

## AUDIOVISUAL FEEDBACK: A WORTHWHILE PRACTICE?

Let's face it: marking students' papers is tedious, especially when we are not sure if the process has any inherent value. How many teachers have ever felt the frustration of seeing their students take back their assignment, glance at their grade, and immediately dismiss it, resuming their conversation with a neighbour? Rather than penning long comments that may well not be understood, or even read, would it not be infinitely more effective to correct each assignment *in the presence* of your students, privately and one-on-one, explaining in detail what changes you have made, and why? While the answer to this question is almost certainly "yes", how can all the space and time constraints of such a practice be overcome?

While seeking a solution to this problem, we discovered observations made by Julie Roberge (2001, 2008) on the advantages of verbal feedback on cassette, and decided to make use of digital technology to add a video dimension. Accordingly, we located the tools that allowed us to correct assignments onscreen, while simultaneously recording an audio commentary, and gave the video to our students. Thanks to this ingenious system, students were able to participate in the correcting process in real time, as though they were sitting right beside us.

This audiovisual-feedback technique was tested as part of our PAREA research project entitled *Intégration des TIC et motivation en français*<sup>1</sup> (Cabot and Lévesque 2014). Over the course of the project, some information and communication technologies (ICTs) were used in a variety of ways throughout an entire session of a French-upgrade course. Twice during that time, students had to hand in an essay (formative assessment) as a Word file. In return, they were sent a hyperlink by e-mail giving them access to a video they could watch in real time, with their assignments, on screen and the instructor commenting on the corrections made. While, at the outset, we had not planned specifically to measure the effects of this practice on student motivation, we had to acknowledge that the technique clearly stood out by the spontaneous, enthusiastic reactions it produced. The next few paragraphs therefore



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describe the technique and the consequences it may involve, for students and teachers alike. It would also be extremely thought-provoking to explore the possible applications and benefits of this practice on disciplines as diverse as languages, science, math, and so on.

### WHAT IS AUDIOVISUAL FEEDBACK?

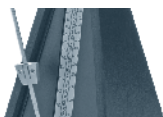
Insofar as it should allow students to access the accounts and questions of the evaluating instructor as authentically as possible, audiovisual feedback requires no preparation or subsequent editing. This, of course, has the measurable advantages of not increasing workload, as teachers do not have to spend more time correcting on video than they would using "traditional" methods.

Audiovisual feedback, or "veedback", as it is called, can be used with any assignment in e-file (readable onscreen) or print format. The latter requires screen-capture software (such as Snagit), which enables users to record what they have on their computer screens. Using a microphone-equipped headset, teachers can narrate as they go. A graphics tablet with a stylus pen is also useful for circling, underlining, or briefly annotating the document (we use Wacom's "Bamboo" tablet and pen). Once the recording is completed, the video must be sent to students. After a few unproductive trials (video files are too heavy to send via Moodle or Omnivox), we opted—rightly, as it turned out—for YouTube. Videos designed for individual viewing can be uploaded onto this platform: only individuals with the proper hyperlink can access and watch them.<sup>2</sup> Teachers can also share Dropbox files with students and upload clips for viewing at no charge (just as they can on YouTube).

When correcting print documents, a cell phone can be easily used to produce video clips. This requires only an articulated mount (these can be purchased online for about \$15; many models are available). Seated in the mount, the phone can

<sup>1</sup> An article published in *Pédagogie collégiale* in the fall of 2014 (Vol. 28, No. 1) discusses the main findings of this study. Readers interested in the research report can visit [aapc.qc.ca/UserFiles/file/Vol 28 no 1/CabotLévesque-Vol\_28-1.pdf]. In French only.

<sup>2</sup> To view an excerpt of feedback created with these tools, visit [youtube.com/watch?v=fEHfq17qt9A]. In French only.



record both the assignment and the teacher's hand as it notes down comments. Once the video is completed, the recording can be shared on YouTube or Dropbox.

The important thing is not to aim for a perfect outcome. As stated by Roberge (2006), teacher spontaneity plays a major role, acting as a sort of “model” for students and highlighting the metacognitive processes in which they should engage (or should have engaged):

students can watch a “real-time restructuring” of their work by the instructor, watching him or her pause, go back and reread a passage, make adjustments, or add details on comments already made.

In other words, students are witnesses to the type of mental questioning that should have gone into their own revision. Access to such a model is obviously an advantage, as it clearly demonstrates how verbal feedback can “trump” written corrections. This is actually a form of modelling, a process characteristic of explicit teaching. In keeping with this approach, teachers implement strategies by means of real tasks, verbalizing their own reasoning in front of their audience. During this *modelling* phase, teachers do not entertain any questions, comments, or interaction: students must be content to observe and listen (subsequently implementing the same strategies, first with assistance, then independently). According to the imposing metasyntesis published by John Hattie in 2009, explicit teaching is one of the most effective approaches for promoting learning.

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### ► WORTHWHILE FOR STUDENTS AND TEACHERS ALIKE?

This method of correction can be extremely beneficial for students, as it enhances both motivation and learning. Plus, once instructors have mastered the technology, we feel it is profitable for them, as well.

#### POSITIVE EFFECTS ON STUDENT MOTIVATION

Feedback can have a considerable effect on student **interest**, the **teacher-student relationship**, the **usefulness** of this technique, and students' **feelings of competence**. The practice can also have indirect consequences on student **engagement**.

As we know, **interest** is a powerful aspect of motivation, composed of affect and cognition. In the first stages of interest development (e.g., among students who are uninterested in a given field from the outset), it is better, strategically, to try to arouse interest by stimulating its affective component. The scientific literature on the emergence of interest points out that such stimulation could result from audiovisual feedback, feedback's unusual nature (as well as the element of surprise it evokes in students whose work is corrected by means of this technique), and the opportunity afforded to students by a practice they acknowledge “technocool” (Hidi and Renninger 2006). As regards students who have already shown an interest in the discipline concerned, however, it is preferable to stimulate interest via the cognitive component of learning—for example by giving them access, during feedback, to additional knowledge on the content evaluated.

In addition to the positive influence evaluation can have on student motivation, a meta-analysis shows that written comments have a significantly higher impact than grades (Koenka, Cooper, and Linnenbrink-Garcia 2014). Students who took part in this study, for example, said they felt greater pleasure and were more interested in reading the instructor's remarks and clarifications than when they were given a simple numerical score; their motivation, as a result, tended to last. The authors therefore recommend that evaluation policies maximizing the use of comments be adopted (these recommendations corroborate the observations of Hattie (2012), who confirmed that comments are more effective than grades in enhancing learning).

Another possible contributing factor is that audiovisual feedback creates a more positive and personal **teacher-student relationship**. To learn, students (in particular those are struggling) must feel they can trust their instructors and view them as caring. They should be taught that mistakes can be a positive tool for learning. It would appear that the spoken word promotes an impression of caring; Roberge (2008) notes that verbal correction has positive affective consequences, even though such consequences are occasionally hard to measure, especially as regards the importance of timbre, intonation, delivery, and rhythm. All relational aspects of communication are also taken into account: the parties know one another, and students realize recordings are addressed only to them.

As the relationships students have with their teachers are also highly correlated with the interest generated by the courses in question (Cabot and Lévesque 2014), it might be expected that the “intimacy” promoted by audiovisual feedback (which can mitigate the anxiety that physical proximity engenders in



some) has a positive influence on students, who would then doubtless be more inclined to attend classes. According to Hattie (2012), the trust between students and teachers is extremely valuable for learning; this author maintains that the affective dimension of learning must be taken into account because a positive teacher-student interaction is likely the most important factor in effective teaching.

As we see it, student perceptions of the **usefulness** of this type of evaluation could very well be stimulated with regard to the actual practice; in other words, students should be able to view the technique as useful in itself (for different reasons it would be interesting to investigate). One might also expect that student perceptions of the usefulness of what they have learned in a given course would be reinforced, at the very least by comments made by teachers during the correction process. Educators could, for example, associate the learning being evaluated with a specific situation in which it would be useful to students, thereby making the latter aware of the relevance of the knowledge and skills they are acquiring.

Not only can feedback be perceived more positively by students than traditional correction methods, it is also likely to contribute directly to a heightened **feeling of competence**, which is developed based on prior experience (Usher and Pajares 2008). Students who feel incompetent in a given area will benefit more from personalized verbal comments about their strong points than from written feedback they might not even bother to read or absorb. As a result, student motivation cannot help but increase. Moreover, the credibility of the encouragement given also bolsters a sense of competency (Usher and Pajares 2008). Because reactions are personal, coming directly from the instructor, and aimed at emphasizing students' strengths, the practice may directly contribute to the positive development of such feelings—a theory made all the more plausible by the fact that the number of students who actually pay attention to comments recorded on video is higher than that of students who actually read traditional written corrections. It should moreover be noted that students truly appreciate positive feedback on what they have done right (Roberge 2008), and that such feedback should be systematically implemented by all college teachers, regardless of the type of evaluation technique chosen.

In courses in which feedback is used, positive effects such as those anticipated in the preceding paragraphs should theoretically result in enhanced student **engagement** (Viau 2009; Appleton, Christenson, and Furlong 2008), which itself is an indicator of motivation. While the relationship between motivation and engagement are recognized in the literature,

it should be stressed that the former is the energy that drives someone to achieve a goal, and the latter, actual efforts in that regard. By way of illustration, students whose motivation has been enhanced by interesting them in the relationship between the assignment and additional, complementary information; those who have been motivated by highlighting the usefulness of the skill they are acquiring, stressing the advantages it could represent; and those whose interest has been aroused by acknowledging the strengths of the work submitted for evaluation, as well as giving them a feeling of competence—in short, all students who have been motivated via the direct, personal verbal contact provided by audiovisual feedback should, in principle, be more inclined to be engaged by the course, both behaviourally and cognitively.

### POSITIVE EFFECTS ON LEARNING AND ACADEMIC PERFORMANCE

Audiovisual feedback allows educators to make more complete, detailed comments than when doing so in writing, if only because of the time saved. According to Roberge (2008):

the “quantity effect” is also important: given that we speak more quickly than we write, educators can provide more verbal than written feedback, as the former is often comprised of observations aimed at helping students improve, which are the most helpful.

When using this type of correction in classes with a high degree of difficulty, we also noted that students watched the entire video. This is extremely encouraging for educators who take care to provide specific explanations for each student. The fact that students seemed more motivated to listen to our comments led us to believe that the audiovisual approach ensures that, among students with significant needs (such as those who are struggling), explanations that can help them improve are better received.

In the classroom, we often observe that the strongest students read our comments, while the weakest put away (“hide”) their assignments after glancing at their grade, without reading what we have taken so much time and effort to consign to paper. Still, it is obvious: as educators, when making judgments on students' work, we do so to help them learn and improve. If they do not even read our comments (for any number of reasons, which may be perfectly understandable), our efforts are in vain, and that is discouraging. On another note, teachers need not worry about videos being too long; during classroom demonstrations, we noticed that all students paid close attention, even where the recording was longer than 20 minutes. This remarkable attention span (you could have heard a pin drop!) is clearly more satisfying for educators





than the traditional “post mortem”, during which we try desperately to hold students’ attention amidst the grumbles of those who are unhappy with their marks and the bored looks of others who have already put their papers in their knapsacks and apparently want nothing more than to “move on”. The fact that, with feedback, teachers speak directly to each student, and that the video is meant for only one individual, could explain this interest and considerable attention span—which, it must be acknowledged, are exceptional in our particular French course.

In short, we believe that the simple fact of watching the video in itself constitutes an improvement in some students, who usually do not read written comments on their work. Roberge (2008) reported that, when students’ original assignments had been corrected verbally rather than on paper, students in her sample got better results when re-writing their texts.

#### BENEFITS FOR TEACHERS

Where feedback is used, students’ positive reactions come from all sides, and are expressed both verbally and via e-mail. Below, for example, is a message sent (at 8:45 p.m.!) by a student to French instructor Marie-Claude Lévesque (co-author of this article) after receiving the hyperlink to her individual audiovisual feedback:

*Hi, Marie-Claude. This is to thank you for taking more than 20 minutes to correct my assignment. Your explanatory video was fantastic. It really helps me understand the rules and the mistakes I sometimes make. Thanks again!*

Such enthusiastic reactions (not nearly as common with written corrections!) are extremely rewarding for faculty. In 2013, we surveyed instructors who taught the French-language upgrade course; 53 responded. To the question asked—i.e., “Do you feel that students’ lack of interest or engagement in this course has affected your own motivation?”, 83% of participants answered “somewhat” or “considerably”. We therefore believe that positive reactions to feedback can help educators (especially those who teach classes in which academic success is hard to come by) by enhancing feelings of professional accomplishment and giving them more energy with which to finish the term. Like our students, we enjoy hearing favourable comments on our efforts! We also think such enhanced student appreciation can have a positive influence positive on the classroom atmosphere.

From a quantitative angle, one might expect the number of requests for one-on-one office meetings with the teacher to diminish. This is an interesting hypothesis, as several of our

colleagues report having to explain written comments they had thought were perfectly clear. Roberge’s findings (2008) allowed her to conclude, inter alia, that students understand verbal feedback better, and are better able to take advantage of the explanations provided. She also noted considerable differences between students’ and teachers’ perceptions on the integration of the explanations provided: with written feedback, there was a difference of 20.6% between the perceptions of students and those of teachers:

with feedback on cassette, the figure was 12.8%. In other words, the discrepancy between students and instructors’ perceptions decreased. There was also a deviation among students themselves: 52.5% of those whose papers had been corrected in writing claimed they had reviewed the instructor’s comments, whereas 67.8% of those whose assignments had been corrected on tape said they had taken the comments to heart—a difference of 15.3% in favour of taped corrections (Roberge 2008).

Furthermore, for reasons such as the length or complexity of the comments to be made, occasionally not all feedback can be provided on paper; some instructors will then write “See me” on the assignment. A feeling of unpleasantness stemming from the fact that certain students systematically fail to read what we write, but then come to us asking for a “recipe” (or a miracle!), asking only what they should have done to better their grade, may also account for the lack of teacher motivation. Then come requests for a meeting—without much hope for any significant outcomes—in which students ask for an explanation of some of what our remarks. We believe that feedback facilitates the formulation of comments, and that verbal contact with students can, in some cases, make those comments more comprehensible.

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#### CONCLUSION

Audiovisual feedback seems extremely relevant in a context in which new educational technologies are being used more and more: not only does it appear to enhance both student motivation and learning, as well as instructional practices, but it also reflects a 2009 recommendation of the Conseil supérieur de l’éducation to develop a high-quality virtual learning environment that takes into account students’ interests and knowledge of technology.



If performed “at first go”, with no editing or attempts to conceal the instructor’s pauses, and in an authentic context, this practice should be no more time-consuming than the traditional correction process. Indeed, it can be reassuring for certain students to see that even their “super-teacher” occasionally has to look something up in the dictionary or verify information while providing feedback (Roberge 2008). Students then realize how much effort is required of their instructor, as well as the need, even for seasoned professionals, to experience doubt and validate their impressions.

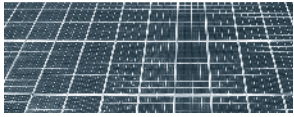
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Obviously, as is true when any new practice is implemented, a period of adjustment must be provided allowing educators to master the technical aspects involved. Each teacher can then adapt feedback in accordance with his or her personal preferences, for example by deciding to record only those passages that require more substantial comments. Microsoft Word lets users, at given locations in a document being reviewed, record audio comments that appear as “balloons” students can listen to with a simple click of a mouse. In short, this type of correction can be used in all sorts of ways, which makes us want to take our analysis further and measure the influence of this practice in another research project.

And why not envision the use of audio or video by students themselves? Rather than being viewed as the “scourge” of modern times, the ubiquitous presence of smart phones could be seen as an opportunity for developing new ways to learn. By way of example, at the end of a course, why not ask students to use their phones to record a personal summary of the concepts reviewed in class? Categorized by subject matter and date, these audio notes, while still fresh in their minds, could constitute an excellent complement to written notes for studying purposes. Students’ metacognitive thought processes could also constitute a little note to be added to a digital document before the assignment is handed in; here, too, possibilities are numerous. ◀

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