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# Instructors' Perspectives Of Giving Audio And Video Feedback: Can You Hear Me Now?

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INSTRUCTORS' PERSPECTIVES OF GIVING AUDIO AND VIDEO FEEDBACK:
CAN YOU HEAR ME NOW?


by


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A Dissertation

Submitted to the Graduate Faculty

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Doctor of Philosophy


Grand Forks, North Dakota
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2016

This dissertation, submitted by Jane Marie Sims in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.
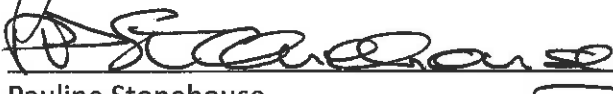
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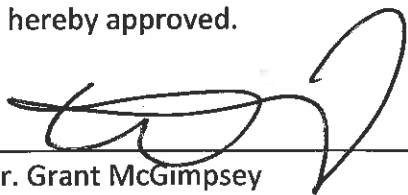Anne Walker, Chairperson

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Mark Guy

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This dissertation is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

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Dr. Grant McGimpsey
Dean of the School of Graduate Studies

_____July 22, 2016_____
Date

PERMISSION

Title        Instructors' Perspectives of Giving Audio and Video Feedback:
                    Can You Hear Me Now?

Department  Teaching & Learning

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Jane Sims
July 21, 2016

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To my family,
who provided support and encouragement in so many ways.
Thank you!

ABSTRACT

This study investigated university instructors' perspectives, values and processes of

giving assignment feedback to students using written, audio and video formats and examined

samples of feedback in these formats for differences in amount of content, language

complexity and tone of feedback. The instructors represented different campus disciplines and

a variety of campus, online and hybrid environments, and their classes included undergraduate

and graduate students and ranged from small to large class sizes. This qualitative study applied

Media Naturalness Theory to a phenomenological and discourse analysis of instructor

interviews and feedback samples. The interview data revealed intentionality in selecting

different feedback formats and three major factors affecting instructors' choices of feedback

formats: 1) educational purpose of the feedback, 2) the interpersonal relationship between

instructor and students, and 3) efficiency of time and effort. Differentiation within these

themes also impacted the choice of feedback formats. Instructors usually chose to use written

or audio formats on minor assignment types such as discussion postings or short papers, while

using combinations of audio and video narrations with written comments for major

assignments. Most instructors appreciated the options that technology provided for them when

giving feedback to students, but they also noted challenges in using different feedback formats.

Feedback samples from instructors were analyzed for tone, language complexity and amount of

content in the different types of feedback formats. The number of words in different feedback

formats varied considerably, as did the tone and language complexity. The more expansive

formats of audio and video presented the most information with regard to word counts, tone

and complexity. The feedback samples were also reviewed to discern how closely instructors'

actual practice matched their perceptions and values of the different feedback formats.

Findings have implications for instructors' practices when giving feedback and further research

regarding audio and video technologies for feedback, and formative and summative feedback

effects.

**CHAPTER I**

**INTRODUCTION**

In this study I addressed an issue that university instructors have raised about giving feedback on their students' writing assignments. Instructors are concerned about their process of giving clear and constructive feedback to student work in a timely manner and how students receive and apply this information (Bardine, Bardine, & Deegan, 2000; Dohrer, 1991; Sommers, 1982; Stern & Solomon, 2006). Instructors realize that the important role of providing feedback is more than awarding a score—it is communicating to students how well they met the goals of their assignments and providing encouragement for improving or extending their work. The process of communicating this information is handled differently by instructors with respect to how much time they spend in giving feedback, the amount of feedback they offer and the language complexity of their responses. The formats, or modes, that they use to deliver this feedback to students affect all of these considerations.

The feedback formats that instructors use range from handwritten comments to electronic "track changes" bubbles in the margins of papers, general end notes, rubrics which neatly categorize assignment requirements and levels of accomplishment, audio recordings, and video screencasts displaying student work with instructor narratives, to personal, face-to-face meetings with students. Each of these formats, or communication modes, has an effect on the instructor's process of giving feedback, the time involved in providing the feedback, and the

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feedback content and language complexity. Instructors recognize the interactional differences between feedback as written comments on students' papers and discussions with them in face-to-face consultations. They may not be as familiar with the communicative qualities and options within the recently available modes of audio or video feedback or the capabilities to include and combine features of more traditional feedback formats. Thus, this study focused on instructors' perspectives, values and processes of using audio and video feedback modes to respond to students' work.

## Statement of the Problem

A meta-analysis of over 250 studies of feedback in the ten-year period between 1988 and 1998 was conducted by Black and Wiliam (1998a), with results showing that feedback to students provided significant benefits in learning and achievement in all levels of education, disciplines, knowledge and skill categories. A landmark article by Chickering and Gamson (1987) included giving prompt feedback and communicating high expectations as two of their seven recommended principles for good practice in undergraduate education.

However, students often don't read or use the feedback provided by instructors, and they give many reasons for not doing so. Referring to written comments on their papers, students complain of illegible handwriting, smudged penciled notes, unclear phrasing or terminology and brief or abbreviated comments (Hyland, 2000; Ice, Swan, Diaz, Kupczynski & Swan-Dagen, 2010). A class of students that I was teaching shared with me their experience with a previous instructor's feedback to them; they were frustrated by his use of an "AWK" notation in the margins of their papers, as they didn't have enough information about what the instructor felt was awkward in their text. Students may have difficulty navigating between in-

text comments and rubric notations or end notes related to overview and thematic

commentary (Nordrum, Evans & Gustafsson; 2013). Similarly, students may find it difficult to

identify and interpret the level and importance of instructor feedback because all of the

instructors' written comments appear at first glance, and at once, on their paper. For example,

different levels of feedback focus on higher, middle and lower (H-M-L)order concerns—ranging

from thesis and organization (H); to paragraphs, structure, transitions and tone (M); to

grammar, punctuation and spelling (L) (Purdue OWL, 2013). Instructors' comments within these

levels appear on the page adjacent to and concurrent with each other, possibly blurring the

lines between items of major importance, such as addressing the issue or topic, with those of

lesser concern such as grammar and punctuation. The ink, whether red or not, can be

overwhelming.

Instructors lament that after spending much time on giving feedback, students often do

not read it or apply it to future work. This scenario is all too common when feedback is given on

summative assignments where no follow-up revisions are expected, especially at the end of the

semester. Students have commented that if the grade received is what they expected, they

don't bother reading the feedback (Hyland, 2010). Lunsford (1997) refers to the time involved

in providing good feedback and the tendency of new instructors to spend hours commenting on

every issue in the paper—a practice that indeed a new instructor recently shared with me, with

a sigh—and which I had experienced as well in my own early grading efforts. "Less is more"

recommendations by Lunsford (1997), as well as other suggestions such as minimal marking of

surface errors (Haswell, 1983) are also not fully understood in terms of impact, much less put

into practice.

Giving written feedback on students' copies of their work also creates challenges. Unfortunately, a major disadvantage of written documents is that they can be lost. I picked up one page fluttering across campus as I was walking by the library. In addition, once the document has been returned to the student, the instructor no longer has a copy of it—unless they make a copy for themselves and put it in their files.

There are many formats for instructors to provide feedback to students. Some instructors use the infamous red pen to write comments on the student's paper, while others use a pencil so that they can make changes on the page. Electronic documents and editing options now allow "track changes" features to insert text in the margins, in different colors and inside "bubble" comment boxes. Other instructors mark up a rubric that categorizes the areas to be addressed in neat boxes or tables. Sometimes there is little feedback to the student, with perhaps only a grade and a brief statement on the overall quality of work. Meeting face-to-face with the student is an option that provides a back-and-forth conversation between the instructor and student, allowing for questions, expressions of understanding or misunderstanding and a sense that the two are working together on reviewing and revising the student's attempt. In the past, some instructors have dictated their responses into a tape recorder to create individual audiotapes, which has been replaced by the modern practice of recording their voice in electronic audio files. More recently, instructors are beginning to give feedback as a screencast, which is a video file created by the instructor. Instructors create a screencast by displaying a student's document on the computer screen and recording themselves scrolling through the document as they speak their thoughts; they may even use their cursor to point to content or annotate the document.

As a college student, I have experienced some of these modes of feedback myself. I can still see the red "bleeding" on the pages of one of my major paper assignments—and recall the depressing feeling of not measuring up. Sometimes I only received a score and a "nice job" comment on my work, which was deflating after I had spent much time and effort on it—I wanted to hear what the instructor thought. On rare occasions, I received meaningful written comments, usually as a summarizing statement at the end of my assignment, next to my score. My meetings with instructors to discuss my assignments and projects usually helped me to hear their point of view and to respond with clarifications or ask questions so that I could move forward, or we could expand ideas and have an extended discussion. Once, as I listened to an audio recording of a professor reviewing my major class project, I could hear in her tone of voice how she was reacting to my work and encouraging me to improve it. My experiences of getting feedback through these different feedback modes echo Evans' (2013) argument that the social dimension of the feedback experience is as important as its content and organization. Feedback characteristics such as number of comments, their tone and inclusion of corrective advice about the writing process and content, and information about how the reader (instructor) experienced the writing instead of judgmental comments are noted by Lunsford (1997) as important in framing feedback comments.

The type of communication format used by instructors in giving feedback to students affects the amount, complexity and tone of the feedback, as well as the processes used by instructors in producing the feedback. Instructors prepare for and provide comments in the margin of a paper much differently than when meeting with a student for a one-on-one review of the work. Handwritten comments on paper and face-to-face consultations mark very distinct

and opposite forms of feedback formats with respect to the time and place they occur, level and ease of communication and extent of the information. However, feedback options using audio and video technologies combine characteristics of both extremes by providing a guided commentary from the instructor on the student's work that is paired with a copy of the student's marked-up paper. The voiced, nuanced details of the instructor's commentary provide additional explanation to the written notes on students' papers. When Séror (2012) and Shafer (2010) began giving video feedback to their students, they learned that they could *say* more than they could *write* in the same amount of time, provide explicit detail and examples, build social presence and empathy, and encourage and motivate students. Séror (2012) believed that he was able to address more of his students' writing, give specific references to organization and phrasing, and even pull in web pages and other course resources.

Instructors are concerned with the process of giving clear and encouraging feedback, especially in regard to the time it takes to provide useful feedback, yet return it to students promptly. Although Collis and Messing (2000) state that giving feedback takes considerable time, Shafer (2010) promotes that screen casting (video) takes up to 75% less time than writing feedback. Giving audio or narrated video feedback is a more natural, oral form of discourse than written comments, and it can be faster and less fatiguing. However, using audio and video formats is not a simple remedy for giving feedback. Unlike written feedback, you cannot copy and paste repetitive phrases to save time and steps. Moreover, because it is also harder or impossible to edit the audio or video file as one can do so in handwritten or digital notes on the student's paper, instructors may need to plan what they will say before starting the recording

(Henderson & Phillips, 2015; Schilling & Estell, 2013). There are also additional steps in using the technology and attaching the feedback to the student's work (Stannard, 2008).

Recording audio or video feedback for students is an emerging practice, and instructors' perceptions of their process of producing these modes of feedback, as well as their attitude and perceived value of this type of feedback, are important considerations in their decisions to provide audio or video feedback to students as alternatives to written comments. Instructors are also concerned about spending more time using digital technology for feedback, which increases their workload, especially if students do not appreciate their effort and time expended in giving personalized feedback (Collis & Messing, 2000; Collis & Nijhuis, 2000).

My interest with using audio and video communication modes for feedback to students on their academic work stems largely from my role as an instructional designer in a university setting. In this role, my responsibilities include assisting instructors in using technology to support their teaching activities and interactions with students. I began investigating options for students to make audio recordings for their course interactions and assignments, and then I moved into the possibility of instructors using audio recordings to give feedback on their student assignments. I learned about the options of using audio messages in student discussions when Internet learning systems created "voice boards" as virtual spaces where users could add their voice messages to a string of comments about a topic. Tweaking the settings in these voice boards created a private space for students to speak their assignments and the instructor to verbally respond to them with feedback.

One of the earliest examples of this type of communication exchange was a Spanish instructor posting her audio recording of an assignment topic, students speaking in response,

and the instructor then giving audio feedback, all in a private manner. Other instructors began to utilize this audio option for their assignments and feedback, with some even prefacing their feedback by giving instructions such as: "Now look at your paper, and let's go to this paragraph—." The technology then advanced from using voice boards for feedback to providing audio comments within the grading area of the course, next to the document itself. However, audio feedback was only one of the new and evolving media options which were becoming available to instructors for feedback to students.

I began to tap into the possibility of using videos to provide feedback to students after I experimented with using video screen casting technologies to provide guides and tutorials in response to instructors' requests for help in using computer applications. Screen casting is the process of recording what is displayed on a computer screen while adding explanatory narration and then saving the final product as a video file. Usually, the screen display does not show an image of the person who is narrating but only an image of the document, web site or application being discussed or interacted with. The screen displays the narrator's cursor moving throughout the document or work and clicking on menus to make selections or change screens, highlighting words or images, or adding annotations or typed text on the screen—all while the narrator is talking about what is shown on the screen. Several software applications offer different features for recording screencasts, with some available free of charge and others requiring a subscription or one-time purchase. Two commonly used free applications are Jing from Techsmith, and Screencast-O-Matic, with Snagit, Camtasia and Captivate requiring one-time purchases or annual subscriptions.

Previously, when I would receive a request from an instructor for help to address an issue of using some form of academic technology, I would respond with a lengthy Word file or email with a list of steps to follow. This required me to click through the "issue" and type the steps, then follow my steps to click through again to ensure that I didn't miss a step, mistakenly reference a button or icon, or not be clear on where to look to find the "click" spot. It took a lot of time to complete each of these actions and to make sure that I was clear in my instructions. However, when I discovered that I could display their issue on the screen and record my "clicking" actions as I narrated what to do next, I realized that I could quickly and easily provide instructions and explanations as if I was sitting right next to them. I didn't have to check myself. I spent less time constructing the explanation. I was able to be more personable and offer more options—even addressing a teachable moment instead of simply solving the problem. Even more—the instructors loved the videos! I then began sharing with these instructors who had received my "Jane's Jings" that they could use this same process to create tutorials and even give feedback to their students. Some of them began to do this, and a new practice emerged—using video screencasts to provide rich and personal feedback to students while maximizing instructor time and efficiencies.

These screencasts had the potential to be an effective method of providing clear and constructive feedback in a timely manner, as well as motivating students to review and apply this information. Studies of student reactions and effects on learning sprouted as innovative instructors experimented with these technologies, with general support for these new modes of audio and video feedback. However, most of the focus remained on the students' experience (Bauer, 2011; Cann, 2014; Thompson & Lee, 2012), and very few studies (Jones, 2014;

Henderson & Phillips, 2015; Séror, 2012) investigated the instructor's perspective and process of providing feedback using audio and video. Most studies that did include an instructor focus were in the forms of action research or case study, and included the details of an instructor learning how to use the software and the reactions of their students (Jones, 2014; Séror, 2012; Shafer, 2010;). This research was helpful to me as a starting point for supporting instructors in using these techniques with their students. Moreover, knowing that faculty often rely on peer experiences, I realized I needed to learn much more about instructors' perspectives and processes of giving feedback if I was to support instructors in using these new audio or video formats. Thus, this study focused on university instructors' perspectives and processes of giving feedback to their students through the different written, audio and video formats, and examined samples of their feedback for differences in content, language complexity and instructor tone.

## Purpose of the Study

The purpose of the study was to 1) identify instructors' perceptions, processes and values related to giving written, audio or video feedback to students on their assignments; and 2) identify the differences in amount of content, language complexity and tone of feedback between these different formats, as evidence of the instructors' perceptions. The research questions separately addressed written, audio and video feedback formats with respect to instructors' perceptions towards giving feedback in each of these formats. It was expected that instructors had given feedback to students in two formats: written and audio, or written and video. Instructors' perceptions of the value of each of these formats were also investigated. The instructors' processes of generating these formats was studied to identify how their processes

of giving feedback were affected by using the different formats, along with any efficiencies or

barriers experienced, and effects on the content of the feedback. To investigate accuracy of the

instructors' perceptions and values, the study included a comparison of samples of instructors'

written and audio feedback, or written and video feedback, with respect to amount of content,

language complexity and tone of instructors' comments. The methodologies of phenomenology

and discourse analysis were applied to this study.

## Research Questions

The research questions guiding this study were:

1. What are instructors' perceptions or attitudes of giving written, audio and video
   feedback?

2. What are instructors' perceived values of giving written, audio and video feedback?

3. What are instructors' processes of giving written, audio and video feedback?

4. How does the feedback in the different written, audio or video formats compare in
   terms of amount of content, language complexity and tone?

5. Are instructors' perceptions of using written, audio and video feedback accurate,
   based on the content of their feedback?

## Theoretical Framework

As this study focused on the communicative features of instructor feedback to students,

it looked to the communications field for a theoretical framework and found that the lens of

Media Naturalness Theory (MNT) provided guidance for interpreting instructors' perceptions,

processes, actions and values relating to providing feedback using different communication

media. Kock (2002) developed MNT by extending Darwin's theory of evolutionary biological

adaptations to support humans' physical abilities to communicate in a face-to-face model. Kock (2002, 2005) positions face-to-face communication as the most natural and effective evolutionary design, based on these essential elements: the extent that each person can see and hear each other, quickly exchange ideas, observe and convey facial expressions and body language, and produce and listen to speech. Kock (2002, 2005) explains MNT as utilizing these essential elements to relate the effectiveness of any other communication medium to the "natural" standard of face-to-face communication, with the number or degree of these elements that is present in any communication media then determining the degree of media naturalness. Thus, using Kock's (2005) rationale, a verbal communication (containing speech) is more natural and effective than written communication, even if both are lacking other essential elements.

However, Kock (2002, 2005) also recognizes that a function of communication media is to support social behavior and that social influence may mitigate these essential elements. For example, Kock (2005) cites the advantages of asynchronous electronic communication such as email for easy distribution and review. Kock (2005) does not to seek to devalue electronic communication, but advocates making electronic communication as natural, or as much like face-to-face, as possible. Kock's premise is not simply based on Darwin's biological adaptations, but also because he believes that, all things being equal, a decrease in the degree of naturalness affects the communication interaction with regard to: (1) increased cognitive effort, (2) increased communication ambiguity, and (3) decreased physiological arousal (2002, p. 374; 2005, p. 124). Kock's (2002, 2005) studies of MNT in business environments claim that communication ambiguity surfaces when interacting individuals reference different cultural

environments, schemas or communication cues to process information, causing gaps or misinterpretations to occur. While MNT studies initially addressed modes of communication in business environments (Kock, 2002, 2005), they have also been applied to academic environments with respect to learning, communication and social interactions (Cothran, McCaughtry, Faust, Garn, Kulinna & Martin, 2009; Kock & Garza, 2011; Kock, Verville & Garza, 2007; Simon, 2006).

Within the academic environment, one now considers the effects of the communication interaction with respect to Kock's (2002, 2005) identified attributes of (1) increased cognitive effort, (2) increased communication ambiguity, and (3) decreased physiological arousal. Increased cognitive effort, or load, interferes with learning. In learning, communication ambiguity may affect interpretation of feedback comments, especially those relating to constructive criticism because non-verbal cues and other tone modifiers which soften the criticism in a face-to-face interaction are missing from electronic or written communication formats (Kock, 2002, 2005). Physiological arousal may also be decreased as a result of written or e-communication modes that are devoid of interactive cues such as facial expressions found in face-to-face interactions.

Kock (2002, 2005) states that a lower degree of naturalness in the communication interaction results in more cognitive effort, more message ambiguity and lower interpersonal connection. Thus, communication and cognitive processing challenges to comprehending a message increase as the media format moves further away from a natural face-to-face communication mode (Kock, 2002, 2005). The naturalness of various media formats effects different levels of cognitive effort, communication clarity and relationship-building between

instructors and students. Simon (2006) recognizes the potential of MNT with respect to computer-based communication for student learning based on his findings that students preferred face-to-face or video-conferencing interactions more than textual instant messaging. Although students did adapt to the instant messaging format, they did not seem to overcome the additional time and effort needed to use the text-based instant messaging system. Blau and Caspi's (2010) study of students' experiences with text chat, audio-conferencing and face-to-face communication also supported MNT, with students reporting higher emotional satisfaction in face-to-face interactions, although there were no significant differences in learning outcomes based on the different communication modes. According to Olaniran (1996), ease of use affects satisfaction with a communication system, which also lends support to users' preferences for media that is most like face-to-face communication. This satisfaction and preference is supported by a statement one instructor made to me, which is that she would never go back to providing written feedback after having learned how to give audio feedback to her students.

### Significance of the Study

Despite the growing interest in research focused on assessment and feedback, there are significant gaps in the literature (Evans, 2013). Eraut (2006) recommends that "we need more feedback on feedback" (p. 118). Juwah et al. (2004) cites that there needs to be more research on "what works best" in student feedback, and Yorke (2003) calls for more research on the assessor's perspective of giving feedback in formative assessments. Nicol and Macfarlane-Dick (2006) suggest that more research is needed on instructor feedback with respect to framing, discourse modes and context of comments as well as in exploration of alternative feedback modes. With regard to the components of feedback, Ellery (2008) believes that delivery, form

and context are all important issues, and Hattie and Timperley (2007) cite that the way

feedback is given affects its impact and call for more research on how feedback works in the

learning process. Black and McCormick (2010) argue for more focus on oral feedback as

opposed to written feedback as well as other strategies to enhance independent learning and

integrate the use of formative and summative assessments.

There is a growing collection of research on student perceptions of receiving audio or

video feedback as compared to written feedback (Borup, West, & Thomas, 2015; Butler, 2011;

Henderson & Phillips, 2015; Ice et al., 2010; Jones, 2014; Marriott & Teoh, 2012; Stannard,

2008; Yuan & Kim, 2015). While most feedback is still in the traditional form of written

comments (Schilling, 2013), many students admit that they do not read the written comments

(Rowe & Wood, 2007). Thompson and Lee (2012) found that "veedback," their term for video

feedback, promoted a more personal connection with students, and students appreciated this

format of a student-teacher conference where they could hear their instructor's voice in real

time but with anytime availability.

As instructors are experimenting with the process of generating audio or video

feedback, some are sharing their personal experiences of using these new technologies and

their students' reactions to it (Séror, 2012; Shafer, 2010). However, there are no studies on

instructor perceptions and processes of giving feedback to students' work using the feedback

modes of audio or video media as compared to written commentary. Importantly, no studies

have evaluated the amount of content, language complexity and tone of instructor messages

within written feedback to that of audio or video feedback, and none have been undertaken

using the theoretical framework of Media Naturalness Theory (MNT). Instructor feedback is an

involved process of communication, and by framing this study within communication theory, I hoped to produce a new and enlightened perspective. As Maxwell (2004) states, "the most productive conceptual frameworks are often those that integrate different approaches, lines of investigation, or theories that no one had previously connected" (p. 35).

Findings from this study contribute to the literature on instructor perspectives and values of using audio and video media formats for providing a naturally occurring feedback experience to students on their assignments. Additional findings highlight instructors' processes of generating that feedback. The study also showcases discrete differences in the amount of content, language complexity and tone of the feedback in these different formats: written, audio and video. Altogether, these results may be of value to instructors who are considering providing new, yet familiar options for giving clear and constructive feedback in a timely manner while also taking into account how students receive and apply this information.

## Delimitations of the Study

1. This research used a sample of convenience for instructor selection and was limited to instructors teaching in a Midwestern research university who had given feedback to students in both 1) written format, and 2) audio *or* video format.

2. This study used samples of feedback selected by participants; thus the researcher was dependent upon their decision-making process in choosing samples.

3. Not all of the instructors had access to copies of their audio *or* video feedback formats.

**Definition of Terms**

Asynchronous: Communication between two or more participants that does not occur at the same time but rather one participant responding to the other at another time; examples are instant messaging, blogs, voice messages, email, and paper correspondence interactions.

Audio: A voice recording using a software application and a computer, mobile device, cell phone or recorder.

Cognitive load: The amount of mental effort required by a person's working memory to process information.

Deixis: Words and phrases that cannot be fully understood without additional contextual information. An example is "Pick that up before the dog eats it."

Discourse: A broad definition is the way language is used in specific contexts, or language in use. A narrow definition is the ways that sentences connect to and relate to each other in speech and writing (Gee, 2014). For example, the statement, "Show me your papers" might refer to a classroom or a legal context or even an entry in a dog show.

Feedback: Information about how a person performed in light of what he or she attempted — intent vs. effect, actual vs. ideal performance.

Genre: A category of artistic products having a similar and particular form or content, such as genres of documentary films, musicals or impressionist paintings.

Grammar: The structural rules of a language.

Intonation: The pattern or melody of pitch changes in connected speech, such as in a sentence. In linguistics: the use of pitch in language to indicate lexical or grammatical meaning.

Intonation unit: Short bits of speech bounded by prosodic features that signal onset and completion—such as rising and falling pitch, silence, or punctuation. Intonation units may also be referred to as utterances. "Ouch!" and "We walked up and down the street." are examples.

Lexicon: The words of a language.

Linguistics: the science of language, including phonology, morphology, syntax, semantics, pragmatics and historical linguistics.

Media: Forms of communication such as paper, audio, video, email, electronic messaging and text.

Mode: A particular type or form of something: Communication modes include text, audio, video; or aural and verbal.

Morphology: Study of the structure of a language's morphemes and linguistic units, such as root words, affixes, parts of speech, intonations and stresses, or implied context.

Phonology: The linguistics branch of study that focuses on sounds in languages; a language's sound system.

Physiological: The branch of biology dealing with the functions and activities of living organisms.

Pragmatics: The study of language in context; or how context gives meaning to words and words give significance to context (some linguists use pragmatics in place of discourse) (Gee, 2014).

Prosodic: The stress and intonation patterns of an utterance.

Register: A variety of a language used for a particular purpose, in a particular social setting or with a specific audience.

Screencast: A video recording produced by capturing what appears on the computer screen, often with added narration.

Semantics: The study of meaning, or relationship between signifier such as words, phrases, signs and symbols, and what they stand for. For example, a large red and white octagonal metal sign at an intersection with the word "STOP" on it signals drivers to stop their vehicle and check for oncoming traffic before entering the intersection.

Situated meaning: The meaning of language based on context and what one feels is relevant within that context (Gee, 2014).

Social presence: The ability of a participant to project himself socially and affectively into a community of participants.

Stance: A person's feeling, attitude, perspective, or position with respect to something.

Synchronous: Communication between two or more participants that occurs at the same time but not necessarily in the same place; examples are web conferences, phone calls, video chats, and face-to-face conversations or meetings.

Syntax: The structure of sentences in language; the rules for composing parts of a sentence.

Tone: A characteristic style or manner of speaking to express a particular meaning or feeling of the speaker.

Utterance: A unit of speech bounded by silence.

**CHAPTER II**

**LITERATURE REVIEW**

The purpose of the study was to 1) identify instructors' perceptions, processes and values related to giving written, audio or video feedback to students on their assignments; and 2) identify the differences in amount of content, language complexity and tone of feedback between these different formats, as evidence of the instructors' perceptions. To understand the rationale for the study, it is useful to review the literature on the importance of feedback, feedback issues from the perspectives of students and instructors, different formats or modes of feedback, and experimentation with new audio or video modes or processes of feedback.

**Importance of Feedback**

Feedback is critical in promoting effective learning because of its focus on learning goals, students' achievement status, and ways to bridge the gap (Sadler, 2010). University instructors note the importance of feedback as numerous meta-studies confirm the impact of feedback on learning (Black & Wiliam, 1998a; Hattie & Timperley, 2007). Hattie & Timperley (2007) state that feedback is "one of the most powerful influences on learning and achievement" (p. 81), and the type of feedback and way that it is provided impacts its effectiveness.

Although instructors refer to the process of providing information on student achievement as feedback, Hattie and Timperley (2007) propose a more progressive view as

"feed-forward" so that it is applied to future work (p. 86). This view gives more relevance and consequence to the evidence by noting that learning is sequential. In addition, Hattie and Timperley (2007) identify four levels or types of feedback: about a task or product, about a process, supporting self-regulation, and personal—which may be unrelated to the specific task. When giving feedback in these areas, Hattie and Timperley (2007) write that simply providing grades does not promote improvement but that comments which include information for improvement, especially with regard to goal setting, can enhance task confidence, self-efficacy and motivation to succeed. Black and Wiliam (1998b) propose that formative feedback that promotes students' self-esteem and self-assessment is productive. Rowe, Wood, and Petocz (2008) advocate that instructors provide feedback that promotes student engagement. The FIDeLity model of feedback proposed by Dee Fink (2003) utilizes four features of educative assessment: (F) frequent, (I) immediate, (D) discriminating, and (L) lovingly (p. 83). These features refer to the timing of feedback, the criteria and standards of evaluation, and the social relationship between instructor and student. Chickering and Gamson's (1987) frequently cited article on seven principles of good teaching and learning in colleges and universities specifically includes a recommendation of "prompt" feedback in addition to practices of communicating high expectations and respecting student diversity in both experience and ways of learning. Thus, while the description of what good feedback is and should do varies, instructors recognize its importance in supporting student learning.

### Issues With Feedback

Despite the importance that instructors and students generally place on feedback, sometimes their actions do not seem to support their beliefs. In a study of student preferences

for feedback by Rowe et al. (2008), 50 percent of students reported that they received no or rare individual verbal feedback and 45 percent of students reported that they did not or rarely received written individualized feedback on assignments; however, the authors speculate that these students may have failed to recognize that they had received feedback. In addition, when students do receive feedback, many readily admit that they do not read the written comments, especially if feedback is given at the end of the term (Rowe et al., 2008).

Students often don't read or use the feedback provided by instructors, and they give many reasons for not doing so. Referring to written comments on their papers, students complain of illegible handwriting (Merry & Orsmond, 2008), smudged penciled notes, unclear phrasing or terminology, and brief or abbreviated comments (Hyland, 2000; Ice et al., 2010). Students report challenges in understanding comments, lack of specific advice on how to improve writing, terseness of comments, and "finality of one-way comments" (Carless, Salter, Yang, & Lam, 2011, p. 395), indicating that they feel that there is no interaction with the instructor's feedback.

Séror (2012) cites from personal experience his challenges to give comprehensive feedback to address topic issues, organization and grammar. Others echo challenges in providing feedback with Butler (2011) referencing heavy schedules, time pressures, limited resources and large classes (p. 99); and Carless et al. (2011) discussing the challenges of providing clear and precise feedback for student understanding while fostering interactive dialogue, especially if feedback occurs towards the end of the course. Instructors sometimes find it challenging to find a balance in marking students' errors when making written comments (Thompson & Lee, 2012), by spending too much time on every error rather than focusing on a

few key points for improvement. In other instances, they feel there is too little opportunity to interact with students while reading their papers as it takes too much effort to put down the "conversation in our own heads" (Thompson & Lee, 2012, p. 3) or questions related to topics or even puzzling semantic or grammatical choices. Thus, key teachable moments often pass by as well as missed opportunities to make personal, conversational and social connections with students. These are the things that instructors wonder about as they spend hours, often in the middle of the night, providing feedback on student assignments.

In "Sugaring the Pill," Hyland and Hyland (2001) identify the traditional role of written feedback as an informational channel to students to facilitate improvements but argue that the traditional format of written feedback fails to take advantage of the interpersonal aspects of feedback between instructors and students to provide praise and constructive criticism. Hyland and Hyland (2001) note that there is little research in this area and also believe that the role of instructor stance and beliefs is an additional, important component that has been previously unidentified. In placing written communication at the lowest end of a communication media scale, Kock's (2002, 2005) media naturalness theory (MNT) further identifies the challenges that instructors and students face when giving or receiving written feedback with regard to communication ambiguity, physiological arousal and cognitive effort.

**Experimentation With Feedback Media**

Universities are beginning to utilize new digital technologies in classrooms and online environments, and instructors are learning to create content and communicate with students by using electronic and social media, cloud-based repositories, and audio and video formats for recorded lectures and tutorials, as well as web conferencing. Assessment activities and

interactions are also evolving with instructors using electronic formats to mark up text, provide spoken commentary, and visually display student work while scrolling through it, highlighting content and "conversing" with students (Butler, 2011; Henderson & Phillips, 2015;  Jones, 2014; Schilling, 2013; Shafer, 2010; Thompson & Lee, 2012; Yuan & Kim, 2015).

There is increasing interest in offering feedback to students using different electronic media. Studies of feedback strategies and new media formats highlight student experiences and preferences and instructor experimentations and perspectives. Sometimes new technologies are used to do things in old ways, such as writing on a smartboard instead of a blackboard or taking notes on a computer instead of a notebook (Klopfer, 2011, p. 70). Text comments in electronic files mirror handwritten comments on paper copies (Schilling, 2013), although more legibly and perhaps faster because one can "cut and paste." Grading rubrics organize feedback with text comments in neat boxes, either on paper or in an electronic document linked to a student's submission.

The innovation in providing feedback occurs when the technology supports new ways and new media, such as audio or video comments. The new media formats embed not just words on paper but "multiple dimensions" (Schilling, 2013) of intonation, stance and personality. These "nonverbals" provide important information and richer context than written words (especially abbreviated) alone. Séror (2012) promotes that screen casting is a "low-cost, intuitive, and timesaving interface" which can overcome limitations of more traditional feedback approaches (p. 104).

Instructors who wish to experiment with new media formats for providing feedback have several free or inexpensive commercial software choices available to them. Audacity is a

free audio recording application with flexibility for minor editing, and it is a recommended source for creating audio files in common formats of WAV and MP3, which are easily accessible to students (Butler, 2011). Stannard (2008) states that use of screen casting software is common, and video demonstrations are often used for teaching computer software. Screen casting technology allows instructors to record themselves as they edit and comment on students' work that is displayed on their computer screens. Several screen casting applications exist for making video recordings of narrations with interactions of on-screen documents. Some are free, such as Jing and Screencast-O-Matic. Snagit is a low-cost application. Camtasia and Captivate are more expensive applications with more advanced features.

**Student and Instructor Perceptions of New Feedback Media**

In Butler's (2011) study of audio feedback, student reaction to audio feedback was positive as students indicated that the audio was an effective means of explaining why they received the grades they did, what they did well, and where improvement was needed. Merry and Orsmond (2008) cite similar student reactions. According to Merry and Orsmond (2008), students preferred audio feedback over written feedback because they felt it was easier to understand, had more depth and was more personal. Additionally, students indicated that they would use the feedback to improve future work, and they wished to receive more feedback in this format (Merry & Orsmond, 2008). The tutors who gave the audio feedback indicated that they were able to give more detailed feedback within the same amount of time as giving written feedback. While acknowledging that there was not a time savings, they felt the higher quality was still beneficial (Merry & Orsmond, 2008). The study also found differences in the type of feedback given, with "giving praise" the largest category within written feedback,

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followed by "identifying errors," "explaining misunderstandings" and "engaging students in thinking" (Merry & Orsmond, 2008). In contrast, the largest category for audio feedback was "engaging students in thinking," followed by "giving praise," "demonstrating correct practice" and "explaining misunderstandings (Merry & Orsmond, 2008). The "engagement" characteristic of feedback that was promoted by Rowe, Wood and Petocz (2008) was higher in audio feedback than written feedback.

Audio feedback provides additional cues from the speaker, but the student who is listening to the feedback may still have comprehension challenges because of difficulty in locating the area of the text which is referenced by the instructor (Cavanaugh & Song, 2014; Rodway-Dyer, Knight & Dunne, 2011). The same challenges may be experienced when the video is of the instructor speaking instead of displaying the student's paper (Henderson & Phillips, 2015). Video screen casting feedback provides that reference because the students can see their documents, with the instructor's "mouse" moving over the words and sections, while listening to the instructor providing verbal comments.

After conducting a study of video grading with engineering students, Schilling and Estell (2013) suggested that feedback will be meaningful to students if it meets many criteria, including timeliness, relevancy, applicability and being engaging; otherwise, students will ignore the feedback by throwing away the assignment or only looking at the final grade. Students reported that it helped them to see the non-linear process of the instructor assessing their work as they could follow the instructor moving back and forth through the document to check contradictory or duplicate information (Schilling & Estell, 2013). Their experiences in this study relate to the challenges of being presented with all of the instructors' feedback at once, with no

discrimination of higher (topics), middle (organization), or lower (grammar) issues (Purdue Owl, 2013), and Kocks' (2002, 2005) premise of reducing cognitive load and ambiguity by using a more natural communication medium.

Schilling and Estell (2013) advise that multiple dimensions be used to improve feedback effectiveness, similar to using multiple in-classroom teaching strategies. In screen casting, this is facilitated by the combination of text (on screen), video (mouse movements), and audio (narration). With respect to faculty impact, there was no significant difference regarding time spent grading although there was additional time required to process the video file (Schilling & Estell, 2013).

Jones (2014) has experimented with using video to create MP4 feedback files, and details the process of using Screencast-O-Matic software and rubrics for grading undergraduate writing assignments. The video screencasts display the student's document or instructor rubric on the screen while the instructor provides narration at specific areas of the document. Jones (2014) claims that this assessment method provides students with personalized video feedback and "the video grading process recreates the face-to-face consultation that usually occurs only in tutoring or office consultations" (p. 54). When creating the video feedback, Jones (2014) advises the instructor to "treat the video grading as if the student is sitting at an office session where the atmosphere is informal and open to regular conversation" (p. 58). According to Séror (2012), the screencasts simulate the one-on-one interaction of personal conferences to provide supportive guidance to students about their strengths and weaknesses.

Stannard (2007) promotes creating video recordings to provide feedback of instructors' spoken comments while displaying their on-screen interactions with students' documents, and

he considers  that this mode of feedback could be "a halfway house between handing back a student a written piece of work with comments on it and actually meeting the student to mark their work" (para. 5). Carr and Ly (2009) also describe screen casting as having a "'look over my shoulder' effect similar to one-on-one instruction" (p. 411). Looking at these experiences from the perspective of Kocks' (2002, 2005) MNT, it seems that the use of video screen casting is very close to his face-to-face standard.

Jones (2014) reports that student evaluations of the method are overwhelmingly positive and perhaps students seem to find this aspect appealing because it is a different format for delivering constructive criticism than the impersonal and harsh red pen or Word markup. Jones (2014) does caution instructors to keep the video shorter than 15 minutes due to students' short attention span, and suggests that instructors "pre-grade" the paper by highlighting specific areas to then address as high points in the video narration. Séror (2012) echoes Jones (2014) findings, and claims that students' reactions to screencasts as feedback are generally positive and students find them appealing—if they are not too lengthy. Stannard (2008) also found that students liked the video feedback more than traditional approaches, especially because it was both visual and oral, as they commented that they felt they received more information.

Although audio and video feedback is new to some instructors, others have been using these modes for some years. Jones (2014) references that the process has been used in undergraduate community college courses with much success for more than three years and highly recommends providing the files to students by saving them in the Blackboard learning management system (LMS). Using this practice, the video feedback is also then available as a

reusable learning object, as students have commented that they review these feedback files several times, and even refer to them as a resource in future classes and writing assignments (Jones, 2014).

Feedback options for students in distance or online courses are important for meeting several of the principles of good practice in undergraduate education which were identified by Chickering and Gamson (1987): encouraging contact between students and instructors, communicating high expectations and giving prompt feedback. Jones (2014) also recognizes the importance of student feedback in online courses where students may perceive instructors to be distant and unapproachable. In this environment, Jones (2014) proposes that personalized video feedback forms connections between the students and instructor, and it can lead to student persistence because the constructive feedback can be understood, especially as brief traditional "red pen" comments may be misunderstood. Based on this flexible and natural communication method, Jones (2014) predicts that the era of short comments in red ink, Word markup text, and highlighting may be nearing an end.

Moreover, Jones (2014) believes that using video grading to provide feedback to students, especially those in distance courses, is a superior method than face-to-face settings in terms of giving quality and timely feedback, because students can visually see the errors while hearing the instructor's positive reinforcement and recommendations, and they can also review this video as many times as needed. Like Jones (2014), Séror (2012) believes that video feedback offers advantages to face-to-face communications, especially because of students' ability to rewind or stop their teacher in order to better hear or understand the feedback and listen to it as often as they wish. Another feature that video feedback (using some programs)

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affords instructors is the ability to track how often a screencast has been watched (Séror, 2012), as compared to knowing how often a student reviews paper copy feedback.

Séror (2012) appreciates that video feedback allows him to communicate with his students with more flexibility, animation and dynamic. The ability to be more conversational and personal, and to add "color" or emphasis by changing the tone of his voice to display praise, confusion and authentic concern are also benefits cited by Séror (2012). One caution is presented however; as Séror (2012) advises that extra visual scaffolding or more textual information may need to be provided as support to oral comments for low-proficiency learners, which may also include L2 learners.

A defining characteristic of video feedback is the ability to provide extensive detail within a short period of time. Speaking 265 words in 64 seconds of a recording amounts to almost a full page of text, providing much more information than one could write in that same time span (Séror, 2012). Stannard (2008) also relates one minute of commentary to about 200 words, or two minutes of video feedback to about 400 written words. The capability to expand commentary also serves to eliminate abbreviations and short phrasal responses.

Providing feedback as a video recording that supports expansive instructor recommendations often facilitates the revision and self-regulation process. Carless and his colleagues (2011) recommend that feedback should occur as part of a two-stage assignment process allowing review and revision, and propose developing a sustainable practice of feedback by promoting feedback as a dialogue between instructor and student, and as a self-regulating process by the student to promote improvement. Pedagogically, when screen casting is used to provide formative assessment with the expectation of revision, students must listen

to the recording and make their own interpretations and revisions to their drafts (Séror, 2012)

instead of accepting the instructor's "track changes" as their own. This puts responsibility for

redrafting back on the students. Séror (2012) believes screencasts to be an important

technological innovation for transforming how feedback can be offered to language-learners on

written assignments, with screencasts being especially valuable for students who are second-

language (L2) writers.

**Challenges to Using New Media for Feedback**

Séror (2012) described his personal experiments of using Jing to create video recordings

as feedback for his students, and noted that he had to make some adjustments to his methods

and practices. Learning to work with digital rather than paper copies of student assignments

required digitizing the paper copies they turned in or implementing a different student process

for submitting electronic files. The process of providing feedback changed, as his work flow

involved opening the digital file, starting the recording and then highlighting and annotating the

document while commenting aloud about his perspectives and actions. Séror (2012)

acknowledged that his initial recordings contained hesitations and misstarts, and that he had to

experiment with different tools and processes for annotations, and to practice coordinating his

voice to his actions.

Séror (2012) recognized that there is an initial investment of time and effort before one

feels at ease in making the recordings. One of the shortcomings of using simple video recording

software is the lack of editing tools, so that serious mistakes might require a restart or "do

over."  Thus, Séror (2012) and others recommend marking up the document before beginning

the recorded narration, and this markup provides a reminder for the instructor of where to

make comments, saves time in the actual recording process, and makes for a shorter video

length. Séror's (2012) strategy of providing initial comments to preface his review and pausing

the recording to collect his thoughts before speaking about different issues in the document

helps him to focus, be efficient and keep within any software recording time limitations. This

latter effect is especially important with Jing's limitation of a 5-minute recording length.

Stannard (2008) acknowledges that technical skill and time may be required if video

recordings need to be compressed for transferability; but recent video formats and cloud

storage within the Internet may mitigate those requirements. A concern of storing video files

on the Internet for "on demand" access may be related to FERPA regulations of student data

privacy; however, if care is taken to not display full student identifying information or grades,

the information may be described as part of an assessment process, which is different from

reporting grades.

Providing audio feedback to students requires more steps because the process still

includes marking up the student's document, but Butler (2011) found that the process of giving

audio feedback took less time than providing written comments only, with an average of 19:30

minutes for audio feedback as compared to 22.26 minutes for written feedback. Additionally,

the average length of the audio feedback was 7:20 minutes.

Relying on a storage system to provide the link to audio or video feedback may pose a

challenge, depending on the reliability of the system. Most commercial "cloud" systems have

built-in redundancies, but they may not have the same levels of recoverability. For example,

videos produced with Jing can be stored in TechSmith's "cloud" system, but the access point is

on the video creator's computer. If the computer hard drive becomes corrupted or is

reformatted, perhaps as part of an upgrade, Jing's access point can be lost and the video in the cloud might no longer be able to be accessed. Also, software system upgrades and interfaces can present unexpected issues if their linking systems can no longer access the files. I have recently experienced exactly this issue with an upgrade of our university's Blackboard system, and waited for several days for the "expedited" ticket to be resolved. These situations remind users that in the technology world, interacting systems may cause unexpected and uncontrollable glitches.

## Extensions of Video Formats for Providing Feedback

While screen casting provides an alternative way for instructors to provide feedback to students, possibilities also exist for students to provide peer feedback to each other on their work (Séror, 2012) and to submit self-evaluations with their submitted documents as evidence of their learning. Geometry students reported a preference for using Jing screencasts to provide self and peer feedback on each other's' geometric proofs, stating that that they learned more about writing geometric proofs from reviewing each other's work than in creating their own proofs (Shafer, 2010).

Students in one of my classes also provided feedback on each other's work using screen casting. First, the students created a video tutorial to explain how to use some academic software. Then they critiqued their partner's video tutorial by recording a feedback video that displayed their partner's tutorial. To record this feedback video, the students would play their partner's video on the screen and pause it as needed to narrate comments for their partner. The process of playing, pausing and commenting enabled students to provide feedback for their partner that was evidence based and timed to fit their partner's actions.

It seems that the work that instructors do in providing feedback is changing, and the processes are even involving students in providing peer and self-assessments of their performance. New technologies and media formats, and the processes and pedagogies they support, are redesigning this critical evaluative component of the learning experience.

**CHAPTER III**

**RESEARCH METHODS**

**Research Design**

According to Maxwell (2013), "the goals of your study are an important part of your

research design" (p. 23). These goals serve two functions; they guide the design decisions to

make sure the study is worth doing, and they explain why the results and conclusions matter.

Relatedly, Maxwell (2013) identifies three types of goals: personal, practical and intellectual.

Personal goals are those that motivate one to do the study; they represent a specific interest in

this issue or topic. Personal goals are also important in identifying researcher bias due to this

interest. Practical goals are those aimed at accomplishing something, perhaps meeting a need

or changing a practice. Intellectual goals intend to understand something by addressing what is

happening or filling in a gap in previous research. My personal goals for this study were

motivations to support faculty in generating useful feedback to students in a manner that is rich

in content, delivered in a supportive and guiding manner, and efficient with regard to time and

effort to generate the feedback. The practical goals included learning what perceptions, values

and processes instructors have about their written, audio and video feedback formats in order

to share them with other instructors who may be questioning their own methods or curious

about what works well for their peers. The intellectual goals were to understand what was

happening in these different feedback formats, especially from an instructor's perspective.

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Intellectual goals are well supported by a qualitative study when they attempt to capture the participants' perspective and meaning of their experience and actions and how this influences their behavior (Maxwell, 2004). A qualitative study is interested in the process of participants' actions rather than outcomes, and the inductive approach has "a focus on words rather than numbers" (Maxwell, 2004, p. 22). Evans (2013) dives even deeper into the discovery process with his position that qualitative research is uniquely designed to produce evidence that stimulates and is based on deep reflection. A qualitative design is consistent with the purpose of this study, which was to identify faculty perceptions, processes and values related to giving written, audio or video feedback to students on their assignments, and the differences in amount of their content, language complexity, and tone between these feedback formats, as evidence of the instructors' perceptions.

My practical goals were also supported by a qualitative study design, as Maxwell (2004) argues that readers of a qualitative study will believe the results are more meaningful because they are based on experiences that may be closely related to their own experiences. The statements and stories that the instructors shared within this study may resonate with other instructors who are new or experienced in the practice of giving audio or video feedback. This study also provided an opportunity to collaborate with participants who are applying these feedback modes in their classrooms, and to better understand their reasoning and experiences as instructors who are interested in providing quality feedback to their students, and are also willing to try a new strategy or technology to enhance their interaction with their students and improve their academic experience. My personal goals were to collect data to support my work with instructors in order to share with them first-person stories of this feedback practice.

Having access to this data and these stories also served to mitigate any unfounded bias I might have had towards these audio and video formats.

Thus, the purpose of the study was to 1) identify instructors' perceptions, processes and values related to giving written, audio or video feedback to students on their assignments; and 2) identify the differences in amount of content, language complexity and tone of feedback between these different formats, as evidence of the instructors' perceptions.

**Participants**

The ten participants of the study were instructors at a medium-size Midwestern research university. The instructors were giving, or had previously given, feedback to students in the form of 1) written commentary on an assignment, and 2) as an audio recording or a video screencast on the same or a similar type of assignment. The written feedback appeared in the form of separate typed files or marked-up student work, either as handwritten comments, or text edits and margin "bubbles" using Word's "tracked changes" features in students' electronic documents. Some instructors gave audio feedback using audio applications or the audio features embedded in the university's Blackboard learning management system (LMS), and others created video screencasts using free or purchased video recording software. The processes of generating these three modes of feedback: written, audio and video, were different due to preparation, tools used and delivery or exchange formats for students.

This study represented a convenience selection of participants. To generate a study size of ten instructors, I contacted instructors who I knew had given written feedback on assignments and who were also using or had used audio or video feedback for student assignments. I personally knew or was familiar with these instructors because of my role and

responsibility as an instructional designer to support instructors in using technology in their teaching activities. In that role, I had introduced strategies and techniques of giving feedback in the form of audio or video modes to instructors who were teaching in many different disciplines across the campus, and in campus, hybrid and online course environments. I had also provided assistance to those instructors regarding how to download or open the audio or video software and the steps to record the feedback and post it for student retrieval. Although I had offered suggestions and tips for preparing to record the feedback, I did not know to what extent these suggestions were followed or modified.

Some of the instructors who were contacted for the study were new to the process of providing feedback in audio or video formats, while others had been doing so for some time. The instructors' range of experience was viewed as possibly affecting their perspectives, processes and values of the audio and video formats. Irrespective of how long instructors had been giving written, audio or video feedback, I focused on instructors who had given the different forms of feedback within a one-year time period, in order to reduce any effects of variability due to experience gained in the process of giving feedback in general. Neither gender nor discipline was important to this study.

The selection process required that the participants have specific and relevant knowledge of the issue in order to be studied for the purpose of sharing that knowledge (Maxwell, 2004). I described my study to the instructors and asked them if they had or were providing feedback in written, and audio *or* video formats. Ten instructors confirmed that they had or were currently providing feedback in written and audio *or* video formats, and were agreeable to being a participant in the study. These instructors represented varied disciplines in

business, education, engineering, health professions, history and languages. The instructors

were teaching in campus, online or hybrid campus/online environments, and to undergraduate

or graduate students. Class sizes ranged from 20 to 150 students.

**Table 1. Participant-Course Demographics**

| Instructor | Written | Audio | Video | Class Level | Class Type | Class Size |
|---|---|---|---|---|---|---|
| Sam | X | X | | Lower level | Campus | 150 |
| Kate | X | X | | Lower level | Online | 40 |
| Isaac | X | X | | Upper level | Campus | 30-58 |
| Linda | X | X | | Upper level | Online | 15-20 |
| Uma | X | | X | Upper level | Online | 16-25 |
| Diane | X | X | | Upper level | Online | 16-20 |
| Iris | X | | X | Upper level | Online | 16-40 |
| Eric | X | | X | Upper level | Hybrid | 20 |
| Kenneth | X | | X | Upper level | Hybrid | 68 |
| Anne | X | X | | Professional Level/Graduate | Hybrid | 40 |

**Data Collection**

Data collection occurred in two phases: individual interviews with instructors, and a

review of their feedback samples. I collected data on ten instructors' perspectives, processes

and values by interviewing the participating instructors individually on two separate occasions.

Initial interviews of approximately one hour were conducted with each instructor, and the

audio recordings of the interviews were transcribed. The transcripts of the ten interviews were

reviewed to generate follow-up questions for clarity and new questions to extend the

investigation. The instructors were interviewed a second time during sessions ranging from 40

to 60 minutes, and the interview was transcribed.

At the end of the first interview, I asked the instructors if they had three samples of both types of their feedback: 1) written and 2) audio *or* video. Copies of instructor feedback to students in the different written, audio or video formats were requested for sample analysis with respect to amount of content, tone and language complexity in the feedback. Using feedback that had already been completed was expected to eliminate any effect on the feedback content by participant bias due to knowledge or influence of being in the study.

This research study initially expected that all ten of the instructor participants would provide copies of their feedback samples. However, not all of the instructors were able to provide samples due to the nature of some of the feedback types, the process used or the timeframe. Some instructors no longer had access to the feedback they had provided to students because they had physically given the documents to students and/or purged their electronic feedback copies as a matter of their, or the university's, retention process. Thus, feedback samples were collected from five, or half of the instructors. Once the samples were collected, audio and video formats were transcribed for analysis and comparison to written feedback formats.

**Interviews**

I interviewed instructors by meeting with them privately, face-to-face, in their office, which was generally free from interruptions and visitors. My first-round questions focused on their perspectives, processes and values of giving feedback in both written modes and in either audio or video formats. I used an interview protocol as suggested by Creswell (2007) that included an introductory statement to the instructor, a list of research and probing questions and a statement thanking the participants for their time.

I began the interviews by discussing the consent form and collecting their signature. I then asked a series of specific questions to identify background information of their courses and the types of feedback they used and for which assignments. I also asked questions related to their perceptions and values of the different formats of feedback, followed by questions about their process of giving feedback using the different formats. I requested samples of their feedback at the end of the initial interview so that they could have them available for me during the follow-up interview. The initial interview usually took an hour to complete.

Questions related to instructors' perspectives on the different formats included when one format seemed to be more appropriate than another, what benefits or challenges they associated with the different formats and what role these formats may have in their course(s) or the academic process in general. Perspective questions also included their perceptions of the amount of content they provide in the different formats, the complexity of their language and the tone of their responses to students. Questions related to values asked instructors to indicate their feedback format preferences and how well a format seemed to fit the goals of their course, the academic process or the student's needs and preferences. The questions related to instructors' processes focused on how instructors prepared to give feedback in each format, what technologies they used, their method of reviewing the student's work and specific actions or reflections about their process of giving feedback. Additional questions on process included their steps to create the feedback and make it available to the students, and how much time was involved in giving and returning feedback on an assignment. Questions about the responses they received from their students regarding the feedback were helpful in determining the impact—from their point of view—from students, and any effect this had on

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their processes of giving feedback. In addition, probing questions explored additional, explicit information in reference to an instructor's comment.

After I conducted a close reading of the initial review transcripts from all instructor participants, I developed a second set of questions for each instructor that was driven by their responses that included follow-up questions as well as new questions based on a general consistency of everyone's remarks. I expected that the second interview would be shorter, taking from 30 to 40 minutes. However, some of the second interviews were just as long as the first. These interviews were recorded and transcribed in the same manner as the first interviews.

I recorded the interviews using the Voice Recorder Pro app, and then transcribed these recordings verbatim using the ExpressScribe application, applying broad transcription methods. For example, "ums" were excluded in the final version, but "you know" was retained for evidence of feedback tone; and pauses were noted, but not timed. When an instructor referenced the name of a student or him/herself, I replaced that name with a pseudonym. I also made minor brief notes during the interview, but these notes were minimal so as to not distract or lead the instructor to disclose information because of my note taking.

**Feedback Samples**

At the end of each "initial" interview, I asked instructors for three samples of each type of feedback, for a total of six samples from each instructor. The samples of three written and three audio or video feedback formats from each instructor were preferably to be selected from the same assignment, same type of assignment or same class; but when that option was not possible, an attempt was made to select assignments that had similar requirements, such

as a major paper, case study or project. The samples were selected from the instructor's classes completed within one year of each other in order to eliminate any effects due to instructor increase in experience. For example, an instructor did not submit a sample from his first year of teaching and one from his third or more recent year of teaching. In an attempt to assess each of the samples in regard to the same level of feedback, I requested samples from assignments of lower quality of student performance, as these samples were expected to generate the most comments. Samples were not requested from a range of student abilities, such as a high performing student and a lower performing student. Samples of different formats for the same student were only used when the two different formats were applied to the same assignment. For example, most audio and video feedback samples were paired with a written sample, thus students received a combination of written <u>and</u> audio *or* video feedback on their assignment. Several samples in this study included this written-audio/video combination.

If a sample of student work contained the first or full name of the student, the instructor or I redacted the student name or changed the name to a pseudonym to maintain student confidentiality within this study. However, it is difficult to remove the identifying information of student name or course from an audio or video recording without using extensive editing software. In the process of transcribing the audio or video recording for comparison to the written text, I redacted course information in the transcript and used a pseudonym for the student. Using a pseudonym for names was important to the study, as one component of the data analysis was to review social connections within the feedback. The research report does not include the audio or video data as part of the data within the report or

appendix. Any images from a video screencast that are included in the report do not show any

student names.

I collected three feedback samples of each format type from five participants: written

and audio, or written and video. The samples of written feedback to students showed

instructors' notes and comments on the students' documents. The verbal samples varied

because of the audio or video format that instructors chose to use. These samples usually

included a copy of the student's work and the instructor's audio or video file. For example,

audio samples usually included a copy of the students' work, with or without instructor

markings, and an audio file (one instructor provided only an audio file). Video samples

displayed the student's work on the screen as the instructor narrated the feedback; the video

also showed instructor markings on the document. Instructors provided three audio or three

video samples, but they did not include a mix of audio or video samples for the analysis. Some

of the instructors provided written and audio or video samples for the same assignment as their

feedback to students was a combination of written and audio or video formats. Others

provided samples from the same or similar assignments that occurred within a year's time. The

short time period was an effort to minimize any effects from instructor experience in the

classroom.

**Transcription**

The interview transcripts included verbatim all the words on the recording as well as the

sounds that indicated feelings, such as laughs or speech markers of "um" (Josselson, 2013),

although "ums" were removed in the final versions reviewed by the participants. While pauses

were recorded, the length was not indicated. The participants were invited to member check

(Lincoln & Guba, 1985; Stake, 2010) the transcripts of their interviews and an outline of emerging themes in an attempt to ensure that the interview data was accurately representing what it was intended to represent (Maxwell, 2004), a measure of validity. However, it was understood that participants may decline to participate in member checking, as Josselson (2013) writes that participants would need to spend time reviewing the transcript, and may not wish to do so (Stake, 2010). Josselson (2013) also argues that the participant is giving "*a* truth" from their perspective, not necessarily "*the* truth," and this may differ from the researcher's perspective, causing interpretive differences (p. 178). Thus, Josselson (2013) states that researcher has interpretive authority. Responses from nine of the instructors indicated no changes were necessary to the transcribed interviews and themes; no response was received from the remaining instructor, even after follow-up contact with her.

The instructors' audio or video feedback files were transcribed using the same process as in the participants' interviews so that the text could be compared to the text of the written feedback sample. The transcripts included utterances that indicated feelings; for example, laughs or speech markers such as "um" and "you know," as well as pauses. Any identifying course information was redacted in the actual written samples and student names were replaced with pseudonyms. The transcripts of the audio or video recordings were also redacted and modified with pseudonyms in the same manner. Any images of documents used with audio recordings or screenshots of the video screencasts were edited to remove identifying information if used as part of the research report.

During the process of data collection, I recorded my actions in memos in an attempt to mitigate any influence of personal and professional bias (Maxwell, 2004), and to create an audit

trail. These memos provided support for the study's validity and trustworthiness (Lincoln &

Guba, 1985; Maxwell, 2013).

## Data Analysis – Interviews

The transcripts of each instructor's interviews were reviewed using a naïve reading, or a

reading of the whole text for general impressions (Speziale & Carpenter, 2003), and a summary

of each interview was developed and converted to an audio file for additional review. The

summaries were read and listened to several times to place individual instructor's responses in

context of the group's responses.

The interview transcripts were then coded to reveal themes. Coding is the process of

applying tags or labels to chunks of words in order to create meaning (Miles & Huberman,

1994), and sorting these tags or labels to find topics, themes and issues relevant to the study

(Stake, 2010). In this study, the coding utilized clusters of words as the units of analysis rather

than the linguistic structures of individual words. These units of analysis were phrases or entire

sentences due to the nature of comments given in the different formats.

Using pattern coding (Miles & Huberman, 1994; Saldaña, 2013), the codes generated

from the instructors' interviews were organized into general patterns, as I reduced the initial

transcribed data into a smaller number of analytical units. These patterns were then reviewed

for emerging themes related to perceptions, processes and values of the different feedback

modes. I utilized the ATLAS.ti application for the coding and thematic reduction processes. The

coding application supported searching and filtering techniques to identify and rearrange the

data into broader *emic* themes based on the participants' beliefs and words and *etic* themes

based on my research concepts (Maxwell, 2004) that surfaced during the analysis. I then used

connecting strategies and ATLAS.ti co-occurrence tables to try to understand the data in context, and to identify relationships between the formats and the themes. The analysis of interview data focused on instructors' perceptions, values and processes, as well as social actions such as engagement strategies and face-saving protocols.

**Phenomenology**

A phenomenological methodology was the basis for the analysis of the instructors' perceptions, processes and values in this study. Phenomenology, as developed by Husserl, is a focus on the "lived experience" of participants (Creswell, 2007). There are two major approaches to phenomenology. Van Manen's approach is a hermeneutic phenomenology, which is focused on the researcher making an interpretation of the lived experiences (Creswell, 2007). Moustakas takes a different and descriptive approach to the lived experiences, without interpretation, that is referred to as transcendental or psychological phenomenology (Creswell, 2007).

This study utilized Moustakas' (1994) transcendental phenomenology approach to examine the phenomenon from a new perspective, as if seen for the first time (p. 34). A researcher's intentionality, or consciousness of orienting his mind to the object or act, is central to the seeing the phenomenon anew (Moustakas, 1994). Intuition is part of the process, and presents itself at first appearance of the phenomenon, and again during reflection and reduction to a central theme or essence (Moustakas, 1994). A critical practice in transcendental phenomenology is bracketing, or setting aside a researcher's experiences, biases or preconceived notions in order to take a fresh, unbiased perspective towards the phenomenon under study (Creswell, 2007; Giorgi, 1997). This bracketing is based on Husserl's concept of

epoche (Moustakas, 1994), which describes the act of removing one's preconceptions and prior experiences from the reflection and analysis, in order to allow the phenomenon to present itself originally and organically.

It is natural to apply phenomenology to research on human behavior. Moustaskas (1994) emphasized that phenomenology should focus on "the appearance of things" (p. 58), and be concerned with wholeness by examining a phenomenon from many sides and perspectives to develop a whole picture. Additionally, transcendental phenomenology pulls meaning from the appearances of the experiences to develop essences of the phenomenon, using intuition and reflection (Moustakas, 1994). Because transcendental phenomenology is concerned with appearances of the phenomenon, it utilizes description rather than explanations or analysis to elicit the presence of the phenomenon (Moustaskas, 1994).

Moustaskas (1994) advocates that a phenomenological researcher has a personal interest in the phenomenon and is intimately connected with the phenomenon. The researcher is careful to integrate epoche and intentionality into the intuition and reflection process in order to develop a believable representation of the phenomenon and to reduce the description of the phenomenon to its essence (1994).

The process of analyzing data using a phenomenological method involves bracketing one's personal ideas, and identifying "significant statements" (Creswell, 2007) from the participants to understand their experiences. Moustakas (1994) calls this process horizonalization because it treats each statement initially with equal value and unending possibility. The statements are then reduced to clusters of meanings, and a textual description of the participants' experiences is developed. Researchers may also describe their own personal

experiences with the phenomenon. Finally, an essence, or essential structure of the

phenomenon is described (Moustakas, 1994). This description identifies the underlying

structure of the common experiences (Creswell, 2007). Briefly, the steps of a phenomenological

study involve 1) collecting the verbal data from participants, 2) reading the data before

beginning analysis—often called a naïve reading, 3) segmenting the data, 4) organizing and

describing the data within disciplinary protocols, and 5) expressing the structure or essence of

the phenomenon (Giorgi, 1997).

Challenges to using transcendental phenomenology as a methodology include selecting

participants that have experienced the phenomenon; bracketing out the researcher's bias,

experience or assumptions; and generating an essence of the phenomenon from the

description of the experiences, rather than an interpretation of the experiences (Creswell,

2007).

**Data Analysis – Feedback Samples**

The written text and transcribed text of the audio or video feedback samples followed

this same process of naïve reading and were then categorized for pattern identification. The

samples were indexed to include reference to each instructor to enable comparative analysis.

Intra-instructor analysis was performed to determine if the instructors' perceptions and values

were accurate, based on the evidence of transcribed feedback from their own samples. The

analysis focused on amount of content, tone and language complexity. Using discourse analysis

methodology, the analysis also included characteristics related to register, stance and

participant framework, as identified in the section on discourse analysis below. Grice's Maxims,

inference, locutionary statements, (Strauss & Feiz, 2014) engagement strategies and face-

saving protocols were also examined to identify linguistic functions as social actions.

**Discourse Analysis**

The feedback samples were analyzed using discourse analysis methodology. Discourse

analysis is a way of "conceptualizing and analyzing language" (McMullen, 2011, p. 205).

Generally, discourse analysis is identified as the study of language in use, in order to discover

meaning and how it is communicated (Gee, 2014). However, there are different perspectives of

discourse analysis, depending on content, structure or use.

One such perspective is based on the actual *content* of language as compared to the

*context* of language. Content usually focuses on structural and grammatical effects of language,

such as phonology, morphology, syntax and semantics. This focus would concentrate on the

meaning of a single word or phrase and how it was said. For example, stressed syllables or

words might be marked as "exci:ted" or "intended" in a transcript.

A contextual focus is primarily based on pragmatics, or the relationships between words

or expressions and their uses, but it can also include the four grammatical effects previously

mentioned; context also invokes choice as an essential element of language use (Strauss & Feiz,

2014). Another contrasting perspective of discourse analysis involves critical analysis, which is

meant to also address institutional, social and political factors that affect language norms and

conventions (Gee, 2014).

This study was based on pragmatics, and used an empirical form of discourse analysis

(Hodges, Kuper, & Reeves, 2008) which looks for "broad themes and functions of language in

action" (p. 570) and the relationships of utterances as linguistic actions and social actions (Van

Dijk, 1980) rather than individual words and utterances. Utterances, or intonation units, are short bits of speech bounded by prosodic features that signal onset and completion—such as rising and falling pitch, silence or punctuation. Examples include "Ouch!" and "We walked up and down the street." As pragmatics is a field of inquiry that is useful for studying human communication and social interaction (Strauss & Feiz, 2014), this contextual method was appropriate for this study of instructor feedback to students on their assignments using different media formats of written comments and audio or video recordings.

A specialization within the pragmatics of discourse analysis is genre analysis. The approach of genre analysis, or the study of patterns in language, identifies language that has a similar structure and context. Genre analysis is used as a contextual lens to identify the ways that an individual's language produces meaning and action by linking discourse with function, purpose and practice (Strauss & Feiz, 2014). This study lies within the genre of higher education instructor feedback to students because it focused on the language of instructors as they communicated feedback to their students on their assignments, and analyzes the "kinds of utterances commonly used, their meanings, and their effects in the context studied" (Hodges, et al., 2008, p. 572). As such, one may further categorize this genre as institutional discourse (Hodges et al, 2008) because the members are a discrete group (instructors) within a social order (higher education) who act in accordance with a specific purpose (to give feedback) (Strauss & Feiz, 2014). From this perspective, a key characteristic of discourse analysis is its examination of language at a meta- or macro-level rather than the micro level of actual semantic meaning, especially because the relevance of the instructors' expertise and authority requires contextual backgrounding.

Strauss and Feiz (2014) emphasize that "language is not necessarily discourse. Discourse is linked to context. Discourse requires participants. Discourse is built on responsivity. And discourse is bounded by structure" (p. 49). Structure provides consistency and observability for discourse, is based on social convention, and shapes the discourse's content and purpose. When examining genre as a form of discourse, one identifies structural factors of modality, register, and participation framework (Strauss & Feiz, 2014). Modality is the channel or medium in which discourse is produced and can be classified at basic levels of spoken, written and electronic. People may say the same things in each of these channels, but they say them differently: they speak differently than they write, and they write in more formal ways on paper than in electronic communications—think of texting and social media posts as compared to letter or report writing. Speaking environments range from face-to-face conversations to telephone exchanges, audio/video "live chats" and recordings of one's voice with or without their image. In this study, modality refers to written, audio or video feedback formats.

Register addresses the many lexical (vocabulary) or grammatical choices in communication with respect to word choice, formality and technicality as well as the use of discipline-specific terms (Strauss & Feiz, 2014). Everyone uses different registers daily in their interactions with family, colleagues and strangers or unknown audiences. Examples of registers are colloquialisms—or informal terms and phrases, formalisms and technical lexicons. Consider the different interactions one has had today with others, especially their use of informal or formal speech and specific words, phrases or acronyms. In this study, register refers to the academic interactions between instructors and students.

Context supports and affects genre and register by framing these choices and providing additional detail, such as identifying or grounding references. Participation framework identifies the importance and relationship of the participants within the discourse, such as speaker and listener, writer and reader, and in this study: teacher and student. Strauss and Feiz (2014) state that "genre, modality, register, and participation framework go hand-in-hand in how we produce and understand discourse" (p 51).

Strauss and Feiz (2014) stress that "nothing in discourse is neutral" (p. 3). Every instance of discourse contains an element of stance, which is the "speaker or writer's feeling, attitude, perspective, or position as enacted in discourse" (p. 4). This stance is expressed in the speaker or writer's choice of words and utterances, sequencing and positioning. The grammatical choices are important identifiers in determining the speaker's position. For example, there is a difference between "Yes, that shirt looks good on you," and "That's an interesting shirt color." Other characteristics that support stance include reference and deixis. Reference identifies the relationship between words and their meanings, and can be highly-specific or generic, such as "Barack Obama" or "president." Deixis points to something, and requires context for meaning. For example, if a child were to ask his mother for *that* toy, she would need to know which toy he was pointing to (Strauss & Feiz, 2014). In this study, deixis may refer to *that* phrase, paragraph or position.

One can also view pragmatics from the perspective of interactional processes of meaning-making. This involves inferences, speech acts, and politeness and deference (Strauss & Feiz, 2014). Inferences involve making sense beyond the literal meanings of words, such as "I'm wiped out." Grice's Maxims (2006) are useful for gauging the cooperation of the participants in

an interaction with respect to how they provide appropriate and adequate information to

understand inferences. Maxims (Grice, 2006) evaluate this Cooperative Principle of meaning

making with respect to quantity of contribution, quality or truthfulness, relevance and manner.

Quantity refers to making one's contribution as informative as necessary, but not more than

that. Quality means saying something that one believes to be true, not false. Staying on topic

relates to relevance, and manner is indicated by how something is expressed: briefly,

unambiguously and in logical order.

In *How to Do Things With Words,* Austin (1962) identified speech acts as utterances

which fulfill a social function. Austin recognized that words and utterances can actually change

reality if said by specific persons under specific conditions, as in the example of a judge

pronouncing "I find you guilty." Austin described three forms of speech acts as locutionary,

illocutionary and perlocutionary, with differences in locution as: expressing something just by

saying so (locutionary), making a request (illocutionary), and enacting a change by stating so, as

in granting the request (perlocutionary). For example, consider this locutionary-illocutionary-

perlocutionary sequence: "I need a friend." "Would you be my friend?" and "I will be your

friend." Speech acts refer to intentionality, and Searle (1981) concisely states that "every

statement is an expression of a belief, every order is an expression of a desire, every promise is

an expression of an intention, and so on…." (p. 720). Searle (1979) expanded Austin's locution

descriptions by identifying five categories of speech acts: assertives, directives, commissives,

expressives and declarations.

Politeness and deference refer to the manner in which one interacts with others

according to social and cultural norms to project *face*—the individual image they have of

themselves (Strauss & Feiz, 2014). Someone might ask of another, "Perhaps I misunderstood the directions, could you please explain how to get there again" to repeat a request for information that had previously been given, but is unclear to them.

As one can see, discourse analysis presents many perspectives of language-in-use. Investigations may focus on the content or form level of language, or on the contextual, functional and pragmatic sense of broader interpretations. This study pursues the latter perspective to identify the situated meaning of the participants' words in both their interviews and in their actual feedback to students in the different feedback modes.

### Validity and Trustworthiness

Maxwell (2004) writes that validity means that the study measures what it claims to measure. Creswell (2007) states that in qualitative studies, validity means that the findings are accurate from the point of view of the researcher, participant and reader of the research. Trustworthiness, according to Lincoln and Guba (1985), refers to how the researcher persuades the reader not only that the research findings are worth noting, but also that the reader can have confidence in the findings (p. 290). Together, validity and trustworthiness measures are fundamental to a study that can stand the tests of time and scrutiny. This study used several methods to promote validity and trustworthiness: address researcher bias, utilize member-checking, triangulate data from different sources, create an audit trail, and reference the rich and detailed data of the study (Lincoln and Guba, 1985; Maxwell, 2013). In this study, these methods served to:

1) Identify the bias that I, the researcher, bring to the study. As Maxwell (2013) recognizes, it is impossible to eliminate a researcher's theories, beliefs and lens (p. 124). Thus, it

is necessary to recognize these personal (and professional) values and biases, and build in measures to control for any influence on the process and findings of the study.

Accordingly, during the data collection, reading and coding processes, I wrote and recorded audio memos to capture my thinking and stimulate analytical insights, as suggested by Maxwell (2004). These personal self-reflection and process memos included my thoughts about the data and choices I made in analyzing and interpreting them. Creating and reviewing these memos helped me to regularly and specifically question any evidences of bias I might introduce to the process. Using a combination of handwriting, typing and making audio recordings to create my memos provided further insights into the differences of the feedback formats in the study—but I was careful to not extend my personal experience of writing or speaking to any interpretations of the participants' data.

Maintaining a researcher's role and perspective during the interview conversations was challenging because of my collegial relationship with the instructors as an instructional designer for the university. In my instructional designer role, I research and promote best teaching practices and the use of technology in teaching and learning, including assessment and feedback interactions. In this role, I have had previous conversations with most of the instructors regarding the practice of using the different feedback formats. These conversations and our relationship may have contributed to a more frank and open sharing of their perspectives, values and processes of the different formats during the interview than if I was an unfamiliar interviewer. However, the conversation during the interviews would sometimes lean toward asking my advice on how or when to use a feedback format or some other technology, requiring me to carefully defer the question to a later time, and refocus the discussion to their

current perspectives, values and processes of the feedback formats under study. In a future study, this relationship and role might be better controlled by using participants from a different university, noting the benefits and drawbacks of familiarity between interviewer and interviewee.

2) Involve the instructor participants in member-checking to determine the accuracy of the interview transcription and themes by providing the transcripts, a summary of the transcripts, and an outline of themes to the instructor participants for their review. Recognizing the limitations of member-checking by the participants with regard to their efforts and time in reviewing the transcript (Stake, 2010), I followed up my initial member-checking request with a reminder email and conversation with instructors. In the end, nine of the ten instructors responded, with no requested changes.

3) Triangulate the evidence by using different data sources to overcome the limitations and biases of any one source, and analyzing the comparative and complementary data from these sources. Triangulation, as promoted by Miles and Huberman (1994) and Lincoln and Guba (1985), was performed by referencing different data sources—instructors' statements from their interviews and samples of their work; and different feedback data types—recordings, text and transcriptions of recordings. The goal was to achieve triangulation by selecting sources that accounted for different biases and strengths so that they complement each other (Miles & Huberman, 1994, p. 266).

The interview analysis utilized emergent themes and memos to make meaning of the processes, perspectives and values of the instructors with respect to the different modes of feedback to students. The data from actual samples grounded instructors' statements and

provided balance between thoughts and actions, theory and practice. I attended to variation and detail, as recommended by Potter (2004), and the variation in the different participants' feedback samples and their interview statements revealed important clues to their perspectives practices and values. I expected that the textual detail within their interview statements and actual samples would be informative for content analysis as well as validity measures, and the contextual information in the samples provided important evidence of participants' statements. The conclusions and themes of the study included these insights.

4) An audit trail which includes evidence to support the analysis and conclusions. The audit trail of this study includes: 1) raw data of samples and interviews, 2) coding and pattern analysis documents, 3) process and personal reflection memos, and 4) the interview protocol.

5) The rich detail of the instructors' words in their interviews and feedback samples. The instructors' perspectives, values and processes are explained in their own words in this study, which focused on using their descriptions to develop the essence of the phenomenon.

### Relativity and Reflexivity

Recognizing one's natural tendency to apply their own versions of reality to phenomenon (Webb & Glesne, 1992) and become absorbed by the study participants' worldviews, I did undertake every effort to carefully consider the data in the study with focused attention. Looking at language use and interactions with a critical eye to exposing information and behaviors that might be unnoticed or assumed, I took the position of intentional focus on the trivial and mundane (Webb & Glesne, 1992) to identify patterns, emerging themes and theories. I repeatedly read and listened to the data as the analysis progressed.

Similarly, I followed a continuous process of reflection on the research, documented in my memos. This reflection examined my perceptions, preconceptions and assumptions, as well as my relationship with the research process, participants and data. This careful process supported a constructive development of meaning of this research study.

Attempts were made to eliminate researcher bias towards any feedback format by using a qualitative method of inquiry so that participant perceptions, actions and experiences would drive the research and allow for perspectives to surface which may have been overlooked or unexpected by the researcher. Themes and data represent *emic* (participants) and *etic* (researcher) viewpoints.

## Limitations of the Study

Participants for the study were selected because they had given feedback to students on their writing assignments in written form and in either audio or video formats. Some participants have used audio format within their Blackboard learning management system. Others have created video feedback using video applications such as Jing, Screencast-O-Matic or Snagit. Half of the participants had available copies of their written feedback and audio or video feedback so that transcription and analysis could be performed. Some of the feedback samples were on different students but on similar student assignments, while other samples were different feedback formats on the same assignment. Historical, existing feedback was reviewed to prevent any feedback delivery bias or impact due to the instructor's awareness of the study focus.

This study used convenience selection of participants. Participants were selected based upon the researcher's familiarity with their feedback formats, as the researcher had introduced

the audio or video formats to the instructors and assisted them in learning to use the

technology to create the audio or video files. The supportive relationship of the researcher and

interest on the part of the instructor on the pedagogical effects on student learning formed an

open, collaborative environment.

# CHAPTER IV

## RESULTS

This study investigated university instructors' perspectives, values and processes of giving feedback to students using written, audio and video formats, and examined samples of feedback in these formats for differences in amount of content, language complexity and tone of feedback. The study's questions were:

1.  What are instructors' perceptions or attitudes of giving written, audio and video feedback?

2.  What are instructors' perceived values of giving written, audio and video feedback?

3.  What are instructors' processes of giving written, audio and video feedback?

4.  How does the feedback in the different written, audio or video formats compare in terms of amount of content, language complexity and tone?

5.  Are instructors' perceptions of using written, audio and video feedback accurate, based on the content of their feedback?

Ten instructors were interviewed and feedback samples from five of the instructors were examined. The instructor participants had given feedback in the form of written and audio or video formats, and they represented the fields of business, education, engineering, health professions, history and languages. Classes were taught in campus, online or hybrid/online

environments, to undergraduate or graduate students, with class sizes ranging from 20 to 150 students.

Interviews with the instructors were coded and analyzed for emergent themes, and the feedback samples were analyzed for content, tone and language complexity. Three themes that surfaced from the interview data included 1) educational purpose of the assignment, 2) the interpersonal relationship with students, and 3) efficiencies. Two additional themes that emerged from the analysis of the feedback samples: 4) discourse styles, and 5) walking the talk, were also related to the three themes of the interview data.

## Feedback Formats

One of the participants, Linda, offered a comment that encapsulates the perspectives of the study participants relative to the feedback options that are available to instructors. Linda stated:

> Today I am mentally preparing to assess my students' big projects. It is interesting because I realize that before the technology options for grading, there were only one or two ways to assess students' work—written feedback or very rarely, face to face. Now I find myself choosing between a host of ways to provide written feedback and voice feedback (e.g., screencast). I like being able to choose the approach or combination of approaches that best fit the students and the assignment.

Instructors now have choices when considering what type of feedback format works best for their students and fits the parameters of the assignment. Instructors' choices include a variety of formats, shown in Figure 1, alone or in various combinations. The scope of this study focused on choices involving written, audio or video (screencasts) formats, individually or in combination with each other.

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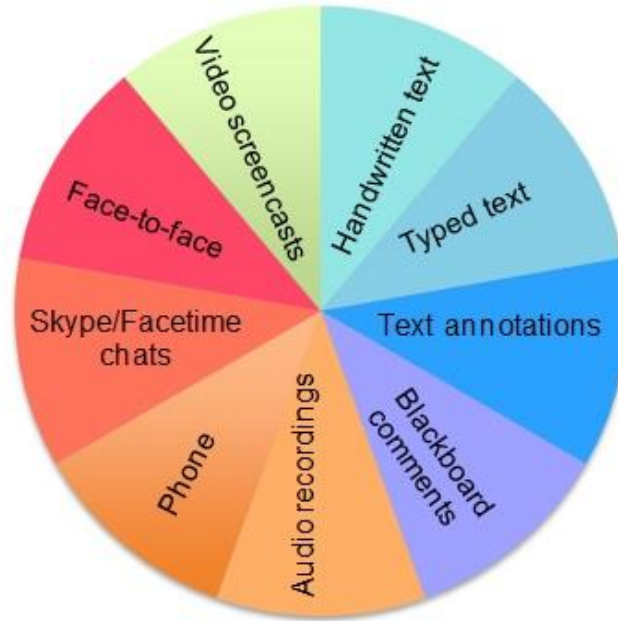
Figure 1. Feedback formats.

Several factors play into the decision of which feedback format(s) to use. Instructors'

consideration of these factors is linked to their perceptions of the different formats, the values

they place on the assignment and their processes of giving the feedback.
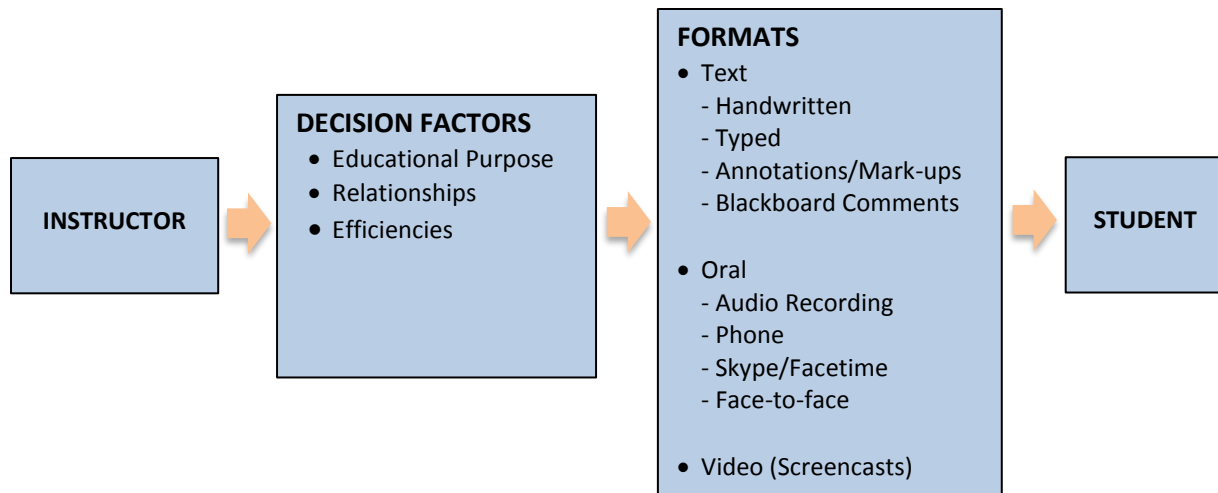


Figure 2. Feedback decision format factors.

**Themes - Instructors' Perceptions, Values, Processes**

Overall, the major factors are the three primary themes of this study: 1) the educational purpose of the assignment, 2) the interpersonal relationship between instructor and students, and 3) efficiency of time and effort.

**Educational Purpose of the Assignment**

Instructors in the study designed assignments to meet course goals and advance student learning. These assignments varied in scope, with major assignments requiring more attention than minor assignments, and some assignments being more personal in nature than others. Instructors chose feedback formats that fit the educational purpose of the assignment by selecting different formats, or combinations of formats, based on the type of assignment or the type of students' submissions.

**Type of Assignment**

University courses include several types of written assignments, with some carrying more weight as major assignments in the form of a project or research paper that includes opportunities or requirements for revision, and others less weight as minor assignments such as homework, online discussions and journaling with only one student submission attempt. In this study, instructors considered the purpose and value of the assignment when choosing a feedback format. Formats were usually selected for their ability to provide specific and general feedback on major assignments as well as ease of acknowledging student work on minor assignments. Instructors also considered different feedback formats based on how closely they matched students' assignment formats.

**Major assignments**. Courses for independent study, dissertation or thesis credits may require students to submit several drafts for review and revision before producing a major, finished paper. Student submissions in these courses may be lengthy documents and require close attention to specific in-text changes, especially citations or the reference section. The purpose of feedback in these courses is to support students' redrafting process by providing specific notations and general commentary.

Several instructors, Sam, Anne and Isaac, stated their preferences for providing written feedback to students on these types of major papers using various combinations of handwritten or typed comments and annotations. Sam wondered:

> I can't imagine how you would give audio feedback on something like that. Instead, you kind of go through it chapter by chapter, and page by page, and as you read and kind of engage with the author's argument, you make marginal comments and then kind of, when you're all done, you then synthesize those things.

Anne discussed her preference for written feedback on detailed work when "I'm grading for a technical skill, like APA citations … or if I'm grading a reference page, a citation page."

These text comments were often combined with face-to-face conferences, phone calls or Skype sessions for interactive discussions about the papers. According to Isaac:

> If it's an independent study, a thesis, something along those lines, some substantive thing, you can bet I'm going to type it, invariably when I have more comments, because it's something that's more in-depth, something that requires more comments…. But it's not uncommon for me to pick up the phone and call them, and say, "Hey, I could make a comment here on audio or text, but it's going to be too much, let's talk about this."

Instructors may combine written feedback with audio or video formats for major course assignments that included one or more drafts (see Table 2). Uma's students wrote several drafts of a literature review. Anne and Kenneth required students to revise and resubmit their

case study and research project assignments based on instructor feedback. The instructors'

feedback included general remarks about the assignment and specific notes on areas needing

improvement.

Table 2. Major Assignment Features and Feedback Format Combinations.

|  | Uma | Anne | Kenneth |
| --- | --- | --- | --- |
| Students | Online | Online/Campus | Online/Campus |
| Drafts | Two | As needed | Three |
| Verbal Format* | Video | Audio | Video – Online<br>Office hours – Campus |

 *Marked-up documents were included with each format.

When using a combination of feedback formats, the instructors added typed comments,

annotations and highlights to students' papers using the *track changes* feature in Word, and

then used Blackboard's inline-grading audio feature (Anne), or a Jing screencast (video)

application (Kenneth and Uma) to discuss their review and recommendations. Usually, the

instructors then uploaded the marked-up student papers and the video recordings into

Blackboard for student access; the in-line grading audio recording option is a built-in feature of

Blackboard.

While Anne and Uma provided this feedback combination to all of their students,

Kenneth provided the marked-up document and video combination to only the online student

groups, as he met with the campus student groups in his office to review his notes on their

papers. Kenneth explained that the face-to-face meetings with campus students were emulated

in the video recordings for online students, saying, "That is actually done using video for

distance students. I think it's the same value, face-to-face interaction that I can bring this

closeness to distance students with me." Kenneth had previously given only the written

feedback to the online groups, and this semester was his first attempt at providing audio

comments as feedback to them so that they would receive more of the same type of

interaction that his campus student groups experienced in their face-to-face meetings.

Anne spoke about her practice of giving feedback by asking lots of questions to push

students into thinking more deeply about their case study results, implications and processes.

She would ask probing questions instead of simply marking up text. Anne referenced,

"challenging them with questions that might help them, change their thinking patterns, and I

just believe that feedback should be rich, so …. underlining something just doesn't work for

me."

**Minor assignments.** Instructors often alternated feedback formats depending on the

type of assignment as major (with revisions), or minor (one-time attempts). While instructors

often used a combination of written and audio or video feedback formats for major

assignments, they chose audio or written feedback only for minor assignments.

**MAJOR -> Written** *and* **audio** *or* **video**
**MINOR -> Written** *or* **audio**

Iris provided both written notes and video recordings to her online students on their

major assignments but made only brief written comments on their weekly journals, noting that

these were student reflections that didn't warrant detailed feedback. Describing her

perspective of journaling, Iris explained:

> For example, there are journal reflections the students are doing, and the
> feedback I want to give is concise; it's a sentence or two of "talk more about
> this" or "I'm understanding the activities you're doing and not understanding

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how you're experiencing the activities," so it's a pretty quick feedback. It's not a critical assignment for them in terms of them understanding the material.

Kate said that audio feedback "works really well" on students' essays on a variety of historical figures or events and gave an example of her comments:

> I always start with "Hi, J____, I really enjoyed reading your paper. I think you did a great job using your resources. I really like your sentence in the second paragraph that John Smith did something or another, but I think there are ways to strengthen your essay here, and hopefully you'll apply them to your future assignments. Let me know if you have any questions" and then I'll go through the "paragraph 3, your analysis could have been clearer, you didn't really explain this, or I would have liked to see more of a comparison between past and present" and then usually I will always say, "If you have any questions about this, contact me as I'd be happy to talk about this further."

However, on shorter assignment responses that were more generic in nature, Kate chose to use the "cut and paste" technique to add written comments, explaining that, "so many of them do the same things wrong that I can have things that I just cut and paste into each student's (comment box), because I know they are having the same problems, and I can just fill in the specific information for their paper."

Diane also applied different formats when providing feedback on students' minor assignments by using the iAnnotate iPad app for marking up documents. iAnnotate conveniently allowed her to annotate student work and insert text or audio comments interchangeably in the same document. Sometimes she used annotations, text and audio; but at other times she used only text comments, even creating a "stamp" for comments that she found herself repeating to multiple students.

**Matching student submissions.** Sometimes an assignment includes an individualized purpose, perhaps connecting personal experiences or reflections to course goals. Instructors often considered an assignment's personal aspect when choosing which feedback format to

use. Because of the personal nature of an assignment that Linda and Anne asked their students

to submit, they felt that they needed to match their students' effort when giving feedback.

Linda used video feedback, explaining:

> I had them write a poem and there was just something about that poem that felt, and that's why I used Jing on that one. It was at the beginning of this semester, and I just had a sense that it was so personal that it would be more powerful for them to hear my personal voice commenting on it. Really just recognizing that they took a risk to even to write this poem because it's about themselves and their culture and their reading history, so I felt it was more personal.

Linda repeated this process at the end of the semester to respond to the students' final

assignment of writing a closing stanza for their poem that reflected their learning during the

semester.

Anne chose to give audio feedback on a cultural journey paper because she felt that

students' personal sharing seemed to require a personal response, and she believed that she

was able to be more personal by speaking to them instead of writing comments. Anne

elaborated:

> I wouldn't even begin to even write comments in that, because how do you—somebody is telling you their entire history, background. It seems to just even write at the end "Very nice job" seems rude (laughs).… Therefore, to me, it requires a personal response back, and some people would probably write a very beautiful paragraph that would be great, but I would just prefer to record three minutes about how fascinating I thought that their family was from X, and (laughs) that personal connection. That I read this, and I know you went to all this work, and I'm not going to just slap a grade on it. I will give you better feedback.

**Specific and General Feedback**

In major assignments, instructors indicated specific issues and general or

comprehensive comments in their feedback using multiple formats. Specific issues were usually

identified using marked-up or highlighted text, and overall themes or connections between

separate areas in students' work were addressed verbally. Uma and Iris noted these differences between speaking and writing to students when giving feedback, and they described providing specific references and details in text markups and highlights, with their voice offering their more holistically and reflective comments.

Anne referenced that her process of recording audio was more expansive than writing linearly through a paper, explaining, "I still think that when they read it as a written document it is linear," adding that:

> Their papers are not usually linear. So when I record it, I'll go section by section, but then I might say, "Hey, you're going to notice that this comes up under this section as well, and this is how these things come together. So you might pop down to that page, but when you get there, I'm going to bring that to your attention again." Well I can't do that on a written document, so …. really it's a larger gestalt that you're after, so that is the part that you could better show them through an audio file. I don't even know if I would bother to try to write that on a rubric.

Instructors would model how to write phrases as they spoke to students, and they also called attention to themes, comparisons and references throughout the students' documents by scrolling through the pages as they talked about the connections. Thus, instructors were able to give specific suggestions as well as overall commentary as layers of information on student work using the feedback format combinations.

Kenneth recognized this, saying, "I think I do the specificity in this (written); my specificity is also recorded in the video, and also I would talk about some general things. It's both ways." Kenneth also pointed out a difference in his approach when adding his voice to feedback, adding:

> The value I think is that I can give them concrete examples or ask them the questions to get them to do the thinking, because originally, I did find myself just telling them what to do because that's just easier when you're doing written, but if I can speak it, I can pull

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certain points together and the value to get them to think at a higher level, is probably, more successful.

Uma also referred to this duality, stating:

I can pick up on some of the details when I provide the video feedback, but I can also talk more holistically about the piece. I can talk about the shape of the piece. I've moved away from writing long comments on the actual written feedback to reserving those for the video feedback so that they get some of the detail on the document, and they would have this video feedback and they would get other kinds of information as well.

These excerpts from Kenneth's feedback illustrate the effect of using both written notes and spoken comments on assignment, shown in Figure 3.



(Shows page) And in the block diagram, it needs to be more specific. The type of power supply, voltage rating, things you are talking about, the type of sta__er, wifi standards, 8.2 or 11.2, or what, what are the particular standards that you are going to follow for communication and moderating, you know. These things all need to be included in the, uh, report. You know.

Figure 3. Kenneth video feedback sample: screenshot and transcript.

Uma's marked up documents illustrate the specific notations, while her comments offer both specific and general advice.

(screen shows the end of the paper) At the end you say, "Llamar mi en octobre." You could say "Llamarme en octobre" or "Llamame en octubre." I think Llamame would work, you know but if you were in Latin American probably Llameme, and I'm going to write that down (types on screen Llameme as emphasizes the "Ja may may"-phonetical spelling). So that is clear to you.

But you're informal in your address and so my, my instinct would be to have you use the "tu" form, but that would really be very popular in Spain. (scrolls back up/down) You're safe, if you've got a Latin American identification going on, you're safe to be using the formal "Llameme" which is the "usted" form.

(scrolls down through document again slowly)

It's nice. It's a meditation, and I like the meditation. (pause)

So I'm going to leave you with these comments and invite you to meet with me if you would like to look at this a little more detail, a little more time.

Bien hecho P___, hasta pronto.

Figure 4. Uma video feedback sample: screenshot and transcript.

For minor assignments, Kate and Diane shared that they gave students detailed feedback on paper by marking text with circles. Diane went on to say:

> I think when you can explain it, and you can use your voice to give more detail perhaps, I think they'll get more out of it. I think they'll have a better understanding. Sometimes I'll find myself with voice comments saying, "for example, you might find this or that" where I might not go to all of that extra effort to write that sometimes, because then it gets to be like you're writing a whole page on their page, and sometimes I also think that that's intimidating for the student.

**Summary**

These examples illustrate the feedback format choices that instructors made to fit the educational purpose of their feedback, with intentional use of written feedback alone or in combination with audio or video feedback for major assignments. Instructors noted the capability to address specific issues and comprehensive commentary using a combination of

feedback formats. When this level of feedback was not needed in minor assignments,

instructors usually used only one type of feedback format: written or audio.

## Interpersonal Relationship Between Instructor and Student

All of the instructors in the study have taught an online course, and most referenced

one of their online courses when discussing their feedback experiences. Some of the instructors

taught online only courses where all students were at a distance, while others taught hybrid

combinations that included online and campus students in the same course. Thus, instructors

prefaced their communication goals as wanting to have a personal connection with their online

students that was as close as possible to the experience they had with campus students, given

the constraints of the different times and places that grounded their online communications.

Fostering a connection with their online students was important to the instructors,

especially if they felt that the opportunities to give feedback were the only moments in the

class where they could personally reach out to students. This sentiment was also shared by the

one instructor who referenced his campus course for this study, as he noted that the course

enrollment of 150 students limited his ability to closely interact with them on a regular basis.

Most of the instructors identified face-to-face communication as most powerful and

natural for interacting with students, and they especially preferred this two-way format when

discussing major problems with students' assignments. Uma recognized the "element of

immediacy" with respect to being able to ask questions. Eric stated, "what the students need is

the opportunity to ask questions." However, noting the constraints of face-to-face

communication with online students, instructors selected formats that might be similar. Iris and

Isaac said that they would pick up the phone to talk to students, or use Facetime or Skype to

chat with them. Iris identified this as an "opportunity for a different level of interaction with the conversation."

Isaac valued the two-way exchange between instructor and students, whether it was over the phone or Skype, but also used a variety of other formats. When giving audio feedback, Isaac tried to keep it very conversational, as he was "trying to mimic face-to-face. That physical space, and I'm trying to close that physical space." Isaac even switches between different types of written feedback for students, as typed comments allow him to get more information on the page, but handwritten comments provided more of a personal touch. Isaac's choices of feedback formats were primarily based on his philosophy that "humans are social creatures" and students want more than just information.

Likewise, Anne also referenced personalization when talking about why she gave audio feedback, sharing, "students will say that they can envision me, like, talking to them. You know, they'll say they can totally do that. The written is not. Just, I don't think, I think it tells them the main elements, but there's no personalization." Similarly, Kate, Diane and Sam echoed the ability of their voice to emphasize a personal connection in their feedback.

Linda explained that she wanted students to feel her presence in the course, saying:

> I initially started using the voice tools thinking the course was feeling so much like I was just managing messages, you know, and like it was de-personalized and it felt like learning modules and things like that. So I felt like it wasn't about feedback, but just voice, and I had to somehow assert my voice literally. The audio to make it, maybe more for me to feel like it was a real person, real people behind it. Connections, and not such a business model of let's get this done sort of thing.

In her field of educational development, Linda valued personal connections and wanted to both offer it and model it for her students.

**Student Response to Feedback**

Instructors considered students' perceptions and integration of the feedback when making their decisions about which feedback format to use. Formats that seemed to personalize the feedback or make it easy to review were selected as a means of encouraging students to actually review and apply the feedback. Instructors considered student responses to written, audio and video feedback, or combinations of the formats, and also noted preferences for face-to-face feedback especially if there were issues with the student's work.

**Written.** Instructors noted the personal nature of handwritten comments, as well as the ability of students to quickly scan handwritten or typed comments instead of listening to audio or video comments. However, these potential preferences were offset by handwriting legibility concerns and the "red ink" phenomenon.

Diane referred to the capability of the iAnnotate application to support handwriting in electronic files:

> One of the things that I've found with iAnnotate that I kind of like; I think the students like it that you can use the stylus and you're giving them handwritten comments. You do have the option with iAnnotate to type a comment, and to me, those are neater, or tidier—it's not the issue of deciphering my handwriting, but the students seem to like those handwritten comments because they feel like you did it, you took the time to write it, that's you talking to me.

However, most of the other instructors: Kate, Anne, Sam, Iris, Isaac and Eric, were reluctant to use handwriting, noting that theirs was usually illegible. Iris and Isaac also referenced running out of room when making handwritten comments in the margins of students' papers, explaining that typed comments could expand on the page.

Uma promoted other forms of text-based feedback because of "red ink" perceptions, and her documents contained different colors of text highlighting and text bubbles in the margins. Referring, to her colleagues, Uma said:

> We think about our students as we're responding to written work, and what the experience might be to receive an essay covered in red. So we're trying to appreciate that that won't promote learning necessarily. So the comments I think, we've moved to highlighting and commenting and encouraging some editing. … What we're trying to do is engage them in the process.

**Audio**. The "red ink" phenomenon and effect on students' motivation was again noted, with instructors promoting the focusing and affective qualities of audio feedback. There was concern, though, about the amount of time involved in creating audio feedback and whether it was worth doing if students did not appreciate it.

Sam recognized:

> The problem with covering a sheet of paper with red ink is that it's very easy to look at this and the first ones and get discouraged. It's also hard to pick out what the big thing is. …. it may be difficult for the student to pick out the fact there's been this <u>huge</u> problem, then all those other kind of subordinate stuff, whereas if you give audio feedback, it allows you to foreground that you have a huge problem, that is, you haven't even got a thesis, everything else <u>pales</u> in insignificance. And the writing has some issues—yes, you should learn what a semi-colon does. But honestly, yeah, get a thesis— answer the question. And audio is great for that.

Diane outlined students' perceptions and their effect on her process:

> They feel like all the feedback they ever get on writing is negative. You have the red pen syndrome and all of those, and so, if there's something that's going to make a student feel better about doing that, why not do it. Especially when it's something that's easy like that. So if the students have a positive perception, then yes, I would absolutely use that to base my decision. …. You try to find out how you're going to reach them, and what they would like, and if they would like it, I absolutely would do it.

Referring to her choice of using written or audio feedback, she continued, "If you feel like 'Meh' they're not going to listen to it anyway, then why bother. Maybe they'll look at that written feedback because they can't help but see it, but with the audio they have to click on it."

Anne discussed her perspective and process of using audio for grading students' weekly journals:

> I provide a 2-minute recording, and I found that students really felt like I read their journal, and appreciated it. In that sense, it probably took me a little bit more time, because I could have just said "Nice journal, keep thinking about that" and moving on. But for the type of feedback it was, I felt it was necessary. I thought it made the experience better for the student… the student usually, then, wanted to make a personal change, because they felt more supported.

Noting that she talks very fast, Anne considered that the possibility of giving video feedback on major assignments might be challenging for her students, saying with a laugh, "I would be a little concerned about they would see me moving through the document as fast as I talk, which could be horrible" and referencing that students slow her down when playing her audio files.

Linda considered final course impressions when considering whether to use audio feedback, especially if she would not see the students again in future courses. Linda states, "part of making the choice now that I have the audio option (is) that a lot of times these students I won't have again in my courses …. maybe just the audio is a good powerful ending tool."

**Video-written combinations.** Kenneth received positive responses about his use of video and written feedback from some students, and he rattled off a comment from a student's email: "Ok, I enjoyed this video session and I appreciate you doing this." Likewise, Uma thought

students appreciated her video feedback as she shared, "It's qualitative, but it's also

psychological, so there's something going on there about their feeling like their work is being

treated seriously." Uma added:

> They love the video feedback, but I've always provided text with the video feedback, … I think they like the evidence of my having reviewed appreciatively their work, and even though there's marks on their paper and suggestions, that fact that it's my voice, it's recorded, reviewing their work and talking about it adds a level of attention that I think they do like, or they interpret as more attention than the written.

Linda noted the value of written feedback in the written-video combination as one of

the ways for students to review the information:

> Unless they want to listen and re-listen to it there are some limitations; that I think written feedback can allow them to go back and say, "Ok, what did she mean here" or "Oh yeah." It's a little more tangible and they don't have to listen and re-listen, they can go back to that particular comment or what they're ready to hear.

Eric echoed Linda's concern about listening to the video:

> I think the big benefit of the video is they could actually see me going through their code, and doing that part of it, …. But I think they'd prefer the written feedback because it was brief, and to the point, and concise. Whereas the video feedback takes like 15 minutes to watch, right, or whatever it takes, 10 minutes to watch. And that can be a little uncomfortable. … if I were a student, the way I would do it, is I would take a look at the written feedback and if the written feedback is good and there's nothing big or confusing in there, then I'm gonna just stick with the written feedback. If I get written feedback where I only got 50 out of 100, and the comments that are on there aren't all that clear, I'm gonna watch the video.

Eric's manner of providing feedback was different from other instructors in the study,

however, as he recorded his process of testing and debugging students' computer code instead

of making notes on their work; his overall comments were referenced in an attached rubric.

**Face-to-face.** Instructors remarked that they would prefer to have face-to-face

conversations with their students when possible, citing the two-way exchanges that occur

between them. Eric noted:

> I'd rather do the face-to-face in the ideal world. … I think the live feedback is better because what the students need is the opportunity to ask questions, and that's what they're missing with either form of the feedback (written or audio). They don't get an opportunity to interact.

Isaac talked about his habit of contacting students to discuss their work, saying, "I'd

rather pick up the phone and talk. That's my first choice. I want to talk with (them), because I

think that's better. Students will hear your inflection. They can ask questions because it's a two-

way street." Sam also highlighted a comparison, saying:

> The big difference, is with audio it is purely one-directional, right, I'm just talking at the student, whereas if the student comes to my office, it's a conversation, and you know, that I think is inherently more productive. But short of, that we can't really do, or at least not yet.

These face-to-face conversations were especially preferred when there were problems

with students' work. Iris stated, "Face to face is great. If there's a major problem, I do prefer

face to face or a call or Facetime or something that's more personal and there's an opportunity

for a different level of interaction with the conversation."

## Positive and Constructive Balance

Instructors would present both positive and constructive comments to students in their

feedback, and the different formats affected their process and presentation of this information

to students. For example, when considering how she presented feedback in written or video

formats, Iris reflected that she feels she is more balanced when she includes audio comments in

a screencast, saying:

I believe that when I write it, I tend to be concise and to the point and I probably tend to focus more on the weaknesses. I do put "Good Job" but that's two words rather than three sentences, so I find the balance is better when I'm doing it in the audio realm rather than writing. Because if I'm taking points off, I feel I need to explain myself more thoroughly than congratulating them on a good job well done.

Thus, a student looking at Iris's written comments on their paper might get the

impression that there was a lot more *wrong* than *right* with their work.

Uma shared that it was a policy in their department to start with positive comments,

and explained:

I just make a rule of doing both because I think, I want the student to have some kind of office hour experience with me by providing the video where I am careful to be complementary in my voice, and supportive, so that not only are they getting that written, the commentary, the red, the highlight; that they're getting a tone of voice and a supportive conversation. I think that has been successful.

Anne walked through an example of her audio feedback, saying:

"I can see that you're trying to maybe not be monotonous in saying the same thing, but in clinical technical writing a nurse is going to review this… You just really gotta be <u>monotonous</u>. This should just be <u>boring</u>." You know I can tell, like "use the exact same words" and then I know they're laughing about it at least when they're reading it. And I know they'll remember, "just be boring."

**Pauses**

One effect in the audio and video feedback formats that may go unnoticed at first is

irregular breaks in speech: the pauses. These pauses seem to occur as grammatical transitions

from one section of work to another, or serve to separate introductory or closing statements

from feedback details. While the instructors may or may not be intentionally using pauses as

part of their audio or video feedback processes, the pauses may have a personalizing effect on

the students, as they might feel that the instructor is paying attention to their writing.

Kate speaks about pauses in her process: "I tend to just look through my notes and just sit there and read it. Often times, I'll say 'I'm looking through my notes on your paper' and I know there's a pause on the system, but I prefer to just talk." These pauses suggest to her students that Kate is recognizing and attending to their work.

Iris includes references to pauses when talking about the linguistic differences between her written and video feedback:

> Written feedback for me is pretty objective, whereas the video recording is more subjective in my feedback. Changes in tone, maybe emphasizing a point more, whereas written it's just, you know, a statement, and unless I, I don't tend to underline something in my statement, so I think those little changes in my voice—. I also will say "please note" and sometimes I do that in written, like I put "note," but I maybe emphasize it more when I do it in a video recording. I'm able to probably drive that home a little bit better by utilizing that change in voice, and even pausing a bit, you know, that, when you write as a period and two spaces. Writing you don't get that. There's a short pause, but how do you transition that same experience with the student?

Uma's pauses give the impression that she's considering her words to students. These pauses are also associated with phrases such as "I think mostly—"; "I (um) wonder though—"; and "Just play around—" Uma seems to be considering the student's work in this excerpt of her feedback:

> So you start off talking about Hemingway's Old Man and the Sea. It opens, but you're not giving us much about that while you're making that reference, unless you're talking about yourself. Um, (pause) yeah, so you're making some sort of reference here, linking yourself as old, to the rest of the class as young, which some of us are, some of us aren't. (Scrolls up and down just a little.) But that's nice, anyway, that's good. Um, and I um, wonder though, if you don't want to refer back to the Old Man and the Sea towards the end.

Linda's pauses pull space into her narrative, giving her students time to orient themselves to her associations and meanings:

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I like all of your lessons. I think it would be a great unit. One of the things, that—, came to my mind is one, is I would almost start with what you're doing on day (pause) 12, I would start with that on day one, and on day one, I—(pause), would, just think about being more of the, the teacher who comes in with the content knowledge.

Pauses that occur within specific topics may also provide navigational or referencing

cues to students. Feedback samples from Anne contain frequent pauses and self-interruptions:

Whatever you do there, it should not include anything that says this is what he needs to do. Um, (pause) so the blue part that I've highlighted there, so that's what he's indicated that he would like to do. So you can see in your Occupational Profile, um, (pause) you have an overlap with occupation, which you would. Now, occupation, um, when you're reporting information about occupation, would really just be those occupations, that, um, that he would need, and as you're aware, um, when, when we do the (pause) transaction form, you didn't have to do the transactions here because those are really your assessment summary.

**Summary**

These examples illustrate the value that instructors place on making a personal

connection with students and their awareness that an interpersonal relationship affects student

motivation and learning. Instructors identify different personal-ness qualities of the written,

audio and video feedback, as well as the unique two-way communication mode of face-to-face

feedback. Some instructors are also aware of the effect of using pauses when giving verbal

feedback and use them intentionally. Instructors consider the capabilities of the different

formats to provide personal, positive and constructive feedback when making their feedback

format choices.

## Efficiency (Time and Effort)

Efficiency relates to the time and effort involved in a task, and time-strapped instructors

are conscious of the amount of time and effort they spend on giving feedback to students,

especially in large class sizes. All instructors had a goal of returning feedback as quickly as

possible, ranging from 2-3 days to within one week of student submissions.

Each of the instructors referred to the amount of time involved in their process of giving

feedback to students, with some of them realizing immediate efficiencies with different formats

and others gaining efficiencies from reduced re-work or follow-up questions from students.

Effort was related to the process of giving feedback, as instructors noted the naturalness of

giving feedback in different formats and the technical procedures of creating and linking files.

Time and effort varied for the different formats in relation to the type of assignments the

instructors were grading.

**Immediate Efficiencies**

Sam noted that one of the benefits of audio feedback was a more timely response to his

students, saying, "one of the nicest things about the whole audio thing, is that you can do it

faster, and so students get their criticism back more quickly, and so they're more likely to

engage with it than if it's a month later or something like that." Other instructors recognized

that they could give feedback more quickly in one way or another, and these formats varied

depending on the type of assignment and their feedback process.

For short assignments and blogs, where feedback tended to be very similar for students,

Kate and Diane would type two or three sentences or use "cut-and-paste" methods with

redundant text. Kate mentioned, "so that's pretty quick, quicker than me even saying it. The cut

and paste is a second, where having to read that or speak it takes a little bit longer." Iris

discussed her efficiencies in her process:

> I cut and paste in Blackboard for example, if I find I'm giving similar feedback to a couple of, two or three students. After the second or third one I'll copy that, and then I'll just cut it into the other students, and I might add or subtract to it. That's a shortcut that I use for sure. It's a valid shortcut. Whenever I start to see repetitive things that I'm doing that seem like a waste of my time I try to think of ways to cut back.

Eric switched from giving video feedback that showed him testing out students'
computer code—which might take him 15-20 minutes to debug—to providing written
comments on a rubric. Isaac mentioned slowing down to make sure his handwritten comments
were legible and said that he could say more, and more quickly, with typed text or personal
contact face-to-face, on the phone or through Skype.

For longer assignments, Iris referred to her process of highlighting and speaking as
faster than clicking and typing—and the fatigue of writing because "I've written it similar 12
times and I'm getting tired of it." Anne and Kate talked about the amount of time they would
spend proofreading, spellchecking and editing their typed feedback. According to Kate, "I'm a
writer so I want those comments to look and sound good and make a lot of sense. …. Whereas
the audio feedback, I approach it more as if it's a one-sided conversation." Uma shared an
example, with "It's easy to sort of say 'Well, I don't know if you—, oh no, you're right, that's
perfect.' It's easy to say that on an audio or video, I mean. Whereas, it's more awkward to sort
of cross something out, suggest something, and then like, 'Oh no, my mistake.'"

**Later Efficiencies**

For Anne, Kenneth and Uma, time efficiency occurred not so much when returning
feedback but when interacting with students after they received the feedback. They noted that
while it might take a few more minutes to give verbal feedback with marked-up documents,
making the recording saved them time by reducing follow-up student questions and office hour
appointments. Uma commented, "They don't ask if they can review something with me once
they have the video—not as often." Anne stated that when she had given audio feedback on

drafts, no students failed the assignment, but that "when students failed this assignment when I provided written feedback, they had to come in twice to meet with me to clarify before they could get a passing grade."

Kenneth referred to his initial time investment of making a general video announcement of overall feedback to students as later saving him time and redundant emails:

> That actually saves my time in repeated emails to the distance students, you know, I'm repeating the same old stuff again and again, definitely I think that is a big benefit for announcing that in the video for capstone course, for a common announcement that talks about everything. ... Even though doing it is a little challenging for me to initially record this, you know that is actually the time that you invest to avoid the other times that you have to spend on emailing back and forth or phone calls that may take your time as well.

These emails and phone calls were often requests for follow-up appointments to discuss the individual feedback, and Kenneth remarked a time savings from avoided office hours as well: "Back then, they would say to me 'Would you set another time for me to go over this grading and report.' ... That is something I am avoiding this semester, because of the video, from the distance students. ... this avoids any redundant time investment."

**Enrollment Size**

Course enrollment size was a minor factor in the decision of which type of format to use. Some instructors, such as Kenneth, Kate and Sam, felt that the audio or video formats saved them time in giving feedback to students in their large enrollment courses.

Kenneth commented, "I think I have to use video if there is [sic] more students. This example, for this semester, this is the only year we have this many students. Last year we had about 40 students, so I was able to manage, but this year it's too big a task for me."

Kate also mentioned time savings in giving audio feedback to her large introductory online course, but she also noted that in her upper-level courses with fewer students, "maybe I think it's only 22 papers, I can do that fairly quickly." Sam stated that:

> It takes me less time to give audio feedback. I find it much less wearing to give audio feedback than to write. I can crank away giving audio feedback for several hours at a time, whereas I get weary writing out comments, and so I was trying to find a more efficient way of getting responses back to my first year courses which are very large.

However, Linda and Iris had concerns about using audio or video with higher enrollments. Linda considered the possibilities of reducing audio or video if her courses were larger, saying, "I think that if I had larger, I would maybe more intentionally make decisions about audio versus video, … or written feedback, or maybe more intentionally try to use audio feedback, and maybe slash audio, video to keep up the pace of the grading, but right now I don't." Likewise, Iris noted, "When you do have 40-45 students, which I did last year with the service learning in my 245 (section), it does take a while to just do that Blackboard upload and that whole piece, and so that has to be part of what I consider."

**Making Notes for Verbal Feedback**

For most instructors, providing feedback involved a balance of written feedback *before* or *with* audio or video feedback, especially on major assignments. Instructors referenced making notes on students' work before giving audio or screencast feedback. Some instructors wrote handwritten notes on paper which the students never saw; while other instructors annotated electronic documents by highlighting or marking up text, or inserting comment "bubbles," and then provided both written and verbal copies to students. Thus, audio or video

feedback usually was prefaced by some type of preparation, either notes as cues for the instructors, or comments on student work.

As one of the instructors who would make notes before recording, Kate preferred to work with paper and printed out her online students' papers so that she could make scribbles on them before recording her audio comments. Similarly, Sam wrote notes on a pad of paper as he reviewed their assignment and then made his audio recording. Linda referred to jotting down notes as a way of making sure that she didn't get off track from her message, and Isaac also made handwritten comments to guide his verbal comments. These instructors first prepared their feedback by making notes to themselves, but didn't share these written comments with students.

Other instructors: Iris, Uma and Kenneth, provided both types of files to students. Kenneth explained his process:

> I like to do the writing first, then I use the electronic scanned copy of it, and then I just open it so that I know where the actual markings are, and it helps me to easily communicate with the students such as "Hey, here's my marking and this is for this purpose," and the students are aware of that.

**Technology Challenges**

Most instructors appreciated the options that technology provided for them when giving feedback to students, but they also noted challenges in using technology. These challenges were usually related to the process of managing student files and the time involved in uploading the files to Blackboard. These challenges affected their choices of feedback formats for the different assignments.

Eric's comment bracketed these perspectives, saying:

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(With) the audio feedback they get that little richer feedback; but the problem with that, was using the (video) software was a real pain, and then on top of that working with Blackboard was always a nightmare. So making sure you get the file uploaded in the right place all the time, and all that stuff.

After using video feedback for one semester, Eric opted to use written rubrics instead, noting that the amount of time it took him to give video feedback was probably not the best use of his or his students' time.

Iris noted, "Sometimes the upload to Blackboard takes way too long. … I don't know if it's a Blackboard issue. The uploading of the videos is annoying." and "I get impatient with that process." Iris also remarked:

I just save the files on my own drive within the course so the feedback files are under an assignment folder and I just name it with the student's last name and upload it in Blackboard so I know that I'm getting the right file in the right place, which I think can be a real concern. We have to be careful with the FERPA to ensure that we're doing it in an appropriate way.

Uma echoed the process of saving and uploading files:

It's saving the file in a safe place, because you need to carefully save it and file those in your courses, and for me, that's how I'm comfortable doing it. I make the recording, I save it in the file for my course under Grading a specific assignment, then I have to upload that into Blackboard to make it available to them, so that's cumbersome. Just the uploading takes Blackboard a while.

Anne also suggested an improvement in how Blackboard displays student work, recommending that it display a split-screen view that would be especially helpful for long documents. Anne further explained how this would benefit her feedback process: "I can see if somebody has written something up here, and I need to know that it gets down to an assessment summary, in a 15-page document." and "When you're looking for patterns to go

through documents, it's just super effective, and you can't do that in Blackboard, so it's kind of a downfall."

Instructors who used the embedded audio option in Blackboard did not have the problem of managing separate student files, and Sam found this to be very convenient. Sam offered:

> One of the nice things about using the embedded software in Blackboard is, first of all, then I don't have to download all the documents. Downloading 80 or 90 documents is a time-consuming kind of thing, and then you have 80 or 90 student documents cluttering up your computer. Yeah, it's just very handy to be able to go to Blackboard. Next. Next. Next. When time is a factor, it's one of those things.

Diane also embedded her audio comments in the student's work, using the iPad iAnnotate app, and noted the ease of editing her audio responses. Diane explained:

> Because I could listen then to the individual little snippets and if I decided that I didn't say what I was hoping to say because I rambled or couldn't get my words out right, or whatever, I just re-recorded and deleted that one. It was kind of nice because it gave the opportunity to say what you wanted to without, like you said, recording the whole thing again.

It appears that the difference in ease of managing feedback responses to students was related to the process of managing separate software applications and student files. Although the instructors generally agreed that the technology was not difficult to use, the extra time and effort in the routine of managing and uploading files did cause some dissatisfaction with the process.

**Naturalness**

Instructors also spoke about what was more natural for them to do when giving feedback, with some differences in their perceptions. Linda described conferring (face-to-face) as very powerful and the most ideal, but also that it was "almost un-natural in grading anyway

because we just don't do it even in face-to-face classes." Relating her audio feedback to her

clinical experience, Anne said:

> I just think that clinical experience of doing my own dictation just makes it much more natural for me to do it that way. Just to pull the points…. maybe I relate it to coaching. Your coach would never write you a note, and as a clinical educator, which is what I was for 11 years before I was teaching, I would never have written a note to give them feedback on their clinical skills.

Eric felt that written feedback was more natural because "I don't have to be thinking

about what I'm saying or mumbling to myself as I'm grading the homework." Kate also referred

to written feedback, saying, "I would feel that written feedback would be more like face-to-face

feedback. I feel that once they hear the audio feedback that's it, that's what they have to work

with," whereas they could quickly scan through their written feedback again.

However, Uma reflected that:

> What seems natural is learned, completely learned. So I feel much more comfortable than I did maybe 20 years ago, in providing electronic and digital feedback. But my training has been to engage with a paper via writing, and that tends to be, there's that, that relationship with paper and pencil, or paper and pen, that has been valued and it's part of an idea of who we are.

**Summary**

Instructors' perspectives of the varying efficiencies of the different feedback formats

were related to the amount of time and effort to give that initial feedback or in subsequent

interactions with students. Some formats produced immediate efficiencies when giving the

feedback or reduced the amount of follow-up interactions with students after reviewing their

feedback. Feedback formats could also cause instructors to become frustrated with the process

of using technologies related to managing and uploading files, although other technology

formats that were embedded in student work seemed to be less troublesome. Instructors

usually made notes on student work in their preparation for giving audio or video feedback, but they did not comment that this required extra time in giving the feedback. The naturalness of the process of giving feedback was discussed, with various perceptions of the naturalness of face-to-face, audio, and written feedback.

**Themes – What Their Words Tell Us**

The study also contained questions that examined samples of five instructors' feedback for amount of content, language complexity and tone to determine actual practice and relationship to instructor's perceptions. Samples were analyzed from only five instructors, as four of the others no longer had access to feedback samples, and one instructor had concerns of FERPA release of the assessments. These questions were:

1.  How does the feedback in the different written, audio or video formats compare in terms of amount of content, language complexity and tone?

2.  Are instructors' perceptions of using written, audio and video feedback accurate, based on the content of their feedback?

Two themes exemplifying instructors' perceptions and processes emerged from the review of the samples: 1) discourse styles, and 2) walking their talk. An analysis of the samples using a discourse analysis methodology examined the amount of information in the feedback, as well as tone and language complexity. The section on walking their talk presents vignettes of the five instructor's perceptions within the context of actual practice.

# Discourse Styles

Feedback samples from instructors were analyzed for tone, language complexity and amount of content in the different types of feedback formats. The number of words in different feedback formats varied considerably, as did the tone and language complexity. The more expansive formats of audio and video presented the most information with regard to word counts, tone and complexity.

## Amount

Feedback formats differed in the amount of content in their feedback. Text mark-up comments and handwritten remarks on students' documents generally had the lowest word counts, followed by typed comments, and then audio and video narrations. Instructors noted that they could provide more information with verbal feedback. Diane stated, "you can convey more with your voice than you can sometimes with your pen in the same amount of time." Iris said that audio is "helpful for me too, because I'm able to talk through both the positive and areas where they could strengthen things more thoroughly."

Word counts and recording lengths provided data that audio and video narrations provided more information than written forms of feedback. Audio and video recordings ranged from 2 minutes to almost 20 minutes, and word counts ranged from 144 to 2827 words, depending on the assignment type and instructor process. Written feedback varied in word counts of 16 to 448 words. See Table 3 for differences in length and word counts.

Table 3. Feedback Samples: Time and Word Counts.

| | | Written | | | Verbal | | |
| | | Document Mark-ups | | | | | |
| | | Handwritten | Word "Track Changes" | Typed | VoiceBoard | Audio | Video |
|---|---|---|---|---|---|---|---|
| Anne (1) | Time | | | | | 5:23 - 7:07 | |
| | Words | | 16-83 | | | 906 - 1906 | |
| Anne (2) | Time | | | | | | |
| | Words | 93 - 178 | | 265 - 448 | | | |
| Linda (1) | Time | | | | | 16:09 - 19:30 | |
| | Words | | | | | 2291 - 2827 | |
| Linda (2) | Time | | | | 0.55 - 1:47 | | |
| | Words | | | 237 - 409 | 144 - 266 | | |
| Kenneth | Time | | | | | | 2:01 - 2:17 |
| | Words | | 25 - 80 | | | | 302 - 340 |
| Uma | Time | | | | | | 2:24 - 4:21 |
| | Words | | 60 - 137 | | | | 286 - 466 |
| Isaac | Time | | | | | | |
| | Words | 123 - 180 | | 48 - 423 | | | |

Anne speaks very fast, and she laughed as she shared that students tell her that they slow her down when reviewing her feedback on their case studies. With audio feedback samples ranging between 5:20 and 7:07 minutes in length, and word counts ranging from 900 to 1900 words, Anne provided much more information to students than in her typed feedback samples of 350 to 700 words.

The marked-up student documents that were associated with Anne's audio or typed feedback also showed differences, as documents that included handwriting, underlines and circled words had more information than those marked-up with Word's "track changes" and comment "bubble" features. Anne's handwritten comments ranged from 93 to 173 words,

while her bubble comments ranged from 16 to 83 words. Thus, while Anne delivered more feedback in her audio than typed files, her handwritten mark-ups had more information than the "track changes" notations.

Linda's samples included two assignments and feedback formats: 1) audio feedback on a major portfolio project, and 2) a combination of Voice Board and written comments in Blackboard for a smaller assignment. The Voice Board in Blackboard is similar to a text-based discussion board, but students can speak instead of typing their postings. The audio feedback on the major project was unusually long compared to other instructors' audio recordings, ranging between 16:90 and 19:19 minutes, with word counts ranging from 2291 to 2827 words. However, in Linda's case, there was no complementary written feedback. In her smaller assignment, the length of the Voice Board feedback ranged from 55 seconds to 1:47 minutes, with word counts ranging from 144 to 266 words. The accompanying written feedback for this assignment ranged from 237 to 409 words. In this assignment, Linda gave almost twice as much written feedback as audio feedback.

Isaac's feedback samples for his critical analysis paper included handwritten and typed formats. Word counts were higher for Isaac's typed comments than his handwritten comments. Word counts for the typed feedback samples ranged from 48 to 423 words as compared to 123 to 180 words in the handwritten feedback samples. The handwritten comments were usually very brief questions, and were barely legible, while the typed comments had more depth and were organized as strings of sentences.

The feedback samples from Kenneth's research article project included video feedback and marked-up copies of student documents. The "marked-up" comments were brief action

directives, with counts ranging between 25 and 80 words. Kenneth's audio feedback was much

more comprehensive and instructive, ranging between 203 and 340 words, delivered in

approximately 2 minutes of video recording.

Uma's video feedback recordings on students' writing drafts ranged between 2:24 and

4:21 minutes, with word counts between 286 and 466 words. The word counts in the marked-

up documents that accompanied the videos ranged from 60 to 137 words. Uma's method of

using color-coded highlights in the marked-up documents to indicate different grammatical

issues may have provided word efficiency in this instance.

The number of words in text comments and transcripts of audio and video narrative

widely differed, with the lowest numbers in text markups and highest numbers in audio and

video feedback. Instructors believed that they could *say* more with the verbal formats, and the

data shows that audio feedback was longer and wordier than video feedback.

**Tone**

Instructors identified distinctions in tone, or a manner of speaking, when they

gave feedback in different formats of written, audio and video. These differences

provided varying degrees of communication cues to students and had an effect on

learning and personal connections to students. These effects may be related to the two

themes of educational purpose and interpersonal relationships that were identified in

the interviews of instructors regarding their perceptions, values and processes of giving

feedback in the different formats.

Instructors described what they thought might be happening when they gave feedback

that included audio, as Isaac described the range of expression in audio feedback:

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In the audio they're hearing the voice inflection, and they're hearing hopefully the excitement "I really like this section, what you did. This is <u>cool,</u> you are right on top of it there (speaking the last phrase very quickly and loudly). Towards the end though, you didn't pull this together as nice as I thought you would pull it together." In that range of what I just said, inflections, emphasis, loud—the volume went up and down; there were lots of changes.

Diane said, "they can hear the intonation and the voice inflections and, you know, if you throw in a little chuckle to go with it, they can tell that you're just kidding, …. because I think when it's written there's the opportunity for it to be misunderstood."

Instructors identified differences in how they would phrase their feedback. Anne gave an example of how she would say something differently, and more strongly, to a student than if she had written it:

> I have, like, said, "at this level of the program you need to be referencing other ideas, because otherwise, this is really considered plagiarism and not professional." But I know if I could say it more like, "Enough's enough. This is the third paper I've graded, and you're still, you know, you're going to redo this. This is serious business."

Some instructors asked for student feedback and perceptions about the different feedback formats for the students' assignments, especially if the instructors were experimenting with new formats. Iris shared students' responses to her video feedback: "They said that they felt like they learned more from it because they could hear the changes in my voice and my emphasis on certain areas, so they, apparently they just thought that they learned more from the feedback having heard it verbally rather than in the written form."

Sam said:

> My students have sometimes said that my written comments sound critical, and they are critical. But they find my audio comments more, I guess I'll say this, the in-person with my students, I've had them say that I have this kind of paternal vibe, right. And, you know, I'm not going to say that I'm Dad, because I've never wanted to be that kind of instructor, but students do, I think, react more to me when they're sitting in my office or

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even when they're hearing my audio; that these are the kinds of comments you would get from, you know, that kind of an individual. Whereas the written comments just come across as criticism (laughs).

**Language Complexity**

The instructors' interview responses were supported by data from an analysis of feedback samples from the five instructors for linguistic features and language complexity. An analysis of one instructor's feedback samples is presented as a representative example of differences between the instructors' written and other feedback formats. Wolcott (2001) suggests that a focus on one example in the study may be discussed as relevant to the broader spectrum (p. 137). This strategy allows the researcher to zoom in on the data and zoom out for perspective. In this example, Kenneth provided video feedback to his online students on their research report, with both written comments in the margins of students' documents using Word's "track changes" features and audio narration in a video recording.

Kenneth's feedback samples presented marked differences in register, stance, engagement strategies and face-saving protocols. The register, or use of language in a setting or with a particular audience, was that of instructor—student; with formal tones in the written "track changes" feedback and informal tones in the audio feedback. The audio comments contained more words and included discipline-specific references, which were not present in the "track changes" bubble comments. These references included words and phrases specific to the project and were particularly identifying, such as: "block diagram, breadboard, current sensor, sequence of codes, and Wi-Fi signals."

Stance refers to a person's feeling, attitude, perspective or position with respect to something. Kenneth's bubble comments were brief, action-oriented directives; while his audio

comments were explanatory and instructive, with positive remarks interspersed with constructive comments. Kenneth remarked that "I feel really, very happy when I do the Jing based video." Engagement strategies were not present in the written comments, but audio comments were peppered with "OK" and "you know" phrases, and use of "you" (pronoun) and "your" (possessive pronoun). Face-saving protocols included spoken phrases such as "I think you—" and "is really good, but it's not—." Choice was also offered by using "either" in one comment. These verbal phrases indicate that there is an interpersonal relationship with the students, which is missing in the text comments alone.

Table 4. Linguistic Features of Video Feedback Sample (Kenneth).

|  | Written | Audio in Video Recording |
|---|---|---|
| REGISTER | Directive | Instructive |
| Discipline-specific references | No | Yes |
| STANCE |  |  |
| Beginning | None | "Ok, Power Line Monitoring Unit. OK. Uh. Your report generally is fine, looks good." |
| Middle | Begins phrases with verbs: "Reduce …" "Maximize …" "Move …" | Sentences include: "Just change the wording …" "it needs to be redrawn in such a way …" "You may want to maximize …" "or maybe restructure it …" "Try to minimize …" "It's really confusing …" "please do …" "Again, move …" |
| Ending | None | "Other than that, your report is fine." |
| ENGAGEMENT | None | "OK" "You know" "you" "your |
| FACE-SAVING PROTOCOLS | None | "I think you did explain a little bit there." "is really good, but it's not …" "Either you show …" |

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**Summary**

The discourse styles in the different feedback samples showed differences in amount of content, tone and language complexity. Verbal feedback in audio or video formats contained higher word counts with more specific discipline references. The tone was more instructive than directive when given verbally, and the language complexity in the verbal feedback was more expansive and contained more instances of stance, engagement and face-saving protocols. Providing more specific information, within the personalizing effects of stance, and applying engagement and face-saving strategies may be more useful and encouraging for the student's progress.

## Walking Their Talk (Vignettes)

Pulling together the perceptions and values that these instructors have of feedback and the processes they describe in giving feedback to students, with actual samples of their feedback resulted in examples of how closely they put theory into practice. In other words, do they walk their talk? Samples of feedback were collected from five instructors and then analyzed and compared to their individual perceptions, values and processes. Vignettes emerged, which are presented below.

**Anne**

Feedback formats:  Written Comments; Audio with Text Comments

Anne's class is a hybrid mix of campus and online students, but feedback is given to both types in the same format(s). The major assignment in Anne's course, a case study, requires that students evaluate a client, reference research-based corrective strategies, and develop a treatment plan that can be implemented by a network of medical professionals. Thus, the case

study is a critical care document detailing a plan of action to be followed by medical staff, and all parts of the document need to be aligned and connected. Anne requires students to submit two case studies during the semester and to resubmit drafts that do not meet acceptable performance levels.

Anne feels that she provides better feedback to students when she uses audio instead of written feedback. This effect stems from both the value that Anne places on feedback and her process of giving feedback. Anne values feedback as a form of coaching for her students, providing commentary on their work that leads to practical application and focusing them on how they can do better at their work.

Anne's style of giving feedback is to give students concrete examples or ask questions to get them to do the thinking, rather than just telling them what to do. Anne notes that when she gives written feedback, it is easier to tell them what to do; and, referring to her audio feedback, states, "if I speak it, I can pull certain points together, and the value to get them to think at a higher level, is probably, more successful." This statement references her process of talking about the various sections of the document when Anne is in any one of these sections, as she reminds students that the same information needs to also be present in different, related areas. This is a critical skill, and Anne explains that it's difficult for students to be repetitive, so she advises them to be monotonous and even boring when writing their case studies. Anne says that when she speaks about this as "just be boring," with a laugh—she laughs a lot as she talks—she thinks that students will remember it better.

Anne's grading schema and feedback are responsive to the students' perceptions of feedback. Realizing that students take her feedback seriously—as they need to use it for future drafts, she tries to reduce a perception that they "did a horrible job," and presents her feedback as a learning experience. Anne shared that "I think you connect better and provide more support" using audio, and she added that some of the feedback that she gives in audio she would never have given as written feedback. Anne gave an example of this phenomenon by sharing how "a student got an A, and I wanted to show them that they did a beautiful job, but also that they really could have been more efficient, so I spent 11 minutes giving feedback to the student in the audio recording. I would never have done this in written feedback."

**Samples.** Anne shared that students can sense her attention to their work and passion for the field when they listen to her audio recordings. In her audio feedback samples, Anne often has run-on sentences and interrupts herself, and she speaks very quickly. Anne mentioned that some students tell her that they slow her down when listening to her. Anne gives much more information in her audio files than in her written files, with word counts ranging from 900 to 1900 words for a recording ranging between 5:20 minutes to 7:07 minutes. Word counts in written files ranged from 350 to 700 words.

When speaking about specific instructions for improvement, Anne presents feedback in a manner similar to a coaching style by frequently using phrases such as, "it's just fine-tuning"; "make this even better"; "could have been a better choice here"; and "so if you're struggling… just say up front …." Anne is also empathetic in her written feedback, but it is shorter and also focuses on one section at a time. Sometimes there is a general overview, but not often. What is

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also missing in the written feedback are the pauses that occur in the audio feedback when Anne is reading their work or considering her next words. These pauses give students the sense that she is focusing on their writing and how she can bring to their attention the areas where they could improve.

Anne has studied her process of giving feedback to students, and she asks students for feedback on her feedback. Anne is attuned to what she does in practice and recognizes that she gives feedback that better fits her goals when she uses an audio format.

**Uma**

Feedback formats:  Video with Text Comments

Uma teaches an online, upper-level literature class, in Spanish, and students submit multiple drafts of their writing assignments. Uma gives video feedback on these drafts, first spending about 20 minutes to mark up the document electronically with different-colored highlights that reference various writing characteristics such as grammar, organization, etc.

Uma's intention is to focus on writing as a process and give holistic feedback in her video comments. She aims to foster an informal experience that emulates an office-hour experience between herself and a student. Uma feels that there is a place for text and a place for video. When Uma is giving video feedback, she says she is "filtering differently" with a focus first on shape, organization and register, and then addresses the nitty gritty grammar issues— usually referencing her in-text comments. She thinks her video comments help students to make sense of the marked-up text.

**Samples.** In Uma's feedback samples, document mark-ups and comments are brief and specific, with word counts ranging between 60 and 137 words; while her video comments are

longer, with word counts ranging between 286 and 466 words, corresponding with video lengths ranging from 2:24 minutes to 4:21 minutes. The documents are colorfully highlighted to correspond with different assignment characteristics such as theme and grammar.

Uma feels that she is giving qualitative information to students while also providing a psychological experience that their work is being treated seriously. In her video samples, there are "ums" and pauses to signal that she is really thinking about what she wants to say, such as, "I (um) wonder though…" and several examples of word and phrase choices. Uma's language is professional, with specific references to the process of writing, but collegial and friendly, often remarking that she makes these mistakes too, as in, "I do that too, we've got to stop that." Uma tries to provide an emotional experience:  that "she really cares." Praise is interspersed with softened criticisms, such as, "It's a little tricky to figure out…" as well as suggestions about the process of writing, by urging students to "unpack" or "walk around an idea." She will muse with them, using phrases such as, "I think mostly..." or "Just play around…" At the end, she recommends, "those are just things you need to review" and always reaches out to students with "invite you to meet with me."

Uma's video comments and manner of scrolling through the document and highlighting her notes or students' phrases do give a sense of meeting and discussing the document in person with the student. There are specific references to issues as well as praise for interesting writing variations, and these are presented within a conversational tone that addresses the holistic purpose of the assignment.

**Kenneth**

Feedback formats:  Video with Text Comments; Typed Comments

Kenneth believes that feedback needs to be productive, and his feedback provides specific recommendations for changes. This feedback is essential for the research article project in Kenneth's senior level course, and students write two drafts before submitting their final version. Complicating the process is that students work in groups to write the article, and the hybrid course has both campus student groups and online student groups. Kenneth has had difficulty in communicating his meaning to online students, who previously received only handwritten feedback on their drafts, whereas campus students obtained the handwritten feedback during a group meeting in his office, affording them the opportunity to ask questions. Online students would often request appointments to discuss the feedback or email him with questions. In the fall of 2015, Kenneth began providing video feedback to online students by using track changes to mark up the margins of the document and then giving audio comments while scrolling through the document.

**Samples.** Kenneth's written comments in the margins of students' papers are brief one-liners in comparison to the strings of detailed and explanatory sentences in the video narrative, and the video contains almost twice as many comments as compared to the written feedback. The written comments indicate word efficiency, with word counts ranging between 25 and 80 words. These word counts are much lower than the 302 to 340 words presented in the two minutes of video feedback that Kenneth now provides to students. Students can also see Kenneth scrolling through the paper and moving his mouse over specific text as he gives his comments.

Kenneth thinks that he is "giving more information" by speaking to the online students in his video feedback, but he is also using words differently. While Kenneth's comments are

action oriented in both formats, his written comments are more directive, while the video narrative is more instructive and informal. The written comments usually begin with action verbs such as: expand, add, show and move; whereas audio comments are softened with "just change," "try to," and "make sure you."

Kenneth's spoken comments are also more conversational. Kenneth's use of "um," "OK," and "you know" infer a conversation with the students, affirming his acknowledgement of the work they have done and promoting their engagement with what he is saying. Kenneth believes that his students can feel his presence in the video feedback and remarked that he "feels really, very happy" when recording the videos. Affective and relationship-building terms are used, and there are frequent instances of "you" and "your" when making constructive comments. In his video comments, Kenneth also refers to corrections as "minor" and uses modals such as *may*, *might* and *should* to suggest student control in making changes. The video narrative also contains phrases such as, "I think you—" or "It's much more easier to—," and offers choice with "either—."

Kenneth believes that his video feedback for online students now comes close to the face-to-face experience that he has with his campus students. The use of affective tone in the video transcript does provide more information and a more informative and instructive manner than the in the written documents.

**Isaac**

Feedback formats:  Written Comments; Typed Comments (Audio files were not collected.)

The questioning remarks in Isaac's feedback, both written and typed, are indicative of

Isaac's feedback perspective and process, as he believes that questions are his hallmark. Isaac's

style is conversational, as he tries to replicate the face-to-face environment of his campus

classroom. He tries to balance the informational with the affective. While Isaac prefers to give

handwritten comments, believing they are more personal, he recognizes limitations of his

handwriting illegibility, and that he can give more feedback when typing because the space

expands on the page.

**Samples.** Isaac provides feedback to his campus students on their critical analysis papers

in either handwritten or typed formats. Isaac occasionally begins his typed feedback with

students' names, but he does not write names when providing handwritten feedback on their

paper copies. The handwritten feedback contains underlined areas in the text and many brief

"one-liner" questions in the margins. Handwritten questions are sometimes difficult to read

because of legibility issues—despite Isaac mentioning that he tries to slow down for readability.

Isaac has fewer questions in his typed feedback, but these questions have more depth and

explanation associated with them.

Isaac's questions are attention-getters, extending and evaluative. There is a wider range

in typed comments, perhaps related to a larger number of one-liner questions and statements

in the handwritten feedback and fewer, more elaborative questions and statements in the

typed feedback. The amount of content and tone in the typed feedback is also more

explanatory and expansive, even providing examples or detailing why some student statements

were not acceptable. The typed feedback also incorporates "all caps" and exclamation marks at

times. Word counts for the three handwritten feedback samples are 123, 150 and 180 words, while the three typed feedback samples have generally higher counts of 48, 157 and 423 words.

While Isaac believes he is more personal with his handwritten comments, the typed remarks are actually more personalized and less directive, even using the student's name on one occasion. Isaac's perception that he gives more information in the typed format is supported, as his questions are more than a single provocative phrase.

**Linda**

Feedback formats: VoiceBoard with Text Comments; Audio with Text Comments

As Linda reviews students' work, she keeps the goals of the course in mind and focuses on connecting student work to the major outcomes, which is developing students' writing skills and modeling those writing skills to their students. The major assignment in Linda's online course involves writing and redrafting shorter assignments and developing writing plans over the course of the semester, culminating in a portfolio of writing products. Linda stresses the value of providing positive and supportive feedback to students, as she has found that even the slightest hint of criticism cuts off student learning in online courses. Linda's intent is to not to point out that students did something wrong, but to say, "this is very good and I like it, and it has it a role, but here's what it could sound like at this point."

**Samples.** When giving audio feedback, Linda acknowledges students' work, reading aloud excerpts of lines that they have written and then sharing her response, such as, "I was <u>immersed</u> in <u>both</u> of these when I read and listened—"(stressed words are underlined). Linda's voice is very melodic and expressive and she stresses and elongates words to provide emphasis.

Her inflections, tone and laughs—more like chuckles—are easily picked up, and her pauses also have meaning as one feels her thinking in the silence.

Linda remarks positively on revisions of drafts, acknowledging, "how moving up a whole paragraph can just create more <u>energy</u> in …," and gently offers suggestions, using phrases such as, "the other thing is, it would be <u>cool</u> if …" or "you could go much further to." Linda also invokes empathy with phrases like "I sometimes struggle with these…" Linda recognizes that students are nervous about their writing, and she aims to be both accepting and encouraging for their next draft, with a sample response such as, "I felt one of your <u>strongest</u> arguments …"

Being passionate about writing in her discipline, Linda is always reaching out to students with ideas to re-think their work, saying, "I would <u>encourage</u> you to …" or "it may be hard, sometimes, to sort through …" or "just think about it …" Linda's responses to students' writing vary in length. Responses to short assignments, covering two or three major points, take the form of brief two-minute voice board messages with word counts of 140 to 270 words, or typed responses of 240 to 400 words; the latter are slightly more formal than the audio recordings with no intonations, laughter or pauses. Responses to portfolio work involve longer audio files of 16 to 20 minutes, containing between 2300 and 2900 words. The longer, complex files are very engaging, as she specifically references different sections of student work with examples and suggestions and sprinkles praise and encouragement throughout her feedback, keeping the experience positive and personal for students.

Linda's perspectives and valuing of giving feedback are very much present in her feedback samples. She intentionally models the practice of giving feedback, and in doing so, is very aware of her purposes and connections to her students.

**Summary**

These examples of the instructors' perceptions and their feedback samples are expressions of pedagogy in action. Although some of the instructors indicated that they hadn't really thought about their intention and practice of giving feedback, from the data presented here, it seems that they intuitively are in sync.

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**Summary**

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The data from the interviews with the instructors revealed intentionality in selecting different feedback formats and three major themes, or factors, affecting instructors' choices of feedback formats. The instructors' choices were based on 1) educational purpose of the feedback, 2) the interpersonal relationship between instructor and students, and 3) efficiency of time and effort. Differentiation within these themes also impacted the choice of feedback formats.

When considering the educational purpose of the feedback and feedback choice, instructors determined whether the assignment type was major or minor, and if it required both specific and general feedback comments. Sometimes the instructors based their selection on the students' assignment submission criteria.

Instructors attempted to develop an interpersonal relationship with their students. In online courses, giving feedback on assignments was a key interaction opportunity. Thus, instructors considered using feedback formats that would convey positive and constructive comments, and elicit a positive student response to the feedback. Choices of audio and video formats included meaningful pauses in their commentary, even when they unintentionally occurred.

Time-pressed instructors also considered feedback formats based on efficiencies of time and effort, sometimes selecting formats based on how natural the process seemed to occur. Time savings sometimes occurred when initially giving feedback or later through reduced follow-up questions from students. Efficiencies were especially important in large class sizes. Instructors noted frustrations and challenges of using technology to provide feedback because of extra steps in the process of returning the feedback to students as attached files.

The analysis of the feedback samples from five instructors, and the comparisons of these samples to their perceptions of their perspectives, values and processes produced two themes: 1) discourse styles, and 2) walking their talk. The different formats demonstrated variances in discourse styles, with more content and more supportive tones and language complexity in oral feedback formats as compared to written formats. When determining how well instructors' perceptions matched their actions by comparing their perspectives with actual feedback samples, it was evident that even if not explicitly expressed, the instructors were acting in concert with their values, or walking their talk.

**CHAPTER V**

**DISCUSSION, CONCLUSION, RECOMMENDATIONS**

**Purpose of the Study**

The purpose of the study was to 1) identify instructors' perceptions, processes and

values related to giving written, audio or video feedback to students on their assignments, and

2) identify the differences in amount of content, language complexity and tone of feedback

between these different formats, as evidence of the instructors' perceptions. The research

questions guiding this study were:

1. What are instructors' perceptions or attitudes of giving written, audio and video

   feedback?

2. What are instructors' perceived values of giving written, audio and video feedback?

3. What are instructors' processes of giving written, audio and video feedback?

4. How does the feedback in the different written, audio or video formats compare in

   terms of amount of content, language complexity and tone?

5. Are instructors' perceptions of using written, audio and video feedback accurate,

   based on the content of their feedback?

**Framework and Methodology**

This qualitative study was designed and interpreted using a Media Naturalness Theory

(MNT) framework, developed by Kock (2002, 2005) to describe the effectiveness of different

communication media on cognitive effort, communication ambiguity and physiological arousal,

by referencing a "natural" standard of face-to-face communication. Although MNT was initially applied to business communication interactions, it has been recently applied to academic functions (Cothran et. al, 2013; Kock & Garza, 2011; Kock, Verville & Garza, 2007; Simon, 2006) due to the increasing adoption of Internet and new multimedia communication formats for instructor and student interactions. The study used a phenomenological methodology to collect and analyze the interview data, and a discourse analysis methodology to analyze the feedback samples. Interviews with the instructor participants were coded and analyzed for emergent themes, and their feedback samples were analyzed for amount of content, tone and language complexity. The instructors' perceptions were compared to their practice by placing their feedback samples in context of their perspectives.

## Discussion of Themes

Instructors recognized that they now have several options for giving feedback on students' assignments, and they identified making choices on which feedback format to use based on three decision factors, which emerged as the three themes of the study: 1) educational purpose of the assignment, 2) the interpersonal relationship between instructor and students, and 3) efficiency of time and effort. Two additional themes that emerged from the analysis of the feedback samples were: 4) discourse styles, and 5) "walking their talk" vignettes. The two themes from the feedback samples related to and supported the three interview themes. The themes of the study are discussed with relevance to the literature and to the Media Naturalness Theory (MNT) framework.

**Theme 1: Educational Purpose**

Instructors developed different types of assignments to meet their course goals and promote student learning. These assignments ranged from minor one-time postings or submissions to major papers and projects requiring multiple drafts and revisions. Some assignments were more personal than others, requiring personalized student responses.

Instructors gave feedback to students using media formats that matched and supported the educational purpose of the assignment, especially in regard to how well the feedback enabled them to give specific and/or general feedback to students. Often a combination of formats provided the most information for major assignments, with written feedback addressing specific issues and oral feedback in audio or video formats providing specific references, connecting statements and comprehensive or general instruction. For minor assignments, this level of detail and support was not necessary; thus instructors most often chose to use a written or audio feedback format. For assignments that were more or less personalized, instructors chose to respond in the style of the students' submissions, as in providing audio feedback on students' audio submissions or personal reflections, or short written remarks on more generalized assignments—which provided efficiencies of grading time and effort.

**Educational Purpose - Relationship to the Literature**

Instructors' perceptions, values and processes supported findings in the literature with respect to using audio and video formats to provide explicit detail and examples (Séror, 2012; Shafer, 2010) and recognizing that written comments are brief and not as extensive as verbal comments (Carless, Salter, Yang, & Lam, 2011). Diane and Uma referenced giving more

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information and examples using verbal comments in audio and video formats. Anne provided

examples as part of her coaching style, even reminding students to "just be boring" and

"monotonous" in repeating information in their clinical case studies.

> Iris promoted the value of video feedback even more than audio comments, saying:

> There is the audio capability, but it doesn't capture your highlights. That's the helpful part, in pointing out in the paper where it is, and being very specific. I think that's the benefit. I think if you just have no paper in front of you, or no post of wherever I'm looking at, I think it would be less effective. I haven't done just the audio recordings, I've only done the video recordings and I think it's helpful. I'm not saying it's better than some other options, but I'm just thinking for my assignments especially, I think the type of feedback I would give, it's really helpful. I would struggle to go back to not having it be a video recording, having now done that. I think I would struggle a bit with that.

> Audio feedback was more useful than written feedback in promoting student thinking

(Merry & Orsmond, 2008), and it was especially useful for providing clear and precise feedback

in assignments allowing multiple drafts or revisions (Carless, Salter, Yang, & Lam, 2011) as

students could not simply accept the instructors' "track changes" feedback, but must listen to

the recording and make their own interpretations (Séror, 2012). Anne noted use of the text

mark-up and audio combination, stating:

> In particular, for certain types of grading, I use the highlighting feature because in the reasoning I'm looking for a pattern of language to come through. So I'll use the highlighting. I use the comment feature more as a cue to myself to make sure I talk about that. So, for the students, I'll say "notice how I highlighted this pattern. You see how these don't match up." (laughs) I'll use that for a visual for the student.

> Video formats could display the non-linear process of the instructor assessing student

work (Schilling & Estell, 2013) and promote connections and higher-level thinking. Eric noted

that his video feedback captured his process of debugging their computer coding, and video

feedback samples from Kenneth showed him scrolling through different parts of students'

papers as he commented on their work. Kenneth shared that the video added more value

because he could give them concrete examples or ask questions to get them to be thinking at

higher level instead of "just telling them what to do."

Chickering and Gamson (1987) recommend that instructors' feedback to students

respect student diversity in experience and ways of learning, which was modeled by Linda when

responding to her students' risk-taking in writing their "I Am" poem by using her voice in a Jing

video. Anne also noted the personal nature of students' experiences and perspectives when

responding to their cultural journey assignments with audio comments, saying that she felt that

responding with a brief written comment "seems rude."

**Educational Purpose - Relationship to MNT**

The instructors in this current study recognized the different qualities of the written,

audio and video feedback formats; and then selected formats, or combinations of formats, to

fit the educational purpose of their assignments, based on the type of assignment or the type

of students' submissions. Instructors usually chose to use written or audio formats on minor

assignment types such as discussion postings or short papers, while using combinations of

audio and video narrations with written comments for major assignments. Instructors' use of

written, audio or video-written combinations thus models Kock's (2002, 2005) Media Natural

Theory (MNT) for communication interactions.

Kock's (2002, 2005) MNT positions face-to-face communication as the most natural and

effective mode of communication and compares the naturalness of any other communication

mode to face-to-face communication. According to Kock, a decrease in naturalness in any other

communication mode results in 1) an increase in cognitive effort, 2) increased communication

ambiguity, and 3) decreased physiological arousal (2002, p. 374; 2005, p. 124). Kock's MNT

premise is that when more of the essential elements of face-to-face communication are

present in any other communication mode, or combinations of modes, then that

communication interaction is more natural and thus more effective. The essential elements

include the extent that each person can see and hear each other, quickly exchange ideas,

observe and convey facial expressions and body language, and produce and listen to speech

(Kock, 2002, 2005).

Instructors perceived their feedback choices as being effective in supporting students'

understanding, with Anne and Kenneth reporting that the combinations of written-audio

feedback or written-video feedback resulted in fewer follow-up questions from students and

improved revisions of students' assignments. The improvements that were experienced by

Anne and Kenneth were also supported by Borup, West, and Thomas (2015), who identified

that "'selecting a method or effectively combining the best of both methods for a specific

course would require consideration of the characteristics and needs of specific assignments or

students," and that new media feedback formats can overcome "the lower levels of specificity

and richness of communication that have been traditionally associated with online courses,

especially those with larger enrollments" (p. 180). Similarly, Schilling, and Estell (2013) noted

that engineering students (similar to Kenneth's students), benefited from seeing the process of

instructors assessing their work, as they could follow the instructor through the document to

check contradictory or duplicate information. Additionally, video feedback might offer

advantages to face-to-face feedback, as Séror (2012) noted students' ability to pause or rewind

their instructor to better hear or understand the feedback, and Jones (2014) cited students'

ability to review the video as many times as needed.

### Theme 2: Interpersonal Relationship Between Instructor and Student

Instructors were intentional in fostering a supportive learning relationship with their

students, and several noted that giving feedback was their most common, and often only,

direct communication with students, especially in online environments. These instructors

desired to establish an interpersonal relationship with their online students that mirrored their

relationship with campus students. Instructors were mindful of their students' response to their

feedback and how this response might affect student motivation and learning. Thus, instructors

intentionally selected feedback formats that enabled them to communicate with their students

in a personal, supportive manner. The different formats of written, audio and video feedback

and occasional face-to-face consultations provided a range of communication and

personalization capabilities, especially in regard to balancing positive comments and

constructive criticisms. The verbal formats of audio and video feedback also included significant

cues in instructors' pauses, whether intentional or not.

**Interpersonal Connections - Relationship to the Literature**

Instructors' perceptions, values and processes supported findings in the literature with

respect to their communication goals of building social and interpersonal connections with

students, especially in online environments or large-enrollment campus courses where

feedback is often the only individual contact with students. Evans (2013) raised the social

dimension of the feedback experience to be as important as its content, and Rowe, Wood, and

Petocz (2008) encouraged feedback that promotes student engagement. Isaac's choices of

feedback formats were based on his philosophy that "humans are social creatures." Linda used her voice to emphasize her presence as a "real person" in her online courses, and Anne mentioned that students say that they can envision her "talking" to them.

Hattie and Timperley (2007) discuss how student confidence, self-efficacy and motivation are affected by instructors' comments, especially when the feedback is formative in nature (Black & Wiliam, 1998a). Both Linda and Anne noted that they were careful in being positive when giving feedback to students, as students quickly assumed the worst and then were not as receptive to their comments. Fink's (2003) FIDeLity model supports this practice, referring to feedback that is given "lovingly" as one of his four educative features of assessment.

Hyland and Hyland (2001) relegate traditional written formats to information channels that do not promote the interpersonal qualities of feedback to provide both praise and constructive criticism. Thompson and Lee (2012) note that instructors are often challenged to provide balanced feedback by recognizing students' good work as well as areas needing improvements. In written feedback, Iris was more likely to write "Good Job" as praise and then write much longer explanations of constructive criticism, and she recognized the imbalance of two words compared to three sentences and how it might seem to students that there was a lot more wrong than right in their work. When giving video feedback, however, it was easier for Iris to acknowledge students' good work and give praise, as well as point out improvements. Iris was able to "talk through the positive and the areas where they could strengthen things more thoroughly."

Thompson and Lee (2012) also use the term "veedback" to promote an experience that is similar to a student-teacher conference but with anytime availability. Uma referenced wanting to have an "office hour" experience in her video feedback by using a supportive tone in her voice. Kenneth began using video feedback for his online students to emulate the campus students' office hours' experience. Séror (2012) and Shafer (2010) also believe that video feedback promotes a more personal connection between instructors and students. Anne shared that her audio comments more closely matched her coaching style in the clinical environment, where she would never have given students written comments on their performance.

Handwriting was seen as more personal, but illegibility concerns prevented instructors Isaac, Iris, Anne, Kate, Eric and Sam from using it more often than they did, as they noted that their handwriting was "horrible," "scribbles" and "illegible." Anne admitted that "the truth is my handwriting is so horrible that the student couldn't read it." Uma promoted use of different colors and text highlighting and comment bubbles in an effort to reduce the "red ink" stigma. Sam recognized that students could easily get discouraged when seeing a paper covered with red ink, and Diane noted the negative effects of red ink on papers. These handwriting perceptions were also cited as issues in students' understanding of feedback by Hyland (2000), Ice et al. (2010), and Merry and Orsmond (2008).

**Interpersonal Connections - Relationship to MNT**

Instructors echoed Kock's (2002, 2005) MNT when they remarked that social cues and interpersonal messages in feedback to students were important. The instructors noted that different feedback formats supported their efforts to create these interpersonal interactions

and affect student motivation and learning to varying degrees of success. The naturalness of instructors' feedback choices affected their students with regard to differences in levels of cognitive effort, communication ambiguity and physiological arousal (Kock, 2002, p. 374; 2005, p. 124), and level of personal-ness (Merry & Orsmond, 2008).

For example, Iris shared that students have said to her that they appreciate her feedback, and that "they felt like they learned more from it (video feedback) because they could hear the changes in my voice and my emphasis on certain areas, so they, apparently they just thought that they learned more from the feedback having heard it verbally rather than in the written form." Diane commented about her graduate students' reactions to the feedback, with, "they felt that it was more personal feedback. They felt like we were talking to them, and they just felt that it was easy to understand what we wanted and they liked it." Anne recognized the possibilities of recording her feedback when a student said, "You talk so fast, could we record you in here?" She was taken aback at first, but then realized that they were playing her back in Blackboard. Anne added, "At the end, they'll always say, 'loved the audio, personalized it, easier to understand, I could play it back.'"

Isaac, Anne, Uma, Sam, and Eric claimed a preference for face-to-face communication when there were assignment issues. Isaac identified the difference as being a "two-way street" while Sam noted audio feedback was "one-directional" instead of a conversation. Uma referenced the "element of immediacy," and Eric noted the ability to ask and answer questions. Isaac and Iris expressed that they would prefer to pick up the phone to talk with students about issues rather than write lengthy comments and explanations. Isaac's other feedback choices

were very conversational, mimicking "face-to-face" interactions as he tried to close the physical

space between himself and his students.

However, Uma also noted that face-to-face conversations did not seem to be most

natural, as students seldom made office-hour visits, preferring web-conferencing formats such

as Skype. Uma added:

> Face to face is hard to do because it's so time consuming for everyone. The video I like
> because it's convenient for the student, but it's a huge time commitment for the
> professor, and professors keep getting more and more work. So, I think on some level.
> To answer the question, I think the video to accompany the written would be ideal.

Uma's perceptions and values of video feedback are supported by Carr and Ly (2009),

who describe video feedback as having a "look over my shoulder" effect (p. 411), and Jones

(2014), who wrote that the video feedback process recreates the face-to-face experience, and

advised instructors to treat video grading as if they were sitting with the student in an informal,

conversational office session (p. 58). Jones (2014) further noted that the personalized video

feedback could form interpersonal connections between students and instructors, make

constructive feedback more clearly understood, and promote student persistence in their

studies.

**Interpersonal Connections - Pauses**

Although case study research includes descriptions of the processes of recording

feedback that referenced use of the pause "button" as part of the process of displaying new

information on the screen and considering next statements (Séror, 2012; Shafer, 2010), the

instructors in this study used pauses as breathing spaces in their feedback while the recording

was still running, which gave the effect that they were seriously considering students' work.

Several of the instructors in the study were not aware that they *could* pause their recordings to catch their breath, prepare next statements, or change their computer display. Linda remarked that she could have used this feature in her recordings and would definitely make use of it in the future.

However, some of the instructors who kept the recording running as they paused to review students' work, such as Linda, Kate, Anne, Uma and Kenneth, may have unintentionally provided additional nonverbal cues of "silence" or "wait times" that indicated to students that they were paying attention to students' writing. Kate gave an example, saying, "I'm looking through your paper here." In their feedback samples, Linda and Anne would pause to specify different areas of student work by location as a reference point for their comments. These silent, spatial expressions, whether noted or not, provided social cues to students that their work was being seriously considered, or directional cues to help students follow along with the narration.

Iris pointed out that she could emphasize a point more by "even pausing a bit, you know, that, when you write as a period and two spaces. Writing you don't get that, there's a short pause, but how do you transition that same experience with the student?" Thus, pauses in audio or video feedback were additional examples of how different feedback formats addressed levels of cognitive effort, communication ambiguity, and physiological arousal (Kock, 2002, 2005).

**Theme 3: Efficiency (Time and Effort)**

Efficiency of time and effort was important to time-strapped instructors, especially when giving feedback to students in large class sizes. The instructors' aimed to return feedback

on assignments within a week of student submissions and thus considered the amount of time

and effort involved in providing the feedback when choosing which format to use. Most

efficiencies were realized during the initial process of giving the feedback, as instructors found

it felt more natural to give verbal face-to-face, audio or video feedback on major assignments,

while using text shortcuts such as "cut and paste" methods on minor assignments. Some

instructors also noted later and additional time savings on major assignments due to students'

increased understanding of their feedback when it was provided as audio or video formats. In

these cases, students had fewer follow-up questions or made fewer requests for office hours

consultations to discuss the feedback, and their revisions were of better quality.

The process of creating the feedback also impacted efficiencies, as instructors who gave

audio and video feedback usually made notes in the students' documents before recording

their comments as separate files, which added file management and uploading complications to

the process. Several instructors voiced frustrations with technology glitches or slow uploading

speeds that reduced their efficiency.

**Efficiency - Relationship to the Literature**

Instructors' perceptions, values and processes supported findings in the literature with

respect to their choices of feedback formats for returning feedback in a timely manner, notably

mirroring prior research results related to technology challenges and learning to use new

processes and media. Instructors in the study intended to return feedback within a week's time,

and often more quickly, which fits recommend practices of providing  prompt, immediate and

frequent feedback (Chickering & Gamson,1987; Fink, 2003). However, the study's instructors

also referenced challenges in providing timely feedback that were similar to Butler's (2011)

listing of heavy schedules, time pressures, limited resources and large classes (p. 99). Kenneth

noted that he felt he had to use video feedback for time savings in his larger enrollment classes,

and Kate remarked that she gave audio feedback in larger classes, but written feedback in

smaller, upper-level classes.

Electronic text efficiencies produced time savings because text comments were more

legible than handwriting, could easily expand in the appropriate text area, and utilized quick

"cut and paste" entries for modifications (Schilling, 2013). Kate, Iris and Diane referred to the

convenience of cutting and pasting text blocks for generalized feedback on common issues.

When speaking about his process of giving handwritten feedback, Isaac shared:

I really take pains to make sure that I write legibly because I know my handwriting is
terrible, you know. But that's no excuse for when they can't read my work, so I try to
take my time to slow down, really my handwriting becomes messy because I write it
fast, so quickly; so I slow down when I'm writing on their paper.

Sam confided:

I haven't even mentioned the fact that my handwriting is just appallingly bad. I've never
been able to write cursive legibly, and so I print. I'm at the point now (that) my printing
is terrible, and so you always have students 'I can't read this.' So, I may "ummm"  a little
bit when I talk, but at least they can understand what I'm saying, whereas with the
written notes, after you've been grading for 4 or 5 hours, I tell you, my—(laughs) it was
just a scrawl, and you have the embarrassing "what does this say?" (Sam whispers.) I
have no idea. (laughs) I have no idea at all what I said. I'm clueless. (I will say) "Give it to
me and I'll go over your paper a second time, (laughs) and maybe it will come to me."
And that's awful. I mean you hate to do that. But, that happened to me more than it
should have.

While Shafer (2010) experienced a time savings of up to 75 percent less time for giving

video feedback than written feedback, none of the participants referred to a savings of that

great an extent, although Diane did refer to being able to say more than she could write in the

same amount of time. Kate reflected that she would spend more time rereading and editing

written feedback than giving audio comments "as if in a conversation." Isaac also noted that he

spends time rereading his written comments to make sure his intent is understood.

Sam shared:

I think there are a lot of benefits. I wouldn't do it if I didn't think there weren't significant benefits. Of course, faster. It's much quicker doing audio comments than it is doing written comments, and that may simply be because of the way I do written comments, right. It's a fairly lengthy procedure, but in many cases I can do audio commentary much more quickly than I can write out comments. That's better, because it means that I can turn stuff around more rapidly for my students and they appreciate that. The students seem to like it. All the comments I've gotten about it are overwhelmingly positive, and I think there's a sense that as educators, when it's possible, we should give the students what they want. And if they want audio comments as they apparently do, then that's fine.

Instructors Anne and Kenneth also noted time savings that resulted from improved

students' revisions and fewer requests from students for more information on interpreting

their feedback comments. Both instructors noted that they had fewer requests for follow-up

office visits when they gave the feedback using audio or video formats, as compared to written

comments only. These formats were valued for improvements to students' understanding and

increases in instructor efficiencies of time and effort.

The process followed by most instructors giving audio or video feedback was to "pre-

grade" (Jones, 2014, p. 59) the paper by marking up specific areas to be referred to later as

verbal comments. Sam made short notes on a separate note pad and Kate wrote scribbles in

the margins of papers in preparation for their audio responses. Anne marked up students'

electronic documents and referred to them in her audio comments; saying, "I just do it because

it is more, it's just easier for me. I don't want to manage paper."

Séror (2012) also made annotations while commenting on student work, pausing the video at times to consider responses. Iris, Linda, Uma and Kenneth displayed comments and text highlights as they scrolled through students' work on their computer screen, audibly pointing out specific references. Iris described her perception of efficiencies of video feedback, with:

> I think now that I've gotten more comfortable with it (video), no, what I'm comfortable with in terms of highlighting, now that I have my system in place, I think that it does take me, it's quicker with the video feedback. The recording is quicker because I don't have to spend so much time writing or typing. Even typing is cumbersome somewhat in Blackboard because you have to click in the right spot. Even highlighting has gotten better, if you can stand the highlight and just highlight, that's pretty quick. If you've got to go back and forth between highlighting and adding text, bleauuugh, so now I just most of the time I highlight and I record and I'm done. So it's quicker. Moves more quickly through the process.

Additional processes in giving feedback that were associated with file management and technology reliance, and related issues (Nemec & Dintzner, 2016), were also referred to by instructors as they complained about the processes of managing files, FERPA security, and upload times. Concerns about spending more time using digital technologies or troubleshooting technology issues were also voiced, similar to those expressed in studies by Collis and Messing (2000) and Collis and Nijhuis, (2000). Linda recalled that she had needed technical assistance to recover files that wouldn't open and play for her students, and she had even recreated new feedback for some students.

Instructors were also concerned about using verbal feedback because it took too much effort to temper or regulate their comments on student work and disregard the "conversations in own heads" (Thompson & Lee, 2012, p. 3). Eric expressed that he was concerned that he

might slip and say what he was thinking, and Isaac voiced an example of "What were you

thinking here?" in an incredulous tone.

**Efficiency - Relationship to MNT**

The fundamental premise of MNT is humans have a natural physical ability to

communicate in a face-to-face model and that other communication modes are related to that

face-to-face standard (Kock, 2002, 2005). Olaniran (1996) relates ability and ease-of-use to

determining user satisfaction with a communication system. Instructors in this study refer to

the natural qualities of giving feedback in the different written, audio and video formats. Sam

remarked:

> Certainly, I think that giving audio feedback is a far more sort of natural way of
> communication, natural form of communication than is the, at least for me, it's more
> natural than writing, and I think for most of my students that would be true as well. As
> far as comparing these sorts of encounters, sometimes students come to my office and
> the encounter is very, very similar to the kind of feedback they would get in audio.

> Isaac also referred to audio feedback when he noted, "It's less of a novelty. It has

become almost like second nature. It's not something I make a special effort to do." And finally,

Uma mused:

> What seems natural is learned, completely learned. So I feel much more comfortable
> than I did maybe 20 years ago, in providing electronic and digital feedback. But my
> training has been to engage with a paper via writing, and that tends to be, there's that,
> that relationship with paper and pencil, or paper and pen, that has been valued and it's
> part of an idea of who we are. So all of that gets challenged and as we move forward
> technologically, I don't feel that I've lost the sense of being able to engage with a piece
> of paper and a pen. I do feel like I can engage online and I do it all the time, and so I am,
> the natural stuff, I would just dispute that anything is more natural. It's all learned.

> However, Eric, shared that "The written feels much more natural for me, as it's

something I'm used to. I'd have to say the written. I don't have to be thinking about what I'm

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saying or mumbling to myself as I'm grading the homework." Thus, perhaps the level of

naturalness of any feedback format relates to one's experience and satisfaction with expressing

their perceptions and critical information within that format. The same may be true for

students in comprehending and applying that feedback.

**Theme 4: Discourse Styles**

Samples of written, audio and video feedback formats from five instructors were

analyzed for amount of content, tone and language complexity. The audio and video formats

provided the most information, with higher word counts and more variation in tone and

language complexity than in written feedback formats (see Tables 3 and 4). In the audio and

video formats, the instructors' tone was more instructive than directive, and there were more

instances of stance, engagement and face-saving protocols. The affective tones and

engagement strategies supported instructors' attempts to establish interpersonal relationships

with their students and to motivate students to recognize and utilize the purpose of the

feedback in making revisions on subsequent drafts of major assignments.

**Discourse Styles - Relationship to the Literature**

Instructors' perceptions, values and processes supported findings in the literature with

respect to an increased amount of content (Séror, 2012; Stannard, 2008), tone and language

complexity (Nemec & Dintzner, 2016) in their audio or video feedback. Word counts in Table 3

showed marked differences between written and audio or video feedback. Uma's tone in her

audio comments was contemplative, often interspersed with pauses which seemed to indicate

that she was considering the students' work or her responses to it. Kenneth's tone was more

inclusive in his audio comments, and included positive comments.

These instructors' experiences were also supported by Lunsford (1997), who wrote that the number of comments, tone and instructors' personal reactions to student writing is important in framing feedback comments. Anne noted that she was able to phrase her feedback more strongly using audio comments to emphasize the seriousness of the content. Sam mentioned that his students found his written comments to be more critical, while they referred to his audio comments as constructive. Linda's audio comments included her reactions to students writing, such as, "First of all, I applaud you for trying out," "You inspire me" and "I valued that you—."

Hyland and Hyland (2001), and Schilling (2013) also refer to instructor stance and personality as important in students' response to feedback, as these features provide nonverbal information and context. Kenneth's written comments were brief directives, while his audio comments were more inclusive and instructive, even including face-saving expressions for students, such as, "is really good, but it's not—" and "I think you did explain a little bit there." Séror (2012) notes that he is able to be more conversational and add "color" (p. 111) to his comments using his tone of voice, and Thompson and Lee (2012) remark on the additional elements of natural speech that further inform the reader. Isaac demonstrated a wide range of inflection, emphasis and volume in his comments to students, and Diane referenced the benefit of a "little chuckle" to add context to her comments.

**Discourse Styles - Relationship to MNT**

Discourse elements affect the range of information and personal connections that is embedded in the different feedback formats, and subsequently, the level of cognitive effort, communication ambiguity and physiological arousal in the feedback communication interaction

(Kock, 2002, 2005). Discourse elements such as amount of content, tone and language complexity impact learning by affecting cognitive load. Tone or other nonverbal cues affect interpretation of instructions or constructive criticisms that are normally softened in face-to-face interactions. Tone and language complexity also affect physiological arousal or interpersonal reactions to comments. For example, Sam shared that students told him he had a "paternal vibe" in his audio responses.

Linda said, "I always have someone or multiple people saying they were so nervous about writing but you didn't criticize it. You gave me some ideas or accepted it as it and a lot of times, I'll just accept it as is and say 'on the next writing—let's try this.'" Iris shared that students told her that they "felt like they learned more from it (video) because they could hear the changes in my voice and emphasis on certain areas, so they ... just thought they learned more from the feedback having heard it verbally rather than in the written form." Diane remarked that "they can hear the intonation and the voice inflections and you know, if you throw in a little chuckle to go with it, they can tell that you're just kidding," and "when it's written there's the opportunity for it to be misunderstood." Anne noted that "I use a lot of humor, but also a lot of empathy. Like, 'this can be very overwhelming.' I try to use that with them."

Instructors utilize the expanded space to give more information, as Iris notes that she's now more balanced in her video comments by also giving more than just two words: "Good work" about positive areas of student work in comparison to lengthy constructive comments on areas needing improvement. The instructors also use the full range of tone, inflection, and language complexity to express recognition, support and cautions.

**Theme 5: Walking Their Talk (Vignettes)**

The content, tone and language complexity of instructors' feedback samples were reviewed to discern how closely instructors' actual practice matched their perceptions and values of the different feedback formats. These vignettes described instructors' actions and perceptions as related to the educational purpose of the feedback and the interpersonal relationships that the instructors attempted to develop with their students. In most instances, the instructors do seem to be giving feedback that supports their purposes, while also attempting to build a personal relationship with students. It was not expected that the theme of efficiency of time and effort would surface as relevant in these vignettes.

**Walking Their Talk - Relationship to the Literature**

Although there is literature on instructors practices of giving feedback in different formats (Séror, 2012; Shafer, 2010; Borup, West, & Thomas, 2015), studies on how well instructors' purposes match their practice are scarce. Thus, the vignettes are summarized within the context of instructors' perceptions, purpose and practice.

For the most part, instructors seemed to be aware of how their processes of giving feedback matched their perceptions and values of the formats in meeting their purposes for giving feedback and making interpersonal connections with students. Anne is an example of one instructor's perceptions and actual practice. Anne prefers to give audio feedback on her major assignments that require revisions because she can give more information to students— she talks very quickly—and because she can use more of a coaching style that fits both her and her discipline in the medical professions. Using audio, Anne feels that she can give better information by modeling the appropriate responses, as well as pulling the discrete elements

into a comprehensive care plan. These strategies are more evident in her audio samples than written samples. Overall, Anne's purpose is to get students to think at a higher level, and she remarks that students have improved their revisions and ask fewer follow-up questions of her when she uses audio feedback than when she uses only written comments and corrections.

Uma intends for students to feel as if they are in a conference with her to discuss their writing drafts, and the frequent pauses, praise and modeling of phrasing in her samples give students the sense that she is seriously considering their writing, and having a discussion with them. The intent of Kenneth's feedback on students' research articles is to help them improve their articles and to emulate for his online students the type of personal experience that his campus students might have in an office hour consultation. In a conversational, yet instructive manner, Kenneth refers to his text mark-ups and comments as he scrolls through the document, explaining and connecting information in different sections, always ending by praising them for doing a "good job."

Isaac's hallmark of responding to students is to ask more questions! This intent of digging deeper into meaning or connections is embedded within a philosophy of building social and interpersonal relationships, and both are evident in the tone, length and language diversity of his feedback when it is presented as more expansive and personal typed comments than brief, sometimes illegible, handwritten comments and one-line phrases. However, Isaac did state that he preferred to give handwritten comments as they felt more personal to him. It is not clear, though, if his personal experience with handwriting successfully transferred to the readers of his comments.

Linda perceives herself as being very intentional in giving feedback to her pre-service teachers' on their writing assignments, as her purposes are to develop both their writing skills and their modeling processes for their own future students. Keeping these purposes in mind, Linda stresses the value of providing positive and supportive feedback. When using audio feedback, the tone of her voice and the language choices she uses invoke empathy and encouragement. The modeling and encouragement are not as evident in her written comments.

**Walking Their Talk - Relationship to MNT**

Again, Kock (2002, 2005) compares the different communication modes to the naturalness of face-to-face communication with respect to attributes of 1) cognitive effort, 2) communication ambiguity, and 3) physiological arousal. Instructors recognize the features of the different written, audio and video feedback formats, and use them intentionally to match the educational purposes of their assignments, and their desired interpersonal relationships with students, similarly to Kock's goals. Isaac cites that he is trying to close that physical space between himself and his students, saying, "I am trying to mimic what I would do in a face-to-face environment, and I would say 'If you were in my office, this is something that I would point out, but I just want to draw your attention to.'" Kenneth tries to recreate the campus office hour environment for his online students. Anne prefers using audio feedback because of her coaching style, saying, "Your coach would never write you a note." These instructors are consciously using strategies to increase the naturalness of their communication with students to promote their understanding of the feedback and motivation to apply that feedback.

## Conclusions

Wolcott (2001) writes, "Good qualitative research ought to confound issues, revealing them in their complexity rather than reducing them to simple explanation (p. 36)." Findings from this study contribute to the literature on instructor perspectives and values of using audio and video media formats for providing a naturally occurring feedback experience to students on their assignments. Additional findings highlight instructors' processes of generating that feedback. The study also showcases discrete differences in the amount of content, language complexity and tone of the feedback in these different formats: written, audio and video. Altogether, these results may be of value to instructors who are considering providing new, yet familiar options for giving clear and constructive feedback in a timely manner, while also taking into account how students receive and apply this information.

The descriptive perceptions, values and process of instructors in this study reveal complementary goals in providing feedback to students and complex ways of meeting these goals. When making a decision to give feedback using written, audio or video formats, instructors' choices are based on educational purpose, interpersonal connections and efficiency of time and effort. Their choices of written, audio and video formats, or combinations of these formats, provide different levels of information and communication cues to students that can affect their degree of cognitive load, communication ambiguity and physiological arousal in understanding and applying the feedback. Uma reminds us that each format has value, saying, "But there's something very hands on about working with text, and I think students need that. So text is not video. They serve different purposes."

While Kock (2002, 2005) promotes using e-communication strategies that have natural qualities which emulate the naturalness standard of face-to-face communication, Uma also reminded us that in using technologies to communicate with students, especially online students, naturalness can be learned: "Our learning curve has been huge, and so what seems natural is learned, completely learned." Isaac echoed this, adding that using audio recordings for students is "less of a novelty. It has become almost like second nature." Thus, instructors who are concerned about their process of giving clear and constructive feedback to student work in a timely manner, and how students might receive and apply this information, have options in choosing natural and efficient modes of communicating their feedback. More instructors might begin their feedback by making a personal connection with students, as Sam does, by saying, "It's snowing …., but alright, I'm going to look at your paper now."

Now, I return to the three personal, practical and intellectual goals that represented my interest in this topic, and how they were met in this study. My personal goal was a motivation to support instructors in giving feedback to students that was rich and informative, while also making a personal connection with them—yet being mindful of their time and effort constraints. A practical goal was to hear their stories about giving feedback so that I could share them with other instructors who wanted to learn more about feedback options. Intellectually, my goal was to understand the process of giving feedback from the instructor's perspective.

This study provided rich content and context in all three areas. On a personal level, I now have more examples to share with instructors regarding giving rich and supportive feedback to students on their major and minor assignments, with some suggestions for efficiencies. Practically, I can relate stories of instructors' experiences in giving feedback, and

their students' responses to that feedback; and these stories may be encouraging to other instructors who are considering more feedback options. Intellectually, I have new insights into why and how instructors give specific forms of feedback to students, and also have many new questions to investigate in this research area. As a beginning, this chart of feedback format options may be useful for different types of assignments in a course.

Table 5. Feedback Format Options for Assignment Types.

| ASSIGNMENT TYPE | FEEDBACK FORMATS | | | |
| --- | --- | --- | --- | --- |
| | WRITTEN | AUDIO (With or Without Text and Markups) | VIDEO (Screencast with Text and Markups) | FACE-TO-FACE (also Video Conferencing, such as Skype, with Text and Markups) |
| **Major Assignments:** | | | | |
| Thesis / Dissertation | x | * | * | x |
| Research Papers/Projects/Multiple Drafts | | x | x | x |
| **Other Assignments:** | | | | |
| Weekly journal or discussion posts | x | x | | |
| Student Audio or Video Submissions | | x | x | |
| Personalized Assignments | | x | x | |

*Not noted by instructors in this study, but are possibilities.

Fortunately, this study was completed while the university's Blackboard LMS had the option of embedded audio comments in the Grade Center; and this convenience was valued, as instructors complained about the additional effort of creating and managing separate media files for other audio and video feedback formats. However, a planned upgrade to the campus Blackboard LMS removes the embedded audio feature. For the time being, instructors may use a complementary Bb Grader app on an iPad, which still provides the embedded audio feature, to complement the inline grading features in Blackboard, or utilize the video screen casting

options. As technology continually changes, instructors will need to be alert for new options for connecting with their students via feedback. Again, this offers new research opportunities.

## Recommendations

It seems that the work that instructors do in providing feedback is changing, and the feedback process is even extending to students in providing peer and self-assessments of their performance. New technologies and media formats, and the processes and pedagogies they support, are redesigning this critical evaluative component of the learning experience, involving both instructors and students. This small scale qualitative study in a Midwestern university only scratches the surface of a potentially rich and productive interaction of instructors and students within the feedback process. Recommendations for future research include:

- Additional studies of different feedback formats on the same assignment within the same course or subsequent semesters to more tightly control for variations in instructors, methods and assignment purposes. These studies may benefit from a mixed-methods approach.

- Studies on students' perceptions, access and application of audio or video feedback in formative and summative assignments. These studies may focus on time, effort and improvements of rework in assignments requiring multiple drafts.

- Investigations of new technologies to support feedback that are less susceptible to technical failures or complex formatting processes in order to give and return the feedback to students. Embedding feedback within the assignment process may increase the naturalness of the feedback process.

- Utilizing video feedback to evaluate students' video assignments. This strategy may be useful for students' self- and peer-evaluation as well as instructor evaluation, as the video information contains evidence of practice. The same applies to audio formats.

- Using audio technologies for students to hear their writing as part of their drafting process, as "hearing your words read aloud can help you concentrate on what has actually reached paper." (Wolcott, 2001, p. 65).

- Use of audio and video feedback for specific disciplines or student groups, such as languages and English Language Learners.

The interest in using and researching the use of multimedia formats of audio and video for giving feedback to students is expanding, and I am sure that there will be many new research opportunities. As Darwin penned in a letter to J. D. Hooker in 1869, "Well it is a beginning, and that is something."

**APPENDICES**

**Appendix A**
**Study Request Email**

Dear (Instructor Name)

I am inviting you to participate in my dissertation study on instructors' perspectives of giving audio and video feedback to their students on their written assignments. The study will look at instructors' perceptions, values and processes of giving feedback to students using 1) written feedback and 2) audio feedback or video feedback (in the form of a screencast of student work with instructor narration). My review of the research literature indicates that providing feedback to students using audio or video is a new phenomenon, and that more study can alert instructors of the possibilities and impacts, so that they can make informed decisions about their choices of media when giving feedback to their students. I will be interviewing 10 instructors across colleges and departments of (university) about their perspectives, values and processes of giving feedback in written format and in either audio or video formats. I will also be reviewing samples of written feedback and audio or video feedback from three instructors, as comparisons of the different types of feedback formats and as evidence of the interview comments. Instructors may be teaching, or have taught, campus or online courses at the undergraduate or graduate student levels.

I plan to interview instructors during the months of November and December 2015 on two separate occasions. I expect that the first interview may take between 40 and 60 minutes of time, and that a follow-up interview may take less than 30 minutes. The first interview will collect information, and the second interview will occur after the first interview has been transcribed and analyzed, with a focus on collecting clarifying information. Questions will focus on instructors' perceptions, processes and values related to giving written, audio or video feedback to students on their written assignments. During the interview I will also request sample copies of written feedback and audio or video feedback, if they are available. Although I will be interviewing 10 instructors regarding their perceptions and experiences, I will only be reviewing feedback samples from three instructors, as I realize that not every instructor may have available copies of their feedback formats. If instructors do not have copies of feedback samples, they can still participate in the study.

I would appreciate the opportunity to visit with you about participating in this study, and perhaps set up a schedule for the interviews. At the first interview, I will bring a copy of the Informed Consent Statement for your review and signature. For your convenience, I am attaching a copy.

Please respond by November 8 by email reply or calling 701-777-0843 regarding your interest in participating in this study. I will also be conducting follow-up phone calls on November 9 if we have not yet connected. I look forward to learning much from you.

Warm regards,
Jane

**(UNIVERSITY)**
**Institutional Review Board**
**Informed Consent Statement**

| | |
|---|---|
| **Title of Project:** | Instructors' Perspectives of Giving Audio and Video Feedback: Can You Hear Me Now? |
| **Principal Investigator:** | Jane Sims, jane.sims@und.edu, 701-777-0843 |
| **Advisor:** | Dr. Anne Walker, anne.walker@und.edu, 701-777-2862 |

**Purpose of the Study:**

The purpose of the study is to 1) identify instructors' perceptions, processes and values related to giving written, audio or video feedback to students on their written assignments, and 2) identify the differences in amount of content, language complexity and tone of feedback between these different formats, as evidence of the instructors' perceptions. Instructors who give feedback to students in written, audio and video formats think about the feedback they give to students differently depending on the media they use. The different types of feedback also effect the time and effort they spend on giving feedback to students, and the content of their feedback. As feedback to students is a critical element for student success, studying how instructors give this feedback using different technologies will have impact on future teaching practices and student success.

**Procedures to be Followed:**

You will be interviewed about your experiences in providing feedback to students on their written assignments using written feedback, and either audio or video feedback. You will also be asked to provide samples of 3 written and 3 audio or video feedback for comparison analysis. A second interview will be requested by the researcher for follow-up questions that may emerge during analysis of the first interview information.

**Risks:**

Although there are no risks in participating in this research beyond those experienced in everyday life, you may feel somewhat uncomfortable or embarrassed answering questions regarding your experiences as an instructor. Should you become upset at any point in the study, you may stop at any time or choose not to answer any questions. If you would like to talk to someone about your feelings regarding the study, you are encouraged to contact the UND's Counseling Center at (701) 777-2127.

**Benefits:**

This research might better clarify instructor perceptions, values and practices of providing feedback to students in different feedback formats of written, audio and video, and be useful to instructors in providing feedback to students in future classes.

This research might provide a better understanding of the content within different feedback formats of written, audio and video, and be useful to instructors in choosing feedback formats for future student assignments.

**Duration:**
You will be asked to participate in two interview sessions. The first interview is expected to take 40-60 minutes, and the second interview is expected to take 30 minutes or less. The interviews will occur during November and December 2015. Any feedback samples that you may provide will be collected in November-December, 2015.

**Statement of Confidentiality:**
During the interview, you will be asked for your name and department, but your name will be replaced with a pseudonym in the transcript if there is any reference to individual instructors. You will be asked to remove any full names of students, in as much as possible, from the feedback samples that you provide to the researcher. Any sample feedback that you provide will be redacted to replace student names, and their name, if included, with pseudonyms. If this research is published, pseudonyms will be used for referring to any feedback examples or personal statements.

**Right to Ask Questions:**
The researcher conducting this study is Jane Sims. You may ask any questions you have now. If you later have questions, concerns, or complaints about the research, you may contact Jane Sims at (701) 777-0843 during the day, or you may contact Dr. Anne Walker, Jane's adviser, at (701) 777-2862.

If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at (701) 777-4279. You may also call this number with problems, complaints, or concerns about the research. You can call this number if you cannot reach research staff, or you wish to talk with someone who is an informed individual who is independent of the research team.

General information about being a research subject can be found on the Institutional Review Board website "Information for Research Participants" http://und.edu/research/resources/human-subjects/research-participants.cfm

**Compensation:**
You will not be paid for being in this study.

**Voluntary Participation:**
You do not have to participate in this research. You can stop your participation at any time. You may refuse to participate or choose to discontinue participation at any time without losing any benefits to which you are otherwise entitled. You do not have to answer any questions you do not want to answer.

Signing this form implies that you have read this information and consent to participate in the research. You will be given a copy of this informed consent statement for your records.


_____

**Participant Name – Printed**


_____                    _____

**Participant Signature**                                    **Date**


**I have discussed the above points with the subject or, where appropriate, with the subject's legally authorized representative.**


_____                    _____

**Signature of Person Who Obtained Consent**                    **Date**

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