

Exploring Video Feedback in Philosophy: Benefits for Instructors and Students

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Abstract

This paper explores the benefits of video feedback for teaching philosophy. Our analysis, based on results from a self-report student survey along with our own experience, indicates that video feedback possesses a number of advantages over traditional written comments. In particular we argue that video feedback is conducive to providing high-quality formative feedback, increases detail and clarity, and promotes student engagement. In addition, we argue that the advantages of video feedback make the method an especially apt tool for addressing challenges germane to teaching philosophy. Video feedback allows markers to more easily explain and illustrate philosophical goals and methods. It allows markers to model the *doing* of philosophy and thereby helps students to see philosophy's value. Video feedback is a promising tool for addressing both cognitive and affective barriers to learning philosophy. Such advantages are especially valuable in the context of a student-centered, intentional learning framework. In light of these advantages, we find that video feedback is underappreciated and underutilized.

1. Introduction

Quality, timely feedback is central to student learning. In many higher education settings, provision of feedback is the primary mode of communication between instructor and students. Unfortunately, both experience and educational research suggest that many students lack the motivation or the ability to engage with and improve from feedback. Of particular concern in philosophy is the worry that students may misunderstand the distinctively philosophical language, learning objectives, and purpose of their feedback. Most obviously, our students may struggle with unfamiliar disciplinary terminology (e.g., concepts like 'apriority,' 'normativity,'

and ‘supervenience’) and learning objectives (e.g., what it means to ‘analyze’ or to ‘consider objections’). More importantly, they may interpret our attempts to philosophically engage with their written arguments as longwinded, idiosyncratic demands or confusing justifications for their marks. If this is right, then we may be missing out on a valuable opportunity to engage our students in both learning and *doing* philosophy. As such, missed opportunities to learn through feedback are especially pressing in the context of teaching philosophy.

The disconnect between feedback and learning may be partly an issue of miscommunication. If this is right, then it is worth exploring alternative approaches to communicating feedback to our students. For more than a decade educators have explored audio feedback as an alternative to traditional, written feedback with reports of success (King et al. 2008; Lunt and Curran 2009; Merry and Orsmond 2008; Rotheram 2009). More recently educators are exploring video feedback and, although effectiveness of video feedback remains underresearched, initial studies likewise report success (Cann 2007; Crook et al. 2012; Henderson and Phillips 2015; Parton et al. 2010).

And yet, despite an awareness of the importance of feedback and its documented challenges, and despite a growing body of research indicating alternative forms of feedback as promising solutions, video feedback has struggled to find its way into classrooms (both virtual and brick and mortar). While access to the required technology remains an issue for some students, and while ability to use the required technology may remain an issue for some markers, most students have the required resources, and video media is now easier than ever to produce and share. For these reasons we suggest that video feedback is underappreciated and underutilized.

In section two we consider in more detail possible barriers to teaching and learning with feedback, and we suggest that video feedback is a plausible, strategic solution to the challenge of

providing students with quality feedback that they are able and motivated to use. In section three we explain the video research project design, including course context, video production, and student surveys. In section four we present and evaluate student perceptions of video feedback in the context of teaching philosophy. We find that student perceptions of video feedback are generally very positive, with most students preferring video feedback to traditional, written feedback, and that students tend to perceive video feedback as (a) clearer, more detailed, and easier to understand, (b) directed toward improvement and easier to apply, and (c) personal, engaging, and motivational. In section five we draw upon survey results in an analysis of the benefits of video feedback, and we argue that the method of video feedback is especially well adapted to the distinctive challenges of teaching and learning in philosophy. In section six we provide suggestions for teaching with video feedback.

2. Quality Feedback and Student Learning: Challenges and Strategies

Quality feedback is a cornerstone of the learning process and critical to student achievement (Gibbs et al. 2004; Hattie and Timperley 2007; Weaver 2006). Indeed, providing quality feedback is supposed to be “the single most useful thing we can do for our students” (Brown 2007). Unfortunately, many students do not use the feedback we give them to revise and improve their work (Crisp 2007; Fritz et al. 2000). Given the value of feedback to student learning, and given the amount of time and effort we spend on providing it, the recognition that we often fail to give students the kind of feedback they are both able and motivated to use has led many educators to critically examine their feedback practices and to explore new ones. It is therefore worth considering possible barriers to teaching and learning with feedback, both in general and

with regard to philosophy in particular. Doing so will identify motivations for exploring the video feedback method in the philosophy classroom.

Very generally, there are two kinds of explanation for the fact that students do not use the feedback we give them to revise and improve their work: either they don't value feedback, or they do value feedback but struggle to understand and effectively use it. Of course one reason why students may fail to value feedback is that they are only interested in receiving their marks. Doubtless every educator has had students who neglect to collect previous assessments and feedback. And, plausibly, students who are satisfied with their current ability (and marks) may decline to act upon feedback (Smith and Gorard 2005).¹ However, while it is probably true that some students just aren't interested in receiving and engaging with feedback, we remain optimistic that most students have a sincere interest in improving their knowledge base and skill sets.

A more interesting reason why students may fail to value feedback is that, in their experience, the feedback itself fails to be valuable. This is especially plausible when feedback on student writing takes the form of marginal notes (or, more accurately, short commands, questions, and idiosyncratic symbols, abbreviations, and squiggles—e.g., 'more analysis', 'explain', '?', 'V') and/or a short, summative assessment aimed more at justifying the mark than at improvement. While some markers are able to provide personalized, detailed, forward-looking feedback on student writing, brief marginal notes and summative end notes are probably not uncommon, especially when the student-to-marker ratio is high.²

¹ Indeed, one student in the present study resented being 'forced' to watch the feedback video in order to receive their mark.

² As graduate student teaching assistants familiar with large lecture courses, two of the present authors can attest to being instructed (if instructed at all) to provide exactly the kinds of comments described here. And, in reading our

Indeed, one barrier to teaching and learning with feedback is practical: the quantity and quality of feedback markers are able to provide is limited by their workload. And, as marker workloads increase, students' opportunities to receive detailed, formative feedback tend to decrease, and much of the feedback students do receive may be too general or too late to be helpful (Nicol and Macfarlane-Dick 2006; Weaver 2006). If this is right, students may reasonably fail to value and act upon feedback because feedback increasingly fails to be valuable and actionable. Moreover, as Dai Hounsell writes, this situation has the potential to generate a "downward spiral": when markers fail to provide quality feedback, students fail to value and use it, which may in turn make markers less inclined to provide it (2007, 102). Almost certainly, dysfunctional trends in higher education may negatively affect both marker and student valuation of feedback. Thus, in moving forward, we need to explore quality, scalable feedback practices—the provision of quality feedback must be a doable task.³

Where some students do not see their feedback as a valuable tool others may see it as valuable but struggle to understand it and use it effectively. Indeed, as a number of recent studies suggest, a significant disconnect between feedback and revision results from the fact that students often misunderstand what their markers intend to convey. In particular, students may be unfamiliar with academic and/or disciplinary language and assessment criteria. For example, the

student surveys (to be described in what follows) one gets the impression that our students often receive feedback that is "short", "hard to read", "not explained thoroughly", "curt" and/or "written on the fly".

³ As previously noted, some markers *are* able to provide personalized, detailed, forward-looking feedback on student writing, especially in smaller, upper-division courses. However, it is plausible that student valuation of a given piece of feedback, as well as the ability to use it, may be shaped as much by familiarity with disciplinary expectations and/or previous experiences with receiving and using feedback as by the quality of the feedback itself. And so, while we think that the kind of feedback described above (chicken scratches in the margins followed by a short justification of the mark) is a reality for many students and markers, we do not mean to suggest that any particular kind of feedback is primarily responsible for the widespread phenomenon of students not using feedback to improve. Rather, we take it that the disconnect between feedback and learning is likely to be complex, that strategic attempts to bridge the gap between feedback and learning should be sensitive to the complexities of communicating and teaching, and that, in any case, time constraints on the provision of quality feedback are a real concern.

relation between description (of which students are often instructed to give less) and analysis (of which students are instructed to give more), as well as the amount of description required for analysis, may vary across disciplines and, in any case, may be unclear to students (Chanock 2000, 97–8). And, similarly, urging students to “define key terms” is only helpful if students already know how to identify which terms are key (Lillis and Turner 2001, 59 –60). Thus, if we are to comment on our students’ abilities to ‘identify’ and ‘define’ ‘key terms,’ or to ‘analyze’ concepts, claims, and ‘arguments,’ we need to do so in terms of clear and specific learning objectives—we need to explain what we mean.

If ensuring that feedback is guided by clear and specific learning objectives is generally good practice, it is especially important in undergraduate philosophy courses. This is because philosophy courses significantly require ‘higher-order thinking skills’ (e.g., interpreting, analyzing, evaluating, and synthesizing). While high-order thinking skills are crucial for mastery of any subject matter, philosophy does not have an obvious subject matter; rather, philosophy is essentially investigative and what it is to *do* philosophy is to exercise and apply high-order thinking skills themselves. Furthermore, *doing* philosophy often requires questioning and defending the norms that are supposed to govern these thinking skills. Thus, to understand and ultimately *do* philosophy requires understanding the nature of philosophical inquiry and methodology, and there is good reason to think that beginning students will struggle in their attempts to make sense of distinctively philosophical learning goals, expectations, and language. Because philosophy students are likely to face confusion and frustration in their attempts to learn, philosophy teachers should be mindful of the potential for miscommunication and demotivation in their attempts to teach.

If the foregoing analysis is correct, we need to identify scalable high-value feedback practices that attend to the various ways in which students may misunderstand the content and purpose of their feedback, both in general and in the philosophy classroom. Video feedback is an intuitively plausible, strategic solution to the challenge of providing students with quality feedback that they are able and motivated to use. After all, communicating via video has a number of obvious strengths to recommend it. Video better captures nuances of communication, e.g. facial expression and tone of voice (which seems especially pertinent in the context of criticizing, however constructively, a student's thinking and writing), and it is often much easier to just say (or explain) something than to write it. The intuitive benefits of video feedback appear to be borne out by the study at hand. In what follows we present student perceptions of video feedback and, on the basis of self-report student surveys, we suggest that video feedback is a promising approach to communicating formative feedback in terms of clear learning objectives, engaging students in philosophical dialogue, and motivating students to invest in the process of learning to do philosophy.

3. Project Design: Course Context, Video Production, and Student Surveys

Our research project investigated student perceptions of video feedback in the context of two undergraduate philosophy courses: a lower division course covering ethics (40 students) and an upper division course covering philosophy and technology (31 students). In both courses students were assessed on the basis of their best three out of four essays (1200 – 1500 words), and received feedback on their first two essays (the remaining essays were submitted as a pair for the final course assessment). In the former course students received feedback from one of two graduate student teaching assistants; in the latter students received feedback from the professor

who was instructor of record. All students received video feedback for the first essay and were given a choice between video and written feedback for the second essay.

Markers used Photo Booth (an OS X built-in software application) to create personalized, unscripted, unedited, five-minute, webcam (i.e., 'talking head' format) videos, and used Blackboard (a widely adopted learning management system) to share them with students. Feedback videos were personalized in the sense that each student received their own feedback videos, which were tailored to their individual essay submissions.⁴ In order to provide tailored feedback (and to keep marker workload manageable), videos were recorded immediately (and in one take) after reading student essays. While videos were unscripted, markers did meet to calibrate assessment standards and to agree upon basic guidelines for feedback practices. For example, markers agreed in advance that feedback videos would be approximately five minutes in length, would include a balance of positive and critical constructive feedback, would begin by addressing students by name, and would end with an invitation to students to follow-up on their feedback.

Of the 69 students who received video feedback on the first essay,⁵ 55 (80%) elected to receive video feedback on the second essay.⁶ At the end of the course students were invited to submit a one-page, open-ended survey for extra course credit.⁷ The ethically-approved survey prompted students to compare video feedback to written feedback, to comment on any perceived

⁴ Personalized feedback videos may be usefully contrasted with generic video learning resources (Crook et al. 2012) and video comments on class performance (Cann 2007).

⁵ Late assignments and assignments with academic integrity issues did not receive feedback. As a result, there is a small discrepancy between stated enrollment numbers and recorded preferences.

⁶ Interestingly, of the students who chose to receive written feedback on the second essay, seven completed a video feedback survey and, of these seven, two stated an explicit preference for video feedback and two ranked video and written feedback equally.

⁷ Students received a two percent increase in the final grade for submitting either a one-page video feedback survey or a reading summary of the same length.

advantages or disadvantages of video feedback, and to speculate on the ideal video length and the best place to state the final mark (if anywhere).⁸ Forty students (56%) submitted surveys.

Student surveys were coded by two of the course markers. In particular, surveys were independently coded to determine categories, and then re-coded in light of reflectively chosen categories.⁹ The final set of categories were then grouped into five umbrella categories: *Valence* (each survey was tagged as either video positive, negative, or neutral/ambiguous); *Understanding* (comments pertaining to clarity, detail, and understanding); *'Feed-Forward'* (comments pertaining to improvement and to applying feedback to future assignments); *Personal Nature* (comments pertaining to feelings of personal connection, student and marker engagement, motivation, and emotional investment); and *Criticisms* (comments pertaining to criticisms of the video feedback method).

4. Student Perceptions of Video Feedback in Philosophy

Student perceptions of video feedback were on the whole very positive. Out of 40 responses, 33 student surveys (83%) were expressly video positive (four were neutral and three were critical) with 23 students (58%) stating an explicit preference for video feedback to traditional, written feedback (two students stated an explicit preference for written feedback). More specifically, student responses indicate that students tend to perceive video feedback as (a) clearer, more detailed, and easier to understand (41 comments), (b) directed toward improvement and easier to apply (22 comments), and (c) more personal, engaging, and motivating (68

⁸ Importantly, survey prompts were open-ended so as to avoid leading questions and thus framing effects.

⁹ In fact, the (independently determined) categories were initially quite similar. Differences between the two coding schemes tended to be a matter of choosing more or less fine-grained categories. Final coding categories were chosen on the basis of their perceived value for understanding the advantages and disadvantages of the video feedback method. For example, the coders made an explicit, reflective choice to distinguish between those comments which connected understanding to quantity, those which connected understanding to quality, and those which were ambiguous between the two.

comments).¹⁰ In contrast to the many reports of positive video feedback experiences, some student surveys were critical of the video feedback method. For example, whereas many student comments suggest that the personal nature of video feedback is one of its greatest virtues, others comment on feelings of discomfort (11 comments). In this section we present and analyze major themes in student perceptions of video feedback.

4.1 Video Feedback is Clearer, More Detailed, and Easier to Understand

Perhaps the most notable theme to emerge is that philosophy students perceive video feedback as clearer, more detailed, and easier to understand than traditional, written feedback.¹¹

The following student remarks are representative:

I really enjoyed having video feedback. There has been so many times where I have received written feedback with unclear comments and references that has left me confused when it comes to trying to improve for the next essay (especially if I can't read the professor's handwriting).

Video feedback allowed for more depth and explanation for my writing compared to written feedback.

With video feedback, I feel as if the professor has the ability to more easily flesh out every idea and reaction to specific parts of the paper. I also realized that I better understand the comments you have on my paper when it's on a conversational level.

¹⁰ These numbers refer to individual comments falling under subcategories of the primary, umbrella categories. For example, under 'personal and engaging' (68) we include 'personal' (19), 'emotional investment of student' (11), 'instructor/marker-student relationship' (5), 'instructor/marker engagement' (13), 'facial expression, tone, and gesture' (14), and 'student engagement' (6).

¹¹ In contrast, one student comments that written feedback is better suited to their personal learning style. Another student notes that "videos usually range from about three to five minutes and prove to be too long for students who only want a basic summary of their paper and grades."

I think video feedback is better [than written feedback] because TAs can provide more comments within a shorter period of time in this way. Furthermore, video feedback is like talking with TA face to face, helping me understand TA's comments better. It's also a fun experience to watch video feedbacks.

I feel as though you can fit a lot more feedback in a few minutes of speaking than you can in a simple paragraph or two of words.

The last two students speculate that more information is conveyed in a few minutes of conversation than in a few written paragraphs, and they are almost certainly correct. Indeed, if we assume an average speaking rate of about 130 words per minute, a five-minute video adds up to approximately 650 words, which translates to more than a page and a half of text. Even recognizing that unscripted, conversational feedback is more likely to be redundant than written feedback, it is reasonable to conclude that conversational videos do in fact convey significantly more information than a typical end/summary comment.

Importantly, as many student comments suggest, markers not only *say* more, they *explain* more, and they explain *more clearly*. In particular, student surveys suggest that:

(1) Markers do a better job of explaining what they mean:

In comparison to a written response, a video feedback not only says exactly what a written response would, but takes it a step farther by preventing any kind of miscommunication that may be present with a written response. I have had several instances in my life where I had to ask the teacher what exactly they meant by a certain comment. A video response completely eliminates this error by allowing the instructor to thoroughly explain exactly what they mean.

The video also leaves very little to no questions for me to ask after receiving my grade because I would not have to guess what the teacher meant in the written comment on the essay.

(2) The conversational nature of the videos makes for clearer explanations:

I feel that being able to 'speak' to the student helps make the comments more clear and understandable.

The feedback is more conversational and therefore extremely clear.

(3) Tone of voice, facial expression, body language, and gesture add additional, valuable layers of meaning to student feedback:

There are changes in pitch, emphasis on certain points, gesturing, etc.—all of which aid the comprehension process. With written feedback, the writing is standardized—meaning that all the sentences generally seem to be of equal emphasis.

Video feedback expresses the comment involving more aspects such as facial expression, tone of voice, gesture, etc. With this information, we are able to interpret the comments more accurately than written feedback. Thus, we can sort of have a close guess of the emotion of the commenter regarding that particular piece of essay.

Many subtle ways of communicating, such as facial expression and tone, are lost in prose. This means the writer of the work can misinterpret some written critique as condescending or flippant. ... I believe that the "humanizing" touch of video feedback made it easier to listen to the critiques. For example, my TA was able to back up every critique with at least one or two points, presented in a friendly, accessible way.

As these comments suggest, not only are students using elements of nonverbal communication to make sense of what has gone right or wrong in their work (where, for example, tone of voice may relay information about the seriousness of a remark, the relative importance of individual comments, etc.), they are also trying to make sense of their markers' emotions and attitudes (and, plausibly, whether or not their markers like them and/or their work). In section five, below, we suggest that video feedback may help students to develop feedback-positive learning attitudes and to make sense of what it is to do philosophy precisely because it harnesses elements of nonverbal communication to bring marker emotions into view.

In total, 29 students comment on quantity, quality, and/or clarity of feedback, and 12 students comment on the contribution of facial expression, tone of voice, and/or gesture to understanding. Taken together, these student comments suggest that video feedback may be a viable solution to the problem of students misunderstanding what their markers intend to convey.

In section two we noted that students may misunderstand feedback because they are unfamiliar with academic or disciplinary language and learning objectives—e.g., what it means to 'identify' and 'define' 'key terms,' to 'draw inferences' from 'evidence'—and we suggested the obvious solution of better explaining what we mean. We are now in a position to argue that video feedback enables markers to better explain what they mean. While this claim rests primarily on student comments to the effect that markers "explain exactly what they mean," it is also worth noting that our experience providing video feedback is consistent with student reports. Indeed, explaining our comments came quite naturally. For example, video feedback made it easy to identify and explain failed inferences. Instead of scrawling "does this follow?" in the margin, as one might when giving written feedback, it felt natural to precisely indicate not only where an argument failed to go through but, crucially, why. Indeed, the sheer amount of

feedback video makes possible makes it comparatively easy to not merely identify, but to explain learning objectives. Thus, on the basis of both student perceptions and marker experience we suggest that video feedback enables markers to give better, more explanatory feedback to students.

4.2 Video Feedback is Directed Toward Improvement and Easier to Apply

Another important theme to emerge from our data is that philosophy students perceive video feedback as directed toward improvement and easier to apply. For example, one student remarks:

Video feedback is very beneficial because it gives the TA or the teacher more wiggle room to explain more in depth the areas of strengthens and weakness in the essay. It also helps because you can also get feedback on how to improve the areas of weakness in the essay which is usually not done in a written feedback.

In addition to remarking on improvement per se, students also claimed to have re-viewed their videos and to better remember video feedback when approaching successive assessments. For example, one student remarks, “you do not just throw the video into your bag to forget, but instead you go back and re-watch the video after you write the second essay to make sure you are improving.” Another that, “when I went back to do my next essay [...] I remembered more of what the professor has said in the video as I had both audio and visual clues rather than simply the visual of reading the comments again.” In total, 13 students remark on using video feedback to improve, six mention re-viewing their videos, and three claim to better remember video feedback.

Of course it is possible to give students formative, forward-looking feedback in writing, and no doubt some students also perceive traditional, written feedback as aimed at improvement, re-read their feedback, and remember it when revising or approaching successive tasks. And, of course, perceptions aren't facts. But our experience providing video feedback is consistent with student perceptions. Providing forward-looking comments came quite naturally. For example, the method of video feedback made it easy to not only identify objections to a student's argument but also to comment on the dialogical purpose of considering objections. Instead of writing "what about the desert-island promise from the Smart reading?" or "be sure to consider and respond to objections," as one might when giving written feedback, it felt natural to not only explain the source of a given objection but also to comment on *strategies* for identifying objections, evaluating their implications, and resolving conflict. As previously suggested, video feedback is highly conversational and allows markers to provide significantly more feedback without much more effort. This may be why video feedback makes it comparatively easy to orient feedback towards strategizing, honing skills, and approaching future writing tasks. Thus, on the basis of student perceptions and marker experience, we suggest that video feedback is especially conducive to providing students with useful forward-looking feedback.

However, the ease with which students claim to understand and apply video feedback may have a downside. One student remarks, "As a writer, I do not enjoy reading my own work and having to go through to get comments makes me hate my writing more. Video feedback allows me to know how to improve without having to look over my work again." This comment gives us pause, as "looking over your work again" is an important part of the revising and learning process. We therefore emphasize the importance of teaching students to use feedback effectively

(they probably need to revisit their work), and of promoting feedback-positive learning attitudes (because hating your writing makes learning painful).

4.3 Video Feedback is Personal, Engaging, and Motivational

Perhaps the clearest (and we think especially interesting) theme to emerge from our data is that philosophy students perceive video feedback as personal, engaging, and motivational. In particular, student reports of feeling engaged and motivated to improve cite both the personal, conversational nature of the videos and perceived *marker engagement*.

Six students explicitly report being engaged by their video feedback.¹² Many other student comments—including reports of re-viewing videos, being motivated to improve, and applying feedback to successive assessments—indirectly suggest a strong sense of student engagement. What interests us here, though, is the possible connection between student engagement and student perceptions of marker engagement. In particular, student surveys suggest that:

(1) Video feedback showcases marker effort:

What makes a video feedback better than a written feedback is the level of involvement shows that the grader thoroughly read through my essay and specifically dissects the problems for me to improve, which is difficult to do in a written response.

Video feedback shows that additional time was taken in preparing feedback as opposed to writing immediate responses on the fly.

¹² Because students were given open-ended prompts (and so were not explicitly asked to remark on student engagement), the fact that six students spontaneously report feeling engaged by their feedback seems to us significant.

I appreciated receiving video feedback on my first essay because it was much more personal and definitely did not seem like the grader just skimmed over my paper and left a few irrelevant comments on certain areas of the text.

Normally with a paper the grader writes one to two notes at the end saying “good job, expand on this idea” or “how is this significant” which feels like the grader just skimmed through.

These comments suggest that students perceive video feedback as more deeply engaged with student work, whereas written feedback may be perceived as generic, a product of “skimming,” “written on the fly,” and generally requiring little effort. In the same vein, seven students speculate that video feedback is more time intensive and potentially unrealistic for many markers (though, as we suggest in what follows, many markers will actually find providing video feedback to be less time intensive than written feedback). In all, thirteen students comment on marker effort or engagement.

We have not controlled for previous experience with written feedback and, plausibly, the effort that goes into providing written feedback is more likely to go unrecognized. However, in this case it is the perceptions themselves that matter. Whether students are right or wrong in their assessments of how much time markers spend reading and commenting on student work, these perceptions may be crucial to student investment. Video feedback enables students to literally see their markers engaging with their work.

(2) Video feedback promotes marker-student relationships. In particular, students perceive markers as caring, honest, and accessible:

The reason that makes video feedback superior to written feedback is that there is more of a feeling of intimacy between the professor and the student when feedback is presented on video. Seeing and hearing a comment made by the professor as if he or she is actually talking to you has a greater impact than on paper. This impact helps students become more motivated to do better on the next assignment.

Video feedback makes us aware that the Professor cares enough to record videos for every student. In this sense, it provides more of an incentive for the student to do better—in part, because the professor cares.

Giving video feedback really shows that you care about each student's progress and that you have taken the time to go through each part of the paper to show our strengths and weaknesses. This can be very important to students at such a big university, and I personally loved being able to feel like I was in office hours rather than reading comments at home.

To my surprise, it went very well, and I really enjoyed the video feedback. Of course, it was very scary listening to the Professor talk about the pros and cons with my essay, but because of my Professor's facial expressions and body language I could tell that my professor put in a lot of effort into critiquing my essay and was very honest about it.

[T]here seems to be a level of vulnerability on the professor's part by being filmed. In a sense, this makes the professor seem more approachable if students want to discuss their papers in depth.

Of the thirteen students commenting on *marker engagement*, five note a greater feeling of connection (or “intimacy” or “more direct interaction”) with their marker, four that their marker cares about their learning, and three that video feedback felt more honest.

Additionally, of the thirteen students who commented on *using video feedback to improve*, five cited perceptions of marker engagement in connection with motivation to improve.

(3) Video feedback is personal. In particular, students comment on emotional investment and receptivity:

I feel like the video feedback shows a more personal connection with the student and teacher.

Another advantage that seems to be presented within video feedback is a higher level of personalization.

Rather than pumping out desensitized critiques that don't take into account the emotional investments of each student, graders using video feedback must now be aware of each student they're addressing within the video, making the experience much more personalized and generally less harsh for the students on the receiving end.

I feel that when graders are limited to written comments in the margins, what they write isn't necessarily inaccurate, but so condensed and to-the-point that they may cause me to get a bit defensive and, ultimately, dismiss the comments. I believe that the 'humanizing' touch of video feedback made it easier to listen to the critiques.

Nineteen students report that videos are more personal than written feedback. Eleven students comment on their emotional investment or report being more receptive to video feedback.¹³

Again student perceptions fit well with our own experience. Recording a video feels like a real conversation—it's a personal and engaging experience that is highly conducive to expressing authentic interest and emotion, and to bearing in mind the emotional investment of our students.

For example, the method of video feedback made it easy to empathize with students over the difficulty of a particular concept or learning objective, to encourage them to take risks or to be more confident in their grasp of the material, and to express genuine intellectual interest in their

¹³ Interestingly, student comments also suggest that written feedback is impersonal, and not merely because written feedback is the obvious contrast class. In particular, the survey prompted students to consider where, if anywhere, the mark ought to be given in the video. A few students suggested that because poor marks are "demoralizing," "demeaning," and "horrifying," it would be more appropriate to deliver the "bad news" in writing since writing is "much more impersonal".

ideas. Taken together, student perceptions and marker experience suggest that the personal nature of video feedback engages both students and markers.

4.4 Student Reservations About Video Feedback

Of course student surveys weren't entirely positive. Eleven students report experiencing discomfort, twelve report difficulties matching commentary to specific portions of their text, and three report accessibility issues.

Perhaps the most significant criticism of the video feedback method is that it makes students uncomfortable. In particular, students report that receiving video feedback is "quite strange," "awkward," or "a little uncomfortable." In some cases it was difficult to determine whether students were expressing feelings of discomfort or mild annoyance. For example, one student reports being uncomfortable with a video running over five minutes in length, another was unhappy with being "forced" to watch the video in order to obtain their mark, and two were annoyed by their marker's speaking mannerisms.

More significantly, two students cite the mere (virtual) presence of their marker as the source of their discomfort. For example, one student writes, "video feedback can actually make students feel more stressed when looking at the feedback, because it makes it feel like they are actually talking to the TA." Another two students report feeling uncomfortable with the fact that video feedback is one-sided. For example, one writes, "it was just a little odd watching the professor talk to you while you can't say anything back."

Fortunately, it seems plausible that students will overcome their initial discomfort. For example, one student remarks, "when I watched the first video I felt a little bit awkward or uncomfortable. The second video feedback I didn't have the same feelings." While discomfort

may be linked to the novelty of receiving an especially personal form of feedback, it may also be linked to novelty itself. For example, one student writes, “[w]hen I first received my video feedback I was very anxious to see how these video feedbacks work. To my surprise, it went very well, and I really enjoyed the video feedback.” Comments like these suggest students are anxious or uncomfortable because they don’t know what to expect. Familiarizing students with the method in advance may help to alleviate their unease.

The second major complaint raised by students has to do with matching video commentary to specific bits of text.¹⁴ The following comments are representative:

The only disadvantage that I noticed was a difficulty in keeping up with the grader about where in the paper they were talking about at a given time.

It was hard to follow along without having the paper in front of me.

One way I think the video feedback could be taken to the next level is if there was a side screen that enables the student to view his paper as you are talking about it. For example, if you are talking about a section on the second page then a side screen next to the video can show an interactive interface that allows the student to engage his paper as you are talking about it.

On a similar note, two students comment that video feedback is more difficult to refer back to:

¹⁴ It may be worth noting that many of these student remarks were ambiguous. In particular, some students remarked that video feedback was “more general” or “less specific” than written feedback, yet seemed to be making a claim about following along or matching commentary to text rather than the generality or specificity of comments per se. For example, one student writes, “I think the only disadvantage with video feedback is that the comments are explained in the video, but its hard to know where in the paper those comments came from because they are general, while comments that are written on the paper are easy to find.” Another writes, “with written feedback, it is nice to be able to see specifically which parts of the paper they are referring to. Having the comments superimposed over the actual essay makes it much easier to understand what the comments are talking about.” While comments like the latter more clearly suggest a “matching problem,” comments like the former are less clear. However, we don’t think video feedback tends to be “more general” because we produced videos immediately upon reading student papers and frequently provided feedback specific to certain portions of the text.

One disadvantage of the video feedback is that it is harder to access when needed as a reference. It is easier to have access to a written feedback on a piece of paper to use as a reference.

The ability for the grader to annotate specific parts of the video (i.e. grade, pros, cons, perhaps even lines of specific arguments) would be especially helpful for the student to use and review, especially during subsequent viewings of the video.

We agree with these students that matching comments to the relevant portions of text and having them available in a format suitable for reference is important. In retrospect we should have explicitly advised our students to have their essays in front of them (physically or electronically), to pause and re-view the video as necessary, to annotate their essays, and to summarize their feedback.

Last but not least, three students reported experiencing difficulties with accessibility. For example, one student writes about “a technical issue with the video files being a little bit hard to find.” While some students may face issues with technological accessibility, in our own study student comments appear to better reflect the fact that students *had to find* their feedback more than they found it *hard to find*. While this isn’t an accessibility issue, it certainly has the potential to be *an* issue. It was in part for this reason that we included marks in the video, thereby “forcing” students to watch them. As previously mentioned, only one student resented this attempt to incentivize watching feedback. But there are other ways to incentivize engaging with feedback, for example by assigning feedback summaries or reflections. In section six we suggest that many student criticisms of the video feedback method may be addressed by careful assessment design and by explicitly advising students on how to get the most out of their video feedback.

5. Discussion: The Benefits of Video Feedback for Teaching and Learning Philosophy

In section two we canvassed potential barriers to teaching and learning with feedback, including recent research suggesting that students may frequently misunderstand what their markers mean to convey. In this section we consider discipline-specific challenges for communicating learning goals and assessment criteria, and we argue that the primary strengths of video feedback—its being exceptionally (a) clear, detailed, and easy to understand, (b) directed toward improvement and easy to apply, and (c) personal, engaging, and motivational—may be especially valuable in the context of teaching and learning philosophy.

In the past fifty years theories of teaching and learning have undergone a revolution of sorts, moving from passive to active models of learning—from understanding knowledge as something to be transmitted by teachers and passively received by students, to something that must be actively constructed by students through complex processes that are influenced as much by social and affective dimensions as cognitive ones. More recently, learning theories tend to additionally emphasize the value of metacognitive, self-directed, goal-oriented features of learning. For example, the highly influential “learning approaches” (Marton and Säljö 1976) and “intentional learning” (Bereiter and Scardamalia 1989) frameworks highlight the value of both intrinsic motivation to learn and reflective awareness of the learning process. Students who take a “deep” (as opposed to “surface”) approach to learning, or who are engaged in “intentional” (as opposed to “incidental”) learning, reflectively aim at understanding, valuing, and mastering domains of knowledge.

The characteristic features of deep, intentional learning are part and parcel of learning to do philosophy. Indeed, as Michael Cholbi argues, “the move toward intentional learning pedagogy

can [...] be seen as a migration of the methods, concerns, and values of philosophical instruction to the rest of the academy” (2007, 57). Unfortunately, many of our students will be more comfortable identifying, highlighting, and reproducing facts than engaging in reflective philosophical inquiry and analysis. Philosophical questions, aims, and methods on the one hand, and steps toward deep, intentional approaches to learning on the other, are both likely to be nebulous, confusing, and /or frustrating for beginning philosophy students.

If this is right, then the ways in which philosophy students may misunderstand their feedback are likely to be especially complex. Making sense of learning objectives, assessment criteria, and feedback requires understanding not just distinctively philosophical vocabulary or discourse conventions (as emphasized by “discourse communities” and “academic literacies” research), but also (and perhaps more importantly) the nature and value of philosophical inquiry itself. This is because the skills required to understand, evaluate and develop philosophical texts are best understood in relation to the aims and methods of philosophy, which are themselves likely to be initially unfamiliar to philosophy students.¹⁵

When students are unfamiliar with the aims, methods, and value of philosophical inquiry, they may be resistant to engaging in it. For example, beginning philosophy students may regard knowledge as legitimate or valuable only insofar as it factual, practical, or the product of empirical, scientific methods (with everything else being a matter of subjective opinion). Similarly, as Kelley (1999) suggests, “because the consumer mentality of many of our students conditions them to see value in terms of tangibility and immediacy, and because philosophical

¹⁵ Consider for example how common it is for students to assume that philosophy is exclusively concerned with the study of god, religion, and ethics, that conceptual analysis is about how people use words, that normative questions are best answered by appeal to descriptive psychology or anthropology, or that thought experiments are impractical hypothetical questions with a lot of missing information.

issues do not admit of easy and/or determinate answers, philosophy seems to them unworthy of attention” (quoted in Cholbi 2007, 49).

Whether students perceive philosophical questions, methods, and learning objectives as ‘unscientific’, of little to no value, or just plain confusing, these perceptions are likely to be attended by frustration and demotivation. As Cholbi (2007, 48) notes,

When students do not fully understand what is to be learned, how the performance of various learning tasks measures and fosters that learning, and how they can manage their efforts in order to learn effectively, the likely results are disorientation, resentment, and a sense of bewilderment at the whole learning enterprise. In particular, students may come to see their learning efforts as controlled by objectives that are arbitrary, ill-defined, or under constant revision. Rather than a sense of purposefulness, security, and growing mastery governing students’ learning efforts, they are instead characterized by anxiety, aimlessness, and risk aversion.

Because philosophy students are especially likely to face confusion and frustration in their attempts to learn, philosophy teachers should be especially mindful of the potential for miscommunication and demotivation in their attempts to teach.

We suggest that video feedback is an effective tool for communicating difficult learning objectives, skill sets, and assessments, and for supporting and motivating students as they face difficult learning tasks. Video feedback makes it easy to give especially clear and thorough feedback, approximates real dialogue, showcases marker engagement and emotion (including empathy and excitement), and has the potential to promote student-teacher relationships. For these reasons, video feedback may be an especially valuable addition to the philosopher’s toolkit.

Because the skills developed in philosophy courses are both difficult and unfamiliar, it is important to comment on student work in terms of clear learning objectives. As Kate Chanock

notes, “it is difficult to write a comment that will convey anything to a student who does not already know what it means” (2000, 96). In philosophy students may not know what a given comment means for a number of plausible reasons. Perhaps the first is that philosophy courses and assessments require higher-order thinking (e.g., interpreting, analyzing, evaluating, and synthesizing) more than other disciplines, especially at the introductory level. Indeed, every important aspect of doing philosophy is arguably an exercise in higher-order thinking. For example, before students can even begin to evaluate the arguments of others and begin to develop their own, they must be able to critically read philosophical texts, to identify central claims and arguments. Once students are able to identify an argument, they must also identify its logical structure, its implicit assumptions, its relationship to other arguments, and its relative importance to some larger philosophical account. In the context of philosophy, even summarizing is a difficult task for many students.

Video feedback is well suited to explaining these higher-order thinking skills. For example, when asked to summarize an author’s argument, many students will present a chronological list of things that author said. In response, a written comment may say something like, “This is just a list; how do all of these claims fit together? Which is the conclusion? How do the other claims support it?” In the next draft the student might exchange the chronological list with a play-by-play commentary: “Author X argues for a strong claim about topic P and backs it up with solid evidence. First X introduces and totally discredits opposing position Q. X then considers three convincing reasons to favor approach R. After giving a logical and well-organized argument, X concludes that we should ϕ .” This example is hypothetical, but it should feel familiar. While it is difficult to explain in writing what exactly has gone wrong in a ‘list’ or ‘play-by-play’ summary (and also what has gone right in moving from the list to the play-by-play), video makes it much

easier to provide an example of how the student might present the “solid evidence” for the claim in question, to emphasize the importance of ‘argument-markers’ and ‘sentence-level transitions’ so as to capture relationships between ideas (and between premises and conclusions), and even to provide everyday examples of arguments or short stories that are missing clear links between ideas. In short, video makes it very easy to say what would otherwise be laborious and time consuming to write down.

Where learning objectives for philosophy assessments are among the most difficult skills to learn, they are also among the most difficult to communicate. In part this is because philosophical learning objectives and assessment criteria are thoroughly intertwined with the nature, goals, and methods of philosophy itself. Without committing to any precise definition of philosophy, it is fair to characterize philosophy as concerned as much (if not more) with questions, aims, and methods as with any proposed arguments or answers. In other words, philosophy may be characterized as an activity or process (Estarellas 2007, 12) that is essentially inquiry-based or investigative (Cholbi 2007, 51). Furthermore, where (and perhaps because) philosophical thinking is an investigative process, philosophical writing is dialogical (Concepción 2004). Understanding the investigative and dialogical nature of doing and communicating philosophy may be crucial for students as they attempt to make sense of their feedback.

We suggest that video feedback on student writing is well suited to communicating the investigative nature of philosophy. For example, imagine a student who, when asked to summarize Descartes’ *Meditations*, says something like, “Descartes argues that we could be dreaming and not know it, or that for all we know we are essentially in the matrix. Luckily, we can’t be wrong about thinking we exist or else who’s there doing the thinking?” Among other

things, a written comment might say something like, “Can you expand? In particular, why does this matter? Why is Descartes concerned with all of these skeptical possibilities?” In response to this kind of comment, it is easy to imagine students wondering which part needs expanding and in what way. It is also easy to imagine students interpreting the second question as an invitation to speculate about Descartes’ childhood or mental health. In a video comment very little additional effort is required to say what should be expanded, or to explain the sense in which Descartes’ assumptions and motives are relevant to understanding and explaining his argument.

Likewise, we suggest that video feedback is well suited to communicating (and modeling) philosophical dialogue. As David Concepción notes, “students sometimes ask [...] one or all of the following questions: (1) Why does the author contradict herself? (2) Why does the author repeat himself so much? (3) Why is this reading so wordy?” (2004, 365). Where students are confused by the dialogical nature of philosophical texts, including for example the purpose of (charitably) presenting alternative arguments and objections, they will also be confused by the dialogical nature of feedback on their own argumentative writing efforts. For example, students may be unsure of what to do about a comment like “susceptible to counterargument.” Perhaps they will think, “If the claim is susceptible to counter-argument, then perhaps it’s a claim I shouldn’t be defending.” One of the most significant hurdles for undergraduate philosophy students is to appreciate the dialogical role of considering objections in the process of both developing and communicating a line of reasoning. The conversational nature of video feedback makes it easy to explain a pressing counterargument, to signal its severity, to identify its source, and to ask students to consider various ways of responding or whether it might be worth qualifying their claim in light of counterarguments. As a marginal comment (which would inevitably extend to the back of the page) this kind of comment may be perceived as an

unnatural, longwinded rebuttal to the student's paper, especially if that student is not yet familiar with the dialogical nature of writing and commenting on philosophy papers.

As the student surveys presented above suggest, the conversational nature of video feedback allows markers to explain *more*, and to explain more *clearly*. Importantly, they also suggest that elements of nonverbal communication (such as facial expression, tone of voice, posture, and gesture) may contribute to students better understanding the content and purpose of their feedback. Because the skills we comment on in a philosophy paper, the ability to think and express one's self, are quite personal, critical feedback (however constructive) may be taken personally. Similarly, because philosophical argumentation may be perceived as combative, critical feedback (again, however constructive) may feel especially hostile and discouraging. When giving written feedback we hope our comments are perceived as expressing interest and care (one of the present authors even makes a show of modeling the tone of voice she would like her students to imagine as they read their written feedback), but when there is room for ambiguity what actually gets communicated is often beyond our control. The fact that video feedback enables markers to unambiguously express sympathy, intellectual curiosity, excitement, optimism, and good will seems to us a unique advantage of the video feedback method.

Indeed, video feedback may help students not only to make sense of what it is to do philosophy but also to develop positive learning attitudes precisely because it brings marker emotions into view. For example, when providing written feedback it is normal to worry whether a low mark will demoralize a student. In response to this worry, most markers are careful to include positive comments. Unfortunately, attempting to come up with non-generic positive comments on a struggling essay can be difficult, and there is always the worry that the student will see through the attempt. In contrast, when a student sees that the instructor's supportive

attitude is independent of the mark assigned, they may be more likely to take risks and to try on new learning strategies. As Entwistle notes, “while level, pace, structure and clarity all contribute to the effectiveness of lecturing, it is generally explanation, enthusiasm, and empathy which are most likely to evoke a deep approach” (2000, 7).

Importantly, video feedback also makes visible marker engagement. As indicated by the student surveys, many students perceive a lack of effort by the marker when receiving written feedback. This perceived lack of effort, whether real or imagined, can have a negative impact on the student-teacher relationship. When the student feels the instructor is not interested in his or her work, this plausibly reduces student-teacher dialogue, and students may take comments less seriously. In contrast, video feedback allows the student to see that the instructor has made an effort and that the comments are personalized. We suggest that the personal nature of video feedback, coupled with the nuance allowed by non-verbal communication, promotes feedback practices that are sensitive to students’ motivation and self-esteem, while fostering a healthy student-teacher relationship.

On a more speculative note, we suggest that video feedback may be well suited to cultivating increased inclusivity, which may be especially valuable given the lack of diversity (gender, racial, ethnic, etc.) in academic philosophy. While the exact causes of various diversity gaps are still unknown, recent research suggests that, at least in the case of the gender gap, the most significant leak in the academic pipeline occurs between introductory and upper-level courses (Paxton et al. 2012, 953). While some research suggests that introductory philosophy courses may be pushing women and minorities away, perhaps due to the presence of implicit biases or encouraging (or failing to disarm) stereotype threat (Saul 2013), other research suggests that we may be losing women and minority students before they even set foot in the door due to

preconceived notions about what it takes to be successful, as well as notions about who has what it takes (Leslie et al. 2015, 264). Importantly, both kinds of hypotheses point to the importance of (a) clearly communicating learning objectives and assessment criteria, (b) encouraging students to see skill development as a process and to aim at high standards, and (c) cultivating a sense of belonging in the classroom. The strengths of video feedback may be especially applicable to all of these tasks.

6. Getting Started: Recommendations for Implementation

Making and sharing feedback videos is surprisingly simple, no more difficult than checking email. Free, easy-to-use video software is ubiquitous. We used Photo Booth (an OS X built-in software application), which involves clicking exactly one button. Sharing videos is also simple, especially through learning management systems like Blackboard. Where most students are already familiar with submitting assignments to Blackboard (or similar), video files can be attached directly to their electronic submissions making them both private and easy to access.¹⁶ In short, navigating the software required for creating and receiving feedback videos is something markers and students alike can learn to do with minimal effort.

In addition to basic software requirements, there are a few less obvious things to consider: location, lighting, camera angle, eye contact, tone of voice, getting used to talking to the camera, etc. While production quality need not be professional (indeed, retakes and editing would be prohibitively time-consuming), making videos does require a quiet, distraction-free environment

¹⁶ For markers using Blackboard, it is easy to combine the video feedback method with anonymous marking. So long as students are instructed to remove all author-identifying information from their work, Blackboard can anonymize essays, and video files can be attached directly to electronic submissions. For markers interested in the benefits of anonymous grading but concerned about compromising the quality of feedback and student-marker interaction, video feedback (in conjunction with a learning management system that enables electronic submissions and anonymous grading) may obviate such worries.

and some awareness of the idiosyncrasies of video communication. For example, eye contact requires looking at the camera (not the video of yourself displayed on your screen), and the camera should be at eye-level, to avoid literally looking down on the student.

Not only is video feedback easy to create and share, we think that many instructors will find video feedback a doable (and enjoyable) task, even in larger courses, and even when marking is distributed between teaching assistants. At a first pass, maximizing efficiency requires systematizing the technical process. For example, we recommend devising a system for recording, naming, organizing, and uploading videos. Because video files can be large, and so may take nearly as long to upload as to record, it may be worth uploading videos as they are recorded.

Unsurprisingly, the most time-consuming part of the video feedback process is the recording of the video itself. Providing quality feedback as efficiently as possible requires some planning and practice. Some markers may be able to read a student's paper and immediately record their comments without marking up the paper or taking notes. For others it may be helpful to have on hand a basic script or rubric. In the current study, all three markers followed a basic script (greeting, positive feedback, critical feedback, invitation to continue discussion) and attempted to keep note taking to a minimum. Beyond the scope of the study at hand, one marker found it helpful to fill out an assignment-specific worksheet or rubric for each paper, and to incorporate that into the basic script. While we hope sharing our own strategies may be useful to others, what works may vary with markers and contexts. The point here is that efficient video feedback production requires planning and practice with an eye towards the learning objectives in question.

In addition to planning feedback content (such as a basic script), effectiveness of the method can be improved by carefully designing assessment instructions to anticipate the idiosyncrasies of the feedback method. As discussed in section 4.4, one of the most common student criticism has to do with matching comments to specific portions of text. One assessment design solution might be to require students to number paragraphs on their submissions. Additionally, students should receive some guidance for using video feedback effectively. For example, they may need explicit instruction to have their papers in front of them, to pause and replay their videos, and to mark up their own texts. Another student criticism of the video feedback method is that, at least for some, it is initially uncomfortable. It may therefore help to show students a sample video in advance.

In our experience the video feedback method does save time, but there is a learning curve. All three markers concur that from the very first assignment they gave better feedback in about the same amount time or less than they would typically spend providing written feedback, and that with practice video feedback seemed to become increasingly efficient. We therefore believe that, for many markers, the method of video feedback may be a doable, scalable task. Just as important, we find that providing video feedback is also a more enjoyable task.¹⁷ We therefore suggest that video feedback is a promising untapped resource for teaching and learning philosophy. While there's more research to be done, video feedback is very much worth exploring in the context of real classrooms.

Bibliography

¹⁷ Of course that is not say that that video feedback will be the most effective (or enjoyable) mode of feedback for every marker, student, or context.

- Bereiter, Carl, and Marlene Scardamalia. 1989. "Intentional Learning as a Goal of Instruction." In *Knowing, Learning, and Instruction: Essays in Honor of Robert Glaser*, edited by Lauren B. Resnick, 361–392. Hillsdale: Lawrence Erlbaum.
- Brown, Sally. 2007. "Feedback and feed-forward." *Centre for Bioscience Bulletin* 22.
- Cann, Alan J. 2007. "Podcasting Is Dead. Long Live Video!" *Bioscience Education* 10.
- Chanock, Kate. 2000. "Comments of Essays: Do Students Understand What Tutors Write?" *Teaching in Higher Education* 5 (1): 95–105.
- Cholbi, Michael. 2007. "Intentional Learning as a Model for Philosophical Pedagogy Teaching Philosophy." *Teaching Philosophy* 30 (1): 35–58.
- Concepción, David W. 2004. "Reading Philosophy with Background Knowledge and Metacognition." *Teaching Philosophy* 27 (4): 351–68.
- Crisp, Beth R. 2007. "Is It Worth the Effort? How Feedback Influences Students' Subsequent Submission of Assessable Work." *Assessment & Evaluation in Higher Education* 32 (5): 571–81.
- Crook, Anne, Alice Mauchline, Stephen Maw, Clare Lawson, Robyn Drinkwater, Karsten Lundqvist, Paul Orsmond, Stephen Gomez, and Julian Park. 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): 386–96.
- Entwistle, Noel. 2000. "Promoting Deep Learning Through Teaching and Assessment: Conceptual Frameworks and Educational Contexts." Paper presented at the first annual conference of the Teaching and Learning Research Programme, Leicester.
- Estorellas, Pablo. 2007. "Teaching Philosophy vs Teaching to Philosophise." *Philosophy Now* 63 (2007): 12–15.
- Fritz, Catherine O., Peter E. Morris, Robert A. Bjork, Rochel Gelman, and Thomas D. Wickens. 2000. "When Further Learning Fails: Stability and Change Following Repeated Presentation of Text." *British Journal of Psychology* 91 (4): 493–511.
- Gibbs, Graham, and Claire Simpson. 2004. "Conditions Under Which Assessment Supports Students' Learning." *Learning and Teaching in Higher Education* 1 (1): 3–31.
- Hattie, John, and Helen Timperley. 2007. "The Power of Feedback." *Review of Educational Research* 77 (1): 81–112.
- Henderson, Michael, and Michael Phillips. 2015. "Video-Based Feedback on Student Assessment: Scarily Personal." *Australasian Journal of Educational Technology* 31 (1): 51–66.
- Hounsell, Dai. 2007. "Towards More Sustainable Feedback to Students." In *Rethinking Assessment in Higher Education: Learning for the Longer Term*, edited by David Boud and Nancy Falchikov, 101–13. London: Routledge.

- King, Dave, Stuart McGugan, and Nick Bunyan. 2008. "Does It Makes a Difference? Replacing Text with Audio Feedback." *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education* 3 (2): 145–63.
- Leslie, Sarah-Jane, Andrei Cimpian, Meredith Meyer, and Edward Freeland. 2015. "Expectations of Brilliance Underlie Gender Distributions Across Academic Disciplines." *Science* 347 (6219): 262–5.
- Lillis, Theresa, and Joan Turner. 2001. "Student Writing in Higher Education: Contemporary Confusion, Traditional Concerns." *Teaching in Higher Education*, 6 (1): 57–68.
- Lunt, Tom, and John Curran. 2009. "'Are You Listening Please?' The Advantages of Electronic Audio Feedback Compared to Written Feedback." *Assessment & Evaluation in Higher Education* 35 (7): 759–69.
- Marton, Ference, and Roger Säljö. 1976. "On Qualitative Differences in Learning—ii: Outcome as a Function of the Learner's Conception of the Task." *British Journal of Educational Psychology* 46 (2): 115-127.
- Merry, Stephen, and Paul Orsmond. 2008. "Students' Attitudes to and Usage of Academic Feedback Provided Via Audio Files." *Bioscience Education* (11).
- Nicol, David J., and Debra Macfarlane-Dick. 2006. "Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedback Practice." *Studies in Higher Education* 31 (2): 199–218.
- Parton, Becky Sue, Mindy Crain-Dorough, and Robert Hancock. 2010. "Using Flip Camcorders to Create Video Feedback: Is it Realistic for Professors and Beneficial to Students?" *International Journal of Instructional Technology & Distance Learning* 7 (1): 15–23.
- Paxton, Molly, Carrie Figdor, and Valerie Tiberius. 2012. "Quantifying the Gender Gap: An Empirical Study of the Underrepresentation of Women in Philosophy." *Hypatia* 27 (4): 949–57.
- Rotheram, Bob. 2009. "Sounds Good: Quicker, Better Assessment Using Audio Feedback." *JISC Final Report*.
- Saul, Jennifer. 2013. "Implicit Bias, Stereotype Threat, and Women in Philosophy." In *Women in Philosophy: What Needs to Change?*, edited by Katrina Hutchison and Fiona Jenkins, 39–60. New York: Oxford University Press.
- Smith, Emma, and Stephen Gorard. 2005. "'They Don't Give Us Our Marks': The Role of Formative Feedback in Student Progress." *Assessment in Education* 12 (1): 21–38.
- Weaver, Melanie R. 2006. "Do Students Value Feedback? Student Perceptions of Tutors' Written Responses." *Assessment & Evaluation in Higher Education* 31 (3): 379–94.