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KEY TECHNOLOGIES THAT CAN IMPACT IN 21ST CENTURY TEACHING AND LEARNING WITH A FOCUS ON FEEDBACK

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Abstract

Developing technologies that enhance both teaching and learning is the major challenge for education in the twenty-first century. Several factors would determine an adult's learning preferences, including their familiarity with new technologies, their attention span, and how capable they are of handling multiple tasks. For students to be ready for their respective fields, universities and colleges need to use their resources.

Both the teaching activities from which they originated, and the future teaching activities they may prompt, illustrate how technology is integral to the work of L2 professionals in the 21st century, both in their practice, their creations of materials, and even in how they conceptualize the profession. What are the core competencies that technology-related teachers should possess to effectively and critically engage in technology-related issues as a profession in a world that depends heavily on it and is connected to it?

Keywords: twenty-first century, Teaching activities, Major challenge.

Introduction

Detailed studies have been conducted on feedback delivery since the 1990's. A big debate is still raging about the legitimacy of feedback. Since the 1990s, educational research and pedagogy have significantly changed the way teachers provide feedback, with peer feedback and writing workshops often supplementing the teacher's written comments. Research has not overwhelmingly supported feedback as a model for student learning, and teachers believe that they are not making full use of it.

This paper outlines how technology is used for giving feedback which may work best for different learners. Specifically, we discussed teacher written and oral feedback as well as recent research related to feedback on L2 students' writing .Technologies that are related to feedback are discussed and contrasted. A summary of best practices for learner preferences and technological literacy is provided. It examines how this technology could contribute to student learning within major disciplines. Educational outcomes can be used as a measure of quality.

In the field of the second language (L2) teaching, feedback is widely recognized as being crucial for encouraging and consolidating the learning process. It plays an important role in process-based classrooms, where students' control of their writing skills is grown through

it, as well as in genre-oriented classrooms that use scaffolding techniques. (Hyland and Hyland).

Literature Review:

Writing teachers began using recordings of their students' writing to give audio feedback to them as early as the 1970s (e.g., Klammer, 1973; Kahrs, 1974; Logan et al., 1976; Hays, 1978). A decade later, as digital technology began to emerge (e.g., Pearce & Ackley, 1995; LaFontana, 1996; Anson, 1999), digital audio feedback for writing emerged (e.g., Pearce & Ackley, 1995). Using feedback from university instructors on about 600 papers, Stern and Solomon (2006) studied feedback and comments from a large number of courses. Instead of comments on organization and expansion of ideas, the most comments were regarding errors in spelling, grammar, and word choice. The instructors believe that, despite the importance of the smaller mechanical issues in writing, their over-reliance on these and the absence of commentaries based on the instructor's holistic ideas may cause their quality to deteriorate. (Solhi and Eğinli)

In a study, Macgregor, Spiers, and Taylor (2011) examined how audio feedback can enhance formative assessment and, thus, affect students' learning through the use of the Wimba VoiceTM platform. On audio-taped learning activities, those who did not get feedback performed better than those who received feedback. As a result, the differences between the groups were not statistically significant. The experimental group also did not demonstrate any gains in its learning. Students prefer written remedial comments, according to Johnson and Cooke (2015).

Detailed studies have been conducted on feedback delivery since the 1990's. A big debate is still raging about the legitimacy of feedback. Screencasting offers the most powerful impact since it combines visual and aural feedback. Richard Maya combined both components and found that the effect was profound.

Technology:

Video feedback on student writing has attracted considerable attention via screencast, which is a digital recording of computer screen output. Using video feedback in the teaching of process-based EFL writing was investigated by *Ozkul and Ortaçtepe (2017).

Screencasts are a fundamentally useful tool in teaching out of many tools available in educational technology. Students can benefit from screencasts in both distance and traditional learning environments since they provide an engaging and student-centred learning experience. Teachers can digitally record any instructional activity performed on a computer screen using screencasts (figure:1), which can serve as an instructional resource, learning task, and instructional support.

Figure 1: screen recording

Out of all the educational technology tools available, screencasts are a fundamentally useful one. Since screencasts offer an engaging and student-centered learning experience, they are suited for distance learning as well as traditional learning. Screencasts can be further used as a digital recording of instructional activities performed on a computer screen as an educational resource, as a learning task, and as a support for classroom instruction in online classes. Podcasts are also used to maximize the effect of video for feedback like vocaroo tool.

The following link help to show how to download and use this technology

https://www.youtube.com/watch?v=K3wqlKDnWv0 (htt13)

Video is permitted for five minutes in the free version of tools and ten minutes in Camstudio.

Tools are available both free and paid

Table 1.1 free and paid screencast tools

Free version	Paid version
Screencast o Matic	Snag IT($30 LIFETIME)
Cam studio	Camtasia ($179)
Jing	Adobe captivate
Screenr	Articulate
	Screen Flow

Research Questions:

Are the video feedbacks beneficial to the students?

How are they used by the students?

What makes them engaging?

How many more corrections have been made?

How is feedback different from other types of feedback?

Would it be more dialogic if it were more interactive?

Method:

Although students, teachers, and scholars are generally in agreement that constructive feedback is needed to revise writing, little consensus exists on how and when to provide feedback and the most effective form of feedback (Weigle, 2014). There are three ways to provide writing feedback: written comments, individual conferences, and recorded oral feedback. With the advances in technology over the last decades, recording comments and other digital means of feedback have opened up new possibilities for feedback.

Recorded oral feedback on writing was examined in this study for English as a foreign language (EFL) students in Hyderabad in engineering college. In so doing, two types of feedback were given to the learner writing in two groups, audio-recorded comments and metalinguistic written corrections. A month intervention with two types of feedback to the participants' writings (e.g., recorded oral feedback and writing- feedback). Participants who received audio-recorded comments outperformed their counterparts in content, organization, and clarity whereas there was no significant difference observed in sentence-level accuracy and clarity.

Screencasting tools could support researchers in working on a variety of items. Extensive research has already been done in the UK, Norway, Canada, and the USA. When providing feedback, we focused on common spelling errors, verb forms, and confusing words or phrases. Model answers could also be provided while sharing video feedback via screencast o matic.

Procedure:

No ethics approval is required for this study. We introduced cause and effect writing and narrative writing in three writing classes. The experimental group received oral feedback, while the control group received written feedback. Students were guided through the phases of writing. As a classroom activity, students write in four distinct phases (planning, drafting, revising, and editing), as well as three related stages (responding, evaluating, and posting).

The first step to getting started is planning. To generate more ideas, we can use group brainstorming, clusters, and generating what-if questions before we go to the next step, drafting. By the end of the second stage; the students are

not preoccupied with the accuracy and neatness of the draft, but rather pay more attention to the fluency of the writing. As part of the first intervening stage, the teacher gives an initial response to students' drafts before proceeding to the third stage: revising. Based on the feedback given during the first intervening stage, students should revise their writing. Instead of checking only for language errors, the revising stage also considers global content and organization. Editing is a fourth stage where students tidy up their texts before the teacher evaluates them. Also at this stage are accuracy and discourse evaluated. These are followed by the evaluating and post-writing stages. Writing is evaluated on an analytical or holistic basis in the first stage, and can be evaluated on an individual level in the second level after which it is ready for publication.

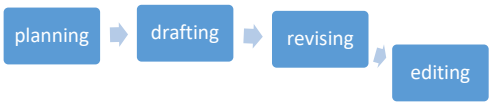

Figure 1.2: writing process

Students were required to produce at least three essays based on the two different types of feedback they received (i.e., recorded oral feedback and metalinguistic WCF) from the same teacher. For four weeks, they took a writing class that lasted for two hours each week. In the essay assessment rubric, students were assessed according to four components: content, organization, style, and mechanics.

Students submitted their written assignments online or may record a video then giving feedback in a video form has revolutionised the teaching -learning process. Students could get it in one click. They would be listening and visualising which also helps them to retain it longer in their memories.

We could deliver 120 words per minute in speaking, which is much more efficient than writing, which is virtually impossible. It becomes more convenient. These key moments carry us to another level. It makes both teachers and students feel more connected. This provides scaffolding in the process, which is mostly needed.

Results:

A pre-test, consisting of a narrative essay, was administered to students. Students were given 30 minutes to complete the test. Based on the rubric, each student's writing was evaluated based on its content, organization, style, and mechanics. Using a t-test analysis of variance, there was no distinction between the scores of the control (M = 14.18, SD = 2.75) and experimental (M = 15.62, SD = 3.00) groups for their content. For organisation, style and mechanics there were varying scores in both the groups.

Participants in the experimental group revised their productions more effectively when they received video-mediated feedback rather than written feedback in the next class.

Feedback, Reflection, and Revision

Technology can make it easier for teachers to give students feedback about their thinking and for students to revise their work. Screen capture technology was used for all feedback. Students felt it was more personalized, which attributed to their higher motivation level. Written feedback from either teachers or students is not at all commendable since it is time -consuming and does not provide constructive feedback.

This feedback provided students with the same convenience as a teacher-student face-to-face explanation. Students could come back to this feedback all the time, proving it to be more engaging and dialogic in a chatty style. As students saved the files, they could review them later. This feedback is especially useful for Distance Learning programs.

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Providing students with such feedback provided the same convenience as teaching face-to-face. It would prove to be more engaging and dialogic

in a chatty style over time if students could refer back to this feedback frequently. Students could save the files and review them later. Distance Learning programs will benefit from this form of feedback. Flipping the classroom and blending learning concepts will also benefit from this form of feedback.

Using this technology poses the following challenges:

- Problems that are technical in nature
- Inability to understand how to use technology
- Aspects of policy

Conclusion:

Among the technologies relevant to education, screencasting probably tops the list. This method has a wide range of uses. The absence of teachers may pose a serious problem since pandemics may arise in the future. Students rate these types of feedback as more accurate and nuanced than written feedback. It gives them more inspiration and motivation to complete their assignments. Additionally, learning dividends increase, as do opportunities for processing feedback and achieving a close relationship with the teacher.{Ruffini, 2012 #8}

- Distance and traditional learning environments alike can make use of screencasts to provide students with a student-centred and engaging learning experience.
- Instead of searching through the thousands of educational screencast videos available on the web, instructors can create their screencasts that align with lesson objectives, goals and assessment practices.
- An effective educational screencast is not only a combination of careful planning and editing, but also a thoughtful reorganization of lesson elements, elimination of awkward parts, and a focussed, easy-to-follow presentation that will accommodate students' time constraints.

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