Canadian Journal of Applied Linguistics
Revue canadienne de linguistique appliquée

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Résumé de l'article

La technologie vidéo a le potentiel d'améliorer les possibilités d'offrir aux étudiants des rétroactions essentielles à leur apprentissage. Cependant, les études précédentes ont toutes porté sur des vidéos d'enseignants, plutôt que sur des vidéos de prestations d'étudiants. L'objet de cette étude est d'établir si la technologie vidéo contribue à améliorer la qualité des commentaires sur les prestations orales des étudiants et comment les professeurs de langues perçoivent les nouvelles technologies en ce qui concerne la formation des étudiants. Les participants à l'étude étaient huit professeurs de langues titulaires. Les résultats des entrevues ont indiqué que ces enseignants semblaient être très favorables à l'utilisation de la technologie vidéo comme outil de rétroaction. La technologie permettait non seulement d'établir des comptes-rendus factuels servant à enrichir la qualité des commentaires, mais elle leur permettait également de mettre en évidence des aspects spécifiques des prestations orales et de créer des commentaires propices à la compréhension. Les résultats de cette étude ont montré que la rétroaction basée sur des preuves et améliorée par la technologie sera en mesure de fournir un complément important à la rétroaction écrite, ajoutant un mode supplémentaire pour un processus de rétroaction efficace.

Teachers' Perceptions Toward Video as a Tool for Feedback on Students' Oral Performance

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Abstract

Video technology has the potential to improve opportunities for students to benefit from feedback that is essential for learning. However, previous studies have all dealt with videos of tutors, rather than videos of students' performances. This study explores whether video technology contributes to the quality of feedback on students' oral language performance and investigates how language teachers perceive contemporary technology regarding student education. Participants in the study were eight incumbent teachers involved in language education. The interview data suggested that the teachers seemed to be very positive about using video technology as a tool for feedback. The technology not only allowed for evidence-based accounts which served to enrich the quality of feedback, but also enabled them to highlight specific aspects of oral performances and create feedback that is conducive to understanding. The findings of this study showed that technology-enhanced evidence-based feedback will be able to provide an important supplement to written feedback, adding one more mode for an effective feedback process.

Résumé

La technologie vidéo a le potentiel d'améliorer les possibilités d'offrir aux étudiants des rétroactions essentielles à leur apprentissage. Cependant, les études précédentes ont toutes porté sur des vidéos d'enseignants, plutôt que sur des vidéos de prestations d'étudiants. L'objet de cette étude est d'établir si la technologie vidéo contribue à améliorer la qualité des commentaires sur les prestations orales des étudiants et comment les professeurs de langues perçoivent les nouvelles technologies en ce qui concerne la formation des étudiants. Les participants à l'étude étaient huit professeurs de langues titulaires. Les résultats des entrevues ont indiqué que ces enseignants semblaient être très favorables à l'utilisation de la technologie vidéo comme outil de rétroaction. La technologie permettait non seulement d'établir des comptes-rendus factuels servant à enrichir la qualité des commentaires, mais elle leur permettait également de mettre en évidence des aspects spécifiques des prestations orales et de créer des commentaires propices à la compréhension. Les résultats de cette étude ont montré que la rétroaction basée sur des preuves et améliorée par la technologie sera en mesure de fournir un complément important à la rétroaction écrite, ajoutant un mode supplémentaire pour un processus de rétroaction efficace.

Teachers' Perceptions Toward Video as a Tool for Feedback on Students' Oral Performance

Introduction

There are innumerable technological resources that teachers can apply in and out of the classroom to develop and thereby improve their teaching practices. In this unexpected era of Covid-19 when educators are required to implement remote teaching, it is all the more essential to understand and make the most of these technological tools (Bao, 2020). Up-to-date resources such as video technology have enabled and will continue to enable teachers to deliver lessons in a more meaningful way for teaching and learning.

A range of literature has highlighted the usefulness of video in language education: assessing listening skills (Ardiansyah, 2018; Rahmatian & Armiun, 2011), speaking skills (Gunada & Wayan, 2017), didactic processes for training purposes (Pisarenko, 2017), and remote communication resources (Oxford et al., 1993). More recently, many researchers have focused on how YouTube, one of the largest online video-sharing platforms, can be used as a tool for language learning and teaching (Almurashi, 2016; Alwehaibi, 2015; Gunada & Wayan, 2017). The video platform offers a wide range of pedagogic materials which can be integrated and utilized in language teaching and learning processes in the classroom (Almurashi, 2016), and provides a ubiquitous learning environment – used anytime and anywhere, in and out of the classroom (Watkins & Wilkins, 2011). This research shows that video-based media has been utilised for diverse purposes in language education schemes.

Video technology also has the potential to improve opportunities for students to benefit from feedback that is essential for learning: students' learning process (Orsmond & Merry, 2011), high-quality feedback for student achievement (Brown & Knight, 2012; Hattie & Timperley, 2007), increased level of engagement, and detailed explanation to students through video feedback incorporated into teaching and learning in higher education in recent times (Abdous & Yoshimura, 2010; Abrahamson, 2010; Bracher et al., 2005; Cann, 2007; Michael & Michael, 2015; West & Turner, 2016). A further advantage is that, like audio, video files provide a permanent record, which can be stored online and replayed at the students' convenience, as opposed to handwritten feedback forms which can be lost or damaged. Thus, video-based feedback has enriched the experience of language education for teachers and learners. Yet, given the potential advantages of using technology to provide feedback to students presented in the digital age, using video technology for dialogic feedback remains an under-researched area in higher education (West & Turner, 2016). Therefore, this paper aims to further discover the applicability of video technology and explore how teachers view the affordance of the latest video technology as a tool to provide feedback on students' oral performance.

Literature Review

Feedback in Second Language Acquisition (SLA)

There has been a consensus in research that feedback is an essential aspect not only to make a significant impact on students' learning (Harris et al., 2014; Lunt & Curran,

2010), but also to establish strong relationships between staff and students (Crook et al., 2012; Debuse et al., 2007; Irons, 2007). Feedback is defined as information that includes all or several components: students' current state, information about where they are, where they are headed, and how to get there and can be presented by different agents (i.e., peer, teacher, self, task itself, computer). This information is expected to have a stronger effect on performance and learning if it encourages students to engage in active processing (Lipnevich & Smith, 2018). Thus, it is important that students understand their current intellectual status and future direction for their improvement. It also suggests that for feedback to make a difference it needs to be delivered via any effective agent for students to be proactively involved in it. Being acutely aware of the importance of feedback for learning, many language practitioners and L2 researchers have widely advocated pedagogic activities that involve a focus on form and meaning in language instruction. There are several different ways of assisting students' learning, one of which is through corrective feedback.

Corrective feedback has attracted extensive scholarly attention in second language acquisition (SLA) over the past decades (Bitchener, 2012; Bitchener & Ferris, 2012). Language practitioners and SLA researchers have shown a keen interest in assessing the feasibility of providing corrective feedback to areas for improvement (Ferris, 2010; Lyster et al., 1999; Truscott, 1999). While the pedagogic effects of corrective feedback have long been considered controversial, many researchers have argued that under certain conditions, corrective feedback can play a crucial role in assisting the acquisition of the L2, which may otherwise be hard to learn through input alone (Nassaji & Kartchava, 2017). Technology could foster the efficacy of effective corrective feedback provided for learner errors.

With the integration of up-to-date technology into language pedagogy, the quality and efficiency of corrective feedback has been further enhanced. Technology-enhanced feedback is not only an efficient way for both language practitioners and students to comment on the learner's L2 output (Lavolette et al., 2015). It also potentially assists the learning of especially difficult forms (Sauro, 2009). Potentially, technology can provide tailor-made feedback to each learner; it can allow learners to notice the errors in their L2 production and subsequently promote their L2 development.

Several studies have examined the use and effectiveness of feedback through technology (Felix, 2005; Liu et al., 2002; Nassaji & Kartchava, 2017; Yousefi & Nassaji, 2019; Ziegler, 2016). These studies have shown that technology-enhanced feedback can assist L2 learning and that its effectiveness may be different from that of face-to-face feedback (Yousefi & Nassaji, 2019). For example, EFL learners were able to receive support for their misspellings thanks to the editing and correcting of spell checkers, which thereby improved their overall writing skills (Flor & Futagi, 2012; Stirling, 2011; Yousefi & Nassaji, 2019). Ranalli et al. (2017) showed that ESL writers' grammar can be improved by comparing the quantity and quality of corrective feedback offered by two automated tools, Grammarly and Microsoft Word. Furthermore, learners have received learning support for their pronunciation through technologies such as automatic speech recognition (ASR) and computer-assisted pronunciation training (CAPT) systems. Wang and Young (2015) reported a study in which they adopted the ASR-based CAPT system. This system provides a range of corrective feedback types such as an audio recast of the learner's utterance displayed alongside a waveform, a model pronunciation of the full sentence at diverse speed, and a model pronunciation of single words. Thus, technology-mediated feedback has enhanced the way corrective feedback is provided to L2 learners.

Feedback and Video as a Tool

Research has shown an emergence of diverse forms of feedback through technological development. A range of modalities through audio, video, and screencast have allowed "for enhanced capture, distribution and storage of digital information by both tutors and students" (Munshi & Deneen, 2018, p. 343). This approach has enhanced the feedback process in more swift and effective manner because teachers can provide feedback on students' work and then upload relevant audio-visual files on an online portal for students to access (Crook et al., 2012; Marriott & Teoh, 2012; McCarthy, 2015; Phillips et al., 2016; West & Turner, 2016). Moreover, this strategy has enhanced the level of students' engagement with feedback, which may explain why student achievement has been positively influenced (Hattie & Timperley, 2007). McLaughlin et al. (2007) also found that students prefer feedback in the format of audio or video instead of written form. Stannard (Stannard, 2007; Stannard, 2008) has further developed these ideas through his attempt to use screen capture to give feedback in language instruction by adopting Mayer's (2005) principles of dual coding - combining oral and visual feedback. Brick and Holmes (2008) confirms the fact that integrating pictures, video and the written word caters to various learning styles:

> The use of speech, graphics and the written word seems to cater to the widest variety of learning styles, reaching those with a preference for auditory and visual learning who are less likely to benefit from standard single mode written feedback. (p. 340)

Video technology serves as a means to make feedback more engaging via various modes (Cann, 2014; Crook et al., 2012). For example, video-based feedback has been able to provide stimulated recall to students (Mackey et al., 2000; Tochon, 2008). Similar studies suggest that video serves as a visual medium to provide a permanent record of learning individualisation (Abrahamson, 2010). Bertolo-Pardo et al. (2012) explored the use of videos to provide exam feedback for questions on logic and control systems and concluded that video podcasts could be a feasible alternative to present the material more engagingly. Furthermore, studies have been done to provide individualised feedback on video recordings to students, revealing that affordances of the media resulted in a strong sense that the feedback enhanced students' learning (Dunlop, 2017; Henderson & Phillips, 2015; Huang & Hung, 2013).

Recently, a project across Europe has been making use of digital video technology in educational settings. This involves academics and professionals from various fields. As reported by Seedhouse in 2022, this project helps to improve the quality of teaching. It does so by giving teachers visual feedback on their methods, an idea supported by researchers (Körkkö et al., 2022; Körkkö et al., 2019). Furthermore, it was highlighted that this project fosters professional development through peer feedback. (Çelik et al., 2018). Data and evidence shown via video technology can be used by teachers to reflect on their education practice, offering "enormous scope for developing detailed and *up-close* understandings of local context" (Mann & Walsh, 2017, p. 112). Thus, video technology can "provide the innovative edge that can help students engage more effectively with their feedback" (Crook et al. 2012, p. 387).

However, previous studies have all dealt with videos of tutors, rather than videos of students' performances. In many cases, students may need clearer evidence to understand what written feedback from tutors means in their specific case. Furthermore, the

contemporary focus appears to be mainly on videos of tutors and feedback on writing but there is a significant dearth of application in the context of oral language assessment and feedback. The main purposes of this study are therefore to see if video technology can be used as a form of feedback for students' oral assessment and to investigate how language teachers see video-evidenced feedback concerning developing the quality and form of feedback given in oral language performance and learning. Within these purposes are two research questions:

Does using video technology contribute to feedback on oral language performance? If so, how?

How do teachers see video technology as a tool to provide feedback on oral language performance?

Methods

Ethics

The author of this study ensured that the work described herein was carried out in accordance with University Code of Practice on Research Ethics. Ethical approval was obtained from the University Research Ethics Committee (Reference: FAHC 19-059).

Participants and contexts

The study included eight incumbent teachers who are involved in language education. These teachers come from three different institutions: the University of Leeds, the University of Sheffield, and an international institution that provides pre-master courses in Korea. Each teacher specializes in different languages and courses. Three teachers are engaged in English for Academic Purposes (EAP), while two specialize in French, and two in Japanese. The remaining teacher's specialization is in German. The participants come with varied educational qualifications. Two of them hold a Ph.D., three have an MA, and the remaining three have a BA degree. These qualifications are all within their respective disciplines. The average teaching experience of participants was fifteen years in higher education institutions. Participation was solicited via e-mail from May to July 2021. The final combined sample consisted of five female and three male teachers. Each participant is referred to by their course titles to enhance the readers' understanding of the participants' comments. They are named as follows: T1_EAP, T2_EAP, T3_JAP, T4_FRE, T5_FRE, T6_JAP, T7_EAP and T8_GER

Tool

The app VEO (Video Enhanced Observation) was used to conform to Miller and Haines' (2022) criteria: cost, accessibility, applicability, and technology. VEO is available at a reasonable cost, enables users to adapt the terminology to suit their purposes and languages, works on multiple platforms (e.g., iPad, Android, and iOS), is designed to allow for a full translation of the interface, and is empowered by deep learning technology (e.g., video tagging, video-based observation, video capture, and video annotation). VEO is an innovative mobile learning technology that integrates accessible video as data to drive continuous organisational and professional improvement (Seedhouse, 2022). By using an

iPad, mobile phone, or any camera, users can record any performance carried out by professionals in any sector. The recordings can then be uploaded to the cloud on the spot so authorised people can share and comment on them which enhances teaching and learning with evidence of actual practice. The app provides a feature allowing users to generate their own tags. These tags can be customized to suit various purposes, enabling users to categorize or highlight specific aspects of observed performances. The tags can be used by teachers to time-stamp videos and jump to the exact moment of a specific feature. For example, on students' oral performances, teachers can leave comments to heighten students' awareness and build an understanding of students' work (see Appendix). This app is therefore well suitable for feedback and reflective practice in students (Mann & Walsh, 2017).

Data collection and analysis

Technical manipulation on VEO was initially made using its internal system to create a new tagging system, Presentation Evaluation, that allows teachers to assess and comment on oral language performance. The tag set of Presentation Evaluation contains relevant criteria such as Delivery, Voice, Body Language, Structure, Visual Aids, and Contents as shown in Figure 1 below. Each tagging of Contents, for example, has sub-criteria such as accuracy, relevancy, and appropriacy to evaluate. Based on this tagging, teachers are able to comment on students' linguistic and non-linguistic aspects of pronunciation, grammar, vocabulary, and gesture.

Figure 1
Presentation Evaluation Tagging
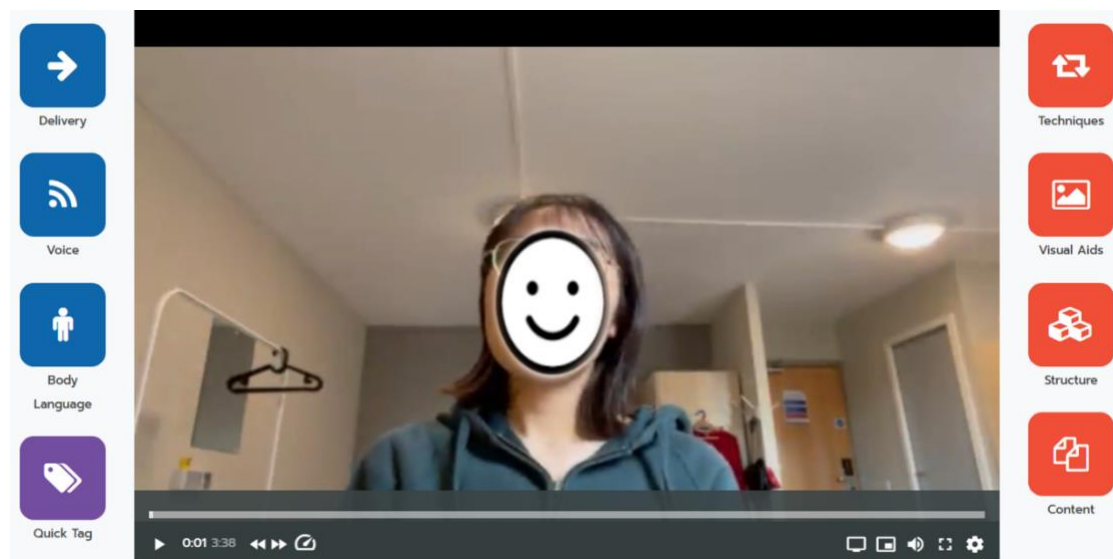
Before participants try out the educational app, they joined an hour-long seminar where they were briefed on how VEO works in detail and how teachers can provide feedback to students. This was followed by questions and answers that helped teachers understand what technological affordances are available and what the app can afford to feedback. All participants took up to two weeks to use the educational app on their own. During this period, the teachers each used their own computer devices to upload the video

recordings of their students' speaking performances on the app, and then manipulated the app to provide time-framed feedback on the performance. They were allowed to try it out by having videos of between one and three students on the app and to ask the researcher if they had any technical questions necessary to utilise the app fully.

More specifically, while watching students' performance, teachers clicked to make a pause at every moment that they thought it necessary to provide feedback. Each pause automatically created a timeline on the right side of the app, showing information on what minute and second was paused and what tagging was used. Teachers were able to revisit each timeline, which had comment boxes where teachers left relevant comments on click. Through this procedure, teachers were able to gain practical opportunities to explore how video technology can affect their teaching practices and their students' learning both in and out of the classroom. The participants then took part in interviews with the researcher about their experience, and the interview data obtained was analysed by the researcher to identify any points or issues pertaining to the provision of feedback.

Semi-structured interviews were used to elicit richer qualitative data. This type of interview is flexible, allowing new questions to be brought up during the interview while also offering a means of entering into the world of the individual to explore concepts and construct meaning (Bryman, 2012), allowing the researcher to obtain in-depth statements of subjects' opinions and experiences. Interview questions included:

Could you tell me about your initial thoughts when you used the VEO app?
Do you think VEO affordances of providing feedback help students' learning?
Could you tell me about any difficulties providing feedback with VEO?
Do you think that technology like the VEO app enhances teachers' practices in providing feedback on students' oral performance?
Could you tell me any practical issues that using VEO may cause?

Interviews were carried out individually with each participant via video call on Microsoft Teams in English, and each interview lasted for twenty minutes on average. Interviews were recorded and transcribed after each interview to minimise recall bias. Interview data obtained were analysed using content analysis to identify manual themes, group concepts, and determine the variance of the participants' perceptions and their experiences of concept grouping (Erlingsson & Brysiewicz, 2017; Hsieh & Shannon, 2005). The data were double-checked by listening to the audio and reading through the transcription notes again to ensure consistency (Campbell, 1997).

Results

A few themes emerged from teachers' interviews:
- Evidence-based accounts
- Technological affordances for feedback
- Impacts on teaching practice

Evidence-Based Accounts

According to the feedback collected from the interviews, the consensus from the teachers was that there were certain aspects of VEO, if not the whole app, that made a positive contribution to the provision of oral assessment feedback. Interestingly, it was

shown that while all participants provided feedback on students' writing performances, no participant had ever provided audio-visual evidence of students' oral performances as part of feedback.

When asked for their initial thoughts about technology that allows students to review their performance second by second in line with written feedback provided by teachers, they agreed that a VEO-like app could potentially be an efficient, effective, and innovative method of providing feedback on students' oral performances:

> This app is more engaging than written feedback, so it could potentially increase motivation/engagement. (T1_EAP)
>
> So, I think that this is something that's missing, we don't have this kind of thing at the moment. We don't do this, and I think it's a shame that we don't. It's an extra thing that we should be doing probably, I think. I imagine that for the student it'd be really clear when they did well, or which section exactly could be improved. (T6-JAP)

These results lead the researcher to ask more questions about what teachers thought about video technology and how it can be conducive to students' learning. It was found that the ability to have video recordings as well as written feedback is beneficial as it allows students to have an element of self-awareness, which, in the opinion of the teachers, is important when improving one's language skills:

> I believe that's one of the best ways to improve performance. I can see there's a lot of potentials there because I think the fact that students can watch themselves is fantastic, and they can watch themselves with feedback, clearly, it has huge potential. (T1_EAP)
>
> The students are engaged in that self-reflection/evaluation process. (T2_EAP)
>
> I think students would surely benefit from watching themselves present […] I think you learn a lot from seeing yourself. (T6_JAP)

These excerpts suggest providing feedback through the medium of video not only allows a teacher to give their perception of the performance, but also allows the student themselves to form a more cognizant perspective. Students view aspects of their performances in different ways at the time of performance versus in hindsight, so this gives them the ability to become more self-aware and to see the areas in which they need to improve more readily. This self-awareness can help motivate a student to work on their oral performance more actively (Schmidt et al., 2013).

Teachers also added that having the video as evidence of feedback is important and meaningful:

> Students are able to actually see what the teacher is talking about and there's concrete evidence of what the teacher is referring to. (T1_EAP)
>
> I think that's really useful for students to reflect on [...] it's not a general thing, you need to do this and this, you're actually saying here's the evidence, here's a video of you doing this. (T7_EAP)
>
> Because I think very often we say body language is important, but we can never really pinpoint it, and it's very difficult to give a mark for it. So sometimes I think it might fall by the wayside and it seems very subjective, whilst if you use the video and you can say "ah, look at this" I think that is quite powerful definitely - for the student. (T8_GER)

It can be difficult for teachers to remember every detail that needs to be highlighted when giving feedback, and sometimes students will also not be able to recall their performance

clearly, especially if they were under stress. Sometimes, students may not fully understand the written feedback on their papers and may wish to discuss specific parts with their teachers. In such cases, a video can be particularly helpful. It provides visual evidence that reinforces the teacher's written comments. Instead of relying solely on written feedback, students can refer to these videos to see tangible examples of their mistakes.

Interestingly, one teacher was aware of the efficacy of a technological tool, audio feedback, for students' learning. The efficacy has been proven in previous studies (Cann, 2014; Hennessy & Forrester, 2014; Schmidt et al., 2013). However, she found using video-based rather than audio-based feedback to be much more motivating as it offers clear-cut evidence, as explained below:

> I think the students would get what they like, because I use voice mail to send feedback and the students like that, they like that you talk to them, and it could be a video, I just use audio, and I suppose what you're doing is then pinning down what I might say in audio feedback. You're pinning it down to the actual example, so I can see that. (T5_FRE)

This suggests that adding one more mode of visual aids in addition to the aural version for feedback could be beneficial for students' learning (Canale, 2019). The video is not from teachers but from students themselves. What is significant here is that this evidence-based feedback creates a space where students can reflect on their performance, which augments their language learning process. As part of their reflection, this evidence enables students to analyse, look for solutions, trial, evaluate and analyse their work again until the desired results are achieved. In this way, video technology assists them in their reflection, and it better helps guide them on how to improve going forward, as commented on below:

> I imagine that it would be really clear to students when they did well or could improve. (T6_JAP)
>
> Just like in terms of writing, students have to reread their work in order to make improvements so in terms of speaking and you know presentations they should be re-watching their work and through self-evaluation and reflection be able to see what areas they need to improve. I think this app helps in that way, making it engaging for students. more quotes relevant to reflection. (T1_EAP)

Having visual evidence of their feedback next to the recording of the oral performance appears to give the teacher a heightened sense of self-awareness, too, which helps them to hone their feedback provision skills to generate feedback better tailored to the students.

Technological Affordances for Feedback

VEO has been designed for professional development, but it promises multiple affordances germane to feedback and language learning (Seedhouse, 2022). One teacher especially noted that it aided the ease of creating feedback by comparing using VEO to the prevailing method of writing notes during the oral performance itself:

> But for speaking work obviously, everything happens too fast, we make notes, but we can't do it minute by minute or second by second, or example by example. So yeah, I can see the rationale for it. I think it's got potential. (T5_FRE)

This shows that VEO providing a time-framed section help improves feedback on oral language assessment. Having the ability to re-watch a performance second by second as many times as necessary makes it easier to pick out the areas that need improvement. It takes away some of the pressure from teachers to have all their notes written by the end of

the oral assessment, as they know they will be able to use VEO to pick up anything that they may have missed.

Arguably, the level of specificity that VEO allows users to go into with the tagging system is ideal for the kind of feedback provided in language learning environments. Teachers enjoyed the way VEO's allowance for pinpointing specific moments let them focus on one component at a time:

> I think this software might be useful if we decided that we were going to focus solely on one aspect, such as eye contact or body language or intonation, and we could pin the feedback down to specific examples in the student's performance. (T5_FRE)
>
> You can just have a single focus; you can say on this activity of this week, we're just going to look at pronunciation, we're going to ignore any grammar error and any kind of delivery aspect and we're just going to focus on pronunciation. (T6_JAP)
>
> This software will allow me to really precisely say it was a pronunciation issue and so I would be able to precisely say where the mispronunciations were, so I suppose in that sense it would be good. (T4_FRE)

These excerpts demonstrate that the teachers believed the ability to highlight certain aspects of performance on VEO is very useful. VEO's tagging system can bolster feedback by allowing the teachers and students to focus on one section at a time, which can make the feedback process overall less overwhelming for the student. Moreover, two of the teachers agreed that VEO is a useful tool for feedback because of how interactive and easy to use it is for the students as well as themselves:

> They can just look at one screen and get all of that information so it's definitely easier for students to use […] and it's more interactive. Students just tend to like to use [things that are on computers] more than looking at all this paper. (T1_EAP)
>
> This app 'appeals' to both the teacher and learner as it serves as a speaking diagnostic assessment but with an interactive and engaging way for those involved. (T2_EAP)
>
> Current practice in relation to feedback is that we just wrote down something and then send it to a student or show it to students, but probably our practice could be changed you know, by just leaving some notes on VEO, and then we can send a link to a student, then students can directly check out what tutors said and then what they did, how they did, and then they can check out everything altogether themselves, and feedback as well. So, they can check it all night, every day. And then if they want to ask us a question, they can retag a message where they are not quite sure, and then we can answer the question again, so that could be really interactive. (T6_JAP)

Having VEO be presented in a way that is more appealing to students may make them participate more actively in the feedback process, even if that means just absorbing that feedback fully initially. Moreover, the affordance that allows students to have access to their own performance with the video feedback securely saved on the platform was also noted as being helpful:

> Another good thing is that the students can go back to watch the video at the time of their convenience […] it basically fits the schedule of the students. (T3_JAP)

As opposed to face-to-face or paper-based feedback, which, despite the advantages, may often be difficult to arrange due to differing timetables, the video feedback provided via video technology can be viewed at the best time for the student. This allows for more

consistent availability of individualised learning resources for students and increases the usage of said resources – learning individualisation (Amiri et al., 2021). It takes some of the pressure away from the feedback process and allows the student time to prepare themselves to sit down and absorb the feedback fully. This comment also implies that the student would be able to do something beneficial for their learning whenever they felt it would be beneficial, for example, every time they need to study. Constant availability of feedback also may allow students to approach the feedback with a more positive mindset.

Impacts on Teaching Practice

These technological affordances available for teaching and learning seem to suggest that video technology could have more impact when preparing for or doing exams, according to teachers verbatim:

> It has the potential to be helpful, especially for formative assessments prior to exams. (T4_FRE)
> I would use it for presentations only, and maybe for exams or something […] Then they can learn from it […] I think that's where students would really be interested, very intrigued. (T8_GER)
> I give very detailed feedback on speaking tasks but in summative work this sometimes causes problems. This is perhaps best used for formative assessment feedback. (T5-FRE)
> I would use it for presentations and maybe exam preparations, I think those and mock presentations. So yeah, I think I would definitely reserve them for those purposes. (T6_JAP)
> I would use it for presentations only, and maybe for exams or something, but not for other things. Then of course they can learn from it, especially for like a mock, I think like a mock exam or a mock presentation should be extremely useful and that is the time when students will not just feel frustrated by you, but they will actually like that sort of comment. I think that's where students would really be interested and intrigued. (T8_GER)

From this, it seems clear that teachers prefer to give more detailed feedback when it comes to formative work rather than summative, as is proposed in an existing study (Crook et al., 2012), making them more likely to use it in the middle of a semester or an academic year. Students tend to be more invested in the feedback on their exams, potentially making them more likely to pay attention to the feedback provided with the video technology. Thus, this video platform's features seem to leave room for teachers to gradually make a positive change in their teaching practices, as commented below:

> If the students are not making any concrete changes or improvements then maybe teachers need to reapproach their comments - the choice of words and ways of encouraging students - to do things a little bit differently. (T2_EAP)
> So, I think all students and teachers benefit. It's not just simply giving the evaluations or simply giving the comments but actually making sure that the comments are going to be helpful for the students to act on independently. I think that might be the way of the future, to use a cliche or an expression, I think that's what is expected these days as a part of teaching whether it's language, academic English or any other subject. I think this has many benefits across different subjects, so it's a very good platform for providing evaluation and feedback. (T5_FRE)

However, one of the main practical issues that teachers felt had an impact on feedback and teaching practices was the time it takes to create the feedback, especially when having to create individual feedback for each student (McCarthy, 2015). This may take time out of the hours they set aside for other aspects of teaching, such as lesson planning. One teacher summed it up like this:

> A problem that most teachers seem to have is that there's not enough hours in the day, there's not enough time to give this detailed level of feedback. (T7_EAP)
> It takes longer for a teacher to do the assessment because the processes includes uploading, saving, inserting comments etc. (T2_EAP)
> Having to click on several buttons and having to type out comments afterwards makes it too time-consuming. (T4_FRE)
> I think my reservations are about the workload […] This is where good practice and innovation and workload don't match. (T5_FRE)

This suggests that while the VEO app is a good tool for providing evidence-based accounts in the context of feedback (Walsh, 2022), the execution is too time-consuming to be viable to use in tandem with written feedback. The last comment can be interpreted as implying that with some tweaking of applications like these to make the feedback creation process quicker and smoother - therefore lessening workloads for teachers - perhaps concerns like these interviewee's could be reduced in the future. State-of-the-art video technology could gradually become a very useful tool for scaffolding the teaching process and allowing teachers to give feedback in a much timelier manner.

Discussion

This study explored if video technology contributes to the quality of feedback on students' oral language performance and investigated how language teachers see contemporary technology with regard to student education. The interview data suggest that the teachers seemed to be very positive about using video technology as a tool for feedback. The technology not only allowed for evidence-based accounts that enriched the quality of feedback, but also enabled teachers to highlight specific aspects of oral performances and create feedback that is conducive to students' L2 learning, although there was a practical issue of time-consuming work on the teacher's side. These findings not only lend further empirical support to previous research on the effectiveness of technology-enhanced feedback and L2 learning (Henderson & Phillips, 2015; Lavolette et al., 2015; Nassaji & Kartchava, 2017; Wang & Young, 2015), but also contribute to the line of research on the effectiveness of video as a tool for self-awareness for learning (Seedhouse, 2022; Van der Kleij et al., 2017). These results provide new insight into how up-to-date technology can support corrective feedback to enhance L2 learners' understanding on their performance and thereby assist language learning.

Notwithstanding these promising results, the interviews show that state-of-the-art technology might not be suitable for summative feedback because of teacher workload and students' learning approaches. Based on the teachers' interviews, it is posited that too much detail in feedback could overwhelm some students. However, it is unknown if the study findings support feedback for summative assessment. Further research is required to understand how students would regard this type of evidence-based feedback. Generally, it appears that this data shows the potential for using technology-enhanced video feedback on students' oral performances.

These results corroborate the ideas of Brick and Holmes (2008), who proposed that combining more than two modes of feedback, such as written forms and graphics, cater to more learning styles than using just a single mode. The latest video technology offers not just a written form of feedback, but also visual evidence of students' performances. The affordances seemed to help teachers further develop their skills in ways that improve feedback quality for students' L2 learning. The main areas in which learning has been seen to be augmented by the technology in this study have been in self-awareness and reflection via visual evidence. According to El-Dib (2007), reflective thinking cannot "take care of itself" and needs to be supported (p.33). One of the best ways to support reflective practice is to make it data-led through evidence (Mann & Walsh, 2017). In this sense, it can be argued that visual evidence can function as a steppingstone for teachers to help students develop their reflective abilities for L2 learning. Further concrete and data-led accounts are essential for students and video technology provides clear evidence of students' performance quality which promotes understanding and reflection. Data-led accounts via video technology help teachers to develop a detailed understanding of their professional practice and help to establish mutual understanding with students. By providing hard data, practitioners communicate with students much more efficiently and clearly.

By revealing how teachers view utilizing video technology in providing evidence-based feedback on students' oral performance, this study has contributed to enhancing existing literature. Much of the current research on feedback has focused on audio/video feedback from teachers (Crook et al., 2012; Martínez-Arboleda, 2018; Mathisen, 2012; Van der Kleij et al., 2017). However, there is less evidence on the effects of video feedback for students. This study explored a feedback platform that uses technology in a novel way. On this platform, teachers can upload videos of students' performances and give them along with written feedback. Teachers found this approach to be meaningful and beneficial for students' learning processes. The combination of written feedback and visual evidence creates a multimodal learning experience. This approach helps students deepen their understanding of corrective feedback. It encourages them to engage in reflective practice, which can enhance their learning outcomes. Therefore, it is reasonable to assert that technology-enhanced evidence-based feedback for students will be able to provide an important supplement to written feedback, guiding a new direction in feedback work. Language teachers should be able to make the most of the pedagogic effects via technology for corrective feedback and SLA.

Conclusion

This study revealed teachers' perceptions toward evidence-based feedback on students' oral performance via up-to-date video technology and its impact on their teaching practices. The data gathered highlighted the importance of incorporating technology through which evidence-based feedback can be offered to students on their oral performances to enhance their learning. The insights gained from this study add to the rapidly expanding field of research on audio and video feedback and their significance in teaching and learning. VAR (Video Assistant Referee) has been adopted in football and provided an eagle eye that humans do not have. The availability of video can clarify a range of confusing situations on the pitch, contributing to the fairness of a match through evidence. Video technology has been made available to use in a range of classroom contexts but is rarely in use when providing feedback on students' oral performances where

teachers could clarify and strengthen the feedback given to students. Since Prensky (2005) called on educators to meet the needs of the digital native generation, many resources have been used for language teaching in and out of the classroom. The simple technological tool shown in this study could, too, represent an innovative shift to give students high-quality feedback on their academic work through evidence.

This research was based on a user-experience study where teachers rarely made actual implementations in language classes. Another issue that was not addressed in this study was whether or not students benefit from technology in practice. Therefore, further research is recommended for practitioners to apply the app to students' performance in the classroom to see how students process feedback for their learning. This is required to establish a greater degree of understanding of the efficacy of video technology on evidence-based feedback and learning.

Acknowledgements

References

Abdous, M. H., & Yoshimura, M. (2010). Learner outcomes and satisfaction: A comparison of live video-streamed instruction, satellite broadcast instruction, and face-to-face instruction. *Computers & Education, 55*, 733-741. https://doi.org/10.1016/j.compedu.2010.03.006

Abrahamson, E. (2010). Assessment through video-feedback on an undergraduate sports rehabilitation programme. *Higher Education Academy [HEA] Case Study*.

Almurashi, W. A. (2016). The effective use of YouTube videos for teaching English language in classrooms as supplementary material at Taibah University in Alula. *International Journal of English Language Linguistics Research, 4*(3), 32-47.

Alwehaibi, H. O. (2015). The impact of using Youtube in EFL classroom on enhancing EFL students' content learning. *Journal of College Teaching, 12*(2), 121-126.

Amiri, A., Wang, J., Slater, N. K. H., & Najdanovic-Visak, V. (2021). Enhancement of process modelling and simulation evaluation by deploying a test for assessment and feedback individualisation. *Education for Chemical Engineers, 35*, 29-36. https://doi.org/10.1016/j.ece.2021.01.001

Ardiansyah, L. (2018). Using videos in the teaching of listening. *Jurnal Ilmiah Mandala Education, 4*(1), 290. https://doi.org/10.36312/jime.v4i1.552

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies, 2*(2), 113-115.

Bertolo-Pardo, E., Jones, P., & Carlton, K. (2012). Feedback and feed forward: Using video podcast to provide student feedback on past examinations and as revision aids. Higher Education Academy STEM Annual Conference 2012.

Bitchener, J. (2012). Written corrective feedback for L2 development: Current knowledge and future research. *TESOL Quarterly, 46*(4), 855–860. https://doi.org/DOI:10.1002/tesq.62.

Bitchener, J., & Ferris, D. R. (2012). *Written corrective feedback in second language acquisition and writing*. Routledge.

Bracher, M., Collier, R., Ottewill, R., & Shepard, K. (2005). Accessing and engaging with video streams for educational purposes: Experiences, issues and concerns. *Research in Learning Technology, 13*(2). https://doi.org/10.3402/rlt.v13i2.10990

Brick, B., & Holmes, J. (2008). Using screen capture software for student feedback: Towards a methodology. *Proceedings of the IADIS International Conference on Cognition and Exploratory Learning in the Digital Age (CELDA 2008)* (pp. 339-342). IADIS Press. https://www.iadisportal.org/digital-library/using-screen-capture-software-for-student-feedback-towards-a-methodology

Brown, S., & Knight, P. (1994). *Assessing learners in higher education*. Taylor & Francis. https://doi.org/10.4324/9780203062036

Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.

Campbell, T. (1997). Technology, multimedia, and qualitative research in education. *Journal of Research on Computing in Education, 30*(2), 122-132. https://doi.org/10.1080/08886504.1997.10782219

Canale, G. (2019). *Technology, multimodality and learning: Analyzing meaning across scales*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-21795-2

Cann, A. (2014). Engaging students with audio feedback. *Bioscience Education, 22*(1), 31-41. https://doi.org/10.11120/beej.2014.00027

Cann, A. J. (2007). Podcasting is dead. Long live video! *Bioscience Education, 10*(1), 1-4. https://doi.org/10.3108/beej.10.c1

Çelik, S., Baran, E., & Sert, O. (2018). The affordances of mobile-app supported teacher observations for peer feedback. *International Journal of Mobile and Blended Learning (IJMBL), 10*(2), 36-49.

Crook, A., Mauchline, A., Maw, S., Lawson, C., Drinkwater, R., Lundqvist, K., Orsmond, P., Gomez, S., & Park, J. (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. https://doi.org/10.1016/j.compedu.2011.08.025

Debuse, J., Lawley, M., & Shibl, R. (2007). The implementation of an automated assessment feedback and quality assurance system for ICT courses. *Journal of Information Systems Education, 18*(4), 491-502.

Dunlop, M. (2017). *Maximizing feedback for language learning: English language learners' attention, affect, cognition and usage of computer-delivered feedback from an English language reading proficiency assessment* [Unpublished doctoral dissertation]. University of Toronto. https://hdl.handle.net/1807/78966

El-Dib, M. A. B. (2007). Levels of reflection in action research. An overview and an assessment tool. *Teaching and Teacher Education, 23*(1), 24-35. https://doi.org/10.1016/j.tate.2006.04.002

Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine, 7*(3), 93-99. https://doi.org/10.1016/j.afjem.2017.08.001

Felix, U. (2005). Analyzing recent CALL effectiveness research: Towards a common agenda. *Computer-Assisted Language Learning, 18*(1-2), 1-32. https://doi.org/10.1080/09588220500132274

Ferris, D. (2010). Second language writing research and written corrective feedback in SLA. *Studies in Second Language Acquisition, 32*(2), Studies in Second Language Acquisition, 32(32), 181–201. https://doi.org/10.1017/S0272263109990490

Flor, M., & Futagi, Y. (2012). *On using context for automatic correction of non-word misspellings in student essays.* [Conference presentation]. The 7th Workshop on Innovative Use of NLP for Building Educational Applications (BEA), Montréal, Canada.

Gunada, I. S., & Wayan, I. (2017). *Using YouTube video: An IT-based media to improve students' speaking skill.* [Unpublished manuscript]. Department of English Language Education, Ganesha University of Education.

Harris, L. R., Brown, G. T., & Harnett, J. A. (2014). Understanding classroom feedback practices: A study of New Zealand student experiences, perceptions, and emotional responses. *Educational Assessment, Evaluation and Accountability, 26*(2), 107-133. http://doi.org/10.1007/s11092-013-9187-5

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81-112. https://doi.org/10.3102/003465430298487

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

Hennessy, C., & Forrester, G. (2014). Developing a framework for effective audio feedback: a case study. *Assessment & Evaluation in Higher Education, 39*(7), 777-789.

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.

Huang, H.-T. D., & Hung, S.-T. A. (2013). Exploring the utility of a video-based online EFL discussion forum. *British Journal of Educational Technology, 44*(3).

Irons, A. (2007). *Enhancing learning through formative assessment and feedback*. Routledge.

Körkkö, M., Kyrö-Ämmälä, O., & Turunen, T. (2022). VEO as part of reflective practice in the primary teacher education programme in Finland. In P. Seedhouse (Ed.), *Video enhanced observation for language teaching: Reflection and professional Development* (pp. 83-96). Bloomsbury Academic. http://doi.org/10.5040/9781350085060.ch-6

Körkkö, M., Morales Rios, S., & Kyrö-Ämmälä, O. (2019). Using a video app as a tool for reflective practice. *Educational Research, 61*(1), 22-37. https://doi.org/10.1080/00131881.2018.1562954

Lavolette, E., Polio, C., & Kahng, J. (2015). The accuracy of computer-assisted feedback and students' responses to it. *Language Learning & Technology, 19*(2), 50-68. http://dx.doi.org/10125/44417

Lipnevich, A., & Smith, J. (Eds.). (2018). *The Cambridge handbook of instructional feedback*. Cambridge University Press. https://doi.org/10.1017/9781316832134

Liu, M., Moore, Z., Graham, L., & Lee, S. (2002). A look at the research in computer-based technology use in second language learning: A review of literature from 1990–2000. *Journal of Research on Technology in Education, 34*(3), 250–273.

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*, 759-769. https://doi.org/10.1080/02602930902977772

Lyster, R., Lightbown, P. M., & Spada, N. (1999). A response to Truscott's "What's wrong with oral grammar correction." *Canadian Modern Language Review, 55*(4), 457. https://doi.org/10.3138/cmlr.55.4.457

Mackey, A., Gass, S., & McDonough, K. (2000). How do learners perceive interactional feedback? *Studies in Second Language Acquisition, 22*(4), 471-497. http://doi.org/10.1017/S0272263100004010

Mann, S., & Walsh, S. (2017). *Reflective practice in English language teaching: Research-based principles and practices*. Routledge. https://doi.org/10.4324/9781315733395

Marriott, P., & Teoh, L. K. (2012). Using screencasts to enhance assessment feedback: Students' perceptions and preferences. *Accounting Education, 21*(6), 583-598.

Martínez-Arboleda, A. (2018). Audiovisual student feedback (ASF) in higher education: Teaching and power. *The International Journal of E-Learning and Educational Technologies in the Digital Media (IJEETDM), 4*(4), 98-113.

Mathisen, P. (2012). Video feedback in higher education: A contribution to improving the quality of written feedback. *Nordic Journal of Digital Literacy, 7*(2), 97-116.

Mayer, R. (Ed.). (2005). *The Cambridge handbook of multimedia learning*. Cambridge University Press. http://doi.org/10.1017/CBO9780511816819

McCarthy, J. (2015). Evaluating written, audio and video feedback in higher education summative assessment tasks. *Issues in Educational Research, 25*(2), 153-169.

McLaughlin, P., Kerr, W., & Howie, K. (2007). Fuller, richer feedback, more easily delivered, using tablet PCs. *Proceedings for the 11ᵗʰ International Conference on Computer Aided Assessment*.

Michael, H., & Michael, P. (2015). Video-based feedback on student assessment: Scarily personal. *Australasian Journal of Educational Technology, 31*(1). https://doi.org/10.14742/ajet.1878

Miller, P., & Haines, J. (2022). From teaching to learning: The development of the VEO App. In P. Seedhouse (Ed.), *Video enhanced observation for language teaching: Reflection and professional development* (pp. 21-38). Bloomsbury Academic. http://doi.org/10.5040/9781350085060.ch-3

Munshi, C., & Deneen, C. (2018). Technology-enhanced feedback. In A. Lipnevich & E. Panadero (Eds.), *A review of feedback models and theories: Descriptions, definitions, and conclusions* (pp. 335-356). Cambridge University Press.

Nassaji, H., & Kartchava, E. (2017). *Corrective feedback in second language teaching and learning: Research, theory, applications, implications*. Routledge. https://doi.org/10.4324/9781315621432

Orsmond, P., & Merry, S. (2011). Feedback alignment: Effective and ineffective links between tutors' and students' understanding of coursework feedback. *Assessment & Evaluation in Higher Education, 36*, 125-136. https://doi.org/10.1080/02602930903201651

Oxford, R., Park-Oh, Y., It, S., & Sumrall, M. (1993). Japanese by satellite: Effects of motivation, language learning styles and strategies, gender, course level, and previous language learning experience on Japanese language achievement. *Foreign Language Annals, 26*(3), 359-371. https://doi.org/10.1111/j.1944-9720.1993.tb02292.x

Phillips, M., Henderson, M., & Ryan, T. (2016). Multimodal feedback is not always clearer, more useful or satisfying. *Show Me The Learning. Proceedings ASCILITE*, 514-522.

Pisarenko, V. (2017). Teaching a foreign language using videos. *Social Sciences, 6*, 125. https://doi.org/10.3390/socsci6040125

Prensky, M. (2005). Digital natives, digital immigrants. *Gifted,* (135), 29-31.

Rahmatian, R., & Armiun, N. (2011). The effectiveness of audio and video documents in developing listening comprehension skill in a foreign language. *International Journal of English Linguistics, 1*(1), 290-304. http://doi.org/10.5539/ijel.v1n1p115

Ranalli, J., Link, S., & Chukharev-Hudilainen, E. (2017). Automated writing evaluation for formative assessment of second language writing: Investigating the accuracy and usefulness of feedback as part of argument-based validation. *Educational Psychology, 37*(1), 8-25. https://doi.org/10.1080/01443410.2015.1136407

Sauro, S. (2009). Computer-mediated corrective feedback and the development of L2 grammar. *Langue Learning & Technology, 31*(1), 96-120.

Schmidt, J., Fleming, J., Ownsworth, T., & Lannin, N. A. (2013). Video feedback on functional task performance improves self-awareness after traumatic brain injury: a randomized controlled trial. *Neurorehabilitation and neural repair, 27*(4), 316-324. https://doi.org/10.1177/1545968312469838

Seedhouse, P. (2022). *Video enhanced observation for language teaching: Reflection and professional development*. Bloomsbury Academic. http://doi.org/10.5040/9781350085060

Stannard, R. (2007). *Using screen capture software in student feedback*. H. E. Academy.

Stannard, R. (2008). A new direction in feedback. *Humanising language teaching, 10*(6).

Stirling, J. (2011). *Teaching spelling to English language learners*. Lulu.

Tochon, F. (2008). A brief history of video feedback and its role in foreign language education. *CALICO Journal, 25*(3), 420-435. http://www.jstor.org/stable/calicojournal.25.3.420

Truscott, J. (1999). What's wrong with oral grammar correction. *Canadian Modern Language Review, 55*(4), 437-456. https://doi.org/10.3138/cmlr.55.4.437

Van der Kleij, F., Adie, L., & Cumming, J. (2017). Using video technology to enable student voice in assessment feedback. *British Journal of Educational Technology, 48*(5), 1092-1105. https://doi.org/10.1111/bjet.12536

Walsh, S. (2022). SETTVEO: Evidence-based reflective practice and professional development. In P. Seedhouse (Ed.), *Video enhanced observation for language teaching: Reflection and professional development* (pp. 167-180). Bloomsbury Academic. http://doi.org/10.5040/9781350085060.ch-11

Wang, Y.-H., & Young, S. S.-C. (2015). Effectiveness of feedback for enhancing English pronunciation in an ASR-based CALL system. *Journal of Computer Assisted Learning, 31*(6), 493–504. https://doi.org/10.1111/jcal.12079

Watkins, J., & Wilkins, M. (2011). Using YouTube in the EFL classroom. *Language Education In Asia, 2*, 113-119. https://doi.org/10.5746/LEiA/11/V2/I1/A09/Watkins_Wilkins

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. https://doi.org/10.1080/14703297.2014.1003954

Yousefi, M., & Nassaji, H. (2019). A meta-analysis of the effects of instruction and corrective feedback on L2 pragmatics and the role of moderator variables: Face-to-face vs. computer-mediated instruction. *International Journal of Applied Linguistics, 170*(2), 277–308. https://doi.org/10.1075/itl.19012.you

Ziegler, N. (2016). Synchronous computer-mediated communication and interaction: A meta-analysis. *Studies in Second Language Acquisition, 38*(3), 553–586. https://doi.org/10.1017/S027226311500025X

Appendix

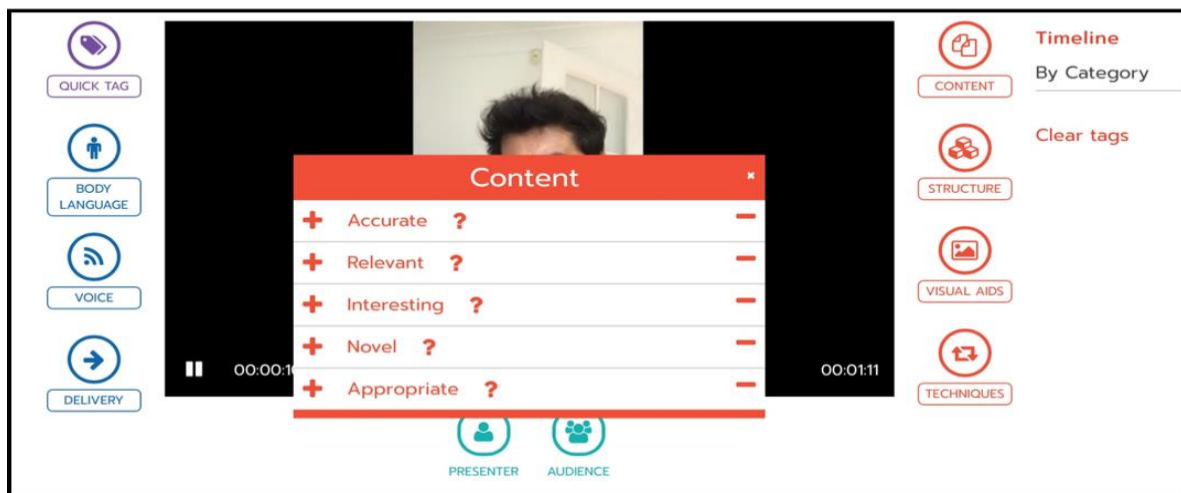VEO 'Presentation Feedback' Layout

Step 1: Once uploaded, you can play the video to leave comments on a relevant tagging
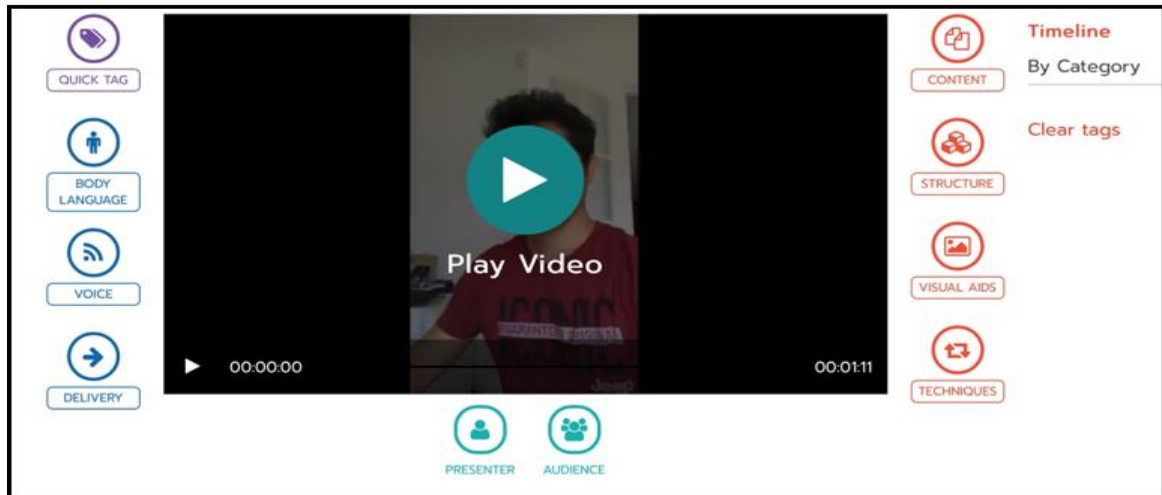
Step 2-1: Comment on your tags with the inbuilt feedback details (e.g., Delivery)
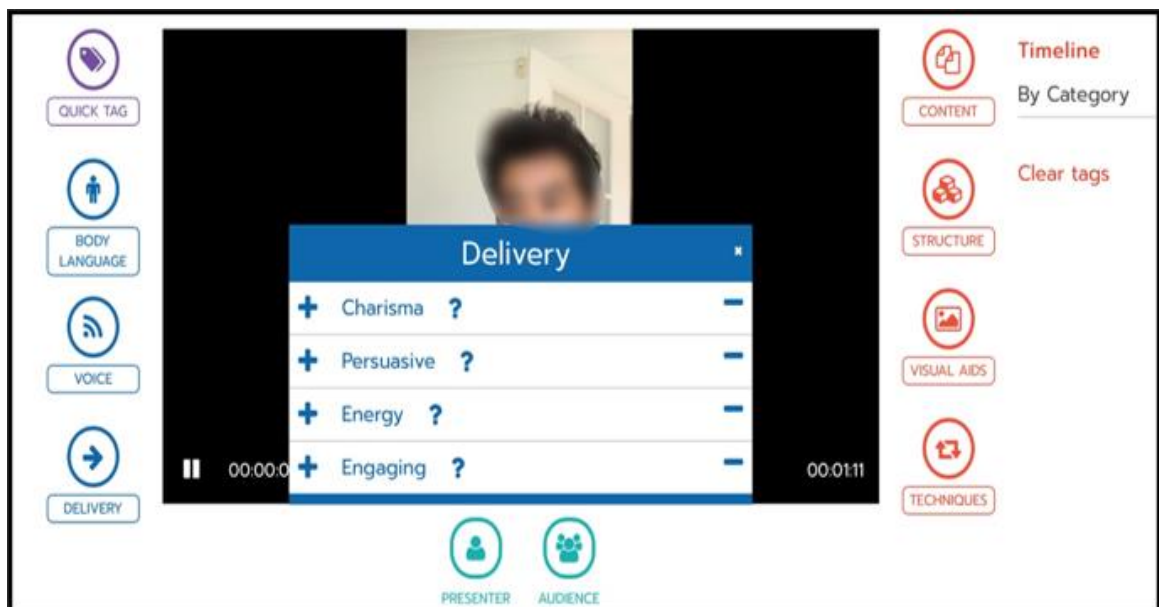
Step 2-2: Comment on your tags with the inbuilt feedback details (e.g., Contents)

Step 3: Add further detail to your feedback on the tag by clicking 'Notes' on the right

Step 4: Finalised feedback with written form with visual evidence of student performance