tasks, and to support the affective interaction between teachers and students (Jones, Georghiades, & Gunson, 2012; Silva, 2012; West & Turner, 2016). It is also stated that audio-visual elements play an important role in this superiority of video-based feedback over text-based feedback (Crook et al., 2012; Henderson & Philips, 2015).

Indicators of the feedback quality, such as being understandable, helpful in the development and revisions of tasks, and supporting affective interaction, are easier to ensure in video format. Therefore, video feedback has great potential in helping students perceive feedbacks with higher quality. Based on this, the effects of video feedback on the perceived feedback quality of the learners were investigated in this study. Students' opinions about video feedback were also examined for obtaining more in-depth information and strengthening the quantitative findings.

Video Feedback

There is a range of ways and methods for giving feedback to students. More traditional methods used to provide feedback to learners include handwritten comments and written explanations on paper (Race, 2001). However, the more frequent use of technology in education led to the emergence of text-based electronic feedback as student assignments are usually submitted through an online environment such as learning management systems. In recent years, the use of feedback in audio and video formats has drawn attention as an alternative to text-based electronic feedback (Race, 2001).

It is stated in the literature that there are limitations of feedback in text and audio formats. In various studies, students stated that text feedback is sometimes difficult to understand (Grigoryan, 2017), lacks necessary detail (Narciss & Huth, 2006), does not support student-teacher interaction (Borup, West, Thomas, & Graham, 2014), and does not involve non-verbal communication cues (Crook et al., 2012). On the other hand, audio feedback lacks visual elements so that students cannot see which part of the homework the teacher is commenting on. Therefore, the audio format makes it difficult to follow and act upon feedback comments (Kerr & McLaughin, 2008). To overcome the limitations in text and audio feedback, video feedback emerges as an effective option due to its multimodal nature that involves audio-visual elements (Mahoney et al., 2019).

In the literature, it is seen that the video has two different uses to deliver feedback. One of them involves only a webcam, which is focused on the face of the teacher (Lamey, 2015). In this type of video feedback, students do not see their assignments while teachers comment on it. The other use of video feedback involves screen-capture software. The teacher records their on-screen activities while evaluating student assignments so that students can see both the teacher and their assignments (Orlando, 2016). In this study, the second type of video feedback, where screencasting is utilized, is adopted to prepare and convey feedback.

Perceived Feedback Quality

One of the concepts closely related to the use of feedback is perceived feedback quality. The literature pointed out that the feedback needs to be perceived as having high quality by the students for applying them effectively on learning tasks for revision (van der Kleij, 2019). There are some high-quality feedback indicators, such as being clear and understandable, giving sufficient details about the development and the revision of tasks, and providing the affective interaction between teachers and students (West & Turner, 2016).

One of the main features of quality feedback is understandability and clarity (Shute, 2008). For the feedback to be used by the learner effectively, the language used in the feedback must be understandable and clear. This is because regardless of how rich, guiding, and useful the feedback content is, if learners do not understand it in the desired manner, they may have difficulties using it to revise their work. In addition to the understandability of the feedback, it has been determined that good quality feedback should also include comments that will allow learners to develop, revise and correct the learning task (Sluijmans, Brand-Gruwell, & van Merrienboer, 2002). The feedback that does not help build and modify learning tasks does

not specify how errors can be corrected and does not contain sufficient details that students prefer, thus preventing effective feedback (Shute, 2008).

Providing affective interaction between the teacher and the learner is also considered among the features of high-quality feedback (Carless, 2013; Nicol & Macfarlane-Dick, 2006). Affective interaction refers to the fact that the teacher values students' work, cares about their efforts, encourages them for revision, provides a sense of personalization, and uses emotional expressions throughout the feedback process. When learners feel that the teacher cares about their learning, spends time and energy for them, and feels emotional expressions in his/her feedback, they are more likely to engage with the feedback in revising their work (Borup et al., 2014; West & Turner, 2016).

Related Studies

In this section, existing studies whose findings provide some implications on the role of video feedback on perceived feedback quality are reviewed. Silva (2012) examined engineering students' views on the use of video feedback given for their composition assignments. The results revealed that students find video feedback to support dialogic interaction between students and teachers, provide a feeling of face-to-face conversation, and be personal. Furthermore, students stated that video feedback is easier to understand compared to text feedback. Turner and West (2013) conducted a qualitative study to determine what undergraduate students think about their assignments' video feedback. Findings indicated that most of the students preferred to get feedback via video in their future works. Moreover, most of the participants noted that they feel more important and valued, and they can understand the content of the feedback more easily and clearly in video format. Denton (2014) investigated the effectiveness of video feedback on the writing skills of preservice teachers. According to the results of this qualitative study, the students stated that video feedback is more useful and effective than text feedback in revealing their work's weaknesses and strengths. Therefore they preferred this type of feedback over text-based feedback. Henderson and Phillips (2015) carried out a similar study in which they tried to obtain students' opinions from both undergraduate and graduate levels regarding a video feedback implementation. The interview results indicated that video feedback was more personal, motivating, understandable, and detailed than text feedback. Anson et al. (2016) studied student perceptions about video feedback through a qualitative study. At the end of the study, the students stated that video feedback was more supportive of their learning. Also, students drew

attention to the effective contribution of video feedback. They said that it became more possible thanks to video technology and easier to get the instructor's emotions. West and Turner (2016) conducted a qualitative study about using video feedback with preservice teachers. The results indicated that students find video feedback easier to understand, include more in content, and better support student-teacher communication and interaction. Grigoryan (2017) investigated the effect of video feedback in composition classes on transactional distance and examined students' views toward the video feedback practice. Findings revealed that video feedback reduces transactional distance perception with the help of the visual and auditory elements it contains. It was also found that the students liked the feedback in a video format because they felt more useful and personal. Karaoğlan-Yılmaz and Yılmaz (2020) investigated the role of different feedback forms (text, image, and video) in an online learning environment. One of the important findings of this study revealed that of the three feedback forms, the video format best helps reduce the perception of transactional distance due to its audio-visual elements.

As seen above, various literature studies give some clues regarding the role of video feedback on students' feedback on quality perception. In this context, video feedback is regarded as being more understandable, detailed, motivating, and supporting affective interaction between students and teachers. It can be stated that these studies are mostly carried out according to qualitative research design, and they do not primarily and specifically aim to determine the effects of video feedback on perceived feedback quality. They only present some qualitative findings of video feedback, and some inferences were made about its possible effects on perceived feedback quality. However, rather than descriptive studies, it is needed to conduct experimental studies to identify better video feedback implementation's effectiveness on feedback quality perception. Moreover, in the studies mentioned earlier, video feedback practices mostly lasted for one time as an intervention. In other words, students experienced only one video feedback in most of the studies, and findings and interpretation were reached based on this. However, longer practice periods are required for obtaining more valid and reliable results. Therefore, it can be claimed that there is a gap in the literature because of these methodological issues. Also, studies were mostly carried out within the language education context. For this reason, studies in different areas where feedback practices are utilized are needed to be conducted.

Significance of the Study

In the literature, it is pointed out that traditional text feedback may have some limitations in improving student perception of feedback quality because of its lack of audio-visual features (Borup et al., 2014; Grigoryan, 2017; Narciss & Huth, 2006). In recent years video feedback, which stands out with its audio-visual aspects, has emerged as an alternative way of providing feedback (Mahoney et al., 2019; Mayhew, 2017; West & Turner, 2016). Therefore, in this study, a video feedback practice, which is considered to hold the potential to improve students' perceived feedback quality better, was carried out. In this manner, this study is believed to make an important practical contribution to feedback.

When the literature is examined, it can be seen that there are a limited number of studies whose main aim is to identify the effect of video feedback on perceived feedback quality. Therefore, new studies are needed to be employed to better clarify the framework of video feedback practices in the context of feedback quality perception of students. For this reason, this study is of theoretical significance in contributing to the video feedback literature by providing up-to-date findings. Besides, the scarcity of research on video feedback points to some gaps in the literature as well. One of the gaps in video feedback literature is that most studies are descriptive in nature (Mayhew, 2017; Turner & West, 2013). In this context, it is noteworthy that mostly students' opinions about the use of video feedback were examined in studies. Furthermore, in most studies, qualitative research methods in which the students' opinions are the only data source were used to determine the effect of video feedback on perceived feedback quality, and some conclusions were drawn based on these data (Jones et al., 2012; Silva, 2012; West & Turner, 2016). However, rather than qualitative studies, experimental studies are needed to identify video feedback effectiveness better. Therefore, an experimental research method is adopted in this study to examine the effect of video feedback on perceived feedback quality.

In addition, unlike other studies, student views and a valid and reliable scale, which has been developed to measure the perceived feedback quality and its sub-factors, development, understandability, and encouragement, were used in the data collection process. In other words, the effect of video feedback on perceived feedback quality was determined using quantitative and qualitative data, which is an important aspect of this study that distinguishes it from other studies in the literature. Moreover, unlike other studies, this study includes a longer period of video feedback intervention. For this reason, it is claimed that the

effectiveness of the use of videos on the perceived feedback quality can be revealed more validly and clearly. In this way, this study differs from other studies, and thus, it is believed that it would make a unique contribution to the video feedback literature.

In sum, considering the research gaps in the literature, it is aimed in this study to investigate the effect of video feedback on perceived feedback quality and its three widely accepted indicators by combining both quantitative and qualitative perspectives. Additionally, it is also aimed to determine the opinions of students on video feedback practice. In reaching these goals, it was deemed appropriate to determine the following research questions:

1. Is there a statistically significant difference between the experimental group receiving feedback in video format and the control group receiving feedback in text format regarding perceived feedback quality and its sub-factors?

2. What are the students' opinions on the video feedback practice?

Method

This study was carried out according to a convergent parallel mixed-methods study design, in which both quantitative and qualitative data were collected during the same phase of the study and then merged together in the interpretation of the results (Creswell & Clark, 2017). In the quantitative part of the study, an experimental research design was used (Fraenkel & Wallen, 2009). In this regard, students were randomly assigned to experimental and control groups. For the qualitative part of the study, the semi-structured interview was conducted with randomly selected participants from both groups. Ethical approval for this study was obtained from the Hacettepe University Ethics Commission (ID: 35853172-300).

Study Group

The study group consists of 38 undergraduate students studying in the Computer Education and Instructional Technologies (CEIT) Department of a public university in the fall semester of 2019-2020 academic year. There were 19 students in each of the experimental and control groups. The research was carried out for ten weeks within the "Information Security and Ethics" course.

Data Collection Tools

In this study, two different data collection tools were used to collect data. The first one is the "Formative Feedback Perception Scale," which was used to determine the students' perceived

feedback quality. The second data collection tool is a semi-structured interview form developed by researchers to examine student views on the video feedback practice.

Formative feedback perception scale

"Formative Feedback Perception Scale" developed by Şat (2017) was used to determine the effect of video feedback on students' perceived feedback quality. The scale consists of 25 items and 3 sub-factors, named as "development, understandability, and encouragement". The Cronbach Alpha reliability coefficient of the 5-point Likert type scale was 0.92, 0.88, and 0.83 for the sub-factors, respectively, and was calculated as 0.93 for the whole scale. In addition, it can be stated that these factors correspond to perceived feedback quality indicators mentioned in the literature, which are allowing development and revision (development), being understandable and clear (understandability), and providing affective interaction (encouragement).

Semi-structured interview form

This form consisting of 19 questions, was developed by the researchers to determine students' views on video feedback practices. The form was finalized after getting feedback from three field experts.

Implementation and Data Collection Process

Students were given three written assignments on the topics covered weekly in the first six weeks of the study. Written assignments do not have a single correct answer but require students to reflect on their thoughts and inferences. For example, the first assignment is as follows: *"Compare the Utilitarian and Kantian ethical approaches in terms of their characteristics you think are strong and weak. Which approach do you adopt when dealing with ethical problems? Why?"*. The students uploaded their weekly written assignments to the Moodle learning management system within the specified deadlines. In the next step, the instructor gave the feedback to the students' assignments using a mailing system. While the experimental group students received feedback in video format, the students in the control group received it in text format.

Screen recorder software was used while preparing video feedback. Videos are in 1920x1080 resolution and about 4-5 minutes in duration (see Figure 1). There is a student assignment in the middle part of the video. While there are comments about the feedback on the screen's right part, the instructor's face is seen in the lower-left part. Also, the cursor in the

video recordings is highlighted by yellow color to attract student attention. In video feedback, the teacher opens student assignments on the computer and verbally comments on it using a microphone. Every on-screen activity such as scrolling, typing, and highlighting is recorded as a video with screen-capture software throughout this process. On the other hand, text feedback was prepared by adding explanations to student assignments using MS Word.
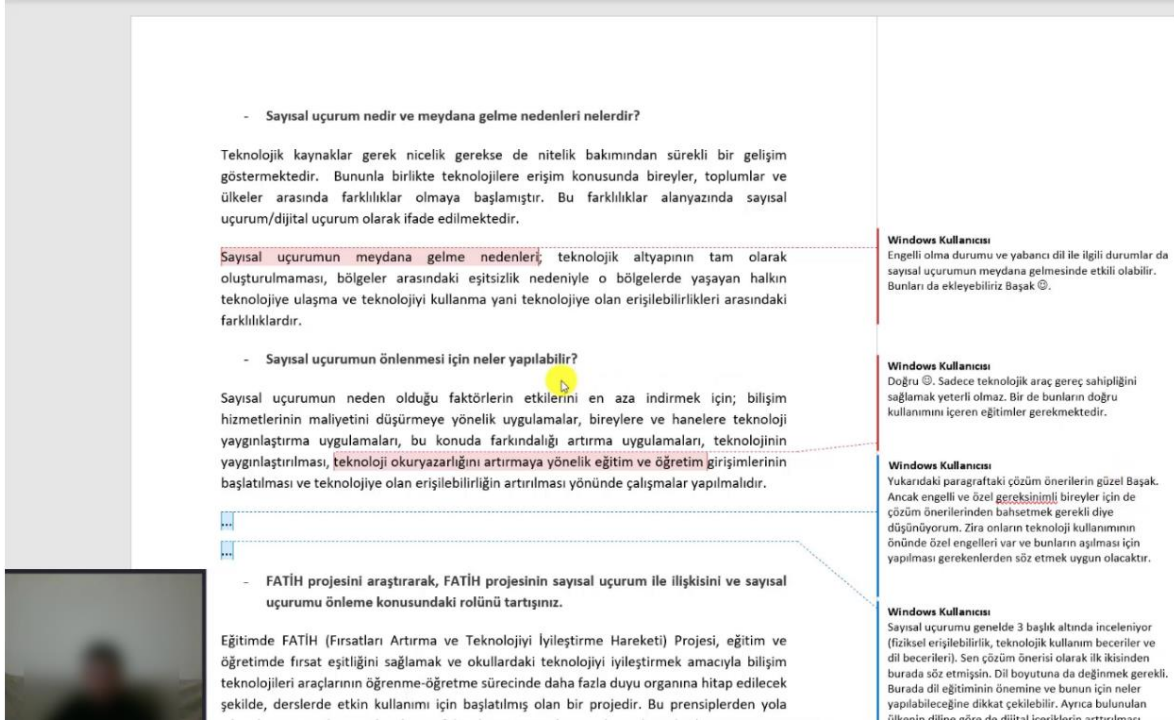

Figure 1. *Video feedback example*

Students were also asked to revise their assignments according to the feedback they received and then evaluate their perception of the quality of the feedback using the scale. In this process, to obtain more objective data, each student was given a nickname. Researchers do not know which nickname belongs to which student, and the entire data collection process was carried out anonymously. As a result, each student filled the "Formative Feedback Perception Scale" three times for the three assignments. The analysis made within the quantitative part of the study includes these three measurements.

For the qualitative part of the study, 15 students were interviewed about video feedback. These students were randomly selected from experimental (n=8) and control groups (n=7). It is thought that students should compare the feedback in video and text format to express their opinions about the video feedback practice in the interview. Therefore, it is important that the students had experiences in both feedback format. For this reason, after the

first three assignments, the experimental and control groups were switched in terms of the feedback mode, and they were given two additional written assignments. In other words, in the following two assignments, the experimental group received text feedback, and the control group received video feedback. In this way, every student was provided with the experience of getting feedback in both video and text formats. However, it is important to note that the last two assignments were not included in the quantitative analysis. They were only to ensure participants who attended qualitative interviews to have both text and video feedback experience.

Data Analysis

In order to decide which statistical techniques to be used in the analysis of the quantitative data, the normality test was carried out for the perceived feedback quality, which is the dependent variable of this study, and its three sub-factors. Since the number of students in the groups is less than 30, the Shapiro-Wilks (S-W) test was used. According to normality test results, independent samples t-test or Mann-Whitney U test were decided to be used. The content analysis method was used for the analysis of qualitative data. In this context, the student interviews, which were obtained by voice recordings, were transcribed. After this process, student opinions transcribed into text were examined in detail. As a result of the analysis, themes, and codes were identified. Later, the transcribed text, the themes, and codes were analyzed separately by the second researcher. The negotiation continued until a full agreement was reached between the two authors.

Findings

In this section, the effects of video feedback on students' perceived feedback quality levels are examined. The findings were presented separately for each assignment, and then findings about the average of all assignments were also mentioned.

The Effects of Video Feedback Practices on Students' Perceived Feedback Quality Levels

The results obtained for assignment-1 show that the perceived feedback quality ($U=122.00$; $p>.05$) and the sub-factors, *development* ($U=132.00$; $p>. 05$), *understandability* ($U=145.50$; $p>.05$), and *encouragement* ($U=122.00$; $p>.05$) are higher in favor of the experimental group. However, these differences are not statistically significant (See. Table 1).

Table 1. *Distribution of Mann Whitney U Test Results About Perceived Feedback Quality and the Sub-Factors for Assignment-1*

Variable	Group	X̄	Sd	Mean Rank	U	p
Development	Experimental	4.65	.36	22.05	132.00	.154
	Control	4.38	.59	16.95		
Understandability	Experimental	4.64	.39	21.34	145.50	.301
	Control	4.36	.79	17.66		
Encouragement	Experimental	4.79	.24	22.58	122.00	.079
	Control	4.42	.87	16.42		
Perceived Feedback Quality	Experimental	4.68	.30	22.50	123.50	.095
	Control	4.39	.67	16.50		

For assignment-2, the experimental group has a higher perception level in the *development* factor, but this difference is not statistically significant ($U=116.50$; $p>.05$). On the other hand, there is a significant difference in favor of the experimental group in terms of *understandability* ($U=112.00$; $p<.05$), and *encouragement* factors ($U=86.00$; $p<.05$), and also the overall perceived feedback quality level ($U=100.50$; $p<.05$) (See. Table 2).

Table 2. *Distribution of Mann Whitney U Test Results About Perceived Feedback Quality and the Sub-Factors for Assignment-2*

Variable	Group	$\bar{X}$	Sd	Mean Rank	*U*	*p*
Development	Experimental	4.73	.31	22.87	116.50	.058
	Control	4.45	.50	16.13		
Understandability	Experimental	4.75	.27	23.11	112.00	.042
	Control	4.45	.48	15.89		
Encouragement	Experimental	4.87	.20	24.47	86.00	.004
	Control	4.49	.49	14.53		
Perceived Feedback Quality	Experimental	4.78	.23	23.71	100.50	.019
	Control	4.46	.44	15.29		

Regarding the results obtained for assignment-3, the experimental group scored significantly higher than the control groups on overall perceived feedback quality (*U*=87.50; *p*<.05) and *development* (*U*=98.50; *p*<.05), *understandability* (*U*=88.00; *p*<.05), and *encouragement* (*U*=108.00; *p*<.05) sub-factors (See. Table 3).

Table 3. *Distribution of Mann Whitney U Test Results About Perceived Feedback Quality and the Sub-Factors for Assignment-3*

Variable	Group	$\bar{X}$	Sd	Mean Rank	*U*	*p*
Development	Experimental	4.80	.25	23.82	98.50	.014
	Control	4.39	.59	15.18		
Understandability	Experimental	4.71	.31	24.37	88.00	.006
	Control	4.35	.45	14.63		
Encouragement	Experimental	4.82	.25	23.32	108.00	.027
	Control	4.47	.63	15.68		
Perceived Feedback Quality	Experimental	4.78	.25	24.39	87.50	.006
	Control	4.39	.53	14.61		

Table 4. *Distribution of Mann Whitney U Test Results About Perceived Feedback Quality and the Sub-Factors for Average of All Assignments*

Variable	Group	X̄	Ss	Mean Rank	U	t	p
Development	Experimental	4.73	.27	23.61	102.50	-	.023
	Control	4.40	.50	15.39			
*Understandability	Experimental	4.70	.21	-	-	-2.66	.012
	Control	4.39	.47	-			
Encouragement	Experimental	4.82	.20	23.95	96.00	-	.013
	Control	4.46	.60	15.05			
Perceived Feedback Quality	Experimental	4.75	.22	23.95	96.00	-	.014
	Control	4.41	.50	15.05			

*Considering the normality test result in Table 5, independent samples t-test was used for *understandability* factor, and the Mann-Whitney U test was used for others.

The results in Table 4 were obtained by averaging the perceived feedback quality and sub-factors measured for all assignments. In this way, besides separate results for each assignment, there could be an opportunity to evaluate the effect of video feedback on perceived feedback quality from a more general perspective. According to the findings, it can easily be concluded that video feedback has a statistically significant effect on perceived feedback quality and all its sub-factors ($p<.05$).

Examining Students' Opinions on Video Feedback

In this section, there are qualitative findings about the students' opinions on video feedback. These findings were also used for corroborating the quantitative findings of the study. Four themes emerged as a result of the content analysis of interviews conducted with 15 students. These themes are "advantages of video feedback," "disadvantages of video feedback," "future use of video feedback," and "suggestions for video feedback practices." In the following section, these themes and the codes under these themes are explained in detail.

Advantages of video feedback

It was indicated that there were eight codes as the advantages of video feedback over text feedback. Details concerning the benefits are presented in Table 5.

Table 5. *Distribution of Codes About Advantages of Video Feedback*

Codes	n
Being understandable	13
Being detailed	12
Providing affective interaction	12
Motivating to revise	11
Providing learning retention	10
Facilitating the revision process	7
Providing authentic communication	6
Arousing curiosity	5

One of the advantages of video feedback over text feedback is understandability. Most of the students who participated in the interview stated that video feedback is more understandable. According to some students, the fact that video contains both text and audio elements and appeals to more senses is the main reason why video feedback is found to be superior to text feedback in terms of understandability and clarity. In addition to this, tone, gesture, and facial expressions are the elements that video feedback has, but text feedback lacks. Students also claimed that these elements play a role in making feedback more understandable and clearer. Some students indicated that video feedback more strongly supports communication with the teacher, thus understanding the feedback more easily. Some of the excerpts from the student views on understandability are as follows:

> P02: *"As I said, I was reading while listening to you. It was more understandable because it addressed our two senses. I both read and listen. It appeals to my different senses."*

> P08: *"Both tones of voice and facial expressions make it clearer to understand."*

Another advantage of video feedback compared to text feedbacks is the detail of the feedbacks. Some of the students stated that video feedback contains both written comments and audio explanations, and these make feedback more detailed. It is also indicated that video feedback is richer in context since it includes written feedback comments, verbal explanations, and instructors' gestures and mimics, which added additional detail to the feedback. Some excerpt from the students' opinions on feedback detail are as follows:

P01: "In video feedback, there are written comments plus audio explanations about them, I think this provides more detail."

P08: "Video includes written feedback, and I hear it verbally. It also provides the instructor's face. I think it is a large scale.

Most of the students stated that video format feedback is more effective than feedback in text format in terms of affective interaction between student and teacher. In this context, some students emphasized that video feedback better supports the delivery of emotions. Also, some students underlined that there is more intimate communication in video feedback. Regarding the affective interaction, some students stated that video feedback is more effective than text feedback in valuing their efforts in assignments, caring their learning, and making them feel individualized and feel teachers' effort for them. Some student views on affective interaction are as follows:

P13: "I think being visual is an advantage because we can easily get your emotions there."

P03: "I'm making an effort for my assignments. The instructor is also making an effort to prepare videos. That makes me happy. I feel special and valued. I feel this in the text as well, but more in the video."

Another advantage of video feedback is that it motivates students to make effective revisions. The students reported that they make their revision in a more motivated, enthusiastic, and fun way when they received feedback by video. Some students stated that, unlike text feedback, elements such as tone, gesture, and mimic that video feedback motivates them during the revision process. Some of the students thought that the instructor made an effort by making videos and, therefore, they wanted to respond to this effort. Besides, students stated that positive comments about themselves in their homework motivated them to revise and that this was more intense and salient in video feedback. Some student opinions on having revision motivation are as follows:

P07: "The video was more effective. Seeing your gestures and facial expressions and also hearing your tone are motivating factors for us. That's why our motivation increased."

P15: "Praises were more effective and salient in the video."

Another advantage of video feedback over text feedback emerged concerning the retention of learning. Most of the students emphasized that video feedback makes their learning about the topics discussed more solid and persistent. In this context, they pointed out the presence of the visual and audio elements of the video. Some of the opinions on the retention of learning are as follows:

> *P07: "It contributes to my learning retention, yes. As a matter of fact, the more the senses are involved in learning, the more people learn. The video includes both listening and watching. So, I remembered things more easily after working on video feedback.*

> *P09: "If I compare it to the text, you just don't see it with the eye. It is more than that because there is also sound. You both hear and see in videos. It also draws attention."*

Video feedback was also found to be advantageous in making it easier for students to make revisions. It was stated that the audio element of the video allows students to listen and make revisions simultaneously, thus making revisions easier and possible in a shorter time. Some opinions about this are as follows:

> *P07: "As I said, there were moments that I made revisions while I was listening to you. It may have had a more accelerating effect on making revisions."*

> *P08: "While I am revising by using text feedback, I open it and looked at it repeatedly. But in the video, I was able to both listen and modify. I was able to complete the revisions in a shorter time in the video feedback.*

It was also concluded that video feedback offers a more realistic and authentic communication environment as a result of the interviews. When the students received feedback via video, they stated that they feel like communicating face-to-face with the instructor in the same environment. Some of the student views on this are as follows:

> *P03: "So while listening to you, there is an ambiance as if I am listening to you in the classroom and not at home. I noticed that."*

> *P07: "Video feedback format was better. Because it made me feel like receiving face-to-face feedback from the teacher."*

Students also expressed that when they received feedback by video, they were more curious about the content of the feedback and what the instructor would say about them, and how s/he would react. One student view on this is as follows:

K09: "I wonder what the instructor would tell me in the video. So, the video was making me more curious."

Disadvantages of video feedback

When interviewing the students, it was mentioned that there were some disadvantages of video feedback compared to text feedback. The analysis of interview transcripts revealed that there were four codes under this theme. Details concerning the disadvantages are presented in Table 6.

Table 6. *Distribution of Codes About Disadvantages of Video Feedback*

Codes	n
Difficulties in revision	5
Difficulties in reading feedback comment on the screen	2
Accessibility problems	2

In contrast to students who think that video feedback facilitates the revision process, there are also those who believe that revisions become more difficult and require more effort. Some of the students stated that correction could be done more easily in the text feedback in this context. Some student opinions on this are as follows:

P02: "When I clicked on comment balloon in-text feedback, I was also able to make additions and revisions. It was easier for me, frankly."

P06: "Unlike video feedback, I do not have to open another file (video file) along with the MS Word document. I was able to make revisions on the same document. In the video, I sometimes have to go backward and forward in the video, which makes the process longer."

One problem with video feedback is that the written comments on the screen's right side are difficult to read due to the small font size. Regarding this, the opinions of one student are expressed as follows:

P11: "Comments on the video feedback were difficult to read because its font size is not large enough. I had difficulty in reading them."

Some students had accessibility problems in video feedback. In this context, a student stated that the videos could not be opened from his smartphone, and therefore, he needed a

computer to open it and watch. Another student expressed a problem with downloading the video due to poor internet connection in the student dormitory. The student views on this are as follows:

> P13: *"We could not run the video on the phone. It has to be done using a computer. I had to look at it on the computer. It was a disadvantage for me."*

> P01: *"We can say that there are such disadvantages, such as the file size or the downloadability. I live in a state dormitory; there are connection problems on the internet."*

Some students stated that video feedbacks do not have any disadvantages compared to text feedbacks, and they do not encounter any problems in this regard.

Future use of video feedback

Students indicated that they would prefer to use video feedback in the future. The analysis of interview transcripts revealed that there were six codes under this theme. Details with the future use of video feedback are presented in Table 7.

Table 7. *Distribution of Codes About Future use of Video Feedback*

Codes	n
Prefer video in receiving feedback in future	10
Prefer video in receiving feedback in future under certain conditions	4
Prefer text in receiving feedback in future	1
Prefer video in providing feedback in future	9
Prefer video in providing feedback in future under certain conditions	5
Prefer text in providing feedback in future	1

Most of the students stated that they preferred to get feedback in video format in their future courses. Some students suggested that they prefer video feedback as they considered it educationally more contributing and more fun. Some students also stated that they wanted to receive video feedback in the future because of the affective contributions and motivation in the revision it provides. Some student opinions about this are expressed as follows:

P09: "I prefer video to understand and see that instructor made an effort for our homework. I feel my effort is valued more with the video."

P15: "I prefer the video because it is more detailed, more encouraging. And it motivates me more to do assignment and revision."

Some students who participated in the interview reported that they prefer receiving feedback in video format under certain conditions. It was seen that accessibility, the assignment's scope, and desire to benefit from the assignment are decisive factors in this regard. In general, students stated that they could prefer video feedback for more extensive assignments and text feedback for less extensive ones. In addition, they also prefer video feedback when they want to make more use of their assignments. Some of the student views on these issues are as follows:

P10: "I think I prefer the video, but there is no obvious difference for me. But again, the video feedback is superior to the text feedback. I would like to get video feedback for higher-level assignments and text feedback for lower-level ones."

P12: "If I want to make the most effective and efficient use of that lesson, I would like to get video feedback. But if I want to do my assignment quickly and superficial, I prefer to get text feedback."

One of the students participating in the interview stated that they preferred to receive text feedback in the future. The reason for this is that she found it easier to act upon. The opinions of this student on this subject are as follows:

P05: "I prefer text feedback for time and convenience issues."

Most of the students stated that they prefer to give their students video feedback when they become an instructor in the future. It was determined that the positive experiences and the motivating aspect of video feedback played a role in this preference. Some student views on this issue are as follows:

P11: "I prefer video because it provides a more intimate atmosphere. Students can see more clearly that I put in the effort for them. This may motivate them to make more effort in doing assignments and revisions."

P08: "To increase their motivation, I prefer video feedback. I also think that I would like to give feedback via video. I think it is fun and enjoyable. I would like to try."

Some students stated that their preferences to use the video when providing feedback might change depending on the situation. In this context, the target audience's characteristics, accessibility, and workload conditions would be decisive factors. The student views regarding this issue are as follows:

P10: "If I see it is necessary, I prefer it. Maybe I will try to determine their reaction to feedback for a while. If I am not effective at in-text feedback, then I would like to try video feedback as an alternative way. If I believe video feedback contributes to my students, then as an educator, I prefer it."

P12: "If it does not take too much time, I would prefer video feedback. Shooting videos seems like a long process for me. Also, I would like to give video feedback, not to everyone but to those who prefer it. I would not make it compulsory to get video feedback and let the students prefer text feedback as well."

On the other hand, one participant stated that she would prefer the text format feedback for her prospective students in the future. Her view on this is as follows:

P05: "I would prefer text format while providing feedback to my students."

Suggestions for video feedback practices

During the interview, the students were asked about their suggestions to improve the video feedback practices. The analysis of interview transcripts revealed that there were two codes under this theme. Details with the possible suggestions on the improvement of video feedback practices are presented in Table 8.

Table 8. *Distribution of Codes about Suggestions for Video Feedback Practices*

Codes	n
Suggestions for video screen features	6
Suggestions for the presentation of videos	3

Some students stated that the font size of the written comments on the video should be a bit increased so that the readability can be improved. On the other hand, one student suggested that the instructor's display in the lower-left corner of the screen should be enlarged. Opinions on these are as follows:

P06: "The written comments on the right edge of the video are not easily readable. They can be enlarged a little bit more."

P12: "You can only slightly increase your display size."

Some students mentioned the way the videos are presented and made some suggestions regarding this. At this point, offering videos as interactive videos were suggested. Opinions about this are as follows:

P01: "So in fact, some things can be done, but it can take a lot of time. For example, videos can be made more interactive."

P05: "Maybe it would be better if it was like interactive video."

Discussion and Conclusions

The quality of the learners' feedback is an important determinant in the effectiveness of the feedback process. Video technologies have been used in recent years to increase this perception. It is considered that it would be possible to reveal the relationship between video feedback practices and perceived feedback quality under the dimensions of understandability, development, and affective interaction. Accordingly, in this study, the effects of video feedback on students' perceived feedback quality were examined. For this purpose, in the study carried out with the mixed method, quantitative and qualitative data were collected through a scale and semi-structured interviews with the student. The findings reached as a result of the analysis of the quantitative and qualitative data collected in the context of perceived feedback quality were associated with each other. This association is considered to provide an important source of information for the discussion of the study findings.

One of the indicators of feedback quality in literature is accepted as understandability (Shute, 2008). Accordingly, in this study, the "understandability" factor of the scale was used. The current quantitative findings show that video-based feedback is significantly more effective than text-based feedback in ensuring the understandability of feedback. The qualitative findings of the study also support this result. In this context, students asserted that video feedback includes elements such as tone of voice, gestures, and facial expressions, provides multimedia support, and gives a realistic sense of face-to-face communication. All this contributes to the understanding of feedback. The daily conversational language used in the video has a simpler structure and vocabulary than the language used in writing (Sindoni, 2014). Therefore, the more familiar spoken language with more nuances may have helped

students better understand the feedback. In this context, it is argued that people more easily understand the information presented in a conversational style than in a formal style (Mayer, Fennell, Farmer, & Campbell, 2004). Additionally, the tone of voice and the instructor's intonation may have played a role in clarifying the meaning intended to be conveyed in the feedback (Jones et al., 2012). Moreover, video feedback includes written comments that appear on the right side of the screen and verbal expressions of these comments and a display of the instructor. This minimizes the risk of feedback not being understood or misunderstood (Silva, 2012), which is ensured by the visual (mimics, gestures, etc.) and auditory (tone of voice, etc.) cues of videos (Crook et al., 2012). Furthermore, in the "Media Richness Theory" which was put forward by Daft and Lengel (1986), it is stated that there is a negative relationship between the richness of the media, and uncertainty and equivocality. In this context, using richer media in the communication process makes it possible to provide clear and understandable communication. Therefore, considering the Media Richness Theory, the video is superior to the text in terms of media richness, enables an easier understanding of the feedback. Studies reveal that feedback delivered through video format is clearer and easier to understand than those in text format (Ali, 2016; West & Turner, 2016).

Another feedback quality indicator is the degree to which the feedback allows to develop and revise the learning task (Sluijmans et al., 2002). In this regard, the "development" factor of the scale was used in this study. This study shows that video feedback contributes significantly more to the development and revision of tasks than text feedback. Qualitative findings also support this result. According to students, video feedback contains more details, makes the revision process more fun and easier, and increases motivation to make revisions. These elements contribute to the development and revision of learning tasks. There are also similar findings in the literature (Denton, 2014; Grigoryan, 2017). Besides that, the video feedback is more understandable and easier to comprehend than the text feedback may have led to this result. This is because the understandability of feedback is a prerequisite for that feedback to support development and revision. In other words, if the feedback is not understood easily and accurately, it becomes difficult to use that feedback to improve the learning task. Moreover, one of the positive features mentioned in the literature regarding video feedback is that video feedback contains more details than text-based feedback (Oskoz, 2016). As a matter of fact, in addition to the feedback comments written on the screen, there are additional verbal explanations about the written comments. Video feedback also includes the instructor's gestures and mimics while explaining things. This makes the video feedback

more detailed and helps students better realize why revisions were needed (Denton, 2014). For this reason, the feedback conveyed in detail may have enabled students to have a perception that video feedback better supports development and revision. The feedback becomes more effective and useful in revising the learning task if given in a detailed manner. In this context, it was found that the learners preferred detailed feedback and used such feedbacks more effectively during the revision process (Demiraslan-Çevik, Haşlaman, & Çelik, 2015).

The affective interaction between students and teachers has an important role in the perceived quality of feedback (Anson, 2015; Carless, 2013). In this context, the "encouragement" factor of the scale was used in this study. This factor includes the issues related to affective interaction in the literature. This study revealed that students who received video feedback had a significantly higher perception of affective interaction than those receiving text feedback. This result in the quantitative part of the study was also supported in qualitative findings. Overall findings indicate that video feedback is more effective in affective issues such as delivering emotions, valuing learners' effort, caring for their learning, and providing intimate and authentic communication between students and instructors. This is because the audio-visual structure in the video makes it easier to perform these affective actions. Moreover, these actions are perceived more clearly and saliently by the students in the video. The findings in this study are in parallel with the results of various studies in the literature. In these studies, video feedback has been found to be more effective than text feedbacks in expressing emotions through gestures, mimics, and senses of humor, creating a rapport between students and instructors and giving the sense of face-to-face communication (Borup et al., 2012; Elola & Oskoz, 2016; Orlando, 2016). In addition, some students reported that when they received the feedback in video format, they have the sense of being cared for and valued by their teachers for their learning and the feeling that the teachers put more effort and concern for them (Anson, 2015; Turner & West, 2013).

Besides the advantages of video feedback, video feedback's disadvantages were also mentioned among the findings obtained in the interview data. According to some students, the revision process becomes more difficult when they receive video feedback. Similar results are found in various literature studies (Crook et al., 2012; Henderson & Phillips, 2015). One reason for this problem may be that students need to simultaneously use both the video file and the word processing program. Some students also pointed to the problem that the feedback

comments are written in small fonts on the video screen and cannot be read. Therefore, it is important to pay attention to the screen properties of the videos.

Regarding the future use of video feedback, students, in general, have taken a positive attitude. This is similar to the results of other studies in the literature (Mathieson, 2012; West & Turner, 2016). Students preferred to get video feedback in the future since they are fun, motivating, and have affective contributions. In addition, factors such as the type and difficulty of learning tasks were found decisive in future feedback format preferences. In this context, students stated that they could prefer text-based feedback for simpler tasks. They also said that considering the positive experiences they had during the video feedback practice, they could choose to give video feedback when they become a teacher in the future.

To sum up, in the light of both quantitative and quantitative findings, it has been concluded that video feedback is more effective than text feedback on perceived feedback quality and sub-factors. A similar result was obtained in some studies in the literature. However, these studies' results mostly depend on student opinions and involve a relatively short period of video feedback implementation. On the other hand, in this study, the effect of video feedback on perceived feedback quality was revealed quantitatively in an experimental setting with a longer practice period that was corroborated by qualitative data. Thus, it became possible to make clearer judgments about the effect of video feedback on perceived feedback quality. Moreover, it is revealed with this study that video feedback has an important effect on the perceived feedback quality in a different field than language education.

Recommendations for Practice and Future Studies

Both the quantitative and qualitative findings show that video feedback is more effective than text feedback on perceived feedback quality and its sub-factors, *understandability*, *development,* and *encouragement*. Feedback quality perception is an important determinant for students to make effective use of feedback. In other words, when students have a high level of perceived feedback quality, they tend to use the feedback more effectively. For this reason, it is recommended to integrate video feedback practices into the teaching processes for providing students with feedback in their homework and term projects.

Other than ensuring more quality feedback perception than text feedback, there are also different advantages brought by video technology to feedback practices in education. First, students can receive both written and verbal comments from their teachers in the video.

This also applies to face-to-face feedback processes. However, when students receive face-to-face feedback, they may forget the teacher's explanations after the feedback session ends. On the other hand, students do not have such a problem in video feedback practices since they can watch the video again and review the parts they missed whenever they want (Crook et al., 2012). Second, some students may be reluctant about receiving face-to-face feedback. This is because they may get nervous and uncomfortable when discussing their assignments and receive face-to-face feedback from their teachers in the same room (Moore & Filling, 2012). Video feedback may effectively eliminate this problem since students can watch the video at home and still experience a sense of face-to-face communication with their teachers. In this context, video technology can be considered an effective and alternative tool for designing feedback practices.

It is clearly seen in the findings of this study that video feedback practices promote student-teacher interaction and also bring affective contributions in this context. Feedback is the information given for improving assignments and a means for providing affective support and strengthening student-teacher interaction (Killingback, Ahmed, & Williams, 2019). From this point of view, video feedback may be used to support student-teacher interaction, which is considered important in online learning environments. In this context, Thomas, West, and Borup (2017) concluded that video feedback might have a larger impact than text feedback on establishing instructor social presence due to the medium's richness. Other studies also have implications for the effect of video feedback on online interaction (Hung, 2016; Karaoğlan-Yılmaz & Yılmaz, 2020). Thus, it may be possible through video feedback practices to reduce the transactional distance (Moore & Kearsley, 2011) and increase the perception of teaching presence (Garrison, Anderson, & Archer, 2000), both of which are significant on online achievement and engagement.

This study also has several limitations. One limitation is a relatively small sample size. It would be better for an experimental study to include more participants in the experimental and control groups. Therefore, replicating this study with a larger sample size can be recommended. Another limitation of the study is to use only written assignments on which video or text feedback is provided. There are also different types of learning tasks that can be involved in feedback practices. For this reason, the effect of video feedback on perceived feedback quality can be examined in a research setting in which different types of assignments take place. Additionally, the video feedback implementation in this study is limited to the face-to-face learning process. On the other hand, feedback is also one of the important

components of online learning practices. Therefore, investigating the effect of video feedback on perceived feedback quality in online learning environments can be considered worth studying.

References

Anson, I. G. (2015). Assessment feedback using screen capture technology in political science. *Journal of Political Science Education*, *11*(4), 375-390.

Anson, C. M., Dannels, D. P., Laboy, J. I., & Carneiro, L. (2016). Students' perceptions of oral screencast responses to their writing: Exploring digitally mediated identities. *Journal of Business and Technical Communication, 30*(3), 378-411.

Bloxham, S., & Boyd, P. (2007). *Developing Effective Assessment in Higher Education: A Practical Guide: A Practical Guide*. McGraw-Hill Education (UK).

Bonnel, W. (2008). Improving feedback to students in online courses. *Nursing Education Perspectives*, *29*(5), 290-294.

Borup, J., West, R. E., & Graham, C. R. (2012). Improving online social presence through asynchronous video. *The Internet and Higher Education, 15*(3), 195-203.

Borup, J., West, R. E., Thomas, R., & Graham, C. R. (2014). Examining the impact of video feedback on instructor social presence in blended courses. *The International Review of Research in Open and Distributed Learning, 15*(3), 232-256.

Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. *Assessment & Evaluation in Higher Education*, *38*(6), 698-712.

Carless, D. (2013). Trust and its role in facilitating dialogic feedback. In D. Boud & L. Molloy (Eds.), *Feedback in higher and professional education* (pp. 90–103). London: Routledge.

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage Publications.

Crook, A., Mauchline, A., Maw, S., Lawson, C., Drinkwater, R., Lundqvist, K., et al. (2012). The use of video technology for providing feedback to students: Can it enhance the feedback experience for staff and students? *Computers & Education*, *58*(1), 386-396.

Demiraslan-Çevik, Y., Haşlaman, T., & Çelik, S. (2015). The effect of peer assessment on problem solving skills of prospective teachers supported by online learning activities. *Studies in Educational Evaluation*, *44*, 23-35.

Denton, D. W. (2014). Using screen capture feedback to improve academic performance. *TechTrends*, *58*(6), 51-56.

Elola, I., & Oskoz, A. (2016). Supporting second language writing using multimodal feedback. *Foreign Language Annals*, *49*(1), 58-74.

Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education*. New York: McGrow-Hill.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment. *The Internet and Higher Education, 2*(2-3), 87-105.

Grigoryan, A. (2017). Audiovisual commentary as a way to reduce transactional distance and increase teaching presence in online writing instruction: Student perceptions and preferences. *Journal of Response to Writing*, *3*(1), 83-128.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, *77*(1), 81-112.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.

Henderson, M., & Phillips, M. (2015). Video-based feedback on student assessment: scarily personal. *Australasian Journal of Educational Technology*, *31*(1), 51-66.

Hung, S. T. A. (2016). Enhancing feedback provision through multimodal video technology. *Computers & Education*, *98*, 90-101.

Jones, N., Georghiades, P., & Gunson, J. (2012). Student feedback via screen capture digital video: Stimulating student's modified action. *Higher Education*, *64*(5), 593-607.

Kang, S. H., McDermott, K. B., & Roediger III, H. L. (2007). Test format and corrective feedback modify the effect of testing on long-term retention. *European Journal of Cognitive Psychology*, *19*(4-5), 528-558.

Karaoğlan-Yılmaz, F. G., & Yılmaz, R. (2020). The impact of feedback form on transactional distance and critical thinking skills in online discussions. *Innovations in Education and Teaching International, 57*(1), 119-130.

Kerr, W., & McLaughlin, P. (2008). The benefit of screen recorded summaries in feed-back for work submitted electronically. In F. Khandia (Ed.), *Proceedings of the 12th CAA International Computer Assisted Assessment Conference* (pp. 153–168).

Killingback, C., Ahmed, O., & Williams, J. (2019). 'It was all in your voice'-Tertiary student perceptions of alternative feedback modes (audio, video, podcast, and screencast): A qualitative literature review. *Nurse Education Today*, *72*, 32-39.

Lamey, A. (2015). Video feedback in philosophy. *Metaphilosophy*, *46*(5), 691-702.

Lunt, T., & Curran, J. (2010). 'Are you listening please?' The advantages of electronic audio feedback compared to written feedback. *Assessment & Evaluation in Higher Education*, *35*(7), 759-769.

Mahoney, P., Macfarlane, S., & Ajjawi, R. (2019). A qualitative synthesis of video feedback in higher education. *Teaching in Higher Education*, *24*(2), 157-179.

Mathisen, P. (2012). Video feedback in higher education–A contribution to improving the quality of written feedback. *Nordic Journal of Digital Literacy*, *7*(2), 97-113.

Mayer, R. E., Fennell, S., Farmer, L., & Campbell, J. (2004). A personalization effect in multimedia learning: Students learn better when words are in conversational style rather than formal style. *Journal of Educational Psychology, 96*(2), 389-395.

Mayhew, E. (2017). Playback feedback: the impact of screen-captured video feedback on student satisfaction, learning and attainment. *European Political Science*, *16*, 179-192.

Moore, N. S., & Filling, M. L. (2012). iFeedback: Using video technology for improving student writing. *Journal of College Literacy & Learning*, *38*, 3-14.

Moore, M. G., & Kearsley, G. (2011). *Distance education: A systems view of online learning*. Boston, MA: Cengage Learning.

Mutch, A. (2003). Exploring the practice of feedback to students. *Active Learning in Higher Education*, *4*(1), 24-38.

Narciss, S., & Huth, K. (2006). Fostering achievement and motivation with bug-related tutoring feedback in a computer-based training for written subtraction. *Learning and Instruction*, *16*(4), 310-322.

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, *31*(2), 199-218.

Nicol, D. (2010). From monologue to dialogue: improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, *35*(5), 501-517.

Orlando, J. (2016). A comparison of text, voice, and screencasting feedback to online students. *American Journal of Distance Education*, *30*(3), 156-166.

Race, P. (2001). *Using Feedback to help students to learn*. York: The Higher Education Academy.

Rowe, A. (2011). The personal dimension in teaching: why students value feedback. *International Journal of Educational Management*, *25*(4), 343-360.

Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, *78*(1), 153-189.

Silva, M. L. (2012). Camtasia in the classroom: Student attitudes and preferences for video commentary or Microsoft Word comments during the revision process. *Computers and Composition*, *29*(1), 1-22.

Sindoni, M. G. (2014). *Spoken and written discourse in online interactions: A multimodal approach*. New York, NY: Routledge.

Sluijsmans, D. M., Brand-Gruwel, S., & van Merriënboer, J. J. (2002). Peer assessment training in teacher education: Effects on performance and perceptions. *Assessment & Evaluation in Higher Education*, *27*(5), 443-454.

Şat, M. (2017). Development and validation of formative feedback perceptions scale in project courses for undergraduate students. *Journal of Education and Future*, *12*, 117-135.

Thomas, R. A., West, R. E., & Borup, J. (2017). An analysis of instructor social presence in online text and asynchronous video feedback comments. *The Internet and Higher Education*, *33*, 61-73.

Turner, W., & West, J. (2013). Assessment for" Digital First Language" Speakers: Online Video Assessment and Feedback in Higher Education. *International Journal of Teaching and Learning in Higher Education, 25*(3), 288-296.

van der Kleij, F. M. (2019). Comparison of teacher and student perceptions of formative assessment feedback practices and association with individual student characteristics. *Teaching and Teacher Education*, *85*, 175-189.

Vasilyeva, E., Pechenizkiy, M., & De Bra, P. (2008). Adaptation of elaborated feedback in e-learning. In *International Conference on Adaptive Hypermedia and Adaptive Web-Based Systems* (pp. 235-244). Springer, Berlin, Heidelberg.

West, J., & Turner, W. (2016). Enhancing the assessment experience: improving student perceptions, engagement and understanding using online video feedback. *Innovations in Education and Teaching International*, *53*(4), 400-410.