I Hear What You're Saying: The Power of Screencasts in Peer-to-Peer Review

Allison S. Walker, *High Point University*

Structured Abstract

- **Aim**: The screencast (SC), a 21st century analytics tool, enables the simultaneous recording of audio and video feedback on any digital document, image, or website, and may be used to enhance feedback systems in many educational settings. Although previous findings show that students and teachers have had positive experiences with recorded commentary, this method is still rarely used by teachers in composition classrooms. There are many possible reasons for this, some of which include the accelerated pace at which classroom technology has changed over the past decade, concerns over privacy when new technologies are integrated into the classroom, and the general unease instructors may feel when asked to integrate a new technology system into their established composition pedagogy and response routine. The aim of this study was to replicate previous findings in favor of SC feedback and expand that body of research beyond instructor-to-student SC interactions and into the realm of SC-mediated peer review. Thus, this study seeks to improve on the widespread written peer review practices most common among writing instruction today, practices that tend to produce mediocre learning outcomes and fail to capitalize on 21st century technological innovations to enhance student learning. This research note demonstrates the validity of SC as a valuable writing analytics research tool that has the potential to collect and measure student learning. It also seeks to inspire those who have been reluctant to adopt SC in both digital learning and face-to-face educational environments by providing pragmatic guidance for doing so in ways that simultaneously increase student learning and facilitate a more rigorous and discursive peer-to-peer review process.

- **Problem Formation**: While research suggests positive student perceptions related to screencast instructor response, results in peer-to-peer screencast response are mixed. After several successful years of experience in instructor-to-student SC feedback, the author wondered what would happen if she asked students to use screencast technology to mediate peer review. How might students' attitudes and perceptions impact the use of peer-to-peer screencast technology in the composition classroom? In order to address these questions, the author developed a survey measuring the user reliability of this new SC technology and the student affect and revision initiative it produces.

- **Information Collection:** This study extends Anson's (2016) research and insights by reporting findings from a study of 138 writing students. Survey data was collected during the 2015-2016 academic year at three institutions. At High Point University, the author of this research note asked freshmen composition students in a traditional face-to-face lecture course to conduct a series of peer review sessions (including both traditional written comments and SC comments) over a 16-week semester. Students were surveyed after each peer review experience, and the results form the foundation of this research note's conclusions. In addition to survey responses, researchers also collected the screencasts exchanged among peer-to-peer interactions within each educational setting.

- **Conclusions**: The author provides an in-depth analysis of students' experiences, perceptions, and attitudes toward giving and receiving screencast feedback, focusing on the impact of this method on student revision initiative in comparison to that of a traditional written feedback system. Some conclusions are also drawn regarding the user reliability and effectiveness of the screencast technology, specifically the free software program known as Jing, a product available through Techsmith.com that enables a streamlined and user-friendly SC interface and cloud storage of all SC recordings through individualized hyperlinks, thereby alleviating concerns regarding student privacy.

- **Directions for Further Research:** While this research note provides compelling evidence to support the use of SC in composition classrooms, there are also many opportunities for continued study, particularly within the emerging field of writing analytics. While the actual student-to-student screencasts were collected in this study, they were not analyzed as a

qualitative data set, and the researchers relied on self-reported survey data to assess the degree of revision initiative among the students surveyed. The screencasts themselves offer a treasure trove of data, should the researcher have the capability to code that data set or utilize automated natural language processing programs in the future. Perhaps this peer-to-peer SC feedback could be compared to similar corpus analyses of instructor-to-student feedback gathered by other writing analytics scholars. In addition, further research in this area could also collect the student writing itself and track revisions made by students after receiving SC feedback and traditional written feedback from their peers. In this way, researchers would be able to make comparisons between the actual changes made by the student writers, the extent of those changes (surface-level or higher-order revisions), and the student's perceived degree of revision initiative reported in the survey. To facilitate future research in this area, the author has included teaching resources for those new to screencast technology and analytics.

1.0 Aim

The screencast (SC), a 21st century analytics tool, enables the simultaneous recording of audio and video feedback on any digital document, image, or website, and may be used to enhance instructor-to-student feedback in many educational settings and improve upon the sometimes-flawed methodologies currently in place. Although Anson (2016), like Killoran (2013), found that students and teachers had positive experiences with recorded commentary, this method is still not being used widely by teachers in composition classrooms, a finding confirmed by Ferris (2003) in her mixed methods study on teachers' philosophies and practices toward responding to student writing. While research suggests positive student perceptions related to screencast instructor response, results thus far in peer-to-peer screencast response are, at best, mixed. After several successful years providing instructor-to-student SC feedback in a variety of instructional settings, the author sought to integrate this technology more extensively into the peer review pedagogy of first-year writing.

Peer review is a common, yet often overlooked, feature of writing instruction, and embedded within that peer review process are key learning objectives and skills that students will need to take with them from the FYW

classroom into their respective disciplines and the professional workforce beyond. The ability to produce and receive a quality critique is essential to success in the classroom, and it is a familiar task for any professional in any field. Since writing is an increasingly digital endeavor with each passing year, this study sought to improve on current peer review practices that still focus almost entirely on written modes of feedback and assess the effectiveness of an integrated genre of peer-to-peer review known as a screencast. To do so, the author implemented screencast technology to mediate peer review in a FYW classroom and then surveyed students about it. She posed the following research question: How might students' attitudes and perceptions of peer review impact the use of peer-to-peer screencast technology in the composition classroom, and how does the integrated genre of SC allow researchers to collect and measure evidence of student learning more effectively?

This study extends Anson's (2016) research and insights by reporting findings from a study of 138 writing students who conducted peer-to-peer reviews of written texts via SC and in a traditional written-only feedback exchange. While Anson's work investigated instructor-to-student SC experiences, this study focused solely on the student-to-student use of this emerging technological genre. An affect scale used by Anson was replicated in the survey portion of this study in order to ascertain students' attitudes and perceptions regarding peer review in both traditional written and SC forms. This scale was used to see if the trends articulated by Anson (2016) would play out in a FYW classroom where students were asked to make comparisons between the experience of SC and written feedback in peer-mediated reviews. According to Anson (2016), SC users typically comprehend and produce SC feedback that most often doubles the typical word count of written feedback, appears qualitatively less judgmental and more discursive, is perceived by its receivers as dialogic even in its monologic and asynchronous recorded form, and inspires more higher-order revisions in subsequent drafts. Rather than focusing solely on the student as a receiver of SC feedback from an instructor, students in this study became agents of screencast production rather than simply the recipients of it.

This study also expands evidence of key "promises and perils" associated with the assessment of integrated writing tasks that ask students to "incorporate substantive content from source materials in print, audio, and/or visual forms" in order to "move language assessment toward a valuable new construct definition for academic literacy," as defined by Cumming (2013, p. 6). Through the collection of 138 student screencasts, the author provides proof of student learning in line with Cumming's definition of academic literacy on integrated writing tasks (such as a Jing SC peer review) and demonstrates the efficacy of the emerging SC genre as a means of educational measurement and massive data

analysis that utilizes an alternative and "integrative" approach. This emerging integrative genre of screencasts seeks to replace the compartmentalized mechanism of language assessment used by researchers in the past, an approach that has traditionally isolated academic literacy into separate categories of reading, writing, speaking, and listening, rather than considering these tasks as interdependent aspects of the same desired learning outcome, overall academic literacy.

As identified by Mislevy & Yin (2009), an effective assessment of academic literacy should address the dynamic and intrapersonal process of "learning, memory activation, and situated action" (p. 250). The New London Group's multiliteracy model (Cope & Kalantzis, 2000) includes reading and writing in conjunction with aural and visual representations across new multimedia technologies (such as the screencast), and Cumming (2013) points out that this view has become the driving force behind literacy innovations over the past decade (p. 4). According to Cumming (2013), "in an age of multimedia literacy and technologies, the focus of educational activities, including assessment, needs to be on processes of learners' knowledge building" (p. 4). The screencast provides the perfect multimedia opportunity to perform such knowledge-building tasks. As readers will see in this author's research study, using screencasts to mediate peer review pushed students beyond the mediocre results of an outmoded written peer review model and into the multi-literate realm of higher-order revision by developing a discursive and cooperative relationship with other peer writers. These results support the "promises" of integrative writing tasks proposed by Cumming (2013) because, in the SC mode, students are asked to "construct knowledge effectively from and across relevant sources" in order to purposefully integrate "knowledge across communication media" in a way that has diagnostic value for instructors as well as peer partners (p. 4). The process of constructing feedback in the form of a screencast for a peer partner and then also revising one's own writing in response to a screencast received by a partner ensures that students are "usefully learning to perform the kinds of writing, reading and thinking tasks that they will need to do in academic courses" and future professions in a way that "embraces the necessary interdependence of writing performance on reading and/or listening performance" (pp. 4-5).

Finally, the author provides an in-depth analysis of students' experiences, perceptions, and attitudes toward giving and receiving both written and screencast feedback by focusing on the impact of the SC method on student revision initiative. In order to improve on the standard peer review practices of the past that have tended to prioritize surface-level revisions among student writers, the use of screencasts brings student writers into the 21st century where they are tasked with high-order revisions that support integrative multimedia and academic

literacies across disciplines and genres. Teaching resources are also included for those new to screencast technology and analytics.

2.0 Problem Formation

"Hello, this is Jenny, doing an analysis of Sarah's paper." Jenny is reviewing Sarah's second writing project a few days before Sarah has to turn it in to the instructor for a grade. Both are college freshmen, and both are enrolled in a first-year writing course designed to introduce them to the practice of academic writing. Jenny has pulled up an electronic copy of Sarah's essay on her laptop computer. Before jumping into the document, she starts by reviewing the assignment they were given and the learning goals associated with it. She says:

> "The goal of Project 2 was to create an argumentative analysis, and use one of our argumentative sources from Project 1, break it apart, evaluate it, and analyze how they used rhetorical tools to create a developed argument. We had to go beyond the surface and really break apart each sentence to, um, radically re-see it and find a deeper meaning."

She then uses her cursor to point to the thesis statement of the essay, a long and detailed pair of sentences she has highlighted and marked as "Revelatory Thesis" in a marginal comment:

> "So these last two sentences I've labeled as your thesis statement, and you point out how Dr. Wedge uses example, allusion, a short narrative, and an appeal to emotion to appeal to the reader; however, um, I didn't find anywhere in your response an example of an appeal to emotion, so I would either take that out of my thesis or I would, like, expand on an appeal to emotion somewhere in my project."

She goes on to highlight parts of the essay that are working successfully toward the project's established goals:

> "You did a great job at finding the sources needed to help the reader better understand the authors, um, in this paragraph. [She highlights the paragraph in question.] This information is necessary to the reader to understand the background on this topic, how the authors are credible, and how they are making an argument. But you need to add something that keeps the reader in the paper. A hook or something, to keep them interested."

Jenny closely follows the guidelines provided by a written peer review worksheet students completed in class by highlighting and commenting via marginal notes and verbal feedback on key "moments" in the text:

> "Down here, I said this was my 'Aha! Moment,' but I wouldn't say it was so much an 'aha' as much as I just thought it was interesting. It was an interesting story that you shared and maybe you could expand it."

Then she scrolls again:

> "So, this was my 'Huh? Moment' because I was kind of confused. [She reads the highlighted sentence aloud so Sarah can hear the awkwardness of the syntax.] I wasn't sure if just your grammar was off, like you should've used 'and' instead of 'but,' or, I don't know. I was just confused and I think you should go back to this and try to reword it so it makes more sense to readers."

She scrolls through the essay, pointing out other spots where she, as a reader, felt confused, and even guiding the writer back to key resources available to students on the course website:

> "Um, also in this introduction here, you need to add more. I think that you didn't exactly explain, like, you didn't go into depth about who Dr. Marilyn Wedge was, and you didn't even give the title of the article you chose to analyze. So I would definitely use the '5-Sentence Rule' on Blackboard to help you develop who, what, when, where, why, how, just to fill in the background information and the relevance of the article. That kind of stuff."

She notes places where she needed more information to fully understand the argument Sarah was making:

> "Like here, you say 'she tries to go more in depth concerning behavior,' and I would just say, how? Expand on that! Because you kind of just end the sentence there, and I think you could, I mean, I wanted more."

Using the marginal comments she added to the document to guide her verbal commentary, Jenny scrolls to comment 19, near the end of the piece: "you did a good job making this a clear statement," then she reads the highlighted statement aloud. "But I would maybe try using an outside source that does show another

strategy or rhetorical tool to support their claim, to like, further explain how Dr. Wedge could have used something else to make her own argument stronger." Jenny provides both sentence-level feedback on Sarah's rhetorical successes, ("and here, the period needs to go inside the quote, but this is a really good source to back up your argument") and really crucial feedback for her ultimate success on this project, ("you need to include a Works Cited page, because, like, we need to know where this information came from") all while maintaining a positive, conversational, and wholly human tone of voice.

Jenny ends with a bit more critique, again referring back to the goals of the assignment and one she felt Sarah hadn't quite reached, highlighting the sentence in question on the screen as she discusses why it needs to be expanded:

> "Another thing we had to do was see where they had fallacies and critique their argument, and it seems like that was just [she scrolls to the final paragraph] thrown in at the very end, in your last paragraph, here, and I feel like that it was part of the, um, project, so you might want to elaborate on that a little more."

She closes her five-minute screencast with a final gesture of collaborative support. "If you have any questions, you can reach me. You have my phone number and email. Have a great night!"

Keep in mind that Jenny and Sarah are college freshmen, and neither student has ever had any prior experience giving or receiving peer feedback in this new multimedia form: the screencast. Neither speaker nor writer is an English major, neither scored high enough on the AP English exam to place out of the required FYW course, and both were attempting to use a new form of technology they had only just learned about the very day this screencast was recorded. Yet both students benefitted from this peer review experience, even if they also rated that process as more difficult than the traditional written peer reviews they'd experienced in the past.

Does this seem like an example of the blind leading the blind? That's how many describe peer-to-peer reviews of student writing in first-year composition classes. How can we expect students at the beginning stages of their college writing experiences to assist other students who are equally inexperienced? For many instructors, this seems like a recipe for disaster. But maybe, instead, it's a recipe for success. By integrating screencasting technology into the peer review process —with every click, highlight and scroll captured as the reviewer discusses them—the author has attempted to enhance peer review and increase revision initiative among students who are equally challenged by their first attempts at scholarly argument.

But perhaps, one might argue, these are just exceptional students from an exceptional, Ivy-league institution. This sort of screencast peer review isn't something a regular college freshman could execute successfully. Well, that's not at all true. Founded in 1924, High Point University (HPU), a small, liberal arts college nestled in the Piedmont region of North Carolina, equidistant from the Appalachian Mountains and the Atlantic coast, hosts 4,500 undergraduate students engaged in 47 undergraduate majors and 51 undergraduate minors on an immaculate 420-acre campus. The average SAT score of an incoming HPU freshman isn't exceptional. It's entirely average, and Sarah and Jenny are perfect examples of that averageness. They, like almost all of their HPU peers, must complete one course in college writing, usually as freshmen, known as College Writing and Public Life, or informally as FYW. This course carries a four credit-hour weight with an enrollment cap of 20 students over a 16-week semester. Students spend three of those hours per week in a classroom, with the remaining hour relegated to asynchronous digital course applications. This course has many academic goals, including digital literacy, analysis, and reflection. In the fall and spring semesters of the 2014-2015 academic year, one instructor in this course chose to pilot a new peer review strategy designed to capitalize on all three of these important skills by incorporating screencasting into a traditional written peer review feedback model.

As an instructor, the author has used screencasting for the past six years to respond to student writing, and the response from her students has been overwhelmingly positive. Confirming prior research in this area, the author found that students felt that screencasts were more personable and the feedback was easier to understand than traditional written comments. For example, Thaiss and Zawacki (2006) claim that students fail to understand teacher comments when that feedback is provided in written form (Silva, 2012, p. 3). From an instructor's perspective, the author found that screencasts were less time-consuming than traditional written comments, they were often more than three times the word count length of traditional written comments, and she could provide them in about half the time, even as the students perceived them to be more labor-intensive than traditional written comments. She found that students reviewed these screencast comments multiple times and enjoyed the humanizing moments that often occurred in the unscripted and unedited audio tracks. The Jing five-minute time limit and absence of sound editing features beyond a pause button forced her to let the natural imperfections of audio recording go, thus humanizing her in the ears of the students. Perhaps her daughter interrupted, or a cat meowed, or she stuttered or sneezed midsentence. These moments made her seem more authentic, more empathic, and less intimidating as a teacher. The students said they could hear how much she cared about them and their writing in the tone of her voice, and so

even when she was delivering less than positive news about a student's work, those comments were taken to heart. According to Silva (2012):

> Excessive written feedback on student writing has been shown to overwhelm students (Dana Ferris, 2003). (p.11) …Students focused on paralinguistic information in the audio feedback to construct a negative impression of the teacher (e.g., a student could hear disappointment in a teacher's comments) (Kim, 2004). Thus, the mode and medium of teacher feedback can play a significant role in student interpretation of the information. (p. 12)

Contrary to this idea, the author found that the average peer review screencast was viewed as more positive and helpful. In the author's own experience, she thinks students prefer the video because they can hear the conviction in her voice when she says, "I'm going to be honest here and tell you that…," even if what follows is a critique; the tone of the instructor's voice shows that she cares about the student and is offering that critique at the service of bettering their writing.

The author decided that she wanted to see if these same positive effects of screencasting could be transferred to the peer-to-peer review process in her classes. The author wanted to find out whether student reviewers would consider oral feedback of up to five minutes "excessive," or whether students are more inclined to perceive oral feedback as conversational and thus ignore the reality that spoken words most often exceed written feedback word counts by more than double. She began by choosing Jing as the screencasting software platform.

Jing is a free, user-friendly product available from Techsmith.com. It has a streamlined interface and a five-minute recording limit; files can be stored on the site's cloud, saving users hours of upload/download time and hard drive space on their personal devices and allowing for private, secure storage of screencast files with unlimited numbers of views. As Anson et al. (2016) note,

> Although limiting a screencast to 5 minutes might be seen as a problematic constraint, Sommers (2013) has found that students overwhelmingly feel that 5-minute Jing recordings provide more response than do conventional written comments. Results showed that teachers' conventional written responses averaged 109 words per paper, whereas teachers' spoken words in the screencasts averaged 745 words per paper (after all, noncontent-focused hesitations such as ''um'' and ''ah'' were eliminated). (p. 388)

While Jing does not include editing tools beyond the use of a pause button when recording, this also is advantageous, as it encourages the user to record in authentic real time without spending additional time enhancing or altering the file. It also eliminates user errors such as this one, described by Silva (2012), who used a more robust program called Camtasia to record screencast feedback for her students:

> At this moment, I realized that the beginning was cropped. He had never received my commentary about the introduction. It probably was lost during the production of the video (Camtasia has several different bugs). I then realized how a technical error could quickly affect teacher-student social interactions. An easy solution to this problem would be to preview each video prior to delivery, yet that would nearly double the time it takes to comment on a student's essay. Fortunately, the technical error only affected one student video and only one student accidentally wrote discriminatory prose; however, this small anecdote is one example by which experimentation using various media and modalities to mediate teacher-student interactions and shift student perceptions and attitudes about teacher feedback has unpredictable outcomes that require further examination. (p. 13)

She provides this anecdote about technical difficulties with Camtasia. Since Jing doesn't allow for editing beyond a mere pause button, and since files are smaller due to the five-minute limit and housed on a Techsmith cloud rather than being uploaded and downloaded through third party programs like Flash, Jing virtually eliminates the possibility for this sort of user error and ensures user and viewer privacy when exchanging SC files through unique one-to-one URL links. The pause button becomes the most vital source of sound editing in Jing, allowing a user to pause the recording to collect thoughts, re-read notes, consult an outline, scroll to another area of the document, switch to another desktop window, or take a bathroom or snack break. This makes the recording process simple to use and expedient for the purpose of peer review. Without access to advanced editing techniques like those in Camtasia, such as background music or cutting and splicing of audio files, users remain focused only on the task at hand, providing discursive feedback on a student project, and that goal is achieved in an efficient time span. With a five-minute recording limit enforced by the Jing platform, users simply don't have enough time to ramble off on tangents or overwhelm their SC receivers with what the students refer to as "TMI," or too much information. The time limit encourages student users to focus their comments and get to the point efficiently. The same time limit ensures that SC receivers gain enough actionable

feedback from their peer review partner, an amount that falls into the Goldilocks zone of "just right" when students embark on revisions in response.

While there are many SC software options available to instructors these days, the author found Jing to be the most agile and user-friendly tool for peer review purposes at the undergraduate level. Some others include: Screencast-o-matic, Camtasia, Collaaj, and NowComment. Both Screencast-o-matic and Camtasia have a complex suite of editing options, including adding intros and outros, background music, overlay shapes and animation, and wipes, fades, and zooms. While these techniques certainly make for more aesthetically pleasing videos, they also require a greater investment of time, energy, and expertise in the recording process, and in the context of peer review, they run the risk of distracting the reviewer from the task at hand, offering comments on a peer project in order to facilitate an effective revision process and an improved outcome. A cinematic SC isn't necessary for student learning to occur, and, on the contrary, time spent on task should be focused on the student writing, not on the production quality of the SC. Collaaj, a corporate learning solution and lecture capture company, is by far the least accessible SC software program for student users. It is designed specifically for instructor use, with LMS (learning management system) connectivity and a Collaaj campus YouTube channel. While it may be highly desirable for online educators who wish to generate professional video lectures to accompany process-oriented lessons in writing instruction, Collaaj is far too robust for undergraduate student users and, in this author's opinion, the least effective platform for the creation of student-generated SC peer reviews. On the other hand, NowComment, a free program run by public interest group Fairness.com LLC, has some advantages over Jing, such as the option to invite multiple users into a group SC conversation, a feature that could be useful in a peer review context. However, NowComment's many options can be daunting to a novice user, and as in Camtasia and Screencast-o-matic, an interface with multiple document viewing options, groups and subgroups, threads, invitations, blogging, folders, profiles, private v. public modes, and social media connectivity means an unlimited possibility for human error in the production and distribution of SC files among students. When one considers the legality of such file exchange among novice users, this author believes the streamlined Jing production platform and one-to-one unique URL exchange offers instructors more control and less class time devoted to technology instruction during the peer review process.

The use of screencasts, regardless of the software platform one chooses for production, can also be applicable across multiple educational settings. While this study focuses on the FYW classroom, one in which students meet with the instructor and each other face-to-face twice a week, the integrative learning

technology of a screencast can easily be adopted in online instructional settings. Furthermore, while this study addresses the impact of SC implementation within an undergraduate humanities and general education writing curriculum, the agility of SC technology allows for unlimited pedagogical application across disciplines. Any document, image, website, or video file one may access digitally with a laptop, desktop, or smartphone can become the focal point of a screencast review. While the act of conducting a screencast is in itself a higher-order learning experience for the producer of that screencast, a producer who must navigate the integrative learning tasks of reading, writing, speaking, and listening (Cumming, 2013) to achieve a successful screencast recording, there are learning gains for the consumer of that screencast as well. The receiver of that screencast review must also negotiate a higher-order integrative experience in order to first process the aural and visual cues presented in the screencast and then act on them in subsequent revisions of the text that was under SC review. This process-oriented approach to screencasting supports Cumming's (2013) case for integrative writing tasks as a means to achieve academic literacy. But screencasts have even more educational value. The screencasts themselves become tangible products of student learning and targets for future educational measurement. Since Jing SC files can be saved as well as stored to the platform's cloud, they are a readymade data set for massive data analysis. As Anson (2016) notes, the sheer number of words one is able to speak in a five-minute sound byte far surpasses that of the typical written response one might offer to the same text. If researchers were able to isolate just the audio portion of a screencast for analysis with the innovations of natural language processing methodologies, they could gather even more evidence of student learning gains associated with the emerging SC genre. While the study described here does not extend into this particular realm of analysis, the implications for screencasting as a point of future research within the writing analytics and educational measurement fields cannot be ignored.

As members of a digital ecology that grows increasingly more pervasive every day, screencasting technology on any platform taps into the millennial student's inherent desire for social interaction via digital means and gives them the opportunity to communicate asynchronously with a peer partner in a way that feels more intimate and dialogic than traditional written comments exchanged digitally through other file sharing mechanisms. Students are highly responsive to social networking in their digital lives outside of the classroom, and the SC capitalizes on that sense of familiarity in a way that feels actionable within the classroom. Furthermore, the author believes that the humanizing elements of SC recording, particularly those achieved when using Jing, (an authentic tone of voice, those impromptu and unedited moments of imperfection, and the combination of visual evidence with audio response) lend themselves to a

feedback loop infused with empathy and free from the missteps and misunderstandings that often stem from traditional written commentary.

3.0 Information Collection

The sample size of this study was 138 students across four conditions: students who received written peer review comments; students who gave written peer review comments; students who received screencast (SC) comments; students who gave SC comments. Students were asked to complete a student perception survey administered electronically via Qualtrics after three rounds of peer-to-peer review during a 16-week instructional semester; each student took the survey for a different condition each time. The surveys follow a parallel structure so that comparisons may be made among similar questions across conditions. One hundred sixty-one students began the survey, and 23 did not complete it. Incomplete surveys were most often the result of a loss of a wireless internet signal midway through the survey, or a student opening the survey to see the questions, then closing it and returning at a later date to complete it. All students enrolled in the course completed the survey in multiple conditions, so no enrolled students withdrew from the study.

Demographically, the students surveyed were first-year writing (FYW) freshmen at High Point University, a small, liberal arts institution in North Carolina that offers a 4 credit-hour course capped at 20 students. None of those surveyed were repeating the course for credit. At this university, the 4th credit hour is defined as a "digital" course component, so the screencast peer review process satisfied part of the digital 4th hour requirement. The students were all residential undergraduates, and none of them came into the university with Advanced Placement (AP) English credit; they all needed this course to satisfy general education requirements for graduation. Incoming students at HPU have average SAT scores and high school GPAs. There was no attrition in this course, as all students who were enrolled at the time of the first survey distribution completed the course, though not all of them passed it.

The project was approved by three university IRB boards at the level of an "expedited" study with a three-year protocol approval, satisfying the ethical concerns for responsible research with human subjects. The project was conducted with colleagues and co-PIs from Arizona State University and the University of Houston Downtown, and their educational contexts varied slightly due to the localized differences among those institutions. Chris Anson graciously shared his student perception survey with the researchers and agreed to let us borrow and modify it to suit our research needs.

The first writing project in the author's FYW course utilized a traditional written peer review mechanism, with a peer review form to guide the feedback

process and an exchange of printed hard copies of student drafts on which they were to write marginal notes and a summative comment at the end. Students were randomly assigned into one of two conditions and completed a survey about that peer review process as either a peer reviewer who commented in written feedback or a student writer who received written feedback from a peer partner. Students were given feedback on this first writing project from the instructor in the form of a Jing screencast link and thus had been the recipients of a screencast prior to the assignment of a peer-to-peer screencast review of the second writing project. It is important to note that they were introduced to the technology as a receiver before being asked to generate a screencast of their own as a reviewer.

The screencast peer review process was implemented after the second writing project of the semester. To train students in this new digital methodology, students were asked to sign up for a free Techsmith.com Jing account and view the short tutorial videos available on the Techsmith.com website. In class, the instructor provided a brief, 10-minute demonstration of the software prior to the first screencast peer review session, then answered any questions and assisted with any troubleshooting before the students exchanged electronic files of their writing. Students were given the same peer review form used on the first writing project, only this time it also included instructions for a "5-Minute Outline" (see Appendix B) designed to distill the peer review form and marginal comments into a minute-by-minute discussion of both macro-feedback, or feedback related to aspects such as the big picture conceptual organization of the essay, and micro-feedback, such as a sentence-level analysis of the student writing to be addressed in the screencast recording. After introducing the "5- Minute Outline" concept, the instructor gave students the remaining class period to read the student work they had been given by their partner, complete the peer review form, and then construct a five-minute outline for their screencast. She emphasized that the outline should take only five minutes to construct, and the recording should adhere to the five-minute limit of the Jing platform. Students were asked to record all screencast peer reviews outside of class that same day and then share the URL with their partner and the instructor. Students were again randomly assigned to two survey conditions, either as a peer reviewer who responded to a student's essay with a screencast, or as a student writer who received a peer review via screencast, and asked to complete the digital survey about that experience.

In the third and final writing project of the semester, the training wheels of a written peer review form were removed, and students were asked to read a peer partner's electronic essay and record a Jing screencast peer review that they would then return to their partner and the instructor as a URL. In this way, the three writing projects over the course of the semester were scaffolded to introduce freshmen students to the concept of screencasting as a form of writing review,

then this new procedure of peer review was grafted onto the existing traditional form of peer review as a way to collect the feedback from a written review system and translate it into this new screencast medium, and finally students were asked to generate the new screencast form of peer review feedback on its own, without the use of traditional written comments. At the end of the semester, students were asked to complete the survey once again and were randomly assigned as either a peer reviewer or a student writer. Thus, across four possible conditions, the survey was administered after each writing project, and the data collected through that survey forms the foundation of this essay.

4.0 Conclusions

When polled, students indicated that their prior experience with receiving feedback from other students on their writing included written comments in the margins and/or at the end of the document (69%), electronic comments such as Word files sent over the internet (40%), and face-to-face discussions in small groups or pairs (60%). Only 7% had ever received audio files or voice recorded comments, and 13% said they had never received feedback on their writing from another student at all. These statistics demonstrate that none of these students had ever received screencast feedback prior to this course.

Some results of this study were certainly positive. For example, 59% of students who received screencast comments "Strongly Agreed" that their peer review partners were "Supportive," while only 19% of students who received written comments "Strongly Agreed" that their partners were "Supportive." When rating the "Helpfulness" of their peer review partners, 56% found the screencast comments "Very Helpful," 30% "Somewhat Helpful," with none rating the screencasts as "Very Unhelpful." In contrast, of those students who received written comments, 36% found them "Very Helpful," 47% found them "Somewhat Helpful," and 6% found them "Very Unhelpful." These findings parallel those of Anson et al. (2016), who discovered that "students emphasized the affective aspects of the feedback interventions, using language such as 'friendly,' 'made me feel comfortable,' 'nice,' and 'welcoming' when describing the effects of instructor screencasts on their perceptions of their own writing" (p. 398).

While student response to Jing screencasts shared by the instructor was overwhelmingly positive, the results were more mixed when students had to generate the Jing screencasts themselves during the peer review process. While one might initially hypothesize that the Jing screencasts have that new car smell and thus will be enticing to digital native students, that wasn't necessarily the result. The author's findings mirrored those of Reynolds and Russell (2008), who found that:

Students prefer written feedback. Students prefer written comments, remarking in particular that they didn't like the fact that they had to spend more time processing audio comments. We think that additional "time on task" is probably time well spent, and that audio feedback may ultimately be more beneficial since it requires students to process the intent of the comments instead of simply "fixing" what is marked on the text. Students listening to audio feedback have to interpret the reader's comments and decide how to respond; both of these activities require active learning and thus have much greater potential to enhance students' development as writers. (p. 36)

The author's study expanded these findings and probably improved on them in the sense that she added video to the strictly audio feedback process used by Reynolds and Russell (2008), potentially alleviating some of the issues students had with processing audio-only comments and trying to then find the related section of a document to address those comments in revision. By placing the document in the recording and allowing the reviewer to highlight, scroll and point to specific features of the text while discussing them orally, this could lessen student-processing confusion. However, while the technology itself performed flawlessly, with more than 80% of students responding that they either "Agree" or "Strongly Agree" with the statement that "the screencast link opened immediately on my computer," and 78% responding that they either "Agree" or "Strongly Agree" that "the audio portion performed to my expectations" and "the video portion performed to my expectations," the labor required to produce a Jing screencast as a student reviewer and the labor required to revise a draft in response to screencast comments left students feeling active learning fatigue. When asked which method (screencast or written comments) they preferred after experiencing both, they reverted to the comfort zone and path of least resistance, with 68% of students who received feedback in screencast and/or written form still choosing written comments over screencasts as the most desired form of feedback. This stands in stark contrast to previous findings (Brick & Holmes, 2008; Seigel & Warnock, 2006; Stannard, 2008) of student preference for screencast feedback over written comments. However, it is important to note that these previous findings were based on *instructor* screencasts, not peer-to-peer ones.

To further complicate things, 75% of students who gave either written and/or screencast comments to a peer partner said they would choose to give face-to-face or written comments to their partner over screencast comments. This confirms previous findings by Silva (2012), showing that instructors already

possess the capacity to assess student writing succinctly and after they develop the technological skillset required to record and share screencasts of those comments, the screencast format becomes the most efficient form of providing student's feedback on their writing and thus significantly lowers the amount of time required to respond to student work while simultaneously increasing the actual amount of feedback given (p. 20). However, students aren't comfortable in the assessment of their own writing or the writing of their peers, so the peer review process is itself a time-consuming one, even when providing that feedback in written form. When one adds a digital element to that equation, a software platform that students must learn on the fly, however seductive that new technology may appear to them from the consumer side of it, and when they have to become proficient as a user of that technology before they can translate their written peer review feedback into a (audio and video) screencast that must cover big picture and sentence-level feedback in five minutes or less, students struggle. As Reynolds and Russell (2008) noted in their use of audio-only feedback between peer tutors and student writers,

> Students did not think audio feedback was more efficient. We conclude from this that audio feedback may be more efficient for experienced reviewers such as instructors, but may be less efficient for inexperienced reviewers who tend to perform extra steps such as organizing their ideas in writing before recording their comments. (pp. 35-36)

The fact that this screencast form of peer review takes a passive feedback system (written comments on a draft) and turns it into an active feedback system (written comments, translated to an outline, then translated to an audio and video recording that requires both verbal and visual organization, and finally a successful use of that technology to distribute the screencast back to the writer and instructor) should be noted. Students tend to resist active learning, even though they can articulate why it results in increased and sustained learning. One could call this "the broccoli effect." Students know it's good for them, but given the choice, they will still choose cake. The same held true for these freshmen writers. While they found the screencasts helpful, and they were more likely to make substantial revisions to their writing after receiving screencast peer reviews, with 25% of students who received a screencast peer review saying they were willing to "Revise Extensively" and 54% willing to "Revise Slightly," they still rated written comments as the most desirable form of peer feedback, as both a receiver and a reviewer. This was further complicated by some of the additional feedback students who received written comments provided in a qualitative response question related to revision initiative. One student said, "my partner's

ideas did not help when revising," and another said the written peer review comments "made me very unsure of myself and skills." When the screencast receivers were asked this same qualitative question, none responded with any criticism or concern.

It's difficult to ascertain from these mixed responses why any student would prefer written comments over screencast ones, and thus more research should be conducted to tease out the subtleties of this seemingly conflicted student response. While this author cannot determine the affective reasoning behind students' preference for written comments, she can offer some speculation for future inquiry. Particularly for first year writers, perhaps prior knowledge/experience with written comments is more familiar and thus fulfills an expectation fossilized by 12 years of writing instruction in which digital modes of feedback were tangential, or entirely absent, and certainly less pervasive in classrooms than the traditional mode of written feedback. Could this familiarity with written modes of commentary feel safer for first-year students? Might upperclassmen be more open to new modes of critique and more comfortable with the intellectual risk-taking required to transfer written feedback processes into this new digital SC form? While first-year students are intimately connected to social networking technologies, they seem to view their digital lives as separate from their academic lives, and the research project described here asked them to blend these two parts together through SC peer review processes. Perhaps that merging of two selves created more cognitive discomfort than the author initially imagined, and the overwhelming student preference for written feedback measured in this study is a response to that perceived discomfort. Clearly more research is needed to investigate this intersection of digital, social, and academic learning.

Another factor that may complicate the student perception of screencast peer reviews could be the degree of personality that comes through in an audio recording of comments. While students may appreciate that humanization of an instructor, they may shy away from that same level of openness when speaking to their peers. The degree of anonymity available when providing written feedback to a peer partner may be preferable to the conversational intimacy of a screencast. However, when "compared to the feedback I have received on my writing in the past," 53% of students who received screencast comments "Strongly Agreed" or "Agreed" that the "comments made more sense to me," while only 40% of students who received written comments "Strongly Agreed" or "Agreed" with the statement. As Anson et al. (2016) point out, students see screencasts as dialogic, even though they are, in fact, a monologic form of communication:

Students felt that the screencast facilitated a relationship with their teacher, and they framed themselves as not simply recipients of information but as part of a dialogue. They attended to the voice, tone, and conversational nature of the feedback, describing it at times as dyadic and interactive even though it was strictly monologic. Perhaps students' perception that the screencast interaction was dialogic came from their feeling that their written words were their contribution to the exchange and that their teacher was interacting with them through their texts. (p. 399)

Perhaps students desire that dialogic effect when it means they get personalized feedback from an instructor that they deem akin to visiting that instructor during office hours without physically making the effort to visit during office hours. In Anson's interviews with students who received screencast feedback from their instructors, he notes,

Maddie also perceived the screencast response as being conversational, almost similar to a two-way discussion: ''I thought it was very interactive.'' Many students echoed Cody's and Maddie's comments, describing the screencast experiences using the language of proximity and conversation. Rowan even suggested it felt like office hours, like ''going to her study hour, or her office hours and talking about the paper.'' Similarly, Aimee said, ''it's almost like they are sitting down with you having a discussion about your paper." (p. 398)

But when students in this study were asked to give that same personalized feedback to a peer partner, they preferred monologic and decontextualized written comments that don't seem to require as much effort. Maybe they don't trust peer partners, or maybe they are risk averse and dislike conversing with their peers when that peer is tasked with what they perceive to be an evaluation of their work. Or maybe it's just the comfort of the written process that they already know. Only 12.5% of students across all four conditions responded with a preference for screencast feedback over written comments, even though they rated the screencasts higher on revision initiative and helpfulness.

It is important to note that peer review in this FYW course is not intended to be an evaluative assessment process. Students receive credit for completing a peer review, but no assessment of the student writing is required. Students don't assign grades to their partners, and student feedback isn't assigned a grade by the instructor either. However, despite the fact that grades aren't attached to the peer review process and it is indeed intended to be a formative practice, students seem

to perceive it as a judgment anyway. As one student commented, "My peer didn't totally know what was wrong with my paper enough to advise me how to fix it, and I don't know what is right or wrong with someone else's work to fix theirs either. In order to better review other's work I think we need to know a lot more."

Another variable in this equation is the way in which students perceive value in the comments they receive. This study confirmed findings by Anson et al. (2016) and Reynolds and Russell (2008), in that students, particularly first-year students who lack experience in college writing, desire quick fix kinds of feedback, corrections of grammar and spelling errors, for example, as opposed to more substantive feedback aimed at higher-order ideas, such as placement of a thesis statement or marshaling evidence in support of a claim. While we know that the higher-order ideas are more worthwhile if we wish to see student writing evolve into more complex and sophisticated academic arguments, students resist that evolution and navigate instead toward "fixing" errors instead of rethinking their own rhetorical choices. As Reynolds and Russell (2008) concluded,

> Peer reviews with a greater number of specific comments about higher-order writing issues provide students with more feedback to work within the revision process. In addition, offering more of these comments allows students to better understand the struggles of their audience, and may help them to detect patterns in their writing. For these reasons, we think that audio feedback, in combination with effective guidelines for peer review, can be effective at encouraging and facilitating higher quality peer reviews. (p. 35)

In the first-year composition classroom of this study, again confirming findings by Reynolds and Russell (2008), Anson et al. (2016), and Silva (2012), the screencasting method of peer review resulted in more substantial revisions by student writers, but students found it most effective when the screencasting was combined with the traditional written comment method of adding marginal notations to a Word document and using a peer review form and 5-minute outline to organize one's comments before recording a screencast response. This indicates that student agency as the producer of a SC review proved to be more challenging than traditional written modes of review, thus stimulating students' abilities to not only receive but also construct quality feedback using integrated writing techniques that combine written response with audio and video genres of communication. To confirm this, one student wrote,

> Some people might not be able to gather their thoughts to speak them verbally and you would get poor feedback with only the screencast. A

combination of both written and spoken feedback was very effective. I was able to get a better sense of the written comments when expounded on verbally. It was like having two reviews in one.

This replicates previous findings by Silva (2012), who notes that,

> At the end of the quarter, students recommended that I use a combination approach by doing teacher feedback videos and detailed Microsoft Word comments. This finding is consistent with studies in which students preferred to receive audio and written feedback (see Sue Rodway-Dyer, Elisabeth Dunne, & Matthew Newcombe, n.d.; Brian Still, 2006). (p. 12)

When asked what sorts of changes the screencast comments encouraged them to make to their writing, many students confirmed that the screencasts gave them a chance to focus on higher-order ideas rather than sentence-level or surface fixes, and the qualitative responses provided by students indicated clear evidence of student learning in regards to the ability to comprehend feedback and respond appropriately through revision. Here are some of those student comments:

- The main idea that motivated me to revise was the mentioning that I was seeming to not delve too deeply in my analysis of a few examples. This was a red flag to me and I followed the examples he pointed out in my paper and set them aside for revision.
- My partner pointed out issues with my paper that I was then able to see on my computer because they were able to scroll right to it. One issue in particular was how some sentences were incomplete and didn't make sense, especially when my partner read them aloud.
- My partner's screencast motivated me to revise partially because my paper was not 100% complete at the time of peer review, but also because I realized that I had not completely synthesized new knowledge in each paragraph as I was supposed to.
- She emphasized that my paper had good points, but needed to be restructured to flow easier and she said it seemed like my thesis was hidden in the middle of the paper, so I needed to bring that to the forefront.
- She really helped me reconsider the tone of my last project. She helped me try to change my perspective and shift my tone to a less emotional one. Because of this shift, I significantly changed my paper.
- The screencast motivated me to revise the central thesis of my paper so that it better aligned with the evidence I incorporated in my paper.

- The biggest thing that she made me want to change was the structure of my paper as well as getting rid of an entire section of my paper because it didn't make sense.

Another important detail that emerged from the author's study was the immediacy of the screencast in terms of the way it motivated students to revise. While students were likely to read written comments once and make surface error changes, the screencasts were viewed multiple times (one student reported reviewing it more than ten times, with the average viewing of three times), and students utilized the pause feature to revise in real time as opposed to viewing the comments and returning to the draft at a later time. For example, one student reflected that, "I wanted to take the time to use the screen cast to fix the problems in my essay as I was hearing them rather than listening to it multiple times to fix the same problem. I just felt like it was easier to pause the screencast and fix the problems right away." This is indeed an improved outcome over those associated with the standard written peer review of the past in which students typically procrastinate as long as possible and then respond quickly to surface-level errors.

Previous research suggests that the longer students wait to receive feedback, whether from an instructor or a peer reviewer, the less likely they are to revise. Furthermore, the longer they wait after receiving that feedback to begin the revision process, the less substantive those revisions are likely to be (Ferris, 2003). Screencasting offers a solution to both of these pressures operating against revision. The screencast itself, once the user has practiced with the technology a bit, is a faster mode of providing feedback, and the digital control of that feedback (the ability to pause, rewind, replay, and see the exact spot in the essay where the reader's comment occurs) allows a writer to immediately tackle revisions in real time and make substantive changes to the higher-order ideas in their writing, thus substantively improving on current peer review practices associated with traditional written modes of peer response.

5.0 Directions for Further Research

In our current digital age, we are witnessing a transition from traditional modes of feedback such as face-to-face conversations and written correspondence and into newly emerging modes like the screencast that offer a digitized hybrid of those past forms. This author believes that students will ultimately find themselves more comfortable in this new mode of critique because it combines the strengths of written evaluation with those of face-to-face conversation. The screencast is a form of digital learning following in the footsteps of the workshop model of writing instruction, and it invokes more immediate and personable

responses and motivates students to tackle higher-order revisions when implemented as a peer review mechanism between student writers. The written peer review strategies of the past have often resulted in hastily scrawled sentence fragments in the margins of student papers, nearly illegible editing symbols that students may ignore, and decontextualized lists of criticisms and quick fixes piled onto the end. Seldom have student reviewers taken the time to worry about how the receiver of those comments will perceive or act upon them. While talking through the peer review process in small group or paired conversations typically improves upon those written commentaries, instructors seldom have enough class time to devote to the workshop form of peer review. In contrast, the SC peer review process articulated in this research note replaces the formerly fractured and dysfunctional peer review with a digital one involving structure, purpose, and humanizing discourse that doesn't require an inordinate investment of class time to execute. The author sees these positive outcomes as only the beginning.

To facilitate future research in this area, the author has included teaching resources for those new to screencast technology and analytics in the Appendix. While this research note provides compelling evidence to support the use of screencasting in composition classrooms, there are also many opportunities for continued study, particularly within the emerging field of writing analytics. While the actual student-to-student screencasts were collected in this study, they were not coded or analyzed as a qualitative data set, and the researchers relied on self-reported survey data to assess the degree of revision initiative among the students surveyed. The screencasts themselves offer a treasure trove of data, should the author have the capability to code that data set in the future. Perhaps this peer-to-peer SC feedback could be compared to similar corpus analyses of instructor-to-student feedback gathered by other writing analytics scholars. For example, do the student peer reviews parallel instructor feedback in terms of length? Do they follow similar patterns of word frequency? Do those word frequencies correlate in any way with the final grades students receive on the writing projects that are being reviewed?

In addition, further research in this area could also collect the student writing as an additional data set and track revisions made by students after receiving SC feedback and traditional written feedback from their peers. This could be accomplished using the "Track Changes" feature in Microsoft Office Suite Word documents. Student writers often overwrite the same document rather than saving different versions of the same writing project as successive drafts. Tracking those changes within one document using the Microsoft software program would allow researchers to see the evolution of that draft over time and compare the changes made at key moments in the revision process, such as after the receipt of a SC or traditional written comments from a peer review partner

and/or instructor. In this way, researchers would be able to make comparisons between the actual changes made by the student writers, the extent of those changes (surface-level or higher-order revisions), and the student's perceived degree of revision initiative reported in the survey used by the author of this research note. This would provide clear evidence that "significant revisions" are actually happening in response to SC feedback and solidify the conclusions drawn by the author based on the self-reported data collected in this study.

In the future, the author would also like to compare the results of this study of FYW students to those in upper-division writing classes to determine if the trends in student affect and revision initiative identified by this study may change with student experience level. The author noted her students' preference for a "training wheels" version of peer review that combined traditional written comments with a SC recording, but perhaps students with more academic writing and peer review experience would function more efficiently as SC reviewers and thus complete competent SC reviews without those "training wheels." This would be especially effective if SC technology were used more extensively throughout educational settings and disciplines. For example, this study focused on the use of screencasts to respond to written student documents, but it could easily be applied to other forms of student work, such as visuals like infographics and photographs or multimedia projects and website designs. If students used and received screencasts in other classes, then baseline digital literacy would increase, and students would more readily transfer those skills throughout their academic endeavors.

The Jing SC methodology used in this study offers an approach to integrative language assessment that could, in future studies, apply the increasingly sophisticated natural language processing technologies used widely among writing analytics researchers to the audio recordings gathered through screencasts in order to assess writing abilities of students in higher education across diverse fields of study. As Cumming (2013) suggests, "assessments of writing abilities in higher education do need to be able to indicate whether students have attained the capacity to use source material appropriately in their writing," and the unique blend of writing, speaking, listening, and reading that is captured by a screencast offers an opportunity to gather and measure this data effectively within one user-friendly, integrative digital genre (p. 6). Though Cumming (2013) sees integrated writing tasks (such as a Jing SC peer review) as useful assessment strategies for the "future design, development, and evaluation of assessments of academic literacy in second or foreign languages," this author believes they have an even broader applicability and scope (p. 2). Academic writing in all disciplines requires "content responsible" discourse, and the use of screencasting technology isn't limited to FYW classrooms, despite the fact that

this study focuses solely on the FYW student population. Should readers wish to adopt SC technology for peer-mediated reviews in other fields of study, the same benefits of integrated writing tasks should be seen on student writing, namely an increase in student revision initiative and higher-order revisions of student writing, and on student learning in the form of effective production and reception of academic feedback, a skill transferrable to any professional career.

Lastly, the author is especially interested in future research regarding "the broccoli effect," or the desire of students to eschew the active learning "broccoli" model of SC peer review in favor of the less labor-intensive and passive "cake" model of written peer review. Is this effect unique to the student population surveyed by this author, or might "the broccoli effect" be measured across other institutional contexts? Is this effect the result of a confluence of factors, as indicated by the author, or could researchers isolate specific conditions that contribute to "the broccoli effect" and thereby control for, or eliminate, it from the SC peer review experience? In order to address this, future researchers would need to collaborate and share data collected across other instructional contexts and student demographics. Perhaps researchers should also work together to ensure that our students more readily value the intellectual benefits of "broccoli" over "cake." The author hopes that our continued efforts in the realm of writing analytics will allow us to definitely say, "Let them eat broccoli."

Author Biography

A graduate of the University of Alaska Anchorage, **Allison S. Walker** received her MFA in 2004 and joined the High Point University Department of English in 2009. Her poems have appeared in numerous literary journals, and her recent scholarly work has appeared in *EvoS*, the *Community Literacy Journal*, and *Visual Imagery, Metadata, and Multimodal Literacies Across the Curriculum*.

Acknowledgments

References

Anson, C., Dannels, D., Laboy, J., & Carniero, L. (2016). Students' perceptions of oral screencast responses to their writing: Exploring digitally mediated identities. *Journal of Business and Technical Communication*, *30*(3), 378-411.

Brick, B. & Holmes, J. (2008). Using screen capture software for student feedback: Towards a methodology. *IADIS International Conference on Cognition and Exploratory Learning in Digital Age*. Germany. Retrieved from www.iadis.net/dl/final_uploads/200818C046.pdf

Cope, B., & Kalantazis, M. (Eds.) (2000). *Multiliteracies: Literacy learning and the design of social futures.* London, UK: Routledge.

Cumming, A. (2013). Assessing integrated writing tasks for academic purposes: Promises and perils. *Language Assessment Quarterly, 10*(1), 1-8.

Ferris, D. (2003). *Response to student writing: Implications for second-language students*. Mahwah, NJ: Erlbaum.

Killoran, J. B. (2013). Reel-to-reel tapes, cassettes, and digital audio media: Reverberations from a half-century of recorded-audio response to student writing. *Computers and Composition*, *30*, 37-49.

Kim, L. (2004). Online technologies for teaching writing: Students react to teacher response in voice and written modalities. *Research in the Teaching of English*, *38*(3), 304-337.

Mislevy, R., & Yin, C. (2009). If language is a complex adaptive system, what is language assessment? *Language Learning, 59* (Suppl.), 249-267.

Reynolds, J., & Russell, V. (2008). Can you hear us now? A comparison of peer review quality when students give audio versus written peer review feedback. *The WAC Journal*, *19*, 29- 44.

Rodway-Dyer, S., Dunne, E., & Newcombe, M. (2009). Audio and screen visual feedback to support student learning. *Association for Learning Technology.* In ALT-C 2009: In dreams begins responsibility - choice, evidence and change, 8 – 10, Manchester. Retrieved from http://repository.alt.ac.uk/641/

Seigel, F., & Warnock, S. (2006). Using video capture software for asynchronous A/V writing feedback. *CCCC 2006 In Review*. Retrieved from http://wac.colostate.edu/atd/reviews/cccc2006/c24.cfm

Silva, M. L. (2012). Camtasia in the classroom: Student attitudes and preferences for video commentary or Microsoft Word comments during the revision process. *Computers and Composition*, *29*, 1-22.

Sommers, J. (2013). Response 2.0: Commentary on student writing for the new millennium. *Journal of College Literacy and Learning*, *39*, 21-37.

Stannard, R. (2008). Screen capture software for feedback in language education. *Proceedings of the Second International Wireless Ready Symposium*, UK. Retrieved from http://wirelessready.nucba.ac.jp/Stannard.pdf

Still, B. (2006). Talking to students: Embedded voice commenting as a tool for critiquing student writing. *Journal of Business and Technical Communication*, *20*(4), 460-475.

Thaiss, C., & Zawacki, T. M. (2006). *Engaged writers, dynamic disciplines: Research on the academic writing life*. Portsmouth, NH: Boynton/Cook.

Appendix A
Peer Review Form

Revelatory Thesis

✳ Introduction

Does the author hook you with the title and introduction?

☐   Yes! The thesis is revelatory and creative; it makes me want to read the source text the student is analyzing.

☐   Sort of. The thesis is interesting, but not unexpected. I've heard about it before.

☐   Not really. The thesis is predictable, and the introduction is kind of boring.

☐   No thesis is given.

- Highlight or underline the thesis statement, and mark it with a ✔+ if you think it's perfect as is, a ✔ if it makes sense but needs a little more work, a ✔- if it's confusing or has serious grammatical issues, and a **?** if you can't find the thesis, or it seems like the thesis isn't appropriate for this project.

- Look closely at the title of the essay. Mark it with a ☺ if it's creative and makes you want to read the essay, a **:/** if it's boring or predictable, and a ☹ if there's no title at all.

BEAMs & Source Integration

✳ BEAMs: How do the sources contribute to the structural integrity of a Jenga tower?

Does the student identify sources that serve as **B**ackground, **E**xhibit, **A**nalysis, and **M**ethod BEAMs?

☐   Yes! The sources are revelatory and diverse; the student makes it clear HOW these sources support the analysis.

☐   Sort of. I think the sources *could* be used in diverse ways, but some are integrated better than others.

☐ Not really. The sources all seem similar, and I think the essay would still make sense without some of them.

☐ This draft does not include the minimum number of sources. (4)

- On the **Works Cited** page, mark each entry with a **B, E, A,** or **M,** depending on how it was used by the student in the draft. If you aren't sure, label the source with a **?** Remember that a source can be used in different ways, so you may mark more than one letter for a source.

✳ Source Integration

Does the student follow the "5 Sentence Rule"?

☐ Yes! Each source is introduced, quoted accurately, cited correctly, translated into user-friendly language, analyzed according to its rhetorical purpose, and connected to the student's own thesis in order to create new knowledge.

☐ Sort of. Most sources are introduced and quoted correctly, but sometimes the analysis is a little unclear, or the student seems to be repeating another author's ideas rather than adding to the conversation in a new way.

☐ Not really. Some of the sources aren't introduced at all, and the analysis and synthesis part seems confusing or missing.

☐ There is no evidence that the student used the 5 Sentence Rule. The sources are cut and pasted like a high school paper.

- Highlight or underline each direct quote in the draft, and mark it with a ✔+ if you think it follows the 5 Sentence Rule, a ✔ if it sort of follows the 5 Sentence Rule but needs a little more work, a ✔- if it needs substantial revision if it's going to stay in the draft, and a **?** if it seems like the quote isn't integrated at all.

Analysis

✳Rhetorical Context

Does the student establish the rhetorical context of the text he/she is analyzing?

☐ Yes! It's clear who the author is, why that author is a reliable source on this issue, what the text is about, where and when it was written, what was going on in the world during that time, and who the target audience was for that text.

☐   Sort of. The context is established and analyzed, but some information is left out that would help a reader understand the essay better.

☐   Not really. Only the most basic parts of the context (such as title and author) are addressed, and they aren't analyzed at all.

☐   The student has not established the context of the source.

- Highlight or underline sections of the draft that you think clearly establish the context of the argument, and mark them as **CONTEXT** in the margins.
- If you marked anything other than "Yes!" offer some suggestions for revision:

❂Analysis of Text

Does the student analyze the source text effectively? Does the student balance HOW and WHY in the analysis?

☐   Yes! The student's analysis uncovers all of the hidden meaning in the text, and focuses on connecting the HOW and WHY by looking at the text under a microscope, down to the very sentence level.

☐   Sort of. The student's analysis is successful, but doesn't connect all the dots between HOW the rhetorical tools and appeals actually convey meaning and WHY the author chose those particular tools to persuade the target audience.

☐   Not really. The student's analysis doesn't really address HOW or WHY and may have misinterpreted the assignment.

☐   The essay does not complete the assignment.

- Highlight or underline sentences of the draft that are clearly functioning as analysis, and mark them as **HOW** or **WHY** in the margins.
- If you marked anything other than "Yes!" offer some suggestions for revision:

❂A Bright, Shiny Object: Descriptive Writing

Find a sentence or passage that brings the analysis to life for you as a reader. Look for poetic details, metaphors, vivid sensory descriptions, and sentences that make you say: "Damn, I wish I'd written that!"

Offer any comments or suggestions about the author's use of descriptive writing to explain or analyze another expert's work.
Comments:

✺An AHA! Moment

An **AHA! moment** is a statement that surprises the reader and makes her/him see the topic from a new and unconventional perspective. Find an **AHA! moment** and mark it with an **AHA!** in the margins of the draft.

Explain why you, the reader, find this to be a memorable and revelatory moment in the draft.
Comments:

✺A Huh? Moment

A **Huh? moment** is a statement that makes the reader confused and keeps her/him from engaging with the topic. Find a sentence or passage that you find confusing, awkwardly worded, or hard to follow. Mark it with a **Huh?** in the margins of the draft.

Explain why it's confusing to you, the reader, and offer any suggestions you might have for revision.
Comments:

✺A Duh. Moment

A **Duh. moment** is a statement that's obvious or expected. Find a sentence or passage that you find repetitive or expected and mark it with a **Duh.** in the margins of the draft.

Explain why it feels like a **Duh. moment** to you as a reader and offer any suggestions you might have for revision.
Comments:

Critique

✺Critique of Text

Does the student critique the source text effectively? Does the student offer counter-evidence to support the critique?

☐ Yes! The student's critique is revelatory and valid, and the student provides ample evidence to support the critique.

☐ Sort of. The student's critique is valid, but it doesn't provide enough evidence to support the critique.

☐ Not really. The student's critique seems a bit underdeveloped, and doesn't provide evidence to support the critique.

☐ The essay does not include a clear critique of the text.

- Highlight or underline sentences of the draft that are clearly functioning as critique, and mark them as **CRITIQUE** in the margins.
- If you marked anything other than "Yes!" offer some suggestions for revision:

✳Public Resonance
"In the conclusion, the student..." Mark all that apply.

☐ Predicts the future or describes a world where the topic has an effect.

☐ Encourages the reader to take action about the topic.

☐ Reaches a personal revelation about the topic.

☐ Reaches a public revelation about the topic.

☐ Ends with a bang!

☐ Restates the thesis.

Final Remarks

✳Smiley Meter
On a scale of 1-4, how many smiley faces would you give this draft?

	0	1	2	3	4
Revelatory Thesis					
BEAMs and Source Integration					
Analysis of Text					
Critique of Text					
Conclusion					

⊗ Parting Words

Offer some positive feedback. What did you like most about this draft, and what did you learn from it?

Appendix B
Jing 5-Minute Outline

Before you begin, take 5 minutes to gather your thoughts. Organize your response into a minute-by-minute outline. ONLY SPEND 5 MINUTES PREPARING YOUR OUTLINE. Jot down notes based on your responses to the written peer review form. Have the student draft handy in print as well as on your computer screen. Then you'll spend 5 minutes recording it!

For example:

- *Minute 1:* Pan across the big picture. Introduce yourself. Frame your response and the assignment objectives.

- *Minute 2:* Highlight what's working in the draft. Start with positive feedback. These could be *AHA! Moments* or *bright, shiny objects*, places where the writing knocks your socks off, or other strengths like style, grammar, integration of sources, and overall organization. Be sure you locate specific places in the draft that are working so the student knows what to build on in revision. Scroll to those spots and highlight them or point to them with your cursor.

- *Minute 3*: Focus on what needs work. Highlight big ideas and questions or areas where more critical thinking is needed. These could be *Huh? Moments* or *Duh. Moments*, but be sure you locate specific places in the draft that the student should return to in revision. Again, highlight or point with your cursor.

- *Minute 4:* Zoom in. Pick a few sentence-level details to highlight. You can't address everything in the draft, but you can highlight particularly revelatory or problematic spots. If there are grammatical or logical issues, try reading a troubling sentence aloud so the student can hear how it might confuse a reader. Try to narrate your thought process as a reader. You are a member of the audience, so you can give real-time reactions to the student's work. What are you thinking or feeling as you read?

- *Minute 5*: Zoom back out to the big picture again. Offer some closing remarks or questions that gesture toward future assignments or revisions. Don't forget to remind the student how he/she can contact you with any further questions about your peer review.

HELPFUL HINTS:

Jing allows you to highlight text as you go, use the cursor to point to specific words or areas, and scroll around or jump to other web pages. Just don't scroll too fast! It can be nauseating.

Use the **PAUSE** button to take a breather or gather your thoughts from one minute to the next. While you can't edit the screencast itself, the **PAUSE** button is your best friend because it allows you to edit your thoughts on the fly.

Create Your 5-Minute Outline Here
Minute 1:

Minute 2:

Minute 3:

Minute 4:

Minute 5:

Appendix C
How to Use Jing

Before you begin: Download Jing for Mac or PC: http://www.techsmith.com/jing
- Follow the prompts to download it to your hard drive, and then open the Jing application. A *sunshine* icon should appear on your desktop.

To capture a Jing Screencast Video:

STEP 1: Scroll over the *sunshine* icon until three rays appear:
Capture/History/More
- Click on the "**Capture**" button ray (it looks like crosshairs).

STEP 2: Drag the crosshairs to the top left of the file you want to review. Let go. This will engage the Jing tool bar above or below your file window. It includes four command buttons.

- Scroll over the icons to see: **Capture an Image/Capture a Video/Redo Selection/Cancel**

STEP 3: Click on the "**Capture a Video**" button. This will engage a microphone countdown and a new Jing tool bar that includes a clock and five command buttons. The first time you record, a dialog box will ask you which microphone you wish to use. Choose your laptop microphone to capture sound.

- Scroll over the icons to see: **Stop/Pause/Microphone/Redo/Cancel**

STEP 4: Action! Record your response.

- Use the "**Pause**" button to collect your thoughts, move to a different screen, or scroll to another area of the file. (If you go over time, you can still use the recorded file, just click "Go Back" when prompted, and move on to STEP 5.)

STEP 5: When you finish your response, click the "**Finish**" button. This initiates another Jing tool bar with three command buttons.

- Scroll over the icons to see: **Share Via Screencast.com/Save/Cancel**

STEP 6: Click "**Share Via Screencast.com**" (it looks like three arrows).

- Your recording will be uploaded to the screencast.com cloud. This takes a few minutes. When the upload is complete, a new Jing preview window will appear. You can then review your recording or email it as a hyperlink to your Peer Review partner and Instructor using **Command-V**.

WARNING: This window will disappear after a few seconds, but you can find the file in your Jing "**History**" (the second ray in your *sunshine*). Just in case, keep your partner's document open on your desktop so you can paste the hyperlink onto it as a backup.