Shannon Mrkich; Jeff Sommers  
West Chester University of Pennsylvania

Audio Response to Student Writing  
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Introduction
Teachers are oral communicators, spending a great deal of time talking (or signing) to students in person in classrooms, offices, and hallways, as well as online through lecture capture and synchronous chat sessions. Nevertheless, despite decades’ worth of evidence on the advantages of audio-based response, composition instructors habitually respond to their students’ work with written comments even though students have long complained that these comments are at times hard to read, generic, or abbreviated, not to mention time-consuming for the instructors. Perhaps hand-written or typed commentary persists because we feel it is logical to respond to written work with written assessment. Perhaps the reasoning goes no deeper, however, than the conviction that this is the way we’ve always responded to student work. (Note: Even with the explosion of online teaching, typewritten comments strongly persist as a routine practice for responding to student writing.)

This bibliography highlights audio response as a long-standing, yet dynamic and evolving feedback strategy with distinct pedagogical and practical benefits for teachers and students. The articles annotated here and listed at the end provide a tremendous range of evidence to support the value of audio-based feedback. This body of literature is vast and diverse – encompassing nearly 250 scholarly articles, book chapters, conference papers, doctoral dissertations, and professional articles that study audio feedback dating from 1958 to the present. The purpose of this bibliography is to review seminal articles on this topic and to identify other articles that should be understood as so. Instructors who provide feedback to their students, as well as writing center professionals, can benefit from the Scholarship of Teaching and Learning (SoTL) orientation of the studies. Researchers interested in response to student writing may be encouraged to expand their attention to include the growing use of and the literature about audio-recorded response.

The articles are organized chronologically in order to emphasize the deep history of audio feedback studies. Through the 20th century, articles on audio response generally are exploratory, focusing on best practices, practitioner advantages, and collegial encouragement toward adoption. As is explained in the Trends in Scholarship section below, the “early” days of audio feedback studies represent mainly tape-based response, focusing on the teachers’ perspectives, using anecdotal/semi-structured studies, based in English/composition studies, (with a few ESL, a small sampling of performance-oriented studies in the early 1990s). While the annotations

represent the most critical studies and highlight the consistency of findings, a gap in time period is evident at this point. The articles in this gap are not summarized because they represent substantive replication of the early findings of Hunt, Olson, and Anson. The latter annotations represent the resurgence of audio response studies that emerged with the advent of online and hybrid courses and with the development of screen-capture technology at threshold of the 21st century. The annotations chronicle the renewed interest in audio response through empirical studies that measure variables such as technology, research perspective, and academic discipline. Since the studies throughout the whole literature are important in the history of audio response, a more comprehensive list of sources at the end allows for further exploration.

**Advantages of Audio Response**

Audio as Pedagogy

As teachers of writing, one of our goals is to help students write more effectively. One way we hope to help them is by giving feedback on their work. However, if students do not read, understand, and use the comments to improve their writing, then the commentary is not a helpful part of writing instruction. Studies have shown that the nature of audio response prompts students to interact and sometimes re-visit feedback. Students often report that the personalized nature of audio response feels like a face-to-face meeting with the instructor. Warnock posits that this conference-like feel may contribute to students’ willingness/desire to review the comments more than once, whereas, the in-person conference is not re-viewable, in general. Students can listen when, where, and however many times they want. Further, Reynolds and Russell argue that listening/viewing commentary multiple times implies that students are engaging in critical reflection. Lunt and Curran assert that the digital nature of today’s audio feedback allows instructors to see if and how many times students access the comments and, often, how long they spend reviewing them.

Student Preferences

Research shows that students perceive audio commentary positively, as well. Studies consistently confirm students’ appreciation of the personal nature of the comments that reduces perceived distance, detailed response that helps them revise and internalize for transfer, encouraging and positive comments that build confidence and motivation, and tone of voice that translates as helping to understand what is important and is perceived as indicative of teachers’ time and care. Students also recognize the practical advantages of having commentary that is easy to interpret, comprehensive, and perceived as spontaneous.

As technology developed, audio commenting has evolved as well. Several recent studies look at student preference for modality. Very rarely did students prefer written comments to other modalities (see Gould and Day). Audio alone has been characterized by students as a natural extension of oral examinations/presentations (Munro and Hollingworth; Chiang) and of mock employment applications (Nortcliffe and Middleton). However, Lees and Carpenter, Silva, and Ice et al. find that students prefer a combination of written and audio commentary, mainly because of the personalization and depth of commentary, but also because of the attention to both global and micro-concerns. Chiang also reports that students like asynchronous audio-visual feedback for research reports and assignments with rigid structures, while they preferred synchronous audio-visual commentary for essays and slide presentations.
Instructor Advantages
To Hunt, the “unqualified advantage” of audio feedback is the opportunity to explain points in more detail. In general and over its long history, audio feedback is characterized by instructors as natural, authentic, and intuitive and as building the instructor-student relationship, often making them feel more approachable. Similarly, Ice et al. and Swan Dagen et al. have shown that audio response usually addresses global/higher-order issues (thesis, evidence, organization, etc.), and Sommers (“Response Rethought”) argues that it appeals to multiple learning styles. One of the most practical advantages reported in nearly all anecdotal and empirical articles is that audio response can save time for the commenter (for minor exceptions see King et al.; Reynolds and Russell).

Trends in the Scholarship

Technology and Modality
One interesting trend about the literature across time is the argument that technology makes responding easier. Hunt was not the first investigator of or advocate for audio commentary. In 1958, Richard F. Bauerele used a reel-to-reel tape machine to provide feedback for his students, while other early adopters through the early 1970s recorded via 33 1/3 records. From the mid-1970s to the mid-1990s, the cassette tape was a popular and increasingly accessible, affordable, and portable recording device. As the 1990s ended, instructors began using digital voice capture originally via CD and increasingly through MP3, WAV, WMA, etc. formats and various devices and software applications. Windows® and Apple® operating systems and Adobe® Acrobat®, all have the capability for inserting voice files into documents. Early in the 21st Century a resurgence of audio response studies emerged. TechSmith’s Jing® and Camtasia®, as well as Apple’s iMovie® and Quicktime®, developed screen capture software that records all activity onscreen along with voiceover commentary.

Research Perspective
While improvements allowed for more voice capture options, these advances have spurred practitioners and researchers to emphasize technology and modality, to consider a wide range of variables, and to ask more complex questions about the impact of feedback modalities. Early explorations of audio feedback are concerned primarily with the instructors’ perspective and experience: these studies generally focus on substantive and affective detail, confidence and relationship building, and saving time. Around the turn of the century, the perspective of scholarly inquiry began to shift to examine the students’ perceptions of the impact of audio commentary on their own learning and attitudes. These studies examine how students perceive, interpret, respond to, value, and use audio feedback and incorporate a multitude of perspective-based variables: first-year and last-year undergraduates, full-time and part-time undergraduates, face-to-face and online students, developmental students, graduate students, and peer reviewers.

Methodology
Changing technology, perspective, and discipline have led to examining the impact of audio commentary on student learning through more formalized research studies on student learning and attitudes. Early in the literature, the emphasis is on establishing the merits of audio response as an alternative to written commentary and on best practices. Later articles showcase empirical
analyses (both quantitative and qualitative), quasi-experimental analyses, case studies, anecdotal observations, constant comparative methodology, grounded theory methodology, and many variations on these approaches. It is clear that as audio commentary became more accessible technologically, researchers have and continue to investigate an increasing variety of perspectives, disciplines, and variables, which foster complex research questions and a wide range of methodologies.

Assessments and Disciplines
The closer the bibliography moves to the present day, the more we see audio commentary extending beyond written texts in first-year composition courses and into multi-modal assignments, oral examinations, oral presentations, poster presentations, and practical assessments. The broadening interest to other fields of study and assignments has led researchers to pose discipline-specific questions about assessment, learning, and attitudes associated with feedback choices. Older studies focus on composition and English Language Learning, but as the twentieth century concludes the literature reflects connections to Education, Business, Performance, and Distance Education. Most recently, research studies have branched into STEM fields, such as Physiotherapy, Engineering, and Nursing.

Conclusion
A theme that emerged from historicizing the literature is a clear sense that audio feedback indicates a positive “shift” from traditional written commentary. In 1975, Hunt wrote that audio feedback represented a shift in perception of audience and changed the fundamental relationship between writer and reader: “Written language is cumbersome, difficult, mechanically time-consuming and hopelessly limited. Given a choice between writing and dictating, I, a teacher of writing, choose to employ the resources of the spoken word as opposed to the written one” (p. 585). Olson, in 1982, noted a shift away from evaluation/corrective marking and toward dialogue between student and teacher. Anson, in 1997, described a shift away from judgment and toward mentoring, which resulted from the narrative quality of audio response, punctuated by personal, individualized comments. Then in 2010, Dixon suggested that audio commentary is a shift in paradigm away from teachers making statement and toward discourse between student and teacher.

The most interesting conclusion drawn from compiling this bibliography is that while technology, perspective, disciplines, assessments, modalities, and methodology have varied, sometimes dramatically, over the last six decades, arguments for the benefits of audio commentary have remained the same, characterized by students and teachers as detailed, natural, intuitive, encouraging, confidence- and relationship-building, personable, compatible with multiple learning styles, and a time-saving.

Nonetheless, while boasting positive pedagogical, rhetorical, and personal qualities for both the student and teacher, it is also clear that audio-based feedback has been a marginalized method for responding to student work. In “Response 2.0,” Sommers applied du Gay’s “Circuit of Culture” to his own feedback and argues that audio response can remedy the challenges of effective responding. In the same year, Killoran used Roger’s diffusion of innovation model in an attempt to understand why teachers do not adopt audio response as a primary method of feedback. Both
scholars conclude by issuing a call for a shift for audio feedback to become a part of mainstream pedagogy.

Hunt’s 1975 investigation of audio feedback to defeat “cryptic hieroglyphics” and to redefine the relationship between reader and writer was a clear precursor to larger, more emergent paradigms. Today, writing instructors concern themselves with the same issues Bauerele, Hunt, Olson, and Anson considered and for the same end: increased class sizes, focus on student learning, emerging technologies, contextualization (connection to class materials) – ultimately to help students write.
Anson, Chris M.; Deanna P. Dannels; Johnanne LaBoy; Larissa Carnierophoto

Students’ perceptions of oral screencast response to their writing: Exploring digitally-mediated identities

Forthcoming in *Journal of Business and Technical Communication* (July 2016).

This article explores student perceptions of feedback with screencast technology on identity and student-teacher relationship building. Anson et al. used inductive typological analysis framework, focusing on identity management, construction, maintenance, and perceptions about the teacher, the student and the interactions involved in screencast feedback. Of the eight courses studied, five were face-to-face, first-year composition (n=89) cross-curricular for sciences and social sciences, and three were distance education, upper-level scientifically oriented (n=52). All students received written comments on the first graded paper through Microsoft Word’s® “insert comments” feature and screencast feedback on the second paper through Jing®. Twelve percent (n=17) of students volunteered for 30-45 minute structured interviews that focused on student perceptions of overall feelings about screen capture. In response to Research Question 1: “What role does screencast technology (Jing) play in the perceived mediation of face during feedback interventions about students’ writing?” Anson et al. report that students perceive screencast feedback as making instructors’ evaluation criteria more transparent and building personal connections by revealing instructors’ personal feelings, visual context cues, and conversational tone. In response to Research Question 2: “What digitally-mediated pedagogical identities do students perceive as emergent in screencast feedback interventions?” Students reported that teachers enacted digitally-mediated identities of “affective guides, personal trainers, and relational partners.” In sum, Anson et al. posit that students who received screencast feedback perceived their teachers as acknowledging face-related issues that created a productive learning environment; students felt “respected, not judged; guided, not criticized.” The researchers conclude the personal, individual nature of screencast feedback lessened face threats common to the evaluative process.

KEYWORDS
Student Perspective; Constant Comparative Method; Online Learning; Screen Capture (Jing ® vs Written; Identity; Face and Face Threats

Anson, Chris M.

“She Really Took the Time”: Students’ opinions of screen capture response to their writing in online courses


Anson reports on his mixed-method comparative assessments of written and screen-capture response in face-to-face (phase 1) and online (phase 2) classes. Two teachers gave feedback to students on the final drafts from classes in Women’s and Gender Studies (n=17) and Psychology (n=23). Commentary on the first paper was typewritten and on the second paper a 5-minute
screen capture via Jing®. The study measured students’ perspectives on differences between spoken and written responses on three dimensions: cognitive, affective, and linguistic. The survey results showed that over 95% of students in both the face-to-face and online classes evaluated screen-capture commentary as “very helpful” (≈85%) or “somewhat helpful” (≈12%). With positive evaluations of screen-capture commentary considerably stronger in the online sections of the classes, Anson notes the reverse pattern for students’ evaluation of written comments, reporting them “somewhat helpful” 60% of the time and “very helpful” 28%. In addition, 70% of students “agreed” or “agreed strongly” for every item (audience, structure, style, purpose, focus, grammar, and content) that screen-capture was helpful in understanding writing, with the dimensions purpose and focus as statistically highest. In all sections and for both face-to-face and online classes, students reported significantly stronger positive affect and weaker negative affect about interpersonal qualities that accompanied the screen-capture commentary. Statistically, the online groups’ responses reported stronger levels of positive affect from screen-capture than written than face-to-face. All five interview participants reported watching the screen-capture commentary more than once and all recalled specific features that “made sense” to them. The informants emphasized their liking of the personal characteristics of spoken discourse – e.g., tone, caring, understanding, enthusiasm – and the sense that they learned how their teachers felt toward their writing. This study suggests that online students perceive interactive, voice response as helpful for building student-teacher relationships and as more effective for helping them learn than written feedback.

KEYWORDS
Student Perspective; Mixed Methods (survey and interview); Summative Feedback; Psychology; Women’s Studies; Online Learning; Screen Capture vs Written

Munro, Wendy; Linda Hollingworth

Audio feedback to physiotherapy students for viva voce: How effective is “the living voice”?

doi: 10.1080/02602938.2013.873387

This article presents a UK-based exploratory study of physiotherapy student and tutor (UK terminology for instructors) perceptions of the value of audio feedback on viva voce skill-based practical, summative assessment. In a pilot study and main study, the researchers used open coding of qualitative questionnaires to identify emerging themes and ideas from students and tutors on perceptions of memory of the oral examination experience, usefulness for exams and clinical practice, and preferred method of feedback, as well as problems accessing (student) or producing (tutor) audio files. Munro and Hollingworth report that students felt audio feedback was more personal and allowed for greater explanation of points, but generally students preferred a combination of both written and audio comments. Due to the nature of the practical, oral examination, students felt they were “walked through” the evaluation and that audio comments allowed for better recall and visualization of the examination process, which allowed them to understand their performance in relationship to expectations. Further, students indicated that audio comments allowed them to recall the positive parts of the examination rather than just the negative comments. Also, students described they were able to see the evaluation experience
from the tutor’s perspective and increase their understanding of comments. Tutors responded that they were able to give more personal and more detailed high-quality feedback in the same amount of time as previous evaluations. Specifically for a viva study, tutors also reported that the verbal feedback felt like a natural extension of the oral examination and that talking through the grading rubric made them feel they could balance the positives and negatives of the students’ performance accurately.

KEYWORDS
Student Perspective; Instructor Perspective; Qualitative (questionnaire); Audio as Alternative to Written; Skill-based Practical Assessment; Oral Examination; Summative Feedback; UK; Physiotherapy

Gould, Jill; Pat Day

Hearing you loud and clear: Student perspectives of audio feedback in higher education

doi: 10.1080/02602938.2012.660131

Gould and Day used questionnaires and focus groups to examine student perceptions of audio feedback on written assignments in a Nursing program in the United Kingdom. The researchers analyzed the data thematically to measure autonomy and to reflect the complexity and multi-dimensional nature of community nursing practice, particularly critical thinking. All students (n= 51) were given audio feedback for three drafts and one final submission. A smaller portion (n = 22) of the same group was given written feedback on an additional assignment. The questionnaire results yielded that 92% of students felt that audio comments contributed to their learning; 84% felt that the formative comments lead to positive impacts on their final work; and 88% felt supported by audio response. However, 27% reported that they would prefer not to have audio feedback, which Gould and Day suggest might be influenced by student perceptions of the purpose of feedback, their scores, and/or the type of course work. The focus groups reported that audio comments were clear and easy to understand while contributing to learning and final work. A few respondents felt that the organization and conciseness of the responses could be improved, and another felt face-to-face feedback was the most beneficial. Students also detailed that they perceived the impact of audio feedback by citing increased confidence, appreciation of tone of voice, and building of the relationship between student and evaluator. While a few students reported stress when listening to comments repeatedly, most reported that the ability to listen more than once and in privacy were positive outcomes. The structure of the audio feedback was reviewed more diversely by students, citing the variations in length (5-30 minutes), style of feedback, and overall helpfulness were inconsistent. Instructors’ views of audio feedback were even more divergent. While some thought the process was quicker and more personal, others felt it took longer because they were not comfortable with audio as the medium. One instructor felt verbal feedback provided motivation and support to the students; however, others were not sure of the actual effects on academic work. Gould and Day recommend that feedback strategies must be weighed in light of students’ learning styles and that issues of consistency can be managed through guidance and practice.
This UK study examined first- and last-year student perceptions of formative audio feedback on an early assignment and on the review of literature of a culminating project, respectively. Hennessy and Forester report that consensus of the open-ended questionnaire and focus group responses was that audio response comments were less technical and more conversational than written feedback. Responses were “more nuanced” in that meaning was derived from tone of voice, as well as the spoken words. They also reported concerns such as needing a quiet place to record audio response, MP3 files taking up email storage space, and other technological difficulties that negatively affected respondents’ perceptions. Students reported that formative feedback was given linearly, paragraph-by-paragraph and that they were more inclined to return to the comments more than once and appreciated the personalized, detailed feedback that was marked by uncomplicated vocabulary. Students also felt that their work was actually read and appreciated and that the tutors (UK terminology for instructors) were speaking to them through the comments. While some first year students felt negatively about the nature of constructive comments (offering suggestions and pointing out areas needing improvement), last year students viewed such comments as affirmations that their work was proceeding acceptably. First-year students also reported that hearing constructive comments was easier at a distance, rather than face-to-face. Final-year students reported feeling a greater sense of collaboration with their tutors, as well as a prompting to read more and/or think more critically about their work. Hennessy and Forester suggest that audio feedback for formative work should be delivered and structured in a particular way: first, responders should thank the student for his/her work regardless of content; second, responders should be supportive and encouraging with their tones of voice; third, comments need to “feed forward” – offering suggestion on how to improve work and achieve a higher grade with the next submission. Their comprehensive framework for effective audio feedback includes responses that are thorough, reflective, encouraging, constructive, supportive, guiding, and clear. For first-year students comments take the form of advice for improvement; whereas last-year students’ comments focus on advancing critical analyses.
Killoran, John B.

Reel-to-reel tapes, cassettes, and digital audio media: Reverberations from a half-century of recorded-audio response to student writing

doi: 10.1016/j.compcom.2013.001

Killoran uses Rogers’ “diffusion of innovation” model to analyze why, after more than 50 years of use and generally positive perceptions on the part of its practitioners, audio feedback on student writing is used minimally. Killoran reviews the history of audio response, as well as the relationships of more current studies in connection with Rogers’ model, which holds that the pace of adoption is driven primarily by users’ subjective perceptions and not by the innovation’s objective attributes. Killoran argues that the “innovation” is the choice of audio response over written response, not the choice of recording device (cassette, MP3, etc.), which are re-inventions, and argues that four of Rogers’ five attributes are relevant here: “Compatibility” in this case, the composition community’s perception that audio-response reflects values such as enhanced student-teacher relationships, instructor as reader instead of judge, focus on formative commentary, increased positive comments, concern with larger issues (organization, development) and less with smaller-scale concerns (grammar), concern with writing and revising process, demonstration of communication skills, and in general focus on commentary that is more clear, specific, explanatory, and less directive. “Complexity” the perceived complexity of the technology is equally important to the actual complexity, since instructors across generations were and are concerned with their own and the students’ amount of time needed to learn the interfaces. “Trialability” which Killoran suggests is relevant since the decision to use innovative technology is not simply an instructor’s but is also dependent on student participation. And “Relative Advantage” which for Killoran consists of audio comments’ lack of legibility issues, time-savings in the production of sufficiently detailed comments, affordability (in some cases free), fewer requirements for follow-up conferences, instructors’ perception of personability, increased student comprehension because of instructor’s tone and attitude, provisions for better understanding and retention, higher motivation, increased appreciation of instructor’s time and effort, and increased feelings of recognition and approachability of instructor. Some reported disadvantages include a sense of responder awkwardness and a perceived necessary connection between commentary and physical paper. Killoran concludes by calling for instructors to experiment with audio response as the major issues of innovation can be remedied by employing free software, such as Audacity®, which will increase observability of this technology’s compatibility and relative advantages.

KEYWORDS
Student Perspective; Instructor Perspective; Review of Literature; Analysis; Rogers’ Diffusion of Innovation; Open Source
Sommers, Jeff

Response 2.0: Commentary on student writing for the new millennium


In this article, Sommers coins the term “Response 2.0,” which is descriptive of the evolution and use of various technologies, such as voice and video, when commenting on student writing. Using the framework of Haswell’s 2006 article “The Complexities of Responding to Student Writing; or, Looking for Shortcuts via the Road of Excess,” itself based on du Gay’s “Circuit of Culture,” Sommers argues that Response 2.0 can remedy the challenges of effective responding if instructors understand comments as a cultural discourse activity. Through a review and consideration of literature and of his own students’ survey responses, Sommers posits that the first challenge of **Production** of the response can be remedied by Response 2.0 because, on average, audio/video takes less time to provide substantial commentary and produces a greater amount of commentary. The challenge of **Representation** – the role of the responder – evolves into a more personal and conversational tone that is highlighted by student perceptions of respect and a sense of relationship between student and teacher. Response 2.0 addresses **Regulation**, which is the instructor enforcing rules or guidelines, by providing depth and clarity over breadth and rules of genre and style commentary. The challenges of the manner in which students receive the responses (or **Consumption**), and how their resistance to response (in this model **Identity**), are addressed because students describe audio/video feedback as personal and as making them feel that responders care and are interested in them and their progress. Response 2.0 also frees responders from the linear nature of written response, while concurrently appealing to multiple learning styles. Sommers concludes by issuing a call for Response 2.0 to become part of mainstream pedagogy because audio/visual feedback can address many of the challenges associated with quality commentary.

**KEYWORDS**
Instructor Perspective; Review of Literature; Analytical; du Gay’s Circuit of Culture”; Audio/Visual

Moore, Noreen S.; Michelle L. Filling

iFeedback: Using video technology for improving student writing

*Journal of College Literacy & Learning*, 38 (2012), 3-14

This study analyzed formative feedback given via video on college students’ papers in order to characterize the types of comments students received, how students used the feedback to improve their writing, and their perceptions of that feedback. Moore and Filling used a constant comparative methodology, which included questionnaires and small, semi-structured interviews, as well as template analysis of the video feedback for drafts and final submissions. They report that formative feedback centered primarily on global issues, such as thesis, evidence, and organization. Students (n=45) responded to this commentary by revising the same emphasized issues in their drafts, which resulted in all but two students improving the quality of their writing,
based on those global issues, from draft to final product. Students perceived the video feedback positively, citing that the comments were clearer, more fully explained, more personal, less harsh than written comments, more encouraging, and indicative of the time and care of instructors. Furthermore, students reported not only viewing the comment multiple times, but also taking notes on the videos in order to improve their writing. Instructors reported positive feelings about using video comments, citing that they saved time because feedback didn’t have to be succinct and allowed instructors to show specific examples of global issues.

KEYWORDS
Student Perspective; Instructor Perspective; Audio/Visual; Empirical; Qualitative; Constant Comparative; Template Analysis; Formative Feedback

Lees, Dave; Victoria Carpenter

A qualitative assessment of providing quality electronically mediated feedback for students in higher education


This case study examined part-time, post-graduate business students’ perceptions of feedback that combined both written comments, via Microsoft Word comments function, and audio feedback, via hand-held digital recorder. According to Lees and Carpenter, students reported that they felt typewritten comments were easy to read and specific but that they could be misinterpreted and lacked a personal element. Audio feedback was also evaluated positively because of the comments’ specificity, context, and personal tone. Overall, students reported that they preferred a combination of written (typed) and audio comments (73%, N=15), based primarily on the depth, clarity, and personalization of the dual feedback. Lees and Carpenter also anecdotally recorded the time for instructors to respond; in general typing comments took less time (15-25 minutes per paper) than handwriting (20-30 minutes per paper), and verbal comments (3-15 minutes per paper) were faster than typing, which was reported as “satisfying” to the instructors because of the quality and quantity of the feedback, as well as the perception from the survey results that their efforts were appreciated.

KEYWORDS
Student Perspective; Instructor Perspective; Qualitative: Case Study; Audio Compared to Microsoft Word Comments; Post-Graduates; UK

Sommers, Jeff

Response rethought . . . again: Exploring recorded comments and the teacher-student bond


Sommers engages in a reflection-on-action case study and develops a taxonomy for audio-based feedback. He notes that while the increased quantity of audio over written comments is well
documented, the perception of positive instructor-student relationship, while reported consistently, had yet to be explored. Is audio response or teacher strategy engendering relationship-building comments? Through close reading of his own formative feedback, Sommers identifies that his audio comments are marked by a pattern of temporality: retrospective – referring to past shared course-based experiences; synchronous – referring to instructor’s first-person thoughts while reviewing a student’s paper; anticipatory – referring to future shared writing activities and experiences. Further, though a comparison of audio and written feedback, Sommers demonstrates that his audio responses appear to be more conducive than written feedback to more plentiful commentary and to commentary that integrates a conversational approach to serious inquiry. Further, the audio response literature shows the temporal comments appear to be a crucial factor in fostering an increased perception of student-teacher bond and emphasize the connection between a writing assignment, what happens in a course (class, revision, assignments, conversations, etc.), and shared experience. Sommers concludes that a combination of teacher strategy and audio response as a modality are responsible for an emphasis on temporal comments which translate to positive instructor-student relationships.

KEYWORDS
Instructor Perspective; Transcript Analysis; Audio Compared to Written Comments; Case Study

Silva, Mary Lourdes

Camtasia in the classroom: Student attitudes and preference for video commentary or Microsoft Word comments during the revision process


This study investigated student perceptions of feedback given via Camtasia®, which is an audio/visual screen capture application, in contrast to comments given via Microsoft Word® comments function during the revision process. In an engineering composition class, an analysis of course management software showed that the 14 of 17 of students viewed video feedback within three days, and 15 of 17 viewed the videos, in full or in part, more than one time. Using survey and participation observation, Silva reports that students preferred video response because it was more conversational, addressed global issues such as thesis, organization, and use of evidence, and was more clear and more specific overall. Students who preferred Microsoft Word® comments appreciated the ease of locating more local problem areas, such as grammar, mechanics, syntax, and cohesion. Overall, the study reveals that students ultimately recommend a combination of both audio/visual and written comments to their work, in order to address macro and micro concerns.

KEYWORDS
Student Perspective; Empirical; Mixed Methods; Audio/Visual Screen Capture (Camtasia®); Audio/Visual Compared to MS Comments
Nortcliffe, Anne; Andrew Middleton

Smartphone feedback: Using an iPhone to improve the distribution of audio feedback


This study examined the use of an iPhone and Recorder Pro application (MP3) as a method of disseminating audio comments to second-year Engineering and Computing students on a mock employment application assignment. This case study examined one instructor’s experiences recording feedback for 130 submissions and student responses to a questionnaire and semi-structured conversations. The tutor evaluated between 10-20 assignments per day and returned all but 8 in six days. The instructor reported that using her iPhone was intuitive and time-saving. Further she felt that audio commentary made her more approachable and that her students reflected on what ways they could improve, as well as having an appreciation for taking the placement course. Nortcliffe and Middleton report that nearly all (53 of 56 students) felt that the feedback was “timely, meaningful, detailed, and useful for their personal development.” Furthermore, 55% listened to the audio feedback more than once, and eight reported sharing the comments with other people. In small focus groups and emails questionnaires, students reported preferring audio to written feedback because the commentary was descriptive, the medium was portable and familiar, and they enjoyed listening to the instructor’s voice rather attempting to read her handwriting. The iPhone was reported to be an accessible and familiar medium for disseminating audio comments, and the smartphone’s portability and asynchronous qualities seems to encourage the dialogic nature of feedback.

**KEYWORDS**
Student Perspective; Instructor Perspective; Case Study; iPhone; UK; Distribution of Feedback

Dixon, Steve

Sounding good: Exploring the potential of audio feedback

*Educational Futures*, 2.3 (2010).

Dixon reports on his study with 83 student and 6 tutors (UK terminology for instructors) on audio response protocols, student and staff perceptions, and reflection that is part of the UK project Sounds Good 2. The audio response protocol provided general guidelines (e.g., have assignment in hand; correct mistakes conversationally; 2-3 minutes time limit, etc.) and structural guidelines (e.g., introduce self and assignment; work steadily through assignment; explain thought process, etc.). Tutors used two types of recording devices for MP3 format audio comments; they reported via Likert-type scale the digital sound recorders were “easy” or “very easy” to use and resulted in taking less time for feedback; whereas the digital microphone was more difficult and took more time for response. Tutors reported that audio comments felt more natural and had more depth that, they perceived, changed the student/teacher dynamic. Eighty-three students were surveyed via questionnaire. Of the 57 returned responses, no students reported problems with accessing or listen to audio files. Furthermore, students provided overwhelmingly positive assessments of audio response, noting that tone of voice allowed them
to understand where major problems were, that the comments were personal in nature, and that they felt the response was encouraging and easy to interpret. Only 4 respondents preferred written comments in addition to audio. Dixon argues that audio feedback notes a paradigm shift in commentary – away from statement and toward discourse – thus focusing on an interaction that is perceived as creating more meaningful relationships with students; the “emotional” context is most exciting. Dixon also notes, however, that this study’s data are not measuring effectiveness of audio feedback, on which he calls for future inquiry.

KEYWORDS
Student Perspective; Instructor Perspective; Quantitative (questionnaire); MP3; UK

Ice, Phil; Karen Swan; Sebastian Diaz; Lori Kupczynaki; Allison Swan-Dagen

An analysis of students’ perceptions of the value and efficacy of instructors’ auditory and text-based feedback modalities across multiple conceptual levels

Journal of Educational Computing Research, 43.1 (2010), 113-134.

Ice et al. build on the extensive writing assessment work led by the principal investigator, as well as Stern and Solomon’s (2006) feedback hierarchy. Using a quasi-experimental design with 196 graduate-level education students over 11 courses, this study assessed student preferences and perceived impact of written, audio, and combination written and audio feedback. Using a Likert-type scale, this study measured student perceptions of commentary, which the researchers defined as students’ sense of relevance of each type of feedback and preference for modality of the feedback. Types of feedback included: Global comments that looked at the assignment as a whole; Middle-level comments that focused on the ideas and support on a paragraph and sentence level; Micro-level comments that were concerned with mechanics. Modality of feedback consisted of audio clips inserted into .pdf files and circled/highlighted points on papers

The study indicates that students perceived a low level of value of feedback at any level. Many students reported not having received comments at various levels (particularly micro-level), which may be indicative of faculty not providing such feedback or students not recognizing those types of feedback when provided. However, students reported the most effective feedback at all levels of feedback (global, mid-level, and micro-level) was a combination of written and audio; written only was second; audio only was third. Written feedback alone was preferred for mid-level feedback and even more so for micro-level, least for global-level. Ice et al. surmise it is difficult to retain temporal comments and mixed modalities may be confusing. Audio alone and combination of audio and written was perceived as more effective for global and mid-level comments (not so much at the micro-level).

KEYWORDS
Student Perspective; Quasi-Experimental; Audio Compared to Written and to Combination Written/Audio (PDF)
Lunt, Tom; John Curran

“Are you listening please?” The advantages of electronic audio feedback compared to written feedback


In this study, Lunt and Curran address multiple issues reported by the 2008 National Union of Students (UK) survey concerning students’ unhappiness with the quality, detail and timing of the feedback process on their work. Areas of concern were whether audio commentary is an improvement over written feedback in terms of (a) efficiency for tutors/instructors and (b) perceived quality for students. Tutors (UK terminology for instructors) used MP3 audio feedback via Audacity® for formative and summative response. Of the students who received audio feedback, 26 of 60 students responded to online survey. In general students had a very positive perceptions of audio response: students agreed or strongly agreed that audio feedback (a) helped them see what they missed from coursework (85%), (b) would help them improve their coursework (88%); (c) was more detailed than written feedback (75%); (d) was the preferred method of feedback (65%); (e) would like to receive in the future (92%).

In direct response to the National Union of Students survey, Lunt and Curran suggest that audio feedback appears to overcome students’ unhappiness with the quality, detail and timing of the feedback process on their work. The data indicated significantly less time was spent by tutors per 2000-word paper. Whereas tutors spent an average of 30 minutes for written comments, audio comments averaged 5 minutes. Lunt and Curran suggest the quick turnaround may reduce student anxiety. Another problem is that students do not collect/read written comments; this problem may be remedied because the data showed that audio files were opened in at least 50% of the cases, as student access of files can be tracked digitally. Other reported advantages include ease of technology for tutor and student when emailed and/or integrated into course management software. Students reported accessibility (can be listened to anywhere), retrieval, legibility, and personalized qualities are other advantages of audio feedback. Lunt and Curran also emphasize a perceived “enjoyment” factor for tech savvy students.

KEYWORDS
Student Perspective; Instructor Perspective; Audacity; Empirical (quantitative and qualitative via Survey Monkey)

Chiang, I-Chant Andrea

Which audio feedback is best? Optimising audio feedback to maximize student and staff experience


Chiang’s study investigated student and tutor (UK terminology for instructor) preferences for audio feedback based on assessment type. Audio-only (MP3), audio-visual asynchronous (audio
files inserted into pdf document), and audio-visual synchronous (Jing® video) feedback were used for poster presentations, formal presentations, project proposals, research reports, and essays. Through a focus group and questionnaires, Chaing found that the type of feedback students prefer is related to the type of assignment assessed. Students preferred audio-only feedback for presentations and assignments that are not written/submitted electronically. Audio-only was reported to be the least challenging method to use and favored over written commentary but liked less than asynchronous or synchronous audio methods. Students preferred audio-visual asynchronous for research reports and proposals that have a rigid structure and are separated into sections. They indicated that the level of detail, ability to self-pace, and transference to future assignments made this their favorite feedback type. Students preferred audio-visual synchronous for essays and Power-Point-type presentations, particularly for feedback about building arguments and because of the personal nature of the method. While they found audio-only feedback simple to use, tutors reported that the feedback was less specific and that this method was their least favorite. Tutors liked the specificity of audio-visual asynchronous feedback, which took more time but found the retrieval/uploading process tedious. They felt this method was the highest quality and most useful for students. Tutors perceived audio-visual synchronous as a compromise between the other methods, which allowed for specificity within the Jing-imposed 5 minute time frame, and easier to manage the files.

KEYWORDS
Student Perspective; Instructor Perspective; Empirical; Audio (MP3); Audio-Visual (embedded pdf); Audio-Visual (Jing); Comparative Study

**Middleton, Andrew; Anne Nortcliffe; Rosie Owens**

iGather: Learners as responsible audio collectors of tutor, peer and self reflection


Middleton, Nortcliffe, and Owens studied audio feedback from the perspective of students gathering various formal, informal, and semi-formal conversations as part of The Student Audio Notes Project at Sheffield Hallam University (UK). They sought to understand feedback from a dialogic, which focuses on students as co-producers of feedback, rather than monologic perspective, which primarily highlights tutor (UK terminology for instructor) commentary. The study’s aim was to assess student gathering of commentary, reflecting on feedback notes, and understanding of the relationship between audio collection on perceptions of autonomous learning. Fifty-two students from a variety of disciplines participated in this year-long project. Middleton et al. used questionnaires to record student pre- and post-study perceptions and focus groups to understand how devices were being used. Students demonstrated an evolving use of recording devices and an increased positive affect toward using audio to enhance personal learning. Whereas they first used MP3 recorders as a memory aid for lecture notes and group work, by mid-study students reported giving feedback to others, reflecting on their own progress, and connecting formal learning experiences. Over the course of the study, students also extended their audio-feedback collection from tutors to peers/group work, and then to personal notes. The study also suggests that the availability of a recording device helped students to recognize
significant conversations, from the formal to the informal quick conversations, and may have been the instigator of the conversations rather than just the recorder.

KEYWORDS
Student Perspective; MP3; UK; mixed methods

Swan Dagen, Allison; Cheryl Mader; Steven Rinehart; Philip Ice

Can you hear me now? Providing feedback using audio commenting technology

*College Reading Association Yearbook*, 29 (2008), 152-166

Swan Dagen et al. compared student and instructor perceptions of written and embedded audio-comments through Adobe Acrobat® in a two-phase case study that employed surveys and interviews. The population was reading specialist/literacy graduate students. The initial phase investigated student perceptions of audio-response, differences in type of feedback between written and audio, and the effectiveness of audio as an alternative to written feedback. The initial survey results indicated students’ positive perception of audio response, showed they most highly valued comments on Content/Subject matter, and indicated that they received substantial feedback on Mechanics. Phase 2 analyzed differences in type and quantity of feedback and student perceptions of differences between written and audio feedback (a) Assignment Content/Subject Matter, (b) Clarity and Flow of Writing, (c) Mechanics, Grammar, and Style, and (d) Rapport Building/Positive Affirmation. The study found that modality was a significant predictor of increased Content/Subject and Clarity/Flow feedback, but not of Mechanics and Rapport. Audio feedback produced an average of 30.7% more Content/Subject commentary and an average 48.2% less Clarity/Flow feedback. In addition, the amount of feedback was double, triple, or greater for audio feedback, and instructors used “richer,” adjective-based feedback with audio response particularly in Content/Subject and Rapport commentary. Although students perceived that both Content/Subject and Mechanics increased with audio feedback, only Content/Subject increased approximately 31%, whereas Mechanics had no significant change. Instructors perceived audio response positively, even though they had to navigate technical difficulties. Swan Dagen et al. advocate audio feedback via imbedded audio comments for face-to-face and online learning based on its richness and personal nature.

KEYWORDS
Student Perspective; Instructor Perspective; Case Study; Graduate-Level; Audio Compared to Written; Audio-Visual (embedded pdf); Quasi-Experimental
King, Dave; Stuart McGugan; Nick Bunyan

Does it make a difference? Replacing text with audio feedback

*Practice and Evidence of Scholarship of Teaching and Learning in Higher Education*, 3.2 (2008), 145-163.

King et al. investigated student and tutor (UK terminology for instructor) perspectives of value, nature, and time of replacing summative, text-based commentary with audio feedback. Twenty-five students from years 1, 2, and 3, and four tutors participated in focus groups with semi-structured interviews. One tutor used Audacity® and the other three used MP3 voice recorders. The results of the analysis showed that in all instances audio response produced more feedback. Generally, both students and tutors like the personal nature of audio; tutors reported that the audio modality influenced their word choices; some students found hearing the tutor’s voice unusual. Students also liked the amount and depth and accessibility of audio feedback, but some found it difficult to link comments to a particular section of an essay. Tutors worried about their tone and voice quality, found reviewing comments time consuming, and had difficulty editing. Furthermore, tutors were cognizant of difference in length of commentary among students and were concerned that students might post files to social media. Besides a higher word count, audio produced “richer,” more comprehensive commentary and allowed for spontaneous reactions, which King et al. deem “authentic” and less likely to appear in written feedback. In addition, audio allowed tutors to convey tacit knowledge that the authors suggest is part of the higher quality of audio. Three of four tutors self-reported spending more time (6-14 minutes) with audio response, with reviewing or re-recording likely the problem.

KEYWORDS
Student Perspective; Instructor Perspective; UK; Audacity; MP3; Summative Feedback; Qualitative

Reynolds, Julie; Vicki Russell

Can you hear us now? A comparison of peer review quality when students give audio versus written feedback


Reynolds and Russell’s study investigated audio versus written student peer review commentary in three first year writing classes. The data were assessed through an anonymous attitudinal survey and a quantitative assessment of the quality of the peer reviews. The quality of the peer review responses were coded in terms of lower-order verses (LOC) higher-order concerns (HOC) and the generic versus specific comments for 75 peer reviews, of which 36 were audio averaging 10 minutes, and 39 were written averaging 496 words. Additionally, an anonymous attitudinal survey was distributed at the end of the semester. The study results supported Reynolds and Russell’s first hypothesis concerning HOCs comments and second hypothesis concerning specificity: Peer review via audio feedback produced an average of 4 more HOCs, 2 more LOCs, and 6 more specific comments than written feedback. Hypothesis 3 was not supported, however,
as peer reviewers did not prefer giving audio feedback because it is more efficient method of commenting and students felt engaging in audio peer review takes more time than written commentary. Students also indicated that they preferred receiving written feedback, which confirms Hypothesis 4, in particular because of the additional time it takes students to process audio feedback they received. Reynolds and Russell advocate the use of audio commentary for student peer review not only because of the focus on HOC but also because they speculate that the additional time spent processing audio commentary may reflect that students are engaging in critical reflection, which may not be happening with written feedback.

KEYWORDS
Student Perspective; Peer Review; Comparative Study; Audio Compare to Written; Quantitative; iPod; MP3

Warnock, Scott

Responding to student writing with audio-visual feedback.


After a brief review of the perceived pros and cons of audio response, Warnock presents recommendations for engaging in audio/visual feedback via screen-capture software, specifically Camtasia®. In addition to hardware and software requirements and a step-by-step overview from electronic collection to dissemination, Warnock also describes that he allows approximately five-minutes for formative commenting on each draft, while thinking aloud – treating the process like a conference. Next, he reviews major advantages of this modality: the visual allows students to see where comments are directed and does not have legibility issues; the auditory has a face-to-face conference, personal quality, reduces “isolation” for instructor and students, allows for a great deal more commentary is a shorter amount of time, and gives room for more encouragement. Warnock also describes a mini-study of two classes that received three types of feedback (a) written, web-based rubric, (b) face-to-face conference, (c) A/V comments. While students had no clear-cut preference for feedback type, they reported liking the personal, conference-like feel and the ability to review comments as needed of A/V comments, as well as finding some challenges with technology.

KEYWORDS
Student Perspective; Instructor Perspective; Screen-capture (Camtasia®); Formative Feedback; Experiential; Best Practices; Case Study
Sipple, Susan

Ideas in practice: Developmental writers’ attitudes toward audio and written feedback


Sipple investigated student perceptions of audio commentary and its effectiveness compared to written feedback in developmental freshman composition courses. Her interest emerged from a necessity to provide individualized instructor feedback to bridge developmental students’ diverse writing styles and skills. Four papers were evaluated for each student, two with MP3 feedback averaging 10-12 minutes and two with written feedback. The survey (n=33) and interview (n=10) revealed that seven students (21%) indicated their preference for written commentary, citing primarily the ease of finding punctuation and spelling mistakes. Three students (9%) preferred a combination of modalities, so they could both “see” errors and “hear” positive feedback and areas for revision. Twenty-three (70%) of students preferred audio commentary on their initial drafts for six main reasons: audio commentary (a) increased student self-confidence and motivation based on the frequency of praise and on students’ perceptions of instructor genuineness; these results imply that confidence boosting can translate to increased motivation; (b) helped students internalize, retain, and transfer feedback to future assignments; (c) was more detailed, which allowed students to revise more fully; (d) reduced confusion by indicating the instructor’s level of expected revision, by allowing students to listen to comments repeatedly and by emphasizing instructor emphasis through tone of voice; (e) generally strengthened perceived teacher-student relationship, indicated instructor time and care, but was reported sometimes as damaging the relationship; (f) was perceived as more innovative, thus more enjoyable to apply.

KEYWORDS
Developmental Writers; Qualitative; Student Perceptions; Audio Compared to Written; Formative; MP3

Anson, Chris

In our own voices: Using recorded commentary to respond to writing

In Mary Sorcinelli and Peter Elbow (Eds.) *Writing to Learn: Strategies for Assigning and Responding to Writing Across the Disciplines (New Directions for Teaching and Learning, No. 69)*, San Francisco: Jossey-Bass, 1997, 105-114.

Anson highlights that one of the major advantages of audio commentary is the narrative quality that is punctuated with personal remarks and contextual richness. The process of “talking to the student” helped to mitigate his feelings of judging and to move toward a sense of mentoring; furthermore, Anson reflects that in his experience audio enhances a reciprocal relationship between teacher and student. Anson’s key issues for considering/implementing audio response include the following: (a) **Formative and/or summative commenting**: Audio allows for formative “intervention” during drafting and less focus on final grade and/or for more summative detail and explanation on what basis and how instructors arrived at the evaluation; (b) **Time**: The conversational nature of audio can lead to extended recordings. Anson recommends limiting
response time five minutes; (c) **Organization**: Instructors should plan how they will organize responses (e.g., read through entire essay, jot notes, read and pause, etc.) to allow for clearer commentary for students and for emphasis on most important issues; (d) **Contextual remarks**: Audio offers opportunities to make connections to class material, students’ other work, progress, etc.; (e) **Explanation**: Instructors can offer “reader-like” explanations for difficult passages instead of cryptic written notations; (f) **Strategies**: Likewise, instructors can offer specific recommendations for addressing problem areas; (g) **Student concerns**: Anson asks for 3 minutes of student commentary before crafting his own feedback; (h) **Student dialogue**: Anson advocates student use of audio feedback during peer review.

**KEYWORDS**
Instructor Perspective; Cassette Tape; Best Practices; Experiential

**Olson, Gary A.**

Beyond evaluation: The recorded response to essays

*Teaching English in the Two Year College*, Winter (1982).

Olson argues that teacher response to student writing should move beyond evaluative and corrective markings and more toward “constructive dialogue with student writers.” Tape recorded feedback can act as an extension of classroom instruction on not only what areas are in need of revision, but also why. After he debunks common objections over cost, availability of technology, and permanence of feedback, Olson contends that audio feedback (a) takes less time, (b) allows for elaboration of detailed and supportive feedback, (c) is perceived as more personal, allowing instructors to adapt tone and inflection, along with individual student-based explanations, (d) focuses on the writer and the writing process less on the product, (e) is perceived as showing concern for, support and encouragement. Furthermore, Olson describes the implementation of audio feedback as particularly useful in ESL classes, where verbal communication is often more advanced than written; and technical writing where assignments are on more complex processes and with inexperienced writers. Other advantages of taped feedback include the ability to share context-rich explanations with writing tutors/writing centers; the ease of altering comments; the reduced likelihood that students will read comments as entirely negative; the addressing of different learning styles.

**KEYWORDS**
Instructor Perspective; Experiential; Cassette Tape

**Hunt, Russell A.**

Technological gift-horse: Some reflections on the teeth of cassette-making

*College English*, 36.5 (1975), pp. 581-585

Hunt asserts that the fundamental advantage to responding to student writing via audio feedback is the shift in students’ perception of audience and that the medium of cassette recordings sends
the message that spoken communication is more effective for teaching than written texts. Hunt briefly overviews perceived disadvantages of audio feedback: portability, retrieval of information across time/papers, access to technology, temporary nature of audio recording, difficulties of accumulating evidence on repeated issues, technical breakdowns, spatial vs. temporal display of comments. His focus, however, builds from the lower-order advantage of obviating the question of legibility and toward his “unqualified advantage” – the ability to explain points in more detail verbally. While Hunt argues that his time marking papers is not shortened by using audio comments, he argues that he is able to explain in more detail and to address complex suggestions through spoken feedback in any given amount of time. Moreover, Hunt acknowledges, that while students may never read or may barely understand marginal “cryptic hieroglyphics,” audio feedback hinges on the relationship between words on the page and students’ sense of audience. Responding verbally redefines the relationship between author and reader – he becomes a “real” audience who can show emotions, digress, and/or provide descriptive explanations to common issues. In sum, Hunt believes that audio comments change the fundamental relationship between writer and reader and that the written word is “clearly on the way out.”

KEYWORDS
Instructor Perspective; Experiential; Cassette Tape
Bibliography

2000 – present


Chiang, I. A. Which audio feedback is best? Optimising audio feedback to maximize student and staff experience. *Paper presented at the 1st annual meeting of A Word in Your Ear*, (2009), Sheffield England


Merry, Stephen, and Orsmond, Paul. Students' attitudes to and usage of academic feedback provided via audio files. *Bioscience Education*, 11 (2008).


Sommers, Jeff. Using digitized recordings to respond to student writing. Low Threshold Application #45, March 31 (2005)
http://zircon.mcli.dist.maricopa.edu/Ita/archives/Ita45.php


Sommers, Jeff. Spoken response: Space, time, and movies of the mind. In Belanoff, Pat; Marcia Dickson; Sheryl I. Fontaine; Charles Moran (Eds.), *Writing with Elbow*; Logan, UT: Utah State University Press (2002), 172-186.


1990-1999


Berner, Audrey; William Boswell; Nancie Kahan. Using the tape recorder to respond to student writing. In Rijlaarsdam, Gert; Huub van den Bergh; Michel Couzijn (Eds.), *Effective Teaching and Learning of Writing: Current Trends in Research*, Amsterdam: Amsterdam University Press, (1996), 339-357.
Quigley, B. & Nyquist, J. Using video technology to provide feedback to students in performance courses. *Communication Education*, 41.3 (1992), 324-34.

1980 -1989


Moore, G. E. Providing instructional feedback to students in education classes. West Lafayette, IN: Purdue University. (1977). ERIC No. ED 173 309

Hunt, Russell A. Reply to Mary Rahme. *College English*, 37.7 (1976), 703.


Rahme, Mary. What is so scary about writing? [comment on Russell A. Hunt]. *College English*, 37.7 (1976), 701-702.

Small, Robert C., Jr. Do I mark all the errors?--or some things to do instead. *The Leaflet*, 75.1 (1976), 26-33.


1958-69

McGrew, Jean B. *An experiment to assess the effectiveness of the dictation machine as an aid to teachers in evaluation and improvement of student composition: Final report* (1969)

Lincoln, Nebraska, Public Schools. ERIC Document Reproduction Service, ED 034 776


Kallsen, Theodore John. *Teachers’ use of dictating machines to improve the written composition of college students* (Cooperative research project, No. 2311), 1965, Nacogdoches, TX: Stephen F. Austin State College. ERIC Document Reproduction Service, ED 003 337


Bauerle, Richard F. The teacher or the tape recorder? *College English* 20.1 (1958), 23-24