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# Not Just Listening to the Teacher's Voice: A Case Study of a University English Teacher's Use of Audio Feedback on Social Media in China 

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#### Abstract

A teacher's feedback is one of the most important aspects of student learning. Although feedback can arguably shift students from their current level toward their desired goals, students in higher education rate it as one of the least satisfactory areas partly because of the unidirectional nature of written feedback. This paper contains a case study of a university English teacher's use of audio feedback on a popular social media platform in China. This study includes an analysis of the teacher's audio feedback and follow-up interactions with the students on the popular WeChat application, teacher interviews, student reflective journals, and 10 classroom observations of student presentations. The study found that many features of the teacher's audio feedback contributed to student learning. The findings also reveal how the instructor's audio feedback on social media created opportunities for dialogic feedback by increasing student engagement with the comments and enhancing meaning negotiation, as well as how the teacher and students perceive the use of audio feedback. These findings are discussed in terms of creating dialogical feedback contexts for student learning, incorporating the use of audio feedback into teacher assessment literacy, and utilizing social media as an innovative platform for audio feedback. It concludes with implications for feedback practice in higher education and teacher assessment education.


Keywords: audio feedback, higher education, case study, social media, university English teacher, China

## INTRODUCTION

Feedback has been recognized as an important driver for student learning in higher education contexts. Despite its significance, feedback has remained one of the least satisfactory areas in students' university experiences (Gould and Day, 2013). Although many studies related such dissatisfaction to a low level of learner engagement with feedback (Evans, 2013), Nicol (2010) attributed it to an "impoverished dialogue" (p.501) in written feedback in mass higher education. Against the backdrop of massified higher education, feedback dialogue between students and teacher seem less likely to occur due to the constraints of large classes and limited resources available to students (Orsmond et al., 2013).

Research suggests that effective feedback needs to be timely, precise, and constructive (Shute, 2008), yet feedback in the written form typically is not timely (Hennessy and Forrester, 2014) due to many practical constraints. The questions regarding how to improve the student experience with feedback and how to bring out the benefits of feedback to student learning, therefore, have remained a critical issue in the research on educational assessment. In reaching out to a generation of
"digital natives," who are comfortable with web-based information in higher education, audio feedback as a means of aiding "the gaining and sharing of knowledge (and facilitating) discussions between students and tutors" (Orsmond et al., 2013, p. 243) needs to be considered as an alternative to traditional written comments.

Audio feedback, defined as "a digital sound file containing formative or summative verbal feedback given by the tutor" (Hennessy and Forrester, 2014, p. 778), has several advantages over written feedback (Carruthers et al., 2015). First, recent research suggests that it provided richer and more straightforward, detailed, and personalized feedback to students than written comments (Ice et al., 2007; Gould and Day, 2013; Hennessy and Forrester, 2014). It usually consists of deliberately chosen, uncomplicated vocabulary and sentences, which are easier for students to comprehend in comparison to written comments.

Second, the audio feedback may be positively perceived and better utilized by the students compared to written comments (Merry and Orsmond, 2008; Lunt and Curran, 2010; Parkes and Fletcher, 2017). Such positive perceptions are mainly because the audio feedback is more likely to provide suggestions regarding how to close the gap between the students' current performance and their desired goals, rather than just identifying the problems (Gould and Day, 2013). It may also increase student engagement with feedback because it may resemble a dialogue (Nicol, 2010), which students tend to reexamine (Hennessy and Forrester, 2014). Students are found to implement the audio feedback in different and more meaningful ways (Gould and Day, 2013). This greater engagement could be partly attributed to the tutor's care and a sense of community projected in the audio feedback. Hearing the tutor's voice might prompt the students to appreciate their supervisor's time and effort in formulating their feedback (Hennessy and Forrester, 2014). The tone of voice, motivational expressions, conversational style, nuance and details, and the tutor care add value to students as listeners and increase their sense of community (Ice et al., 2007; Savin-Baden, 2010; Gould and Day, 2013).

Third, the audio feedback can be a more time-efficient mechanism for teachers to provide a more timely and higher quality feedback (Ice et al., 2007; Hennessy and Forrester, 2014). In practical terms, 1 min of audio feedback may carry information equivalent to 6 min of written feedback (Lunt and Curran, 2010), which provide a comparatively more indepth assessment of the students' work than written comments (Gould and Day, 2013). Although this figure has been contested considering the time taken to save and upload the audio files (Morris and Chikwa, 2016), the faculty will find the audio feedback to be more time-efficient only if the teachers are technically literate, speak quickly, and use a convenient method for delivering the audio file (Rotheram, 2009).

Audio feedback also has some recognized disadvantages, most of which are associated with its administration processes. For example, the large size of the audio files and their incompatibility with some email systems were found to have confused students who struggled to access their feedback (Hennessy and Forrester, 2014). Other disadvantages include the reduced sound quality
of the audio feedback due to the reduced size of the audio files (Merry and Orsmond, 2008), difficulty in finding a quiet place for recording the feedback (Hennessy and Forrester, 2014), and the teachers' reluctance to use audio feedback due to their insufficient technology literacy (Cann, 2014). Considering that these disadvantages are mainly obstacles related to creating and delivering the audio feedback, it highlights the importance of media to the effectiveness of audio feedback. Although most of the prior studies have reported audio feedback delivered through email or other online learning systems, it is necessary to explore innovative media on which audio feedback could be efficiently created and delivered.

Since audio feedback is still an under-researched area, empirical evidence is needed to understand how the teachers use the audio feedback in their assessments, how they perceive it, and what benefits it brings to student learning. In addition, although the ways in which the teachers utilize the audio feedback fall into the scope of teacher assessment literacy (Xu and Brown, 2016; Xu and Carless, 2017), how teachers could improve their effectiveness in administering audio feedback has remained relatively underexplored. This study thus attempts to address these gaps by exploring a university English teacher's practice of using audio feedback on a popular social media site in China.

## STUDY CONTEXT

In recent years, social media has become a major means of communication, especially among young people. In China, WeChat, an all-in-one messaging app which also provides games, online shopping, and financial services, is the most popular social media site. One popular function in WeChat is group chat, which allows a group of people to send both written and audio messages that can be seen by all the group members. The audio messages on WeChat have a 1-min time limit; any message longer than that would be automatically split into two or more messages. Due to the nature of its instant messaging, WeChat's group functionality has been used increasingly by teachers and students in Chinese universities as an important means of communication within their classes.

The participating teacher ("Rosa," a pseudonym) works in a university that specializes in technology and teacher education in a city in southern China. She was chosen to participate in a larger project on teacher assessment literacy for several reasons. First, she was one of the high performers in a previously administered survey test of teacher assessment literacy with two standard deviations higher than the average ( Xu and Brown, 2017). Second, she had more than 10 years of teaching experience and was well recognized for her teaching excellence by her university. Black and Wiliam (1998) suggested that teachers with higher teaching efficacy perform better on assessments than their less confident peers. Third, she taught Comprehensive English to a class of 50 first-year undergraduates. Fourth, she volunteered to participate.

Comprehensive English is part of College English, a compulsory English curriculum for non-English-majors in their first or second year of university study in China. Classroom
assessments have become more common in College English. This is partly to downplay the importance of the College English Test Band 4 and 6 (CET 4 and 6) as exit proficiency tests and partly to mirror the formative and summative assessments prescribed by the College English Curriculum Requirements (CECR) (CMoE, 2007). In other words, the teachers need to conduct assessments for both learning and accountability purposes. Within this context, the university English teachers in China are increasingly expected to provide a formative feedback to the students on various classroom assessment tasks.

## METHODS

## Research Questions

To understand Rosa's use of audio feedback, this study addressed the following research questions:

> RQ1: What are the features of Rosa's audio feedback?
> RQ2: How do the audio feedback processes function? RQ3: What are the teacher and students' perceptions of the use of audio feedback?

## Data Collection and Analysis

This study was part of a larger project on teacher assessment literacy. Ethical approval was obtained from the Human Research Ethics Committee for Non-clinical Faculties at the University of Hong Kong. In the larger project, three sets of data were collected for each of the three case study teachers, including Rosa. The data were collected from (a) classroom observations with 35 h of video-recordings for Rosa's classroom practices and the author's field notes; (b) seven rounds of interviews with Rosa; and (c) documents which were collected to understand the teachers' assessment practices and their underlying assessment literacy, including course syllabi and lesson plans, assessment assignments, and teacher-student interactions via social media.

Part of the data from these three sources were used for this study. Both Rosa and her students gave their written informed consent to participate. All names appearing in this study are pseudonyms to protect the identities of the participants.

The primary data used for this study was Rosa's audio feedback and her follow-up interactions with the students on WeChat. A total of 10 rounds of audio feedback and follow-up interactions were collected from Rosa's WeChat records on her smartphone. With Rosa's consent, her group chat records with her students were fully transcribed. The transcripts were then sent back to Rosa for verification.

Then, with Rosa's consent, these audio messages were analyzed in three ways. First, each round of audio feedback was summarized in terms of its pattern. All patterns were then synthesized into a diagram that illustrates how the audio feedback worked in Rosa's practice. Second, the content of Rosa's audio feedback was analyzed inductively to summarize the important issues covered and their frequencies. Third, both Rosa's audio feedback and the students' audio responses were manually tallied to generate descriptive statistics about the number of audio messages, their average duration, and the average number of words in her audio feedback and in her students' audio responses.

The secondary set of data used for this study was collected from two rounds of interviews with Rosa, in which the audio feedback was discussed, and also from end-of-term journals, in which the students reflected upon their audio feedback. These two interviews were transcribed verbatim, and the transcripts were subjected to open and axial coding (Strauss and Corbin, 1998). In open coding, each line of the interview data was coded by labeling the topic being described. The open codes were then subjected to axial coding to identify the core categories that were closely related to the research questions, including the changes brought about by the audio feedback to the feedback processes and Rosa's reflections on her use of the audio feedback. Likewise, the reflective journals of the students were read, and excerpts of their perceptions of the audio feedback were extracted for further analysis. These excerpts were then categorized based upon two general themes: perceived benefits and challenges of audio feedback.

The third set of data used for this study was based on 10 sessions of classroom observations of student presentations, which provided supplementary evidence on whether and how student presentations may have improved after Rosa's audio feedback. Each of Rosa's audio feedback files was compared to the specific presentation to identify the application of her feedback. The percentage of the suggestions that were followed was then calculated manually for each round of audio feedback.

## Limitations

This study carries some limitations. First, although the students reported their positive perceptions of audio feedback in their reflective journals and student engagement of feedback was observed in the student presentations, how the audio feedback affected student learning in the long run was not explored. Second, as this study was based on one case teacher's practice, the usual cautions about potential generalization should be applied.

## FINDINGS

Rosa's feedback practices featured her use of audio feedback on a popular social media site. The findings were organized around the research questions: (a) Rosa's accidental use of audio feedback and its features; (b) the ways in which audio feedback functions; and (c) Rosa's and her students' perceptions of the use of audio feedback.

## Rosa's Accidental Use and Features of Audio Feedback

At the beginning of the semester, Rosa established a group chat on WeChat, which she intended to use as the main means for sharing important notices related to the course. Rosa shared how she accidentally discovered that audio feedback can be a handy substitute for written comments:

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FIGURE 1 | The pattern of Rosa's audio feedback.
him four messages on the WeChat group. I directed the messages to him with the "@." It just took me three minutes.
Researcher: How did they respond?
Rosa: The next morning when I turned on my phone, I found many audio messages popping up. A student . . . the group leader responded to my feedback. He thanked me. He also asked me other things, asking for me advice on the structure.
Researcher: So the student's response was quick.
Rosa: Yeah. Other group members responded as well. Then students from other groups joined in. The group chat was very active that day. I then thought that maybe I should use more audio feedback like this.
Researcher: Did you learn about using audio feedback before? Rosa: No.
Researcher: So you mean you just intuitively used audio feedback?
Rosa: Yes. Exactly. I am not sure whether I did it right, but it was quite convenient.
Two main benefits of audio feedback on social media can be inferred from the above excerpt. First, it was more efficient for the teacher (Rotheram, 2009). The audio feedback relieved Rosa from having to type written comments, which enabled her to deliver the feedback within a few minutes. Second, the transmission of audio feedback on social media engaged the students more quickly and with a larger scope. The students responded through audio messages on social media, which engaged not only the students who sent the slides for feedback, but also those from other groups whose work was not commented on. In addition, Rosa's use of audio feedback was mainly accidental and intuitive, which suggests a need for relevant training. Three dimensions of Rosa's audio feedback will be thoroughly discussed: patterns, issues uncovered, and descriptive statistics.

As Figure 1 illustrates, each round of Rosa's audio feedback usually was not unidirectional. Instead, it engaged students from both the presenting group and other groups. Their responses further elicited Rosa's elaboration on her feedback, which often led to more teacher-student and/or student-student discussions.

Another feature of Rosa's audio feedback was the diversity of issues covered. Table 1 shows that her feedback covered four areas: organization, content, mechanics, and presentation skills. Among them, the feedback on mechanics comprised the largest group (29.3\%), followed by the feedback on content (27.1\%), organization (25.4\%), and presentation skills (18.2\%). The examples from each category suggest that Rosa often gave

TABLE 1 | Issues covered by Rosa's audio feedback.

| Issues <br> covered | Description | Examples | Number (\%) |  |
| :--- | :--- | :--- | :--- | :--- |
| Organization | Feedback that focuses <br> on how students <br> organize the structure <br> of the presentation | "You need to follow a <br> structure, like, <br> introduction, main <br> argument, sub <br> arguments and | 89.4) |  |

feedback as direct instructions, which implied a need for followup actions and revisions.

To gain a more general picture of Rosa's feedback, descriptive statistics in comparison to the students' audio responses are presented in Table 2. The data suggests that the students' responses-both audio and written-outnumbered Rosa's audio feedback. It can be inferred that every piece of audio feedback can trigger an average of seven to eight student responses, and this can be considered as evidence of student engagement with feedback. However, the average duration of Rosa's audio feedback was much longer than the students'-probably because her feedback was more detailed, focused, and personalized based upon her evaluation of the students' presentation slides; students' audio comments, however, were mainly follow-up questions or direct responses to the teacher's advice. Being accessible multiple times, Rosa's audio feedback triggered student responses and created opportunities for dialogic feedback.

## Audio Feedback on Social Media as a Platform for Dialogic Feedback

To illustrate how the audio feedback on social media created opportunities for dialogic feedback, transcripts of the first feedback dialogue between Rosa and her students (with pseudonyms) on the WeChat group are presented below:

TABLE 2 | Descriptive statistics of Rosa's audio feedback and students' audio responses.

|  | Total <br> number | Total duration <br> (in seconds) | Average <br> duration per <br> message (in <br> seconds) | Average <br> number of <br> words per <br> message |
| :--- | :---: | :---: | :---: | :---: |
| Rosa's audio feedback | 351 | $4,422.6$ | 12.6 | 36 |
| Students' audio <br> responses | 2,104 | $12,834.4$ | 6.1 | 17 |
| Students' written <br> responses | 320 | NA | NA | 9 |

Written responses refer to the students' typed messages. Animated pictures were not included. NA means "not applicable."

Rosa: Because of time limits, here I briefly comment on the PowerPoint slides from John's group. @John
Rosa: Your topic is healthy diet. But what you need is a clearer argument. It should be a sentence, not a phrase. You can't simply give a list of foods in a healthy diet. These are facts, not an argument. @John
Rosa: The slides need a clear structure. First, you need an outline. After that, each part needs a topic sentence. When you finish, you need a conclusion. @ John
Rosa: Remember that when you present, you should have some interaction with the audience. Don't just read the slides. @John John: What do you mean that each part should have a topic sentence? Our original plan was to suggest to people to have a healthy diet. @Rosa
Rosa: Yes. You need to have a better argument. Why do you suggest that people should have a healthy diet? @John
Mary (from John's group): Because some students don't have a healthy diet. They don't eat breakfast, but they eat a lot at dinner. @Rosa
Rosa: Right. Do you have any evidence of a correlation between a healthy diet and academic performance? You should have a topic sentence in one part, like, a healthy diet is necessary for excellent academic performance.
Mary: I understand now. Can our main viewpoint be, "a healthy diet is very important"? @Rosa
Rosa: Yes, but I would suggest you narrow it down. This argument is very general. Discuss with others.
Rosa: Also, very important: There are too many slides. You need to reduce the number of slides. And there are too many words on each slide. Make sure the point size is big enough for everybody to see. The animated pictures should not be too abrupt.
Hank (from John's group): Could we read from our notes when we present? Thank you!
Rosa: You could bring your notes with you just in case, but don't read them. Try your best to speak naturally. @Hank
Tina (from other groups): Wow! A lot of audio messages to listen to this morning. You worked so late last night, Rosa. We really appreciate it. @Rosa
Max (from other groups): Teacher, could we present on "studying abroad" in the next unit? We want to introduce some useful tips for studying abroad. @Rosa

Rosa: Yes, you can. But make sure your content is relevant to your classmates. You may introduce how to apply for a graduate program at a university abroad. @Max
Max: O.K. Thanks a lot! @Rosa
Key meanings could be gleaned from this conversation on WeChat. First, Rosa's audio feedback was directed along three dimensions: content, organization, and presentation skills. She reminded the students of the need for relevant content, logical structure, and interaction with the audience. Second, the students in that group quickly responded to the teacher's feedback with further questions and requests for clarifications. This indicated a high level of engagement with the feedback. In addition, the group members seemed to have developed a dialogue with the teacher and among themselves. Third, students from other groups joined in the discussion at different levels: some asked for advice on their own topics while others simply expressed their appreciation for the teacher's commitment. Interestingly, the audio feedback initiated by Rosa was later turned into a dialogue that engaged many of the students to respond to the teacher's feedback and to think about issues that required further advice and clarification. This dialogue was made possible partly through sustained student engagement with audio feedback, as evidenced by the active participation of the students in the group chat.

Rosa's spontaneous, unplanned use of audio feedback was later developed into a daily routine. She used it regularly for commenting on the students' presentation slides and giving additional feedback based on their in-class performances. Although most of Rosa's audio feedback and her students' audio responses were similar to those in the first round of interactions, one exception was found in the third round of feedback, in which the presentation group did not agree with Rosa's comments:

Rosa: Attention, group 3, my comments on your presentation slides are as follows: First, you need to rewrite your outline of this presentation in a more specific way.
Rosa: Currently, you wrote "Introduction, major argument and conclusions." It's not O.K. You need to explicitly tell us what your introduction is, etc.
Rosa: Second, your supporting evidence is not enough.
Rosa: Your major argument is, "Smartphones should not be banned in university classrooms," yet your supporting evidence is limited to the teacher's perspective.
Rosa: I hope you could also support the argument from the perspective of student learning.
Rosa: Another important issue about supporting evidence.
Rosa: You can't simply express what you think. You need to quote from authoritative resources. They could be newspapers, research journals, authoritative websites, etc.
Rosa: My last comment is in regard to the conciseness of words on the slides. Make sure that they are as simple as possible. Don't fill the slide with words.
Rosa: Make sure all the spellings are correct. You had a few typos. Check the grammar of the sentences. Some of the sentences lack modal verbs.

Rosa: Also, maintain eye contact with the audience. Make sure you talk; don't read the slides. Jerry, please remind your group members. @ Jerry
Tina (from group 3): Rosa, I have a question. You said we should quote from newspapers, etc. But I think our voices are also important. @Rosa
Tim (from group 3): Teacher, could you explain more?
Lynn: I also want to know.
Rosa: @Tina @Tim @Lynn Thanks for your response. I mean you need to cite authoritative sources to make your argument more convincing.
Tina: Thanks. But we want to collect our classmates' opinions and use them to support our argument. Is it O.K.?
Rosa: In that case, it is data-based evidence.
Rosa: You need to explain how you collect and analyze data. This will help the audience trust your data. They will think, "oh, that's serious" - not just some casual numbers. @Tina @Tim
Tim: Do you mean we can use our views as supporting evidence? Rosa: Yes, as long as you can prove to your audience that it's reliable. @Tim
Lynn: Could you give us an example?
Rosa: O.K. Will send you an example later. It should look like a mini-study.
Rosa: The key thing is, you need to tell your audience how you collect and analyze your data - data from you and your classmates.

This long excerpt is a good example of how Rosa's audio feedback on social media provided a platform for dialogic feedback for negotiation between the teacher and the students. Although the students from Group 3 accepted most of her feedback, they disagreed with Rosa in terms of not using their own views as supporting evidence. At the students' request for clarification, Rosa further elaborated on the reasons why personal views cannot be used. This elaboration calibrated Rosa's earlier statement and clarified to the group how they could use their views as reliable data to support their argument. This conversation well illustrates that the dialogic feedback between Rosa and her students was made possible through successful meaning negotiation.

Although many excerpts from Rosa's audio feedback and her students' responses are not presented here due to space limitations, the students' implementation of Rosa's audio feedback is shown in Table 3. The data indicates that the level of student engagement with the audio feedback was highespecially related to the issues of organization, content, and mechanics on which 70 to $80 \%$ of Rosa's audio feedback was based. Although it has remained unknown why the enactment level of audio feedback on oral presentation skills is relatively low, one possible explanation is that one's oral presentation skills were less likely to be improved in such a short period of time.

## Rosa's and Her Students' Perceptions of the use of Audio Feedback

Data from interviews with Rosa and the students' reflective journals are presented here to help understand their perceptions of the use of audio feedback. Rosa discussed her perceptions:

TABLE 3 | Student enactment of audio feedback in oral presentations.

| Issues <br> covered | Organization <br> (feedback <br> enacted/total <br> feedback) | Content <br> (feedback <br> enacted/total <br> feedback) | Mechanics <br> (feedback <br> enacted/total <br> feedback) | Presentation <br> skills (feedback <br> enacted/total <br> feedback) |
| :--- | :---: | :---: | :---: | :---: |
| Group 1 | $4 / 10$ | $4 / 9$ | $5 / 5$ | $2 / 6$ |
| Group 2 | $3 / 11$ | $7 / 11$ | $7 / 7$ | $2 / 8$ |
| Group 3 | $3 / 3$ | $11 / 13$ | $4 / 5$ | $2 / 2$ |
| Group 4 | $5 / 7$ | $2 / 6$ | $8 / 11$ | $3 / 5$ |
| Group 5 | $6 / 8$ | $11 / 12$ | $7 / 9$ | $4 / 4$ |
| Group 6 | $9 / 9$ | $10 / 10$ | $13 / 13$ | $5 / 9$ |
| Group 7 | $11 / 12$ | $6 / 7$ | $11 / 16$ | $6 / 10$ |
| Group 8 | $4 / 8$ | $7 / 8$ | $12 / 14$ | $4 / 7$ |
| Group 9 | $11 / 13$ | $10 / 10$ | $7 / 8$ | $3 / 8$ |
| Group 10 | $8 / 8$ | $9 / 9$ | $12 / 15$ | $4 / 5$ |
| Total | $64 / 89$ | $77 / 95$ | $86 / 103$ | $35 / 64$ |
| implementation | $(71.9 \%)$ | $(81.1 \%)$ | $(83.5 \%)$ | $(54.7 \%)$ |


#### Abstract

Researcher: What do you think of the audio feedback you used this semester? Rosa: I found it very effective. Researcher: In what way? Rosa: It aroused students' interest in responding to my feedback. If I gave them written comments via email, I didn't know whether they read it or not. But my audio feedback on the group chat was responded to very quickly. It's very convenient for me to provide feedback on WeChat. I can "@" anyone, individuals or the whole class. Researcher: Are you satisfied with the degree of their feedback utilization? Rosa: Yes. Definitely. I repeated the four criteria many times: organization, content, mechanics and presentation skills. They seem to get it. They did it better and better - especially the last few groups.


Rosa's experience with audio feedback was largely positive. The benefits she perceived included increased student engagement, convenient feedback delivery, and improved oral presentations. These positive perceptions were justified by the high levels of student responses to audio feedback presented earlier. Meanwhile, the students were either motivated by or involved in the teacher's audio feedback, since it was tagged with the "@" function commonly used on social media. In this sense, every audio feedback message could be precisely directed to the specific students who were supposed to hear it. It also could benefit other students who took the initiative to engage with it. Rosa's perception of the improved quality of presentations also was confirmed by the high level of enactment of her feedback, as depicted in Table 3.

Similarly, the student reflective journals suggest that most students thought highly of the value of audio feedback, while a few felt less satisfied with it. These findings correspond with Gould and Day's (2013) observations about students' positive attitudes toward audio feedback. Three selected excerpts are presented below:


#### Abstract

The audio feedback on WeChat is useful. We finally used WeChat for learning - not for chatting or killing time. I listened to every message, and sometimes I listened to some of them more than once. It's not just listening to the teacher's voice. I particularly like to hear how the teacher responded to some classmates' questions. The interactions helped me think. - Jane

When we prepared our presentation, we re-listened to our teacher's audio messages. Audio feedback is more detailed because the teacher talks. It helped us better understand what she meant. And she repeated many times that we should have a clear structure. We then avoided many problems that our classmates had made. Mike

Hearing the teacher's voice is good. I like her way of telling us directly what we should do. We could ask questions and get the teacher's immediate response. - Luke


These three students' reflections clearly reconfirm the benefits brought about by audio feedback, which goes beyond just listening to the teacher's voice: turning social media into a useful platform for genuine learning, allowing repeated access to teacher feedback, and enabling students to reach a greater understanding of how their work has been assessed. Considering that the audio feedback only required Rosa's modest investment of time and effort, it appears to be an efficient form of feedback that can engage students and facilitate learning-particularly when executed on a popular social media platform.

Despite these benefits, two students mentioned a few challenges they faced with the audio feedback on WeChat:

I like audio feedback, but sometimes it was time-consuming. If the teacher gives me written comments, I can finish reading them within a few seconds. Now it took me many minutes to listen to all feedback and classmates' responses. (Linda)

I am not used to talking to the teacher and other classmates on WeChat. I prefer to communicate with them via email or other means. (Jill)

While the second excerpt only suggests the student's personal preference for written communication, the first excerpt points to one possible challenge of audio feedback: the longer time commitment required for students to access the audio messages in comparison to written ones. Although the audio feedback may be perceived as efficient from the teacher's perspective (as Rosa's stated), it is inevitable that it might be more time-consuming to the receivers (i.e., the students). Considering that this complaint was not echoed by other students, it is assumed that most students enjoyed and benefited from repeated listening to the audio feedback.

## DISCUSSION

Rosa's audio feedback through a popular social media platform indicated her efforts to improve the effectiveness of feedback, which is in essence achieved through creating a dialogic feedback context. While being available for students' multiple access through the replay option, her audio feedback on social media also engaged students with feedback and motivated them to participate in dialogues and meaning negotiation with the teacher
and their peers in the virtual community. This corroborates prior studies which found that feedback was most effective when it was cyclical and involved a dialogue (Carless et al., 2011; Boud and Molloy, 2013). Rosa's use of audio feedback highlighted the importance of the mode and means of feedback (i.e., audio feedback on a social media platform) in constructing a dialogic feedback context. Though similar to written comments as unilateral input, audio feedback-when executed on social media-is arguably different as it creates a dialogic feedback context through relational bonding and cognitive reinforcement.

First, audio feedback on social media can build relationships between the teacher and students. As indicated in their responses on WeChat, Rosa's students unanimously expressed gratitude for the teacher's efforts in sharing the audio feedback. This was remarkable since the audio feedback took Rosa less time than composing written comments. Earlier studies also have found that hearing the teacher's voice may prompt students to appreciate the time and effort involved in formulating the feedback (Hennessy and Forrester, 2014). Further, the perception that the teacher cares increases the students' sense of community (Savin-Baden, 2010). The teacher's voice, when compared to written comments, may carry more weight and display his or her commitment to the students. The relational bonding prompts the students to respond, which in turn leads to a virtuous cycle of more responses from students and more feedback from the teacher. Although the importance of relationships in feedback interactions and the potential for the educational alliance to influence the use of feedback have been discussed in prior studies (e.g., Savin-Baden, 2010), this case reaffirms that the mode of feedback (i.e., audio) can help strengthen the relational bonding between the teacher and students, which will facilitate a positive context for dialogic feedback.

Second, audio feedback offers potential opportunities for cognitive reinforcement with high levels of student engagement and feedback enactment. Such opportunities are realized partly through students' replaying an audio message and responding to a teacher's feedback. When the audio feedback was released in the chat group in Rosa's case, most of the students would listen to the messages-presumably out of curiosity. They were then inevitably involved in comprehending the feedback, which may have increased their engagement with feedback. Their follow-up responses to the teacher's audio feedback as well as their high level of feedback enactment suggest that most students were engaged in thinking about the feedback and incorporating it into their presentations-even when the comments did not target their own work. This finding indicates that audio feedback can trigger peer feedback on the work done by others and open the floor for dialogic feedback among students. It extends the scope of audio feedback from knowledge sharing and discussion between students and tutors (Orsmond et al., 2013), to similar knowledge sharing and dialogues among peers.

Similar to the cognitive and social-affective dimensions in Yang and Carless' (2013) conceptualization of the dialogic feedback processes, the relational bonding and cognitive reinforcement served as two conditions for creating a dialogic feedback context. Further, this contributes to their conceptualization by clarifying the role of the feedback mode
in structuring the feedback processes. In other words, the mode of feedback could in many ways predict whether or not the content of the feedback was well delivered, and also whether the interpersonal negotiation of feedback can be reached. Rosa's case indicates that audio feedback can be an excellent way to structure a dialogic feedback context through strengthening relational bonding and cognitive reinforcement.

Another issue that warrants discussion is how to enhance teacher awareness and competency in effectively using audio feedback-one area of teacher assessment literacy ( Xu and Brown, 2016). Although her audio feedback on social media has increased student engagement with feedback and created a context for dialogic feedback, Rosa's use of WeChat messaging to communicate with her students was both accidental and intuitive. Her confession that she had not learned how to use audio feedback suggests a need for enhancing teacher assessment literacy. Such improvements can be achieved through various professional opportunities, such as workshops, coursework, and school-based training, and they can be directed along various dimensions, such as developing quality assessment criteria, using appropriate oral language to address particular students, and constructing sustainable feedback dialogues.

The findings of this study also contribute to the literature by highlighting social media as a beneficial means for audio feedback. Considering that many of the reported disadvantages of audio feedback were caused by its administration processessuch as the size of audio files and incompatibility with email systems (Hennessy and Forrester, 2014), low sound quality of the audio files (Merry and Orsmond, 2008), and having difficulty in locating a quiet place to record the audio files (Hennessy and Forrester, 2014)-the findings suggest that social media (e.g., WeChat) can overcome these weaknesses as it provides an excellent platform for the recording, delivery, and storage of audio feedback.

As many popular social media platforms are currently inaccessible in China, it is not yet known whether Rosa's success with audio feedback on WeChat is transferable to audio feedback on other social media, such as Facebook, Twitter, and Instagram. More empirical studies are needed to explore audio feedback using other forms of social media if generalizations are to be made about its importance and effectiveness.

## CONCLUSIONS

This study explored the use of audio feedback on social media through a case study of a university English teacher in China. The

## REFERENCES

Black, P., and Wiliam, D. (1998). Assessment and classroom learning. Assess.Educ. 5, 7-74.
Boud, D., and Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. Assess. Eval. Higher Educ. 38, 698-712. doi: 10.1080/02602938.2012.691462
Cann, A. (2014). Engaging students with audio feedback. Biosci. Educ. 22, 31-41. doi: 10.11120/beej.204.00027
findings suggest that Rosa's audio feedback on social media had many features that contributed to student learning. Her feedback served as a platform for dialogic feedback and was positively perceived by both the teacher and the students. These findings suggest the importance of creating a dialogic feedback context to improve the feedback processes, enhance the awareness and competency of audio feedback as part of teacher feedback literacy, and utilize social media as useful media for audio feedback.

This study has implications for both professional development and practice. There is a need for joint efforts by the teacher educators and educational assessment specialists in professional development activities to ensure the effective use of audio feedback. Such activities should guide the teachers in both conceptual and technical dimensions. Conceptually, the teachers need guidance in terms of how to create a dialogic feedback context for student learning through audio feedback on social media. Technically, the teachers need to be supported in choosing and using the appropriate social media for audio feedback delivery, and they need to know how to utilize this platform to engage student learning. In practice, the findings from this study encourage those teachers who have been frustrated by low levels of feedback engagement with their students to utilize the audio feedback on social media as an alternative means of facilitating dialogues with students and improving their students' feedback utilization.

## ETHICS STATEMENT

This study was carried out in accordance with the recommendations of Research Ethics in Social Science, Ethics Committee of the University of Hong Kong. The protocol was approved by Ethics Committee of the University of Hong Kong. All subjects gave written informed consent in accordance with the Declaration of Helsinki.

## AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and approved it for publication.

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[^1]Evans, C. (2013). Making sense of assessment feedback in higher education. Rev. Educ. Res. 83, 70-120. doi: 10.3102/0034654312474350
Gould, J., and Day, P. (2013). Hearing you loud and clear: student perspectives of audio feedback in higher education. Assess. Eval. Higher Educ. 38, 554-566. doi: 10.1080/02602938.2012.660131
Hennessy, C., and Forrester, G. (2014). Developing a framework for effective audio feedback: a case study. Assess. Eval. Higher Educ. 39, 777-789. doi: 10.1080/02602938.2013.870530
Ice, P., Curtis, R., Phillips, P., and Wells, J. (2007). Using asynchronous audio feedback to enhance teaching presence and students' sense of community. J. Asynchr. Learn. Net. 11, 3-25.
Lunt, T., and Curran, J. (2010). "Are you listening please?" The advantages of electronic audio feedback compared to written feedback. Assess. Eval. Higher Educ. 35, 759-769. doi: 10.1080/02602930902977772
Merry, S., and Orsmond, P. (2008). Students' attitudes to and usage of academic feedback provided via audio files. Biosci. Educ. 11, 1-11. doi: 10.3108/beej.11.3
Morris, C., and Chikwa, G. (2016). Audio versus written feedback: exploring learners' preference and the impact of feedback format on students' academic performance. Active Learn. Higher Educ. 17, 125-137. doi: 10.1177/1469787416637482
Nicol, D. (2010). From monologue to dialogue: improving written feedback processes in mass higher education. Assess. Eval. Higher Educ. 35, 501-517. doi: 10.1080/02602931003786559
Orsmond, P., Maw, S. J., Park, J. R., Gomez, S., and Crook, A. C. (2013). Moving feedback forward: theory to practice. Assess. Eval. Higher Educ. 38, 240-252. doi: 10.1080/02602938.2011.625472
Parkes, M., and Fletcher, P. (2017). A longitudinal, quantitative study of student attitudes towards audio feedback for assessment. Assess. Eval. Higher Educ. 42, 1046-1053. doi: 10.1080/02602938.2016.1224810
Rotheram, B. (2009). "Sounds Good: Quicker, Better Assessment Using Audio Feedback." Final Report - Version 1. (Accessed April 3, 2016). Available online
at: http://www.jisc.ac.uk/publications/reports/2009/soundsgoodfinalreport. aspx\#download
Savin-Baden, M. (2010). The sound of feedback in higher education. Learn. Media Technol. 35, 53-64. doi: 10.1080/17439881003671128
Shute, V. J. (2008). Focus on formative feedback. Rev. Educ. Res. 78, 153-189. doi: 10.3102/0034654307313795
Strauss, A., and Corbin, J. (1998). Basics of Qualitative Research. Techniques and Procedures for Developing Grounded Theory. Thousand Oaks, CA: Sage Publications.
Xu , Y., and Brown, G. T. L. (2016). Teacher assessment literacy in practice: a reconceptualization. Teach. Teach. Educ. 58, 149-162. doi: 10.1016/j.tate.2016.05.010
Xu, Y., and Brown, G. T. L. (2017). University English teacher assessment literacy: a survey-test report from China. Papers Lang. Test. Assess. 6, 133-158.
Xu, Y., and Carless, D. (2017). 'Only true friends could be cruelly honest': cognitive scaffolding and social-affective support in teacher feedback literacy. Assess. Eval. Higher Educ. 42, 1082-1094. doi: 10.1080/02602938.2016.1226759
Yang, M., and Carless, D. (2013). The feedback triangle and the enhancement of dialogic feedback processes. Teach. Higher Educ. 18, 285-297. doi: 10.1080/13562517.2012.719154

Conflict of Interest Statement: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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[^0]:    Researcher: How did you decide to use audio feedback?
    Rosa: Actually, I used it accidentally when one student sent me his group's PowerPoint slides late at night. I was too tired to type my comments. I thought of a WeChat group. I reviewed his slides on my computer, and I talked into my phone and sent

[^1]:    Carless, D., Salter, D., Yang, M., and Lam, J. (2011). Developing sustainable feedback practices. Stud. Higher Educ. 36, 395-407. doi: 10.1080/03075071003642449
    Carruthers, C., McCarron, B., Bolan, P., Devine, A., McMahon-Beattie, U., and Burns, A. (2015). "I like the sound of that" - an evaluation of providing audio feedback via the virtual learning environment for summative assessment. Assess. Eval. Higher Educ. 40, 352-370. doi: 10.1080/02602938.2014.917145
    CMoE (2007). College English Curriculum Requirements. Beijing: Foreign Language Teaching and Research Press.

