

CAN VIDEO FEEDBACK HELP IMPROVE STUDENT PERFORMANCE IN
ONLINE DISCUSSION BOARDS?

BY

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ABSTRACT OF THE DISSERTATION
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Asynchronous online classes have not only enabled students to learn at a time and place of their convenience, they have also enabled academic institutions to reach more students than ever before. In exchange for such flexibility however, online students and instructors usually forgo the opportunity to meet face-to-face. As a consequence, asynchronous online classes can be inherently isolating. One possible remedy to this situation is engaging feedback provided by instructors. Indeed, some instructors have attempted to connect with their online students via video technology (Borup et al, 2014, 2015; Giffiths & Graham, 2010). Video strategies remain a relatively new alternative for online courses however, and several issues have yet to be fully addressed.

The study presented in these pages sought to investigate if a video feedback strategy could be designed that would enable busy instructors to connect with their online students, and busy students to improve the academic quality of their contributions to online discussion board conversations. This was done by reviewing 3,046 posts, submitted by 116 students enrolled in 14 fully online courses. The review focused on both the educational quality of the posts, as well as the extent of threading within the discussion boards as a whole. Six of the fourteen online courses supplemented their discussion boards with a video feedback strategy, while the remaining eight did not. The

VIDEO FEEDBACK IN ONLINE DISCUSSION BOARDS

results of this study suggest that the students who did receive video feedback from their instructors ended up contributing discussion posts that were higher in educational quality. These students also participated in a greater level of discussions threading than their peers who did not receive video feedback.

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When I'd fallen, hers was the hand that reached-out to help.

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DEDICATION

I dedicate this study and its results to my family.

Any time spent on this work, was precious time spent away from them:

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TABLE OF CONTENTS

ABSTRACT OF THE DISSERTATION.....	iii
ACKNOWLEDGEMENTS.....	v
DEDICATION.....	vi
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	viii
LIST OF FIGURES.....	x
CHAPTER I: INTRODUCTION.....	1
CHAPTER II: LITERATURE REVIEW.....	11
CHAPTER III: METHODS.....	33
CHAPTER IV: RESULTS.....	47
CHAPTER V: DISCUSSION.....	86
REFERENCES.....	94
APPENDICES.....	104

LIST OF TABLES

1. Educationally Valuable Posts (EVPs).....	20
2. Educationally Less Valuable Posts (ELVPs).....	22
3. Embodied Conjecture.....	33
4. The Three Types of Groups Observed in this Study.....	38
5. Levels of Discussion Board Threading / The “Speak Style” Strategy.....	43
6. Number of EVP Posts Per Week in each Course.....	54
7. EVPs with Student Participation Taken into Consideration.....	56
8. EVPs with Number of Students Taken into Consideration as a Function of Feedback Condition with Number of Students Taken into Consideration.....	56
9. Educationally Less Valuable Posts by Week and Course.....	57
10. ELVP with Student Participation Taken into Consideration by Week Course, and as a Function of Feedback Condition.....	59
11. ELVP with Number of Students Taken into Consideration by Week Course, and as a Function of Feedback Condition.....	59
12. Overall Quality of Discussion Posts by Week, Course, and as a Function of Feedback Condition.....	60
13. Overall Post Quality with Student Participation Taken into Consideration.....	63
14. Overall Post Quality with Number of Classes Taken into Consideration.....	63
15. Overall Occurrence of Speak Threading by Week, Course, and as a Function of Feedback Condition.....	66
16. Speak Threading by Week as a Function of Feedback Condition.....	67
17. Speak Threading with Student Participation Taken into Consideration.....	69
18. Speak Threading by Week as a Function of Feedback Condition with Student Participation Taken into Consideration.....	69
19. Overall Occurrence of Speak Threading by Week, Course, and as a Function of Feedback Condition.....	70

VIDEO FEEDBACK IN ONLINE DISCUSSION BOARDS

20.	Level 1 Discussion Threading as a Function of Feedback Condition.....	71
21.	Level 1 Discussion Threading with Student Participation Taken into Consideration as a Function of Feedback Condition.....	71
22.	Level 1 Discussion Threading with Student Participation Taken into Consideration as a Function of Feedback Condition.....	72
23.	Overall Occurrence of Level 2 Discussion Threading by Week, Course, and as a Function of Feedback Condition.....	73
24.	Level 2 Discussion Threads as a Function of Feedback Condition.....	73
25.	Overall Occurrence of Level 2 Discussion Threading with Student Participation Taken into Consideration by Week, Course, and as a Function of Feedback Condition.....	75
26.	Level 2 Discussion Threading with Student Participation Taken into Consideration as a Function of Feedback Condition.....	75
27.	Level 2 Discussion Threading Posts by Week, Course, and as a Function of Feedback Condition.....	77
28.	Level 2 Discussion Threading Posts as a Function of Feedback Condition.....	77
29.	Level 2 Discussion Threading Posts with Student Participation Taken into Consideration by Week, Course, and as a Function of Feedback Condition.....	79
30.	Level 2 Discussion Threading Posts with Student Participation Taken into Consideration as a Function of Feedback Condition.....	79

LIST OF FIGURES

1.	The Number of EVP Posts per Week as a Function of Feedback Condition.....	55
2.	Educationally Less Valuable Posts by Week as a Function of Feedback Condition.....	58
3.	Overall Quality of Posts Over Time as a Function of Feedback Condition....	61
4.	Averages of Overall Post Quality: NVF vs. VF Courses.....	62
5.	Overall Quality of Posts Over Time as a Function of Feedback Condition and Student Participation.....	64
6.	Averages of Overall Post Quality: NVF vs. VF Courses.....	64
7.	Speak Threading Totals: NVF vs. VF Courses.....	67
8.	Average of Speak Threading Totals: NVF vs. VF Courses.....	68
9.	Level 2 Discussion Threading Totals: NVF vs. VF Courses.....	74
10.	Level 2 Discussion Threading Totals with Student Participation Taken into Consideration: NVF vs. VF Courses.....	76
11.	Level 2 Discussion Threading Posts Totals: NVF vs. VF Courses.....	78
12.	Level 2 Discussion Threading Posts Totals with Student Participation Taken into Consideration: NVF vs. VF Courses.....	80
13.	Average of Level 2 Discussion Threading Posts Totals with Student Participation Taken into Consideration: NVF vs. VF Courses.....	80

CHAPTER I

INTRODUCTION

Online learning, a relatively new method of education that requires students and instructors to interact via computer, has enjoyed a rise in popularity over the recent years. Between 2002 and 2010, the number of students registering for online degree programs grew by 18.2% (Conchar, Meric, & Wright, 2015). A subsequent report, issued in 2013, claimed that roughly 6.7 million individuals, representing 32 percent of the total student population, were taking at least one online course (Allen & Seaman, 2013). The relatively rapid expansion of online learning can be traced to many things, but four factors stand above the rest:

1. The information revolution
2. Competitive forces in higher education
3. Changes in student lifestyles, and
4. The rising educational needs of all students regardless of nationality, geographic location, and personal circumstance (Taft, Perkowski, & Martin, 2011).

In response, many academic institutions are making determined efforts to develop online education programs (Putman, Ford, & Tancock, 2012). Some have done this to address revenue challenges and/or funding cuts (Borup, Graham, & Valasquez, 2011; Taft et al., 2011), while others have focused on attracting students who, due to time and/or distance constraints, would otherwise have been unavailable (Uzuner, 2001). In adapting various online learning strategies, many educators have been quick to acknowledge the benefits of such technologies, even going so far as to consider them a panacea. Unfortunately,

once the technologies are up-and running, it is difficult not to acknowledge some very real problems that plague today's online learning (Thompson & Lee, 2012).

One key problem with online learning is the fact that many fundamental elements of traditional, face-to-face education are absent. Granted, some may consider this an unintended benefit of online learning, for face-to-face education is not, nor has it ever been, a perfect system. When classifying the lack of face-to-face elements however, this study is considering the ideal face-to-face environment, one in which a caring human being is on-hand to render timely and beneficial assistance to a manageable number of students who are eager to learn.

The fundamental elements of an ideal face-to-face environment that are often absent from online learning include behaviors such as eye-contact, body language, and vocal tone. Of these missing elements, feedback is often among the most critical. Feedback is a strategy used to promote learning between an instructor and his or her students, or between the students themselves (Rowe, 2011; Wolsey, 2008). Feedback helps instructors identify items that are correct about a student's work, as well as items that may need a little – or a lot – more attention. By facilitating the identification of errors, as well as the confirmation of correct responses, feedback enables students to appreciate the degree to which they understand the course material (Kulhavy, 1977). Those who receive such guidance, are then more likely to reexamine their work and correct their mistakes (Bangert-Drowns, Kulik, Kulik, & Morgan, 1991). Unfortunately, the concept of feedback has not enjoyed an ideal transition into the world of online learning. While it is indeed possible to guide students via online feedback (Sorensen, 2015), basic online feedback lacks the vocal tone, speech volume, body language, and

facial expressions of its face-to-face counterpart. Some feedback techniques can be translated into online versions of the in-person strategies; these include informal discussions, questions asked and answered while an assignment is being described, and office hours, but even these techniques can be subject to extended turnaround times that can inhibit their overall effectiveness (Getzlaf, Perry, Toffner, Lemarche, & Edwards, 2009; Ladyshevsky, 2013; Liebold & Schwarz, 2015). Since feedback has been widely acknowledged as a critical part of the learning process, the difficulty of replicating the face-to-face exchanges in traditional learning poses a formidable challenge to the success of online coursework.

One attempt to recreate traditional classroom dialogue has been the online discussion board. The discussion begins when an instructor posts a topic in the appropriate unit of his or her online course shell. Typically, the instructor writes the initial post as a question. Students are then expected to add their responses based on what they have learned about the topic(s) of interest. A successful online discussion board provides students with opportunities to interact, reflect, exchange ideas, and expand their knowledge base (Aragon, 2003; Craig, 2013). Studies have suggested that students may be more willing to ask questions, and participate in online coursework through online discussions (Croxtton, 2014). One key characteristic that has made discussion boards a prominent feature in many online classes is the opportunity they provide for instructors and participants to send ongoing feedback to one another when commenting on each other's posts (Bliss & Lawrence, 2009b, Nagel, Blignaut, & Cronjé, 2009). Since online discussion boards have shown themselves to be one of the more successful strategies for replicating face-to-face classroom behavior in an online

environment, it was decided to make this specific tool the focus of the current dissertation study.

Despite their many benefits, online discussion boards are far from perfect. Indeed, there a number of reasons why the asynchronous conversations can, and often do, proceed in a series of fits and starts. First and foremost is the persistent lack of visual or verbal cues. In a face-to-face conversation, these cues enable people to judge when it is time to talk, and when it is time to listen. Without these cues, certain questions in an online discussion board can go unanswered, while others may receive simultaneous answers that unintentionally pull the conversation in different directions. Another issue with online discussion boards is the asynchronous format. To accommodate the often diverse schedules of online students, the majority of discussion boards are designed to be asynchronous, meaning that participants can come and go as their schedules permit. Consequentially, it is uncommon for any single individual to be present for the entire conversation. Indeed, some students may become uninterested in the discussion and only check-in long enough to earn participation credit. Regardless, most students tend to drop-out of the discussion once they have met the teacher's requirements. In doing so however, they never really get to see how things end. This could be one reason why online instructors rarely wrap-up their online discussions. Unfortunately, when there is no closure to online discussion boards, students can be left with unresolved issues.

The online discussion board is not the only strategy that has been used to recreate a face-to-face environment in an online class. Some instructors have succeeded in adding both vocal and facial features to their online courses with the help of video technology. Griffiths and Graham (2010) have studied the integration of asynchronous video in online

student assignments. They, along with Borup et al. (2011), have investigated whether video techniques can be used to provide online students with instructor feedback. As distance meeting technologies such as FaceTime, VoiceThread, Google Hangout, Big Blue Button, and GoToMeeting become more mainstream, there is increased opportunity for video savvy instructors to provide meaningful, rich, closure to their online discussion boards.

This dissertation paper reports on a study that combined the ideas presented hitherto. Essentially, instructor feedback was provided to classes of online students that participated in discussion forums. This feedback was provided via video technology at the close of asynchronous discussion board assignments. The primary objective of the work was to determine if such an intervention could encourage online students to enhance the educational value of their contributions during subsequent discussion board activities. A secondary objective was to design an effective video feedback strategy that could be successfully managed by busy online instructors.

These two objectives are important, for despite the fact that online learning is not necessarily a new field, it is fair to say that it is in a state of open-ended development. Ongoing studies are still attempting to determine the best strategies for effective online learning practices. Any information that can lead to an enhancement of the current methods stands to benefit students and instructors who participate in the growing environment of online learning.

During the course of this report, a number of unique acronyms will be used to convey information quickly and efficiently. To avoid confusing the reader, each acronym will be defined twice:

1. The first time the acronym is used
2. In Appendix A.

Problem Statement

Interactivity is a key to learner success; the more interactive an instructor is with his or her students, the more effective the learning experience is likely to be (Kanuka & Garrison, 2004). The rise of online learning has been particularly challenging in this regard, for instructors have been confronted with finding ways to successfully interact with students whom they will likely never meet in-person. To say the least, it can be difficult for an online instructor to faithfully recreate the subtle face-to-face exchanges between students and teachers that often occur in traditional classroom settings (Dolan, 2014). Video technology however, may afford online instructors a means of providing their students with rich interactive feedback (Borup et al., 2011). By capturing facial features and vocal tones, video can enable online instructors to portray themselves as real flesh and blood people to their distance learning students. Students have been known to appreciate such outreach efforts, often awarding video savvy professors higher scores on post-class surveys (Borup, West, Thomas, & Graham, 2014).

Despite these advantages, one must be careful before suggesting that video technology is a win-win proposition. While online students may or may not enjoy seeing and hearing their instructor on their computers, some studies have intimated that such experiences might not actually inspire students to produce work of a higher academic quality. Indeed, online videos may only succeed in elevating students' personal opinion(s) of their instructor, thus suggesting that the higher scores on the post-class surveys are more emotionally based than educationally grounded. Therefore, this

dissertation study investigates whether video technology can be employed as a truly viable feedback option in today's online learning environment.

Context

The setting for this study was the School of Communication & Information's Professional Development Studies (SC&I-PDS), which is a part of Rutgers, The State University of New Jersey. SC&I-PDS has developed a non-credit online certificate program. This program consists of a fully-online series of classes designed for working professionals. Students typically fall into two categories:

1. Beginning professionals trying to advance their careers, and
2. Seasoned professionals attempting a career transition.

Those who take these classes have not formally matriculated, thus they are not officially students of Rutgers University.

Three characteristics of SC&I-PDS's Online Certificate Program made it an interesting focal point for this kind of research. First, the program's online instructors were required to provide their students with asynchronous video lectures. To accomplish this, all instructors were issued active Panopto accounts by Rutgers University. Panopto is a recording software that can be used to film videos; these videos can then be uploaded to a Learning Management System (LMS). Due to this provision, SC&I-PDS's online instructors already possessed the skills and tools necessary to make and distribute video recordings. Second, none of the non-matriculated students received grades for the SC&I-PDS classes. Instead, they were awarded marks signifying excellent (E), satisfactory (S), or unsatisfactory (U) performance. In lieu of traditional grades, feedback was the only tangible indicator of how well, or poorly, they performed. Consequently, instructor

feedback was arguably more important for these students than most others. Finally, all classes in the Online Certificate Program used the asynchronous discussion board as a learning tool. This feature made it possible to obtain comparable data across a variety of online classes.

Purpose of the Study

Asynchronous online classes have enabled students to learn at a time and place of their own convenience. As a result, students who may have wished to take a face-to-face class, and were unable to do so, are now being presented with realistic alternatives. The reality of more people registering for more classes has provided academic institutions with opportunities of generating additional streams of revenue. In response, many of these institutions have been working to develop online learning opportunities for prospective students. To attract and retain such students, institutions need to make the online learning experience as beneficial as possible for all involved. Identifying practical strategies to help instructors provide quality feedback is one viable option for doing this. The feedback should be designed to enable learners, wherever they are, whenever they are, to be able to modify their thinking or behavior in a manner that will improve their learning (Shute, 2008). Video technology, employed in online discussion board assignments, could conceivably accomplish this.

Video technology has already been used by some online instructors to engage their students (Borup et al., 2014; Griffiths & Graham, 2010). New technologies, including Big Blue Button and VoiceThread, have been successfully employed to bring disparate students together in synchronous “meetings” via evolving video technology. Nonetheless, the many possibilities and potential problems of video have yet to be fully

explored in the full spectrum of online learning environments. In their research work for example, Griffiths and Graham (2010) noted some issues their instructor, and his students, encountered with online videos. For example, the instructor reported that there was a fair amount of extra work involved in the initial design and set-up of the online class, and while he was able to make accommodations to his schedule, he recognized that such flexibility might not be possible with other instructors. A comment from his student ratings system indicated that: “Some of them [video assignments] took a very long time to complete” (Griffiths & Graham, 2010, p. 10). Another student commented that “the main reason this class is hard to take online is because of the many technical difficulties I and others experienced” (Griffiths & Graham, 2010, p. 10). These comments highlight a fundamental concern for the present study: If instructors are unable to reliably prepare, produce, and distribute clear, meaningful, video feedback, in a timely manner that can be easily accessed by their students, then the resulting feedback may not be worth the time and effort it takes to produce.

Bringing together all of these disparate threads, the purpose of this study was twofold. Part one sought to investigate:

- Whether meaningful feedback, provided via video by instructors at the conclusion of online discussion boards, could be designed to improve the quality of students’ subsequent online postings, and
- Whether said feedback would have a positive effect on students’ perception of the specific online learning experience.

Part two focused on developing a strategy that enabled online instructors to develop and provide quality video feedback to their online discussion board participants.

Research. This study was designed to explore the following questions:

1. Can video feedback help online students improve the academic quality of their discussion board postings?
2. Is it possible to design a strategy that will enable online instructors and students to overcome the potential problems that may be linked to video feedback?

CHAPTER II

LITERATURE REVIEW

The challenge of providing effective feedback in an online learning environment has been addressed by many peer reviewed journal articles. Indeed, several aspects of feedback have been explored, explained, and discussed at length. This current review will focus on four topics in particular. While these topics have been introduced to some extent in Chapter I, the purpose of this literature review is to offer a more detailed and nuanced picture of how video feedback might be used to motivate students who are participating in online discussion boards.

The four feedback topics of interest are:

1. General overview of feedback
2. Suggestions of how video can be used to benefit online classes
3. Possible problems with current video technologies, and
4. Potential strategies for creating and implementing effective video feedback.

A General Overview of Feedback

Feedback, as noted previously in this report, is a critical component of effective student-teacher communication. Nicol and Macfarlane-Dick (2006) broadly define feedback as anything that might strengthen students' capacity to self-regulate their own performance. More precisely, they suggest that effective feedback should clarify a good performance, deliver information to students about their learning, and encourage positive motivational beliefs. By incorporating meaningful exchanges between learners, peers, and educators, feedback often plays a critical role in the learning process (Phillips, 2005;

Rowe, 2011). Instructor-generated feedback not only increases the chances that students will learn, but homework accompanied with feedback can be more effective than homework alone (Hattie & Jaeger, 1998). When informative feedback is available, students can use the information to help understand if their work is correct, incorrect, or somewhere in-between. On the other hand, instructors can use feedback as a guide to steer students' learning towards study behaviors that are appropriate for the subject matter of interest (Denton, Madden, Roberts, & Rowe, 2008; Eom, Wen, & Ashill, 2006; Parikh, McReelis, & Hodges, 2001).

As there are many types of subject matter, and many types of students, it follows that there will be, and should be, many kinds of feedback. In her research, Shute (2008) has identified a number of different feedback strategies. Simply judging the correctness, or incorrectness, of an answer would constitute verification feedback. On the other hand, if one were to advise students about what has to be fixed or revised in existing work, one would use directive feedback. Providing comments and suggestions to students who are in the process of revising and/or conceptualizing their work would be an example of facilitative feedback. Sharing information that enables students to modify their thinking, adjust their behavior, and improve their learning, would illustrate the concept of formative feedback.

While carefully defining the different variations of feedback, Shute also postulated that if one were to simply ask what feedback worked, or what feedback would not work, there could be no simple answer. Indeed, no feedback is perfect, and all feedback will be subject to limitations. An online instructor can take certain steps to make his or her feedback more meaningful; for example, the instructor could take a little

extra time to customize the message before sending it along to a student. An instructor might also try to discourage students from misinterpreting specific feedback as terse or critical by including a positive element in their message (Edwards, 2005). Bangert-Drowns et al. (1991) noted that simply advising a student that his or her answer is “correct”, or “incorrect” can be helpful. However, feedback can be more helpful if it is used to guide students towards the correct answer. While keeping all of this in mind, instructors must be careful to avoid providing feedback that is too elaborate. Williams (1997) has suggested that students may not understand exactly what an instructor wants if the proffered feedback is too elaborate. In such instances, students typically focus on trying to provide something that they think their instructor would like to see, rather than attempting to clarify their own thoughts.

While good feedback can help improve learning processes and outcomes for students, studies also indicate that it can do these things only if it is delivered in an appropriate manner. A report by Shute (2008) advises instructors to give students opportunities to develop their own solution(s) before chiming-in with any advice. When instructors do reach-out to students, the feedback they provide must be simple and focused so that it can enable learners to meet expectations as well as sustain their motivation to learn (Stein, Wanstreet, Slagle, Trinko, & Lutz, 2013). If it is necessary for instructors to provide lengthy and/or complicated information, then they should divide the resulting feedback into manageable sections that will not overwhelm the students. If there is a risk that students might feel overwhelmed, the instructor can consider encouraging students with some supportive feedback, or advise students of the progress they have already made via goal-directed feedback. Getzlar et al. (2009) recommends

that instructors should compose their feedback so that it comes across as positive and constructive information that can help students identify gaps in their knowledge, and guide the way for students' future learning. While instructors should seek to offer praise where praise is merited, this should be done selectively. Too much praise can distract students from the corrections that might still be needed, and the work that may yet have to be done. In focusing on the coursework, instructor feedback should endeavor to address specific features of the work, and how those features can be improved. When providing feedback, online instructors might also consider methods of enhancing their connection with distant learners (Steinweg et al, 2006) by using students' names, and mentioning something specific about their work. It is also critical for instructors to never present feedback in a manner that could discourage learners or threaten their self-esteem. While negative feedback should not be ignored, it is best to provide such feedback in an encouraging manner that attempts to support, rather than humiliate, the students (Getzlaf et al., 2009).

The current evolution in online learning has not come without its share of growing pains. This is perhaps most evident when one considers that the number of available online instructors has not always kept pace with the increasing number of online students. Some academicians have expressed concerns about the effects that high enrollments could be having on the overall quality of online education (Sorensen, 2015). While learning institutions may be tempted by the ostensibly limitless space of the online classroom, large enrollments can affect both the quality, and quantity of an instructor's feedback. Thus, these large enrollments can also affect the quality of each students' learning experience (Sorensen, 2014). Indeed, instructors who have been tasked with

teaching increasing class sizes can struggle to balance the quality and timeliness of their feedback (Steinweg, Williams, & Warren, 2006).

The balance between quality and timeliness is an issue of specific concern, particularly since Bangert-Drowns et al. (1991) determined that timing, in and of itself, can spoil or enhance even the best feedback. Data have shown that learning increases when students are provided with immediate feedback for immediate feedback allows students to know the answers instantly, as opposed to trying to recall or look-up questionable details at a later date (Peck, Werner & Raleigh, 2013). Phillips (2005) advised that online students can become impatient if expected feedback is delayed more than 24 hours after their work has been submitted. Getzlaf et al. (2009) concur, advising that modern online students consider 24 hours to be a sufficient interval for prompt feedback. In order to meet such a deadline for every assignment in every class, Johnston, Killion, and Oomen (2005) suggested that online instructors set aside ample time to provide timely feedback that is also meaningful, extensive, and personal. As online class sizes continue to grow however, it can become progressively challenging for instructors to meet a 24-hour deadline. Leibold and Schwartz (2015) have even suggested that a turnaround time of 72-hours may be more appropriate for discussion feedback, while anything under one week should be sufficient for longer assignments like papers or projects.

Taking another look at timing from the students' perspective, Leibold and Schwartz (2015) caution that students can become frustrated, even demotivated, when they believe that feedback has been unduly delayed. Vrasidas and McIsaac (1999) agreed that delayed feedback could not only discourage online students, but that it could also

stifle contributions to online discussions. This, in and of itself, would argue for prompt feedback, particularly with respect to the present study, but there are other reasons to consider the timeliness of online feedback. Prompt feedback enables students to grasp specific information while the original lessons remain fresh in their minds. On the other hand, delayed feedback might reach students after they have already transitioned to other topics. Whether or not the information contained within the feedback is important might be irrelevant, for if students decide that it is no longer needed, it will likely remain unread. Granted, there are some reasons why instructors may choose to delay feedback. For example, if a particularly difficult assignment has left students too fatigued or frustrated, they may be disinclined to give the instructor's feedback the attention it deserves (Kulhavy & Anderson, 1972). In the end, it is always best to adjust the feedback to the particular needs of the class.

Benefits of Online Video

Feedback. Rich and rapid feedback has long been considered a best teaching practice. Just how to provide such feedback in an online environment is a relatively recent problem, one that has not been easy to solve (Bonnell & Boehm, 2011). Those faced with this situation have advised: "you have to have excellent communication with [the students], and you have to demonstrate that you're willing to communicate with them and that you care about them when you're sending emails back and forth, and you have to be careful with your wording so that they don't take anything the wrong way" (Bailey & Card, 2009, p. 154). Even with such precautions firmly in-place, critics of online learning continue to advise that, because such courses lack the face-to-face interactivity that may be found in an ideal version of face-to-face learning environments,

online courses fall short (Marks, Sibley, & Arbaugh, 2005). Bonnel and Boehm (2011) have suggested that technology might be used to help bridge this gap. Digging deeper, Michael H. Way (2009) identified video as a powerful medium that can be used to hold an audience's attention while conveying information in a relatively timely manner. Further, Delen, Liew, and Willson (2014) concluded that video could be used to enhance learning by making the learning environment more interactive. An instructor can use video technology to add nuance to his or her feedback by capturing the vocal intonations and facial expressions so critical to human interaction. Though small, such details can communicate information that would not be possible via the written word. Another benefit of video technology is that it can accommodate the flexibility that has made the asynchronous online configuration so appealing to so many. Instructors can record their videos, and students can watch these videos at times and places that are convenient for each (Griffiths & Graham, 2009a).

Studies of survey data have suggested that students have been known to rate their online courses more favorably than their face-to-face counterparts. Griffiths and Graham (2009b) observed that online instructors, including those who provided students with video feedback, often received the highest ratings. When surveyed, students not only indicated that they were satisfied with the online learning, but that their knowledge scores had also increased significantly during the online experience (Wiecha, Gramling, Joachim, & Vanderschmidt, 2003). This may be due, in part, to asynchronous video communications that enabled students to experience feelings of social presence and instructor immediacy. These feelings, in turn, helped students decide that they had

received more individual contact, and had thus formed a more personal relationship with the online instructor whose videos they had watched.

McCarthy (2015) studied the responsiveness of 77 higher education students to written, audio, and video feedback in order to better understand the advantages and disadvantages of each strategy. His results showed that, of the three strategies, students preferred video feedback. Interviews with students and faculty suggested that video feedback was engaging and dynamic, that it seemed more personal than written feedback, and that the available vocal tone and emphasis helped improve their understanding of the feedback message(s). Despite these advantages, the study also recognized some of the limitations of video feedback. In addition to noting the additional time it took to record video feedback, instructors commented that producing video files increased their existing workloads.

Borup et al. (2014) researched students' perception of video feedback in courses that had integrated video technology. All participants were given the same assignment, and then divided into two separate groups: A control group that received text feedback, and a treatment group that received video feedback. Surveys and interviews were used to collect data from students as well as instructors. The results suggested that video technology did add authenticity to the course communications. Students reported that it was easier for them to recognize the instructor's emotions when they could see his/her facial expressions and body language. This additional information helped them put the feedback into its proper context. Students also reported that the video feedback seemed more conversational than lines of written text. Another feature that helped students appreciate the video feedback was the fact that the instructor referred to students by

name. This detail enabled the students in the treatment group to enjoy a feeling of social presence in the online class (Borup et al., 2014), thereby suggesting that one of the benefits of video technology is the personal bond that can arise between instructors and students (Parton, Crain-Dorough, & Hancock, 2010).

During a subsequent study of 71 students enrolled in three one-credit educational technology courses, Borup, West, and Thomas (2015) were able to ascertain some of the more challenging aspects of video feedback. It must be noted that the classes in this study were not 100% online, as there was some face-to-face instruction. Students in this study indicated that feedback delivered via written text was easier to access, easier to view, and often more concisely edited. Additionally, their instructors admitted preferring written text over video feedback, advising that it was not only more convenient and efficient, but that it was also easier to edit. Nevertheless, the students did admit that the feedback provided via video felt more supportive than the text feedback due to the visibility of the instructors' facial expressions and emotional manners. Further, the video and vocal cues helped reduce the possibility of misunderstanding, and allowed for more detailed explanations of difficult concepts or complicated processes. One instructor commented: "I could describe it better because I could just say it." (Borup et. al., 2015, p. 178). Other instructors added that the visual and vocal cues helped students understand that they weren't trying to be antagonistic, but offer constructive criticism, and that the tone of voice carried to students via video enabled them to ensure that there weren't any misconceptions with what was being said. Despite their occasional face-to-face interactions, both students and instructors in this study reported that video feedback tended to be more conversational, supportive, and fully developed.

Discussion Board. Northover (2002) describes the online discussion board as a form of communication that generates a clear archive of questions, answers, and information equally available to all class participants. Using a discussion board in their online class enables instructors to select the content of the conversation(s). If one or more conversations begin to deviate from the chosen topic, the instructor can re-focus those conversations, guiding them back to the primary thread. Online instructors have used discussion boards to initiate and sustain virtual conversations between students and themselves; some instructors have gone so far as to develop their entire online course around virtual discussions (Bailey & Card, 2009). Despite the popularity of this technique however, relatively little research has been done to compare the effectiveness of discussion boards within and between courses (Bliss & Lawrence, 2009a). An exception to this would be the research conducted by Uzuner (2007). In her work, Uzuner developed an educational value strategy that she then used to evaluate discussion boards. Student posts were classified as either educationally valuable talk, or educationally less valuable talk. Educationally valuable posts, or EVP's, are identified as constructive and critical engagement with ideas and key concepts. Eleven characteristics are used to identify EVPs, these are described in the table below:

Table 1

Educationally Valuable Posts (EVP)

Characteristic	Definition	Example
Analytical	<ul style="list-style-type: none"> Interpretation of content through the analysis, synthesis, and evaluation of others' understanding 	<ul style="list-style-type: none"> The original question was XXX, Jacob said YYY, Nolan said ZZZ, as for me, I say, ***

Argumentational	<ul style="list-style-type: none"> Suggesting a line of reasoning to incite discussion 	<ul style="list-style-type: none"> This topic is important because _____
Critical	<ul style="list-style-type: none"> Playing devil's advocate Challenging the statements or ideas of others 	<ul style="list-style-type: none"> I agree with you in theory, but _____
Explanatory	<ul style="list-style-type: none"> A chain of connected posts that are intended to clarify. Statements used to elaborate on ideas suggested in previous posts. 	<ul style="list-style-type: none"> I'd like to build on your comment that _____
Exploratory	<ul style="list-style-type: none"> Recognition of confusion, curiosity, or perplexity in response to an issue or problem encountered during an experience or the assigned class readings. Posing a problem and inviting others to delve deeper into it. 	<ul style="list-style-type: none"> It wasn't clear to me what the author meant when he said _____. Instead of solving the problem for me, the author raised a few questions in my mind...
Heuristic	<ul style="list-style-type: none"> Expressing an "ah-ha" discovery moment. Advising others of a newly discovered idea. 	<ul style="list-style-type: none"> I never realized _____ before, have any of you?
Implicative	<ul style="list-style-type: none"> An assertion calling for action. Statements in which students formulate a proposal and/or decision about how to reach an objective based on insights obtained via the class readings or discussions. 	<ul style="list-style-type: none"> These individuals really should be _____
Informative	<ul style="list-style-type: none"> Providing information from the literature and tying it to course content and/or a topic of discussion 	<ul style="list-style-type: none"> I once read an article about _____. Here is a link, if you're interested: _____
Interpretive	<ul style="list-style-type: none"> Interpreting formal content through opinions that are supported by applicable examples, facts, and evidence. 	<ul style="list-style-type: none"> Michael said _____ about the discussion topic, but after thinking about it, I feel _____
Invitational	<ul style="list-style-type: none"> Inviting others to think collaboratively and engage by asking questions, requesting information, calling for an opinion, or soliciting for approval. 	<ul style="list-style-type: none"> Luke said this, but I'm curious what you think. Do you think this is what the author really meant?

Reflective	<ul style="list-style-type: none"> Analyzing past events, practices or understandings with regard to formal content 	<ul style="list-style-type: none"> I didn't use to _____, but after this week's readings I now do _____.
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Educationally Less Valuable Posts, or ELVP's, are identified by a lack of substance and meaningful engagement. Five characteristics are used to identify ELVP's; these are described in the table below:

Table 2

Educationally Less Valuable Posts (ELVP)

Characteristic	Definition	Example
Affective	<ul style="list-style-type: none"> Short posts that only contain a statement of personal feeling. Short posts that only offer praise or thanks. Questions that do not contribute any new information. 	<ul style="list-style-type: none"> I like this topic. Thanks Ben. Why am I not surprised?
Experiential	<ul style="list-style-type: none"> Personal experiences, narratives, and/or descriptions without any reflection. 	<ul style="list-style-type: none"> When I was growing up I did the same thing
Judgmental	<ul style="list-style-type: none"> Short statements without any elaboration. Short disagreements without any elaboration. 	<ul style="list-style-type: none"> That's so cool. No.
Miscellaneous	<ul style="list-style-type: none"> Off-topic opinions. Statements about technical issues or course logistics. 	<ul style="list-style-type: none"> My boss's girlfriend was happy that the Mets won last night. I can't open the article we have to read for next week.
Reproductional	<ul style="list-style-type: none"> Repeating ideas raised earlier without further elaboration 	<ul style="list-style-type: none"> So, you say X is better than Y.

Additional research has suggested that student participation, the quantity of student posts, and the extent of threading, have all been positively correlated with

instructor presence and feedback. It has even been suggested by Rollag (2010) that feedback provided to discussion board participants could help anchor and adjust the guideline for group postings. This, in turn, can help improved the efficiency and effectiveness of subsequent online discussions.

Swan (2001) studied the popularity of asynchronous discussion boards by conducting interviews with students. Many positive comments were made during this study, including the following:

- “In a traditional setting, students usually don’t get to participate as much, but in this class I felt like I took a much more active role in my learning.” (Swan, 2001, p. 314)
- “Being able to reflect before responding and being able to look forward and backward in a discussion was very beneficial.” (Swan, 2001, p. 315)
- “Students who normally would not participate in class did, people who would normally dominate class discussions couldn’t”. (Swan, 2001, p. 315)

Further insight has been provided by the work of Pena-Shaff, Altman, and Stephenson (2005). As most discussion board assignments extend over a multi-day period, their research noted that students believed this gave them extra time to prepare comments as well as evaluate what others had written. Students in their study also self-reported an increase in their class-related knowledge following active participation in an online discussion board. Altogether, online discussion boards not only help level the playing field by giving all students a relatively equal opportunity to contribute their comments and responses to the conversation, they also leave a written record of the conversation

that can be accessed and reviewed by both the students and instructor (Griffiths & Graham, 2010).

Before presuming that an online discussion board is more than it truly is, one should endeavor to take a deeper dive in to the relevant literature. With this, some concerning issues do come to light. The biggest and perhaps most frustrating challenge for educational faculty is the time it takes to design, administer, and grade an educationally useful discussion board. Even those who experience and follow the latest best-practice techniques will require more time to set-up, facilitate, wrap-up, and assess an asynchronous discussion board than they would a comparable face-to-face conversation (Rollag, 2007), particularly if that conversation occurs under ideal circumstances. Despite this disadvantage, instructors who do commit to an online discussion board have also been known to overdo it. While studying online discussion boards, Rovai (2007) advised that when instructors are establishing their online social presence, they must avoid the temptation to become the center of all discussions. Additionally, Rovai advised instructors to avoid letting the discussion forum mutate into a question and answer session wherein the students were posing all of the questions, while the instructor was supplying all of the answers.

Discussion board issues do not rest solely with the instructors however. For all the benefits this method provides to students, there are some drawbacks. Rovai (2007) observed that for some, posting a question, comment, or thought can feel like writing a message, placing the message in a bottle, and dropping that bottle into the sea without any assurance that they will ever hear back from anyone. Others, who have noted the absence of immediate feedback, have equated the experience to speaking into a vacuum

(Hew & Cheung, 2014). Alternatively, some students, who may feel that they are being forced to participate, resist this obligation by doing the minimum amount of work required. If one student does the minimum, the overall discussion board may still function; however if a number of students decide to do as little as possible, the resulting dialogue might not be a viable learning experience.

Potential Problems with Current Video Technology

Students. While contemporary research has focused mainly on the strengths of online learning, it has also uncovered a number of potential problems, particularly where students are concerned. The relatively recent growth of computer technology has led some to presume that today's students enjoy a uniformly high level of computer self-efficacy, particularly compared to the students of previous generations. Indeed, studies have suggested the existence of a relationship between self-efficacy and academic performance (Pellas, 2014). When interviewed about their experiences with online videos however, some students suggested to Thompson and Lee (2012) that they were not as computer savvy as initially presumed. Comments included the following:

- “I liked the videos but they were really hard to get them to work.” (Thompson & Lee, 2012, p. 18)
- “If I got a comment back it may have not opened because I tried to open some of the comments you left, but they would not open for me.” (Thompson & Lee, 2012, p. 18)

Prevailing assumptions about high levels of computer self-efficacy in today's students however, combined with the race to remain one step ahead of the competition, can often

pressure decision makers to force-fit digital content into their classes. In the end, this rush to do something good, may actually risk doing more harm than good.

Studies have also suggested that, despite their level of computer literacy, students occasionally experience issues with video feedback. Some may get sidetracked by problems that can include distracting background activity, poor recording quality, and an instructor's nervous, on-camera behavior. While the basic intent of video feedback is to provide a personal interaction between the instructor and his or her students, it has also been noted that there is really "no dialogue, no interaction, no opportunity to ask questions and get an answer right away. No chance for probing deeper following-up with another question" (Mathieson, 2012, p. 149). While videos can convey the impression that one is participating in an authentic conversation, asynchronous video messages simply do not allow for spontaneous, two-way, discussions (Griffiths & Graham, 2009a). Furthermore, after giving video feedback a try, some students have suggested that verbal or textual feedback can still be advantageous. When pursuing this point during student interviews, Thompson and Lee (2012) recorded the following comments:

- "I'd rather have the comments written down so that I can quickly access the notes and not have to keep track of just where in the video a certain comment is."
(Thompson & Lee, 2012, p. 18)
- "Written feedback helps more because I get to see the description and review it again if I need to. It is more easier for me to see it written out than video."
(Thompson & Lee, 2012, p. 18)

Reading between the lines, one additional concern regarding the effectiveness of video feedback is that much of the information has been culled from surveys – often

anonymous surveys – that students completed at the end of their semester. While surveys can help reviewers gain some insight into students' emotional opinions about a particular topic, it is not always easy to link emotions to academic performance. Students may genuinely enjoy seeing and hearing their instructor, but determining if such appreciation actually encourages improved academic performance is something else entirely. Thus, the key question asked by Thompson and Lee (2012) must be kept in mind: Is video feedback more effective in improving student performance, or is this merely the students' perception that it does this simply because video feedback is something new and different?

Instructors. The decision to provide video feedback to online students should not be taken lightly. Before committing oneself to a video feedback strategy, Borup et al. (2014) advise instructors to carefully consider how they will appear on camera. Instructors should practice looking into the camera, and delivering their lines with inflection. The recording place should also be considered. If instructors are uncomfortable recording in a public area, such as a computer laboratory, then they will have to secure a private location. Even after the commitment to video is made, instructors should not forgo all written feedback. Rather, written feedback can be retained as a fallback option, one that can be used if instructors cannot record an effective video, or if technical problems disrupt the recording process.

Another issue that must be carefully considered by all online instructors is the time commitment required of online teaching. Studies have suggested that, when considered on a per-student basis, instructors spend more time working with an online class than with a comparable face-to-face class (Sorensen, 2015). Specifically, studies

have estimated that online teaching requires 14% more of an instructor's time than traditional classroom instruction; much of this can be attributed to the fact that online instructors are unable to interact directly with their students (Edwards, 2005; Nagel & Kotzé, 2010; Tomei, 2006). A study conducted by Mandernach, Hudson, and Wise (2013) estimated that, in an environment where faculty were expected to work 40 hours, online faculty averaged 44.19 hours, or 116% of what was expected. With regard to this, one participant commented: "I realize that my percentage estimates are over 100%. This is not an error in math, but rather a reflection of the realities of teaching online; I often spend time beyond my scheduled hours interacting in my course and preparing new material. As such, my estimates are calculated on a 40-hour work week with the overages reflecting the additional time I dedicate to my online work." (Mandernach, Hudson, & Wise, 2013, p. 12). This same study also observed that class size affects the time needed for online coursework; it takes more time per student to grade assignments, respond substantively to discussion questions, answer emails, take telephone calls, and provide quantitative as well as qualitative feedback, than meeting students face-to-face. Preparing, scripting, recording, editing, and distributing video feedback can add to the significant time commitment, particularly for instructors who are either new to the technology, or uncomfortable being filmed. Given this, it might be difficult for instructors, who are already spending a considerable amount of time teaching their classes, to justify spending additional time recording, producing, and distributing video feedback.

Strategies for Creating and Implementing Video Feedback

Timing. The time required to plan, record, and distribute video feedback has already been noted, as has the fact that the larger the class, the larger the time requirement. Complicating this issue is the importance of timing when providing feedback interventions to students (Coll, Rochera, & de Gispert, 2014). Specifically, reports suggest that students who receive immediate feedback often earn higher scores in fast-paced, online courses (Lemley, Sudweeks, Howell, Laws, & Sawyer, 2007). This observation is linked to the fact that immediate feedback can help motivate students when face-to-face contact is rare or nonexistent (Shute, 2008).

In order to help online instructors better manage their time, thus giving them an opportunity to accommodate video feedback, two strategies are suggested. First, instructors are advised to limit their feedback videos to five minutes or less. Not only will this help limit instructors' time in front of the camera, it will also force them to stay on topic. Videos of five minutes or less are also more likely to be watched, from start to finish, by students who tend to be juggling busy schedules as well. The second strategy suggests that, instead of providing individualized recordings for each student, instructors might consider recording one video for the class as a whole (Mathieson, 2012). While research has suggested that video feedback works best when each student receives personalized feedback, a knowledgeable instructor can employ techniques, like naming names and noting individual accomplishments, to recreate a "teacher at the head of the class" feeling.

Information. A criticism that some students have raised about online video feedback underscores one of the primary differences between the video and written

comments. Essentially, if a student has to find a particular piece of information, it is easier for some to simply skim a text document than watch, or fast-forward through a video. There are two strategies that online instructors might consider when addressing this issue. First, the feedback videos could be divided into chapters, possibly by inserting title slides at the appropriate transition points either during the recording, or in post-production. Second, the video feedback could either be closed captioned, or sent to students with a downloadable script that can be perused separately. While both of these strategies may address the issue of finding specific information quickly, they would undoubtedly require extra work from the already-busy online instructors.

Technical. A number of issues encountered by online instructors and students can be traced to technical problems. Song, Singleton, Hill, and Koh (2004), reported that online students often consider technical problems to be their biggest challenge to a successful online learning experience. According to Berg (1998), some of the more common technical problems encountered by online students may include, but are not limited to:

- Lack of system reliability
- Lack of connectivity and/or access
- Inadequate hardware
- Inadequate software
- Problems with the class set-up
- Inadequate infrastructure
- Inadequate technical support

Song et al. (2004) have recommended that, in addition to a hands-on workshop, students should be provided with overviews of all the tools that they will be expected to use for their online course. While instructors should not hold students accountable for institutional issues, online students should be advised to save all of their data in a secure manner, and to have a back-up plan ready in case their own system(s) fail.

Summary

Within the extensive number of peer reviewed sources covering feedback, online discussion boards, video, and implementation strategies, there are several themes common to all four topics. Online learning is an important technology. It is serving a demographic that would have difficulty attending classes in a traditional face-to-face manner. This flexibility is one reason why it has enjoyed the success that it has. However, online technology is far from perfect. It takes instructors longer to do everything necessary for a successful online class than for an ideal face-to-face class. As online classes continue to grow, there is a danger that the instructor-student interaction, vital for effective learning, will be adversely affected. One area where this is particularly evident is feedback. Busy instructors are less able to provide timely and effective feedback. Consequently, though many online instructors use asynchronous discussion boards as an alternative for live, in-class, discussions, the majority of instructor interactions occur as faceless, voiceless, bits of written text. Video feedback is one way to capture some of the missing elements such as vocal tone and facial expressions. However, like online learning, online video is also an imperfect technique; it is imperfect for a variety of reasons that include technical issues and the required time commitment.

Thus, the purpose of the current study was to investigate whether it is possible to realistically improve online class discussions with video feedback.

CHAPTER III

Method

This study investigated whether or not video feedback, provided at the conclusion of online discussion board assignments, helped improve student contributions during subsequent discussion board interactions. To accomplish this, the following items were observed and measured:

1. The quality of student contributions to four separate discussion board conversations per course,
2. The amount of threading that occurred during those online discussions,
3. Students' self-reported motivation with regard to the assignments, and
4. The ability of online instructors to consistently incorporate a quality video feedback strategy throughout the extent of their four-week course.

Embodied Conjecture for Video Feedback

Following the work of Sandoval (2004), an embodied conjecture was developed for this study. The result is presented in the following table:

Table 3

Embodied Conjecture

EMBODIMENT	INTERMEDIATE OUTCOME	INTERVENTION OUTCOME
VIDEO FEEDBACK	ENHANCED MOTIVATION	HIGHER NUMBER OF EDUCATIONALLY VALUABLE POSTS
CONSISTENCY OF APPEARANCE	INCREASED ENGAGEMENT	HIGHER LEVEL OF THREADED DISCUSSION
PERSONALIZATION	DEEPER UNDERSTANDING	VIDEO FEEDBACK STRATEGY BUSY INSTRUCTORS CAN ACCOMMODATE
BREVITY		
TIMELINESS		

The embodiment column on the left-hand side of the embodied conjecture lists four points that characterized the video feedback that online instructors were asked to provide to their students. Because Panopto had been used in all online SC&I-PDS courses for recording self-introductions and video lectures, every online instructor in this study was asked to use Panopto to create their feedback videos. This helped ensure that students were not distracted by videos that looked, or behaved, differently from other videos in the class. It also saved students who were less computer literate from having to figure out how to operate another online video technology.

Instructors were asked to record one feedback video at the conclusion of each discussion board in their four-week online course, for a total of four feedback videos per instructor, per course. To ensure a uniform approach among the different instructors, and across the different courses, a list of Best Practices for Online Discussion Board Feedback (Appendix B) was drafted. This list was distributed to all online instructors teaching SC&I-PDS classes during the course of the study. In addition, an interactive tutorial was designed and published in Pearson's Learning Studio/eCollege Learning Management System (Appendix C). Instructors selected to provide video feedback to their students were given access to this tutorial, which provided online information and examples for them to use to deepen their understanding of the current study. To help organize their thoughts, the interactive tutorial was divided into units which explained the separate features of the video feedback strategy. Instructors were invited to proceed as quickly, or slowly, through the tutorial according to their own needs. The tutorial concluded with an actual feedback video recorded by one of the participating instructors who took care to use all of the recommended strategies.

Once these initial materials were ready, attempts were made to randomize the SC&I-PDS instructors into VF (Video Feedback) and NVF (No Video Feedback) groups. Unfortunately, these attempts were less successful than anticipated. This was due to the fact that some online professors were reluctant to invest the additional time that would have been required to prepare and distribute the feedback videos. Therefore, the actual division was made according to instructor preferences. Those who wished to participate were allowed to do so; those who chose not to participate were not pressured to change their minds. Regardless of their involvement, all SC&I-PDS instructors who taught online between October, 2016 – March, 2017 received the list of Best Practices for Online Discussion Board Feedback. Additionally, real-time assistance was provided to all SC&I-PDS instructors who had feedback questions, or wished to discuss anything related to the current dissertation study. However, only the instructors who actually chose to provide video feedback to their online students were given access to the eCollege tutorial.

When preparing their feedback videos, the online instructors who participated in this study were asked to use the names of individual students in their videos. To clarify, the instructors were not required to name every student in each video, they were asked to mention roughly two to five students, by name, who had contributed a good example of an Educationally Valuable Post, or who had participated in Level 2 Discussion Threading. As identified by Bliss and Lawrence (2009a), Level 2 Discussion Threading occurs when a response is made to an initial discussion post, and then additional responses are made to the initial post as well as to the response(s). The naming of specific names by the instructors in their feedback videos was done to convey a personal

touch to the communication. It was also done in an effort to encourage students to pay closer attention to the feedback, for all humans are naturally drawn to the sound of their own name. With this, instructors attempted to:

1. Demonstrate that they were monitoring the discussion and reading the posts,
2. Reward deserving students with public praise, and
3. Help clarify the behavior that constituted effective, efficient, class participation (Rollag, 2010).

As noted previously in this report, the instructors were asked to limit their feedback videos to five minutes or less. This enforced brevity was intended to encourage busy instructors to continue making their recordings, and busy students to continue watching the feedback. Once a feedback recording was completed, instructors then had to make the feedback available to their students. Studies by Steinweg et al. (2006) suggested that email was students' preferred means of receiving feedback. Truskowski and VanderMolen (2017) also determined that video feedback could easily be shared with students by emailing a web link that could be viewed on computers, tablets, or cellular telephones. Therefore, the participating online instructors were advised to email their feedback videos to all students approximately 24 hours after the discussion board assignments were completed. This 24-hour turnaround provided students with timely, asynchronous feedback that they could watch at their convenience. To ensure that the students did view the video feedback, participating instructors were encouraged to ask a question that could only be answered by students who had actually watched the feedback.

For example, many instructors chose to hold-up one or more fingers while recording themselves. They then asked their students to identify that number via return email.

The middle column, or intermediate outcomes, lists four ideas about possible short-term results of the video feedback strategy. One benefit of video is that it can convey verbal and non-verbal communication signals, such as a smile or positive tone of voice, that can help motivate online students. When the video is provided asynchronously, encouraging signals can be delivered while simultaneously maintaining the flexible time and location advantages of distance education (Griffiths & Graham, 2009a). Well-balanced video feedback messages can also encourage higher levels of cognitive engagement by enabling the instructor to demonstrate that her or she is truly involved in the discussion (Zhu, 2006), and that students' efforts are being observed and appreciated. Visual evidence of instructor involvement helps students understand that they are being taught by a guide who is willing to lead them along the way so long as they do the necessary work. The vocal intonation and body language that can be shared via video also enable online instructors to clear misunderstandings, guide students' acquisition of new knowledge, and address teachable moments (Sorensen, 2015), which can foster a deeper understanding of the course material. Such feedback can also help build the strong student-instructor connection that is so critical for a successful online course (Boling, Hough, Krinsky, Saleem, & Stevens, 2012), and thus enhance the social presence of instructors who might otherwise remain out of sight, and thus out of mind.

To clarify the overall strategy: Discussion board posts from three different groups of students were studied to help determine if video feedback influenced the academic performance of students assigned to contribute to online discussion boards.

1. The first group of students received a feedback video from their professor at the conclusion of each of their class's four discussion board assignments. Prior to preparing the videos, the instructors received a list of Best Practices for Online Discussion Board Feedback; they were also given access to an eCollege tutorial that was designed to clarify how to create and distribute feedback videos for students participating in online discussion boards.
2. The instructors in the second group were neither told nor encouraged to send any feedback videos to their students, and they were not permitted to access the eCollege tutorial. However, they did receive the list of Best Practices for Online Discussion Board Feedback.
3. The instructors in the third group did not receive the list of Best Practices for Online Discussion Board Feedback, nor were they permitted to access to the eCollege tutorial. They did, however, teach the same online SC&I-PDS classes as the instructors in the first and second groups.

The differences between the three groups involved in this study can be found in the table below:

Table 4

The Three Types of Groups Observed in this Study

Group	Best Practice Memo (Appendix B)	Access to eCollege Tutorial (Appendix C)
One	X	X
Two	X	
Three		

Procedure

SC&I-PDS offers an ongoing selection of non-credit, certificate courses in Public Relations, Business & Organizational Communication, and Leadership & Managerial Communication (Appendix D). This study focused on fourteen classes taught between March, 2016 and March, 2017. Only five of these classes had been taught in previous years, the other nine were either brand new, or being taught for only the second time during the course of this research. Roughly two-thirds of the fourteen classes received a copy of the prepared memo: “Best Practices for Online Discussion Board Feedback”. This was sent via email from the Director of SC&I-PDS Professional Development Studies. In addition, instructors in the treatment group (Group One) were provided with access to the eCollege tutorial. Following these initial contacts, all instructors were free to ask questions, or request assistance in case any problems occurred.

Intervention Design

Facilitating and guiding an online conversation can be challenging. When the online discussion is scheduled over several days, the volume of posts can be greater than the average number of verbal exchanges that accumulate in a face-to-face class. As a result, online students often require some assistance to grasp the key takeaways of a completed discussion board (Rollag, 2010). Studies show that instructors who post towards the end, or at the conclusion, of online forums often score highly for both enthusiasm and expertise on university evaluation surveys (Mazzolini & Maddison, 2007). Given this, the instructors taking active roles in this research project were advised to provide a final feedback message for their students after their asynchronous discussion boards had closed. They were also asked to record themselves using the Panopto account

that had been provided by Rutgers University, and they were discouraged from making their feedback videos longer than five minutes. By accessing the eCollege tutorial prepared especially for this study, Instructors were coached on how to recognize Educationally Valuable Posts (EVPs), as well as examples of Discussion Threading. They were subsequently asked to highlight these items in their feedback videos. When recording their feedback, instructors were invited to mention two to five students, by name, who had succeeded in providing EVPs as well as participating in discussion threads. Once the videos were complete, they were sent via email to all students in the class. To ensure timely feedback, instructors were asked to respond within 24 hours of the close of the discussion board. In order to determine if the online students did indeed watch the feedback video, the instructors were encouraged to ask a question in their video that could only be correctly answered by students who had viewed the feedback.

Research Design

This was a quasi-experiment that followed a mixed methods approach. The basic hypothesis was that the provision of video feedback at the conclusion of an online discussion board would motivate students to contribute a higher number of EVP's, as well as participate in a greater degree of discussion threading during subsequent discussion board engagements. Discussion board video feedback was offered to classes from SC&I-PDS's Online Certificate Program. Between March, 2016 and March, 2017, eight classes elected not to use the video feedback strategy, while six classes did. Four of the fourteen classes did not receive the Best Practices for Online Discussion Board Feedback memo, while six of the remaining ten classes received both the memo and access to the eCollege course designed for this study. Only instructors from the

intervention group were encouraged to provide video feedback to their online students. The resulting discussion boards from all fourteen courses were subsequently analyzed to compare the posts from classes that included the intervention with those that did not. The independent variable was the type of feedback (i.e. video or non-video). The dependent variables were the number of educationally valuable posts made to the discussion boards, as well as the degree of discussion threading. A mediating variable was the video feedback provided by the online instructors; this was due to the fact that some videos were simply better than others. For example, some instructors encountered technical issues; some forgot to email the feedback until after the 24-hour deadline had passed; and some feedback improved after the instructors had recorded their second or third video. While reviewing each instructor's feedback video, every potential issue was carefully taken into consideration to help determine if video feedback could be considered a viable strategy for instructors of online courses.

Evaluating discussion boards. The educational value strategy, prepared by Uzuner (2007) is a carefully developed method for evaluating discussion board posts. Uzuner focused on creating a conceptual framework to better understand, measure, and improve the nature and quality of student posts in online discussions. She approached these objectives by first establishing criteria that could be used to analyze the content of student posts, and then ascertain their educational value. Uzuner uses the term “educationally valuable talk” to identify interactional patterns characterized by dialogic exchanges. In such exchanges, participants collaboratively display constructive, and at times critical, engagement with the ideas or key concepts that comprise the topic of an online discussion, thus building knowledge through reasoning, articulation, creativity,

and reflection. As noted in Chapter II, these educationally valuable posts, or EVP's, can be identified by 11 characteristics.

Uzuner's counterpoint to educational valuable talk is educationally less valuable talk. Educationally less valuable talk is characterized by a lack of substance with regard to the critical and meaningful engagement in an online discussion. Again, as previously noted in Chapter II, educationally less valuable posts, or ELVP's, can be identified by five characteristics.

In their work on online discussion, Bliss and Lawrence (2009a) suggested that strategies designed to compare the use of discussion boards within and between courses, at least from a disciplinary standpoint, had not been well documented. Given this, they sought to develop a multifactor metric to characterize the use of discussion boards in a data set consisting of 11,506 posts. Once the metric was prepared, they applied it to Mathematics courses taught in January, 2008, at the Center for Distance Learning at Empire State College. This work recognized that threading could be used to determine the level at which discussions had been generated in asynchronous, text-based, discussion boards. A lack of threading was synonymous with unanswered posts. Essentially, unanswered posts indicated that while participants may have been talking, they were not talking with each other. On the other hand, a threaded discussion exhibited not only replies to posts, but often replies to those replies. These distinctions are further elaborated in the table on page 43:

Table 5

Levels of Discussion Board Threading / The “Speak Style” Strategy

Conversational Style	Example
<u>Speak:</u> An original post to which there is no reply.	<i>Joe:</i> George Washington was a good leader.
<u>Level 1 Discussion Threading:</u> An original post that receives only one reply, or that receives several replies that are only one layer deep.	<i>Joe:</i> George Washington was a good leader. <i>Ted:</i> I agree, not only was he a good President, but also a good General.
<u>Level 2 Discussion Threading:</u> An original post that receives replies at least two layers deep.	<i>Joe:</i> George Washington was a good leader. <i>Ted:</i> I agree, not only was he a good President, but also a good General. <i>Mary:</i> He was a better President because there had been Generals before, but there had never been a U.S. President. <i>Joe:</i> He showed good leadership by giving up his power instead of establishing himself as an American King.

Sample. The samples for this study were drawn exclusively from the Online Certificate Program administered by Rutgers University’s School of Communication & Information Professional Development Studies (SC&I-PDS). SC&I-PDS has developed a total of 18 different online courses taught by 14 different online instructors (Appendix D). As noted earlier in this Chapter, five of these classes had been taught in previous years while the other nine were either brand new, or being taught for only the second time during the course of this research. While some instructors teach more than one course, all courses essentially exist independently of one another. The SC&I-PDS

contract with Rutgers University stipulates that each online class is expected to include between 6 and 20 students.

The online instructors who taught for SC&I-PDS between March, 2016 and March, 2017, were contacted and fully apprised of this research project before the start of their session(s). Once they understand the purpose of the video feedback strategy, all were given an opportunity to participate. None of the instructors were coerced into playing an active role in this research project however.

Each course lasted for four weeks, and was offered by Rutgers University. Rutgers is a school located in the Northeastern part of the United States of America. The students in the Online Certificate Program are non-matriculated business professionals who decided to take one or more non-credit classes at Rutgers University. To be accepted into the Online Certificate Program, prospective students were required to submit a resume, a sample of their writing, and an outline of their professional experience. They were also required to familiarize themselves with Rutgers' version of Pearson's eCollege course shell to ensure that they would be prepared for their online class responsibilities from day one.

Available Data

A total of fourteen online classes were involved in this study (Appendix E). Each of the fourteen classes scheduled four discussion board assignments, for a total of 56 discussion boards. Rubrics were not used by the online instructors to score students' performance, rather the discussion board exercises were used to provide students with some experience discussing the topics of interest. Combined, the discussion boards reviewed in this study captured a total of 3,046 original posts, which were collected by an

SC&I-PDS research assistant. The assistant blinded the data before they were provided to the primary investigator. Every student was assigned a unique code by the assistant (Appendix F). The research assistant has retained this information in a secure location. The students' identities were not shared with the primary investigator, and the lists of codes will be destroyed by the research assistant five years after the completion of this study.

Materials. The majority of this research project occurred in the online environment; this included the online course developed in Pearson's eCollege to advise participating instructors about the video feedback strategy (Appendix C). Thus, relatively few physical materials were required. The totality of physical materials consisted of printed documents. Among these were the copies of the discussion board texts, student surveys, and instructor interview transcripts.

In order to test the conjecture of increased motivation, engagement, understanding, and instructor connection, the students participating in the SC&I-PDS courses were provided with a brief survey during the third week of their four-week online class. The intent of this assessment was to measure students' feelings while they were actively interacting with their online environment (Coller, Shernoff, & Strati, 2011). The research assistant emailed the surveys on behalf of the primary investigator, however it was not necessary to blind the results; the surveys were programmed to be anonymous. A copy of the student survey, as well as the survey results, appear in Appendix G of this report.

Once an instructor had finished teaching an online course using the video feedback strategy, that instructor was invited to a thirty-minute, post-class interview.

During these interviews, the online instructors were asked about their experiences with, and opinions of, the different facets of the video feedback strategy. Their initial responses were probed to give the instructors a chance to elaborate on their answers, and all information was recorded for analysis. A copy of the Interview Protocol, along with a summary of instructor responses, appears in Appendix H of this report.

Data collection procedures. All online class information was harvested from the eCollege database, to which both the primary investigator and the research assistant had access. This information included all discussion board conversations, as well as many of the feedback videos that were prepared as part of this study. All other feedback videos were obtained directly via email from the participating online instructors.

The student surveys were created with the Qualtrics account provided by Rutgers University; these surveys were distributed via email by the research assistant. The online surveys were programmed so that only the information provided by students, and not their actual identities, were available to the primary researcher.

The instructor interviews were done in three different formats according to the convenience of the interviewees: Face-to-face meeting, video conference, and telephone conversation. The sessions were recorded, enabling the primary investigator to focus on the discussions instead of taking notes. These recordings were subsequently used to deepen the overall understanding of the instructors' opinions and feelings about using the video feedback strategy in their online classes.

CHAPTER IV

Results

Data Analysis Plan

The videos produced by the online instructors for their classes were reviewed by the primary investigator. This was done to determine if the feedback videos adhered to the following recommendations:

- Short duration: No more than five minutes – in recognition of the instructors' and students' busy schedules
- Positive feel: The good things observed in the overall discussion were noted, and suggestions were offered for improving the 'not so good' things
- Personal: Students' names were used
- Panopto recording: The feedback was recorded with the same Panopto account that was used to record the course lectures, thus all interested parties were familiar with the operation and appearance of the video.
- Email: The videos were emailed to all students, as per the studies indicating that students are more likely to routinely check their email than their course shell (Steinweg et al., 2006).
- Confirmation of viewership: Instructors asked a question in their feedback video that could only be correctly answered by students who had actually watched the video.
- Timely: The videos were emailed to students within 24 hours of the conclusion of the discussion board assignments.

According to Patton (2001), “without classification there is chaos and confusion” (Patton, 2001, p. 463). To prevent chaos and confusion from seeping into this study, concerted efforts were made to accurately classify all discussion board conversations in a timely and consistent manner. One benefit of online discussions is that the resulting conversations are easily organized, stored, and retrieved (McKenzie & Murphy, 2000). The complete text of each asynchronous online discussion board was archived in the eCollege database. This information was collected at the conclusion of each of the fourteen classes listed in Appendix E. Following the blinding of the data, a strategy similar to that employed by Bliss & Lawrence (2009a) was used to analyze the posts.

Quality of posts. The strategy developed by Uzuner (2007) was used to classify each post as either an EVP (Educationally Valuable Post) or an ELVP (Educationally Less Valuable Post). Each post was categorized by the primary researcher, who also listed one of the EVP/ELVP characteristics as the reason for the classification. The research assistant stood ready to assist in determining the appropriate categorization if the primary researcher had difficulty classifying a particular post, but this precaution was not necessary in the current study.

Once the initial coding was completed, the educational value of the student posts was calculated using a two-step process. First, the posts labeled “EVP” were added together. This process was done for each separate week of all courses in the study. Second, the average EVP for each course was then obtained by adding the number of EVPs across all four weeks, and then dividing this sum by four (the total number of weeks in the course):

$$\text{Average of EVPs per course} = \frac{\text{Total number of EVPs submitted during the four class discussion boards}}{4}$$

These results were charted, and then graphed to help make the differences and similarities between classes more visible. An example of EVP charting and graphing is available in Appendix I for reference.

This process was helpful in determining the EVP level in each of the discussion boards for all fourteen SC&I-PDS classes. Upon further consideration however, it was decided that a deeper analysis was required. This was due to the fact that not all of the online courses were the same size. Indeed, a class consisting of three students could not be expected to submit as many EVPs as a class of eighteen, even if the discussions in the class of three were arguably of higher quality. In an effort to level the playing field, another two-step process was devised. First, the number of EVP posts in each week's discussion was divided by the number of students involved in that particular discussion:

$$\text{EVP with student participation taken into consideration each week} = \frac{\text{Total Number of EVPs submitted each week during the four class discussion boards}}{\text{Total number of students participating in each week of the four class discussion boards}}$$

Note: This calculation was done on a week-by-week basis (i.e.: Four times for every class), to help account for the fact that not every student participated in every discussion of their four-week class.

Second, the EVP results for all four weeks, with student participation taken into consideration, were added together. The total was once again divided by four to get the average result for each online class:

$$\text{Average of EVPs per course} = \frac{\text{Total number of EVPs submitted during the four class discussion boards}}{4}$$

Again, the results were charted and graphed to help make the differences and similarities between classes more visible.

An identical process was followed to identify the presence of the ELVPs in the course discussions. First, all posts labeled “ELVP” in each discussion board assignment were added together. Next, the average ELVP for each course was calculated by totaling all of the ELVP values in each four-week course, and then dividing the sum by four. Once this was done, the student participation was then taken into account for the ELVP values using methods identical to the EVP work.

After the EVP and ELVP values had been calculated, an effort was made to determine the overall quality of all discussion posts. Quality here was evaluated by determining how many of the total posts that had been contributed to an online discussion were educationally valuable. Again, a two-step process was involved. First, the total number of EVPs posted during the week were divided by the total number of discussion posts contributed during that same week:

$$\text{Overall quality of weekly discussion} = \frac{\text{Number of EVPs posted during the week's discussion}}{\text{Total number of posts made during the week's discussion}}$$

As soon as this value was calculated for each week of the four week classes, the average overall quality for each discussion board was then determined by adding the values of all four weeks together, and then dividing the sum by four:

$$\text{Average overall quality of class discussion} = \frac{\text{Quality of Week \#1} + \text{Week \#2} + \text{Week \#3} + \text{Week \#4 discussions}}{4}$$

As with the EVP and ELVP sections, it was also necessary to take a second look at the overall quality of the discussion posts with student participation taken into consideration. This was done by using the same mathematical process that was used to calculate the EVP and ELVP values.

Extent of threading. After the quality of the students' discussion board posts was assessed, the extent of threading in each discussion board was ascertained by using the "speak style" strategy developed by Bliss and Lawrence (2009b). This strategy divides online discussion board posts into three separate categories:

- Unanswered or Speak Posts: These are unique student posts to which no one responded
- Level 1, or Speak-Reply Posts: These are unique posts to which one or more replies were made
- Level 2, or Discuss Posts: These are unique posts to which replies were made, as well as replies to those replies.

Determining the extent of threading in each discussion board helped clarify if the addition of the video feedback facilitated discussion board conversations that were more engaged and involved.

In order to establish consistency in the data review and analysis, the level of discussion board threading was calculated in a manner identical to that by which the educational value had been determined. First, all instances of Speak Threading, Level 1 Threading, and Level 2 Threading were counted in each week of all fourteen classes, and their averages were calculated. Then, these same numbers were revised with student participation taken into consideration. This was done because, as noted earlier, not all students participated in every class discussion.

While examining the results of the online discussion threading, it was observed that even though some discussion boards included fewer instances of threaded discussions than others, those discussion threads actually contained more posts. In other

words, although some students were not having as many Level 2 discussions, the Level 2 discussions that they were having were far more engaged and involved. As a result, it was decided to track not only how many threaded discussions there were in each discussion board, but how many posts were contained within each threaded discussion. Again, this was done using a method similar to that employed when analyzing the EVP and ELVP posts. First the number of posts within the threaded discussions was totaled every week, for every class. The average was then calculated for each class. After these values had been charted and graphed, the same calculations were made a second time, this time taking student participation into account.

Transitioning from the quantitative to the qualitative aspects of the current study, an effort was made to determine if video feedback directly affected the students' motivation, engagement, understanding, and sense of instructor involvement during the different online classes. This was accomplished by evaluating the responses to the student surveys. Additionally, all online instructors who created feedback videos as part of this study were interviewed at the conclusion of their classes to assess their opinion of the proposed strategy.

Summary of the Results

Discussion board data were collected from fourteen SC&I-PDS courses administered by Rutgers University between March, 2016 and March, 2017 (Appendix E & Appendix J). In total, 3,046 posts, written by 116 students, across 56 separate online discussion boards, were analyzed.

Taken as a whole, the results suggest that the video feedback strategy, described in Chapter III, helped students improve their contributions to the online discussion boards.

Educationally Valuable Posts. The EVP data reveal a number of interesting things about the video feedback strategy. First, at the beginning of the four-week courses students in the NVF (no video feedback) classes submitted 117 EVPs while the students in the VF (video feedback) courses submitted 116. From this it might be surmised that, all things being equal, neither of the group began its work with any particular advantage over the other. Starting in week two however, after the first video feedback had been filmed and delivered, students in the VF courses began submitting more EVPs than their NVF counterparts. This trend continued throughout the remainder of the four-week term.

Another interesting trend was that both sets of classes followed approximately the same pattern in their overall EVP submissions. Essentially, the number of EVP's rose from week one to week three, indicating that students were becoming accustomed to their new course. One small difference is that the results for the NVF students declined very slightly in week two, but then increased in week three, while the results for the VF students increase in both weeks two and three. Finally, from week three to four there was a drop-off for both groups of students, possibly indicating a growing fatigue with the course material or greater focus being diverted towards final course projects.

One additional item is worth noting. When the week four EVP submissions dropped, the drop was less pronounced in the VF courses than in the NVF courses. In fact, the EVP value for the NVF courses dropped to its lowest value of the entire course

in week four. For the VF students however, while their final EVP value was lower than their week three result, it was still much higher than their totals for weeks one and two.

These results can be observed from the table and figure below, which compare courses that used the video feedback strategy with those that did not.

Table 6

Number of EVP Posts Per Week in each Course

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	3	5	3	3	3.5
2	24	27	44	40	33.75
3	15	16	15	5	12.75
4	7	9	11	7	8.5
5	12	7	17	18	13.5
6	16	20	11	7	13.5
7	9	4	27	27	16.75
8	14	11	8	10	10.75
9	29	21	30	11	22.75
10	5	8	15	15	10.75
11	12	24	29	38	25.75
12	33	54	98	74	64.75
13	48	64	123	71	76.5
14	6	4	5	6	5.25

Color Coding Scheme	
NVF Courses	
VF Courses	

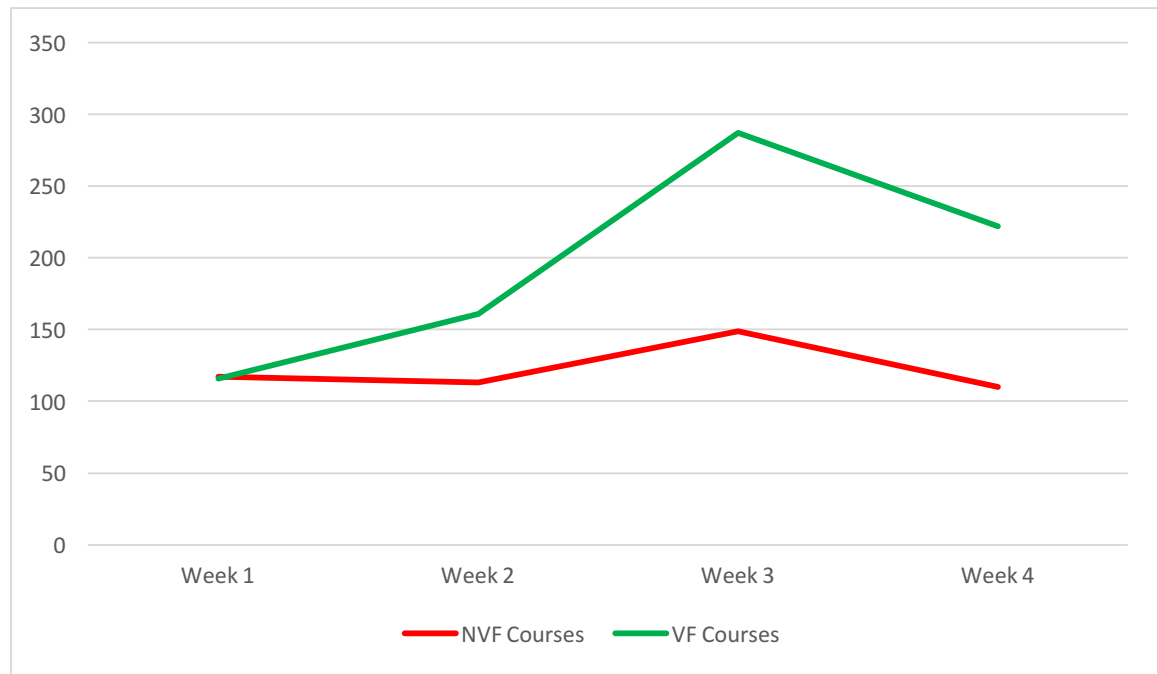


Figure 1. The number of EVP posts per week as a function of feedback condition

An accurate analysis of the data proved somewhat challenging; this was primarily due to the fact that each class contained a different number of students, and not every student participated in every discussion board. To illustrate this point, consider two hypothetical classes: a small class of five students (Class X), and a larger class of twenty students (Class Y). If all five students in Class X contributed an educationally valuable post to an online discussion, yet only half of the students from Class Y did likewise, it would appear that the larger class had enjoyed a more educationally valuable experience. Reporting the data in this manner would have yielded an incorrect interpretation of what was really happening however. Taking student participation into consideration on the other hand would provide values of 1.0 for Class X, and 0.5 for Class Y, thus affording a more accurate picture of the situation.

With this line of reasoning, student participation was taken into consideration during the EVP review. The results of this analysis appear below:

Table 7

EVP with Student Participation Taken into Consideration

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	0.75	1.25	0.75	0.75	0.86
2	2.18	2.45	4.00	3.64	3.07
3	3.75	4.00	3.75	1.25	3.19
4	1.75	2.25	2.75	1.75	2.12
5	0.20	1.40	3.40	3.60	2.15
6	1.23	1.54	0.85	0.54	1.04
7	1.00	0.44	3.00	3.00	1.86
8	2.33	1.83	1.33	1.67	1.79
9	1.93	1.40	2.00	0.73	1.52
10	1.25	2.00	3.75	3.75	2.69
11	1.50	3.00	3.62	4.75	3.22
12	2.36	3.86	7.00	5.28	4.62
13	3.00	4.00	7.69	4.44	4.78
14	2.00	1.33	1.67	1.00	1.50

Table 8

EVP with Number of Students taken into consideration as a Function of Feedback Condition with Number of Students taken into Consideration

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	1.86	1.90	2.30	1.67	1.93
Yes	1.72	2.60	4.52	3.80	3.16

Accounting for student participation provides a similar picture to the results seen when student participation was not considered, with one interesting exception. At the beginning of the course, students in the NVF courses provided a slightly higher amount EVPs than students in the VF course. Beginning with Week Two however, the roles are reversed, with the VF courses providing more EVPs

Educationally Less Valuable Posts. Educationally Valuable Posts are helpful for determining the quality of an online discussion, but they only tell half of the story. Consider our hypothetical classes X and Y once again. This time, presume that both classes have ten students apiece. During an online discussion, each class contributes ten EVPs to their respective discussion board. If only EVPs are taken into consideration, then both classes would appear to have enjoyed experiences of equal value. However, presume that, in addition to the ten EVPs, the students of Class X submit one ELVP and the Students of Class Y contributed ten ELVPs. Given this new information, the two discussion board results could no longer be considered equal. Thus, in order to appreciate the total quality of an online discussion, one must pay attention those things that did not go as well as they might have.

Table 9

Educationally Less Valuable Posts by Week and by Course

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	10	10	10	6	9.00
2	40	40	61	50	47.75
3	15	27	35	22	24.75
4	6	9	9	12	9.00
5	30	18	20	18	21.50
6	37	29	34	32	33.00
7	18	26	37	59	35.00
8	21	12	25	19	19.25
9	65	62	51	47	56.25
10	11	10	20	7	12.00
11	35	23	35	19	28.00
12	93	85	78	63	79.75
13	78	74	94	32	69.50
14	5	4	2	1	3.00

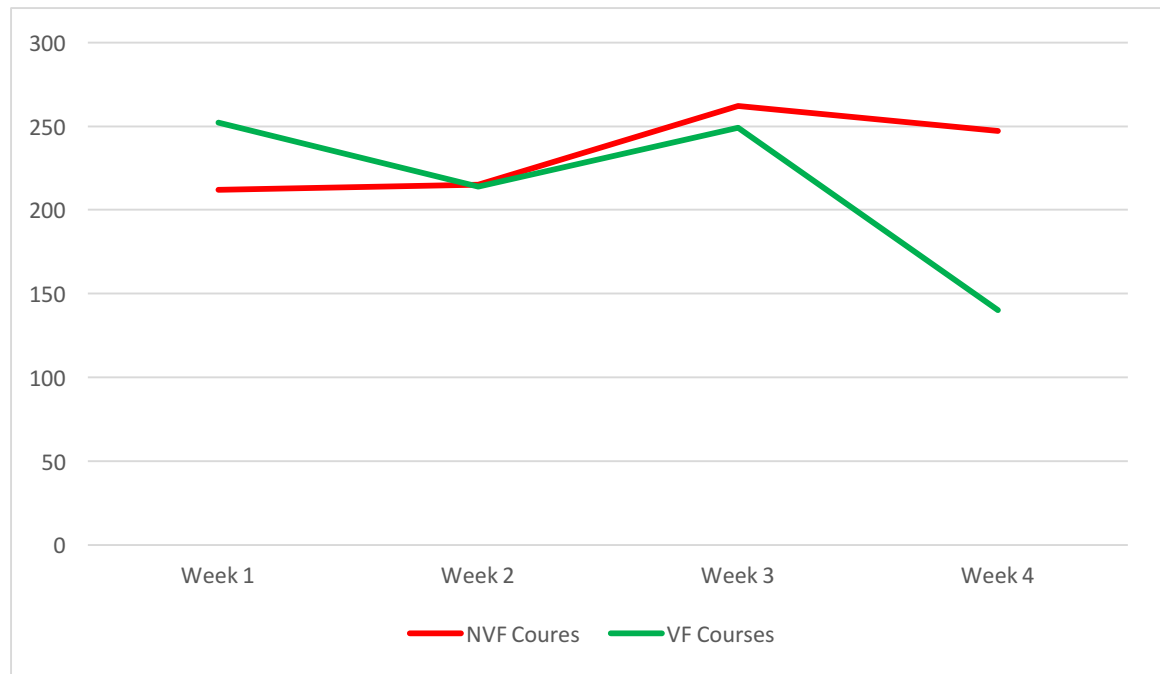


Figure 2. Educationally less valuable posts by week as a function of feedback condition

The ELVP data tells a story that is not terribly dissimilar from that told by the EVP data. In week one, students in the NVF courses performed better than their VF counterparts by submitting fewer ELVPs. After the first feedback videos are released however, the ELVPs submitted by the VF students drop; in this case, a drop in ELVP numbers indicates an improvement in discussion board performance. Concurrently, the ELVPs submitted by the NVF students rise slightly. At this point, the two groups are roughly equal. By week three however, the difference between the two becomes more pronounced, with the VF students submitting fewer ELVPs. As the courses come to a close, the VF students are submitting substantially fewer ELVPs than their NVF counterparts.

To determine if an unequal numbers of students affected the ELVP results, the numbers were adjusted for student participation. This was done using the same method employed on the EVP information.

Table 10

ELVP with student participation taken into consideration by Week Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	2.5	2.5	2.5	1.5	2.25
2	3.64	3.64	5.54	4.54	4.34
3	3.75	6.75	8.75	5.50	6.19
4	1.50	2.25	2.25	3.00	2.25
5	6.00	3.60	4.00	3.60	4.30
6	2.85	2.23	2.62	2.46	2.54
7	2.00	2.89	4.11	6.56	3.89
8	3.50	2.00	4.17	3.17	3.21
9	4.33	4.13	3.40	3.13	3.75
10	2.75	2.50	5.00	1.75	3.00
11	4.38	2.88	4.38	2.38	3.51
12	6.64	6.07	5.57	4.50	5.70
13	4.88	4.62	5.88	2.00	4.34
14	1.67	1.33	0.67	0.33	1.00

Table 11

ELVP with Number of Students Taken into Consideration by Week Course, and as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	3.00	3.30	4.17	3.73	3.55
Yes	4.38	3.50	4.25	2.42	3.64

With regard to the ELVP values, taking student participation into consideration tells a story similar to the one we saw in Table 9, with one slight yet interesting difference. This time around, students in the NVF courses provided fewer ELVPs than

their VF counterparts in weeks one, two, and three. The values for weeks two and three are very close, but it isn't until week four that students in the VF course actually submit fewer ELVPs. The big picture story remains the same however: While students in the VF courses begin the term submitting more ELVPs than their NVF counterparts, at by the end of the term they are submitting fewer ELVPs than students who did not receive any video feedback.

Overall Quality of Discussion Feedback. Earlier in this chapter it was mentioned that once the EVP and ELVP values had been calculated, an effort would be made to determine the overall quality of all discussion posts reviewed in this study. To do this, every post contributed by every student in every discussion board was carefully reviewed to determine how many of the total posts were educationally valuable. The results of this analysis are shown in the table below:

Table 12

Overall Quality of Discussion Posts by Week, Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	0.23	0.33	0.23	0.33	0.28
2	0.38	0.40	0.41	0.44	0.41
3	0.50	0.37	0.30	0.18	0.34
4	0.54	0.50	0.55	0.37	0.49
5	0.29	0.28	0.50	0.50	0.39
6	0.30	0.41	0.24	0.18	0.28
7	0.33	0.13	0.42	0.31	0.30
8	0.40	0.47	0.24	0.34	0.36
9	0.31	0.25	0.37	0.20	0.28
10	0.31	0.44	0.43	0.68	0.46
11	0.26	0.51	0.45	0.67	0.47
12	0.26	0.39	0.56	0.54	0.44
13	0.38	0.46	0.56	0.69	0.52
14	0.54	0.50	0.71	0.86	0.65

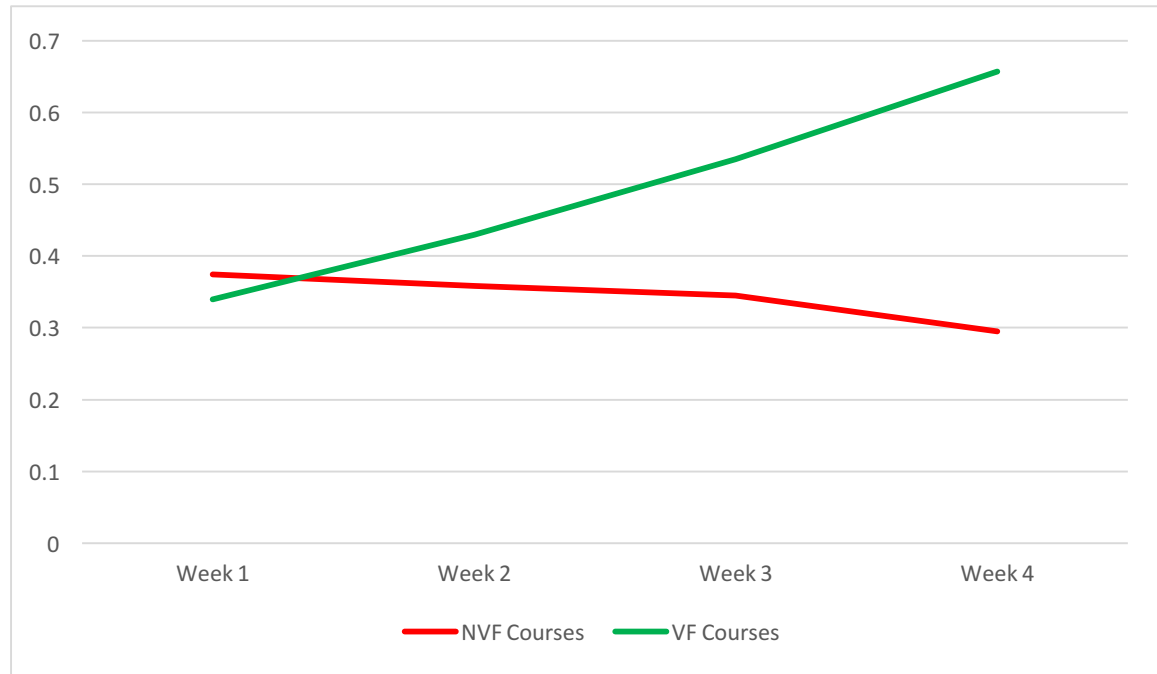


Figure 3. Overall quality of posts over time as a function of feedback condition

This data helps further refine the information obtained during the EVP and ELVP analyses. While students in the VF courses engaged in lower quality discussions at the beginning of the term, once the video feedback was provided the quality of their discussions not only began to rise, but continued to rise throughout the remainder of the four-week term. On the other hand, while students in the NVF began their courses by performing slightly better than their VF counterparts, the overall quality of their discussions began to drop-off, with the steepest decline occurring between weeks three and four. Taken as a whole, students in the NVF courses never enjoyed a discussion board experience that was higher in quality than their VF counterparts with the exception of that very first week.

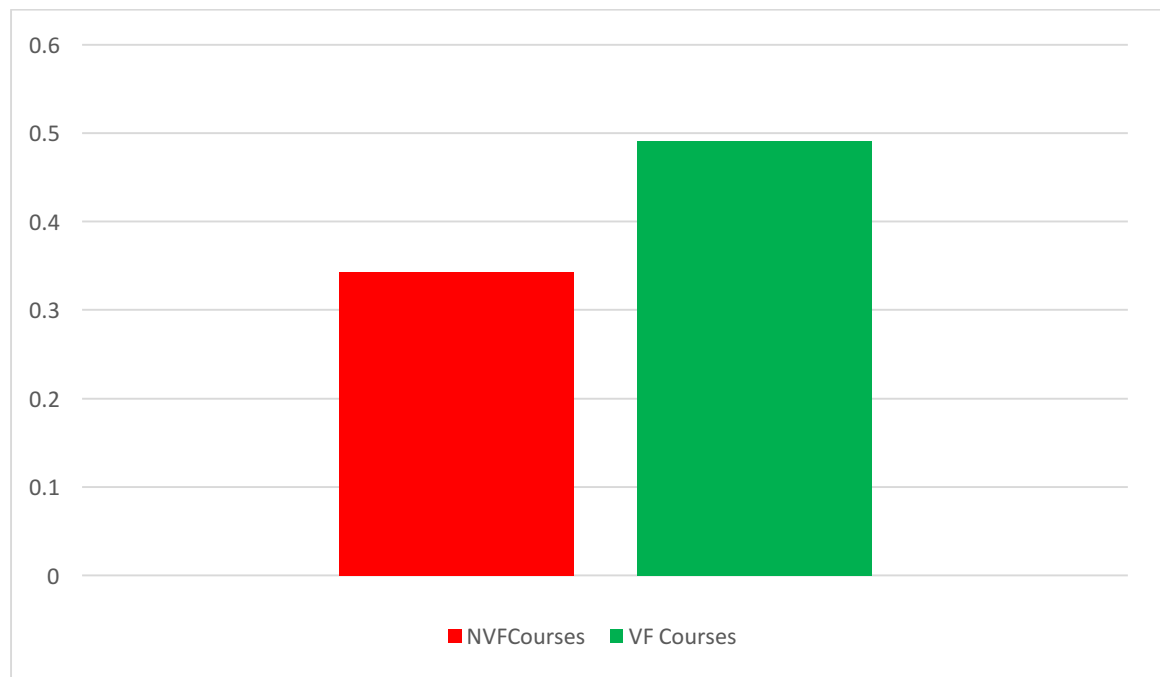


Figure 4. Averages of overall post quality: NVF vs VF courses

In reviewing the overall quality of the discussion postings, it was again determined that taking student participation into consideration would be the most accurate way of observing whether or not the video feedback strategy actually had any effect on student discussion posts. By leveling the playing field with regard to the number of students involved in each separate interaction, the intent was to observe the pure quality of the discussion without any undue influence.

Table 13

Overall Post Quality with Student Participation taken into Consideration

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	0.058	0.082	0.058	0.082	0.070
2	0.034	0.036	0.037	0.040	0.037
3	0.125	0.092	0.075	0.045	0.084
4	0.135	0.125	0.138	0.092	0.122
5	0.058	0.056	0.100	0.100	0.078
6	0.023	0.032	0.018	0.014	0.022
7	0.037	0.014	0.047	0.034	0.033
8	0.067	0.078	0.040	0.057	0.061
9	0.021	0.017	0.025	0.013	0.019
10	0.078	0.110	0.108	0.170	0.116
11	0.032	0.064	0.056	0.084	0.059
12	0.018	0.028	0.040	0.038	0.031
13	0.024	0.029	0.035	0.043	0.033
14	0.180	0.167	0.237	0.287	0.218

Table 14.

Overall Post Quality with Number of Classes taken into Consideration

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	0.062	0.060	0.055	0.047	0.056
Yes	0.065	0.076	0.096	0.120	0.089

While these numbers may suggest that the overall quality of the discussion boards for the VF courses and the NVF courses remained fairly close, a look at the following graphs support the results that have already been observed.

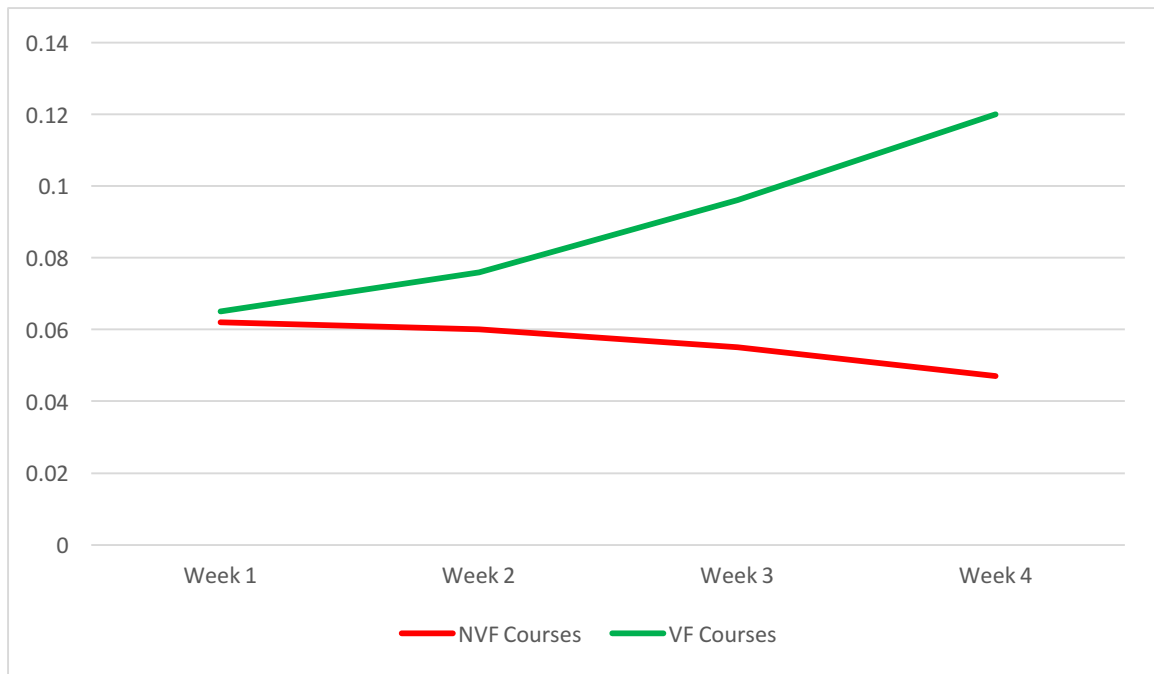


Figure 5. Overall quality of posts over time as a function of feedback condition and student participation

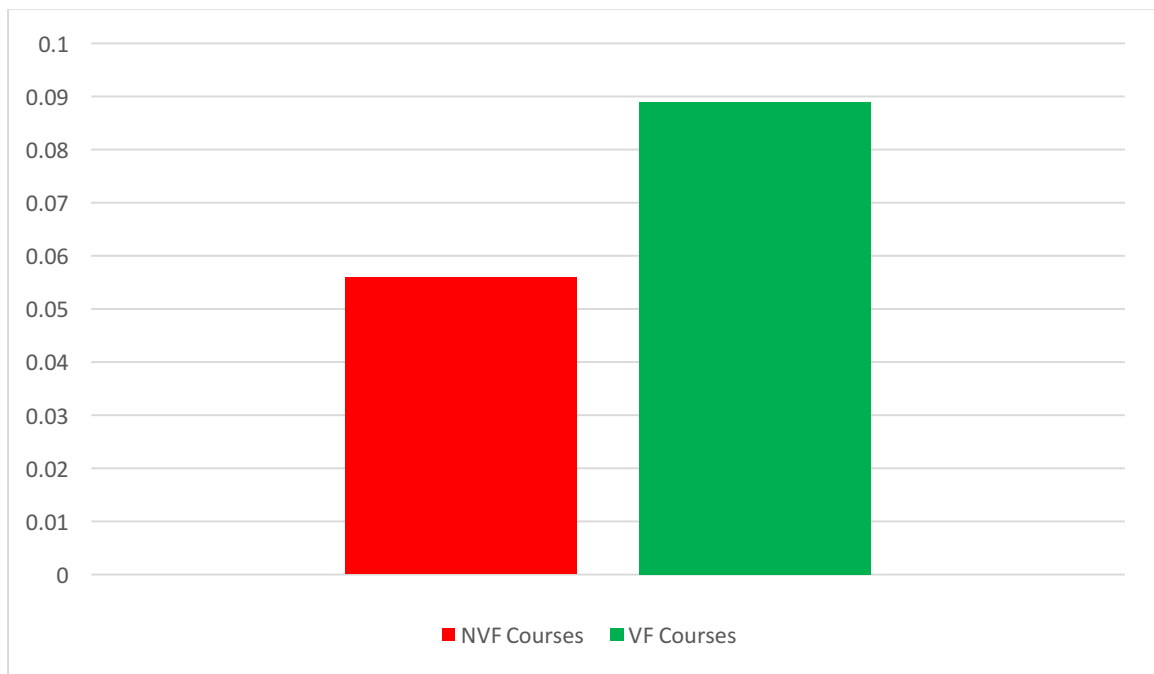


Figure 6. Averages of Overall Post Quality: NVF vs. VF Courses

The Overall Post Quality data displays another interesting trend. As seen in previous calculations, both the VF and NVF classes begin at almost exactly the same point. Again this indicates that, all other things being the same, the two groups are roughly equivalent with regard to raw ability. Almost immediately however, the two groups take-off in different directions. The quality of the NVF courses decreases little by little each week, reaching its lowest point during the final week's discussion. On the other hand, the quality of the VF courses increases each week, with the highest discussion quality appearing during the final week's discussion. This suggests that the video feedback not only enabled students in the VF classes to improve their discussions from one week to the next, but that the educational value of the discussion board experience steadily improved over the length of entire course.

Discussion Threading. We now turn our attention from the quality of the individual discussion posts, to the manner in which those posts combine, or fail to combine, to form actual discussions. Specifically, we look at the extent to which the Discussion Boards in this study were threaded. To further clarify, if one considers the individual discussion posts as individual trees, then the threading would be the way those trees are grouped together, or spread apart, to form the overall forest.

Threading is a term used to describe how well the participants in an online discussion board actually communicated with one another. It is one thing to contribute a stand-alone post in which a student expresses his or her thoughts about a subject. It is another thing entirely when a student reads someone else's post, considers it, and then responds. In the first instance, the student is thinking, and writing. In the second instance, the student is thinking, writing, and communicating. When students

communicate in an online discussion, there is a greater instance of discussion threading.

Ideally, the more threading that occurs within online discussions, the better.

Speak Threading. Speak Threading occurs in an online discussion when students post their thoughts on a topic of interest, but do not respond to the posts of others, and no one responds to them. When there is only Speak Threading, no true discussion is taking place. Essentially students are talking to themselves, but not to each other. Consider a room full of people in which everyone is talking, but no one is listening. If students are to engage in a healthy online discussion, then the amount of Speak Threading should be relatively low.

To determine if the video feedback strategy had any affect on the SC&I-PDS courses, all discussion data was reviewed for instances of posts that were made, but to which no one responded:

Table 15

Overall Occurrence of Speak Threading by Week, Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	0.00	0.00	0.00	0.00	0.00
2	3.00	5.00	1.00	1.00	2.50
3	0.00	0.00	0.00	2.00	0.50
4	0.00	0.00	0.00	0.00	0.00
5	1.00	1.00	2.00	0.00	1.00
6	2.00	1.00	2.00	3.00	2.00
7	4.00	1.00	3.00	9.00	4.25
8	0.00	0.00	0.00	0.00	0.00
9	1.00	2.00	1.00	1.00	1.25
10	0.00	0.00	2.00	2.00	1.00
11	5.00	3.00	2.00	0.00	2.50
12	0.00	0.00	0.00	0.00	0.00
13	3.00	1.00	2.00	3.00	2.25
14	0.00	2.00	2.00	2.00	1.50

Table 16

Speak Threading by Week as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	1.25	1.12	0.88	2.00	1.31
Yes	1.50	1.17	1.67	1.17	1.38

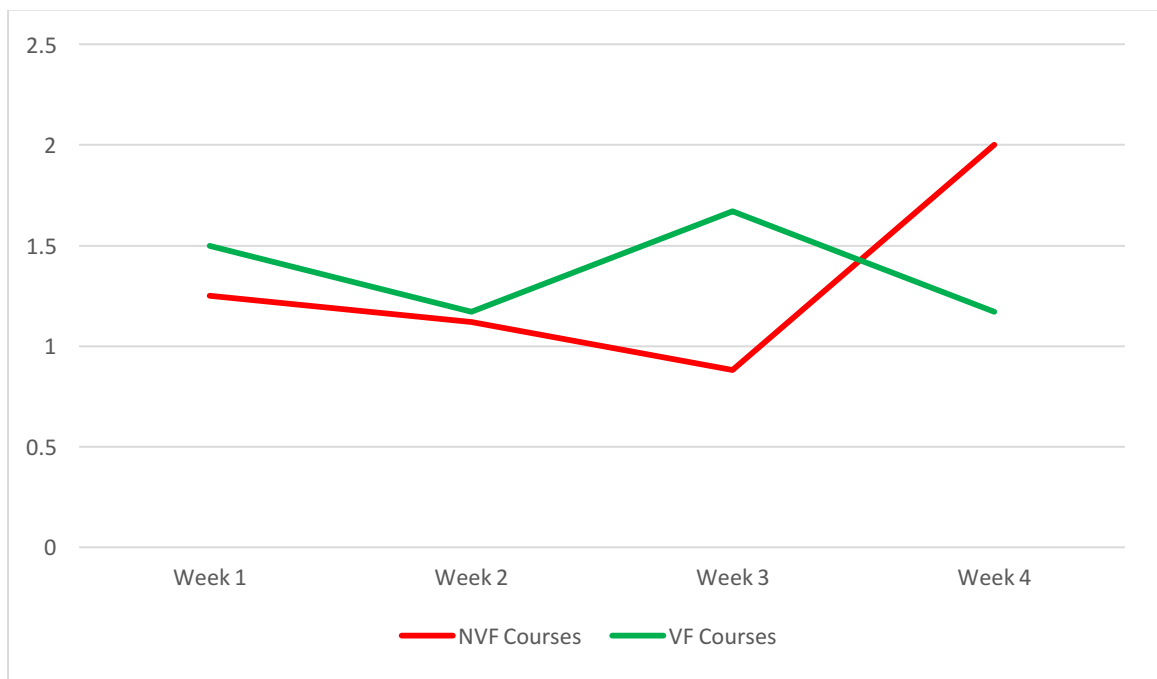


Figure 7. Speak Threading Totals: NVF vs. VF Courses

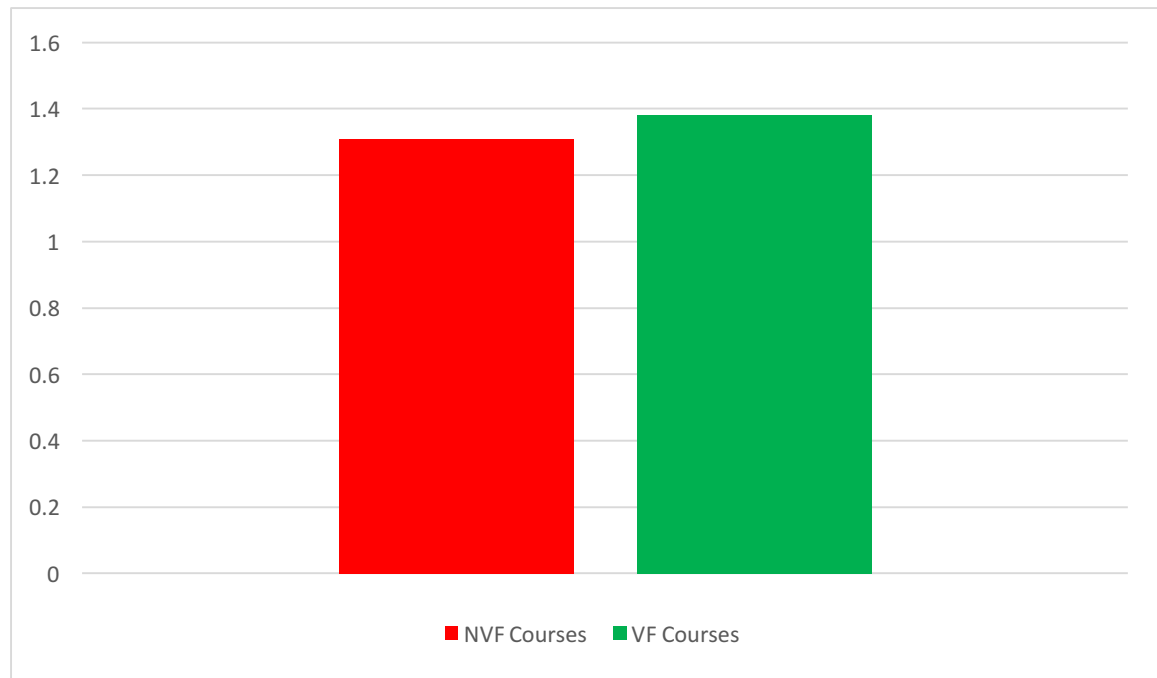


Figure 8. Average of Speak Threading Totals: NVF vs. VF Courses

These results exhibit two features of interest. First, it appears that students in the VF courses not only began the session by submitting more Speak Threading Posts than their NVF counterparts, but that they continued to do so through weeks two and three. However, during the final week of the course, the situation reversed: The amount of Speak Threading submitted by the VF students dropped, while the amount submitted by the NVF students rose. Even though the data shows that the VF students submitted a higher overall amount of Speak Threading than students in the NVF courses, the fact that their numbers were lower by the end of the class suggests that the overall quality of their online discussion may have improved with regard to this measurement.

To ensure that the Speak Threading results were not being unduly influenced by the number of students involved in each weekly discussion, these values were recalculated to account for Student Participation. The results of the recalculation appear below:

Table 17

Speak Threading with Student Participation taken into Consideration

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	0.000	0.000	0.000	0.000	0.000
2	0.273	0.454	0.091	0.091	0.227
3	0.000	0.000	0.000	0.500	0.125
4	0.000	0.000	0.000	0.000	0.000
5	0.200	0.200	0.400	0.000	0.200
6	0.154	0.077	0.154	0.231	0.154
7	0.444	0.111	0.333	1.000	0.472
8	0.000	0.000	0.000	0.000	0.000
9	0.067	0.133	0.067	0.067	0.084
10	0.000	0.000	0.500	0.500	0.250
11	0.625	0.375	0.250	0.000	0.312
12	0.000	0.000	0.000	0.000	0.000
13	0.188	0.062	0.125	0.188	0.141
14	0.000	0.667	0.667	0.667	0.500

Table 18

Speak Threading by Week as a Function of Feedback Condition with Student Participation taken into consideration

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	0.117	0.097	0.081	0.236	0.133
Yes	0.169	0.326	0.324	0.226	0.261

These values essentially tell us the same story that we saw in our previous analysis of the Speak Threading values. Essentially, students in the VF courses were doing more Speak Threading during Weeks One, Two, and Three than their NVF counterparts, but less by the final week of the online courses. Therefore, the information presented earlier is confirmed by these numbers.

Level 1 Discussion Threading. When an online discussion contains Level 1 Discussion Threading, conversations are taking place, but the conversations are short and

small. Essentially a Level 1 conversation is only one layer deep. What this means is that someone submits a post, and then one other person responds to that post. If the two conversationalists continue to reply, but reply only to each other, the conversation will grow, but it will remain only one layer deep. Level 1 Discussion Threading is a fairly ambiguous measure of the health of an online discussion board. While deeper, more involved conversations are the ideal, Level 1 Threading is still preferred over Speak Threading.

All 56 discussion boards included in this study were reviewed, and instances of Level 1 Discussion Threading were noted. The final numbers for this classification appear in the table below:

Table 19

Overall Occurrence of Level 1 Threading by Week, Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	2.00	1.00	1.00	3.00	1.75
2	1.00	4.00	10.00	7.00	5.50
3	0.00	0.00	3.00	0.00	0.75
4	4.00	3.00	2.00	2.00	2.75
5	5.00	5.00	3.00	2.00	3.75
6	3.00	6.00	8.00	7.00	6.00
7	0.00	5.00	9.00	11.00	6.25
8	2.00	3.00	2.00	4.00	2.75
9	6.00	4.00	18.00	5.00	8.25
10	2.00	4.00	8.00	5.00	4.75
11	16.00	7.00	6.00	5.00	8.50
12	2.00	0.00	1.00	1.00	1.00
13	9.00	1.00	10.00	3.00	5.75
14	2.00	2.00	2.00	2.00	2.00

Table 20

Level 1 Discussion Threading as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	2.25	3.25	6.62	4.88	4.25
Yes	6.00	3.17	5.00	3.00	4.29

What this data show us is that, during week one, students in the VF classes contributed more Level 1 Discussion Threading to their class discussion boards than their NVF counterparts. By Week Two however, after the first video feedback had been recorded and distributed, the two groups were contributing an almost equal amount of Level 1 Discussion Threading. After that point, students in the VF courses contributed less Level 1 Discussion Threading than their NVF counterparts.

When the Level 1 values were re-calculated to account for student participation, the story told by the feedback did change in a manner reminiscent of the ELVP data covered earlier in this chapter. Here, students in the VF courses contributed more Level 1 Discussion Threading than their NVF counterparts during the first three weeks of the four-week course, albeit by smaller and smaller ratios. It isn't until week four that students in the NVF courses actually engage in more Level 1 Discussion Threading.

Table 21

Level 1 Discussion Threading with Student Participation taken into Consideration as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	0.500	0.250	0.250	0.750	0.438
2	0.091	0.364	0.909	0.636	0.500
3	0.000	0.000	0.750	0.000	0.188
4	1.000	0.750	0.500	0.500	0.688
5	1.000	1.000	0.600	0.400	0.750
6	0.231	0.462	0.615	0.538	0.462

7	0.000	0.556	1.000	1.222	0.694
8	0.333	0.500	0.333	0.667	0.458
9	0.400	0.267	1.200	0.333	0.550
10	0.500	1.000	2.000	1.250	1.188
11	2.000	0.875	0.750	0.625	1.062
12	0.143	0.000	0.071	0.071	0.071
13	0.562	0.063	0.625	0.188	0.360
14	0.667	0.667	0.667	0.667	0.667

Table 22

Level 1 Discussion Threading with Student Participation taken into Consideration as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	0.319	0.394	0.695	0.581	0.497
Yes	0.812	0.601	0.786	0.534	0.683

Level 2 Discussion Threading. The most effective online discussion boards take place when a student responds to another student's initial posts, and then other students respond to one or more of the following:

- The initial post
- The initial response
- Subsequent responses.

In essence, this is representative of a successful online conversation in which people are joining together to discuss a topic. When this type of interaction occurs in an online discussion board, it is known as Level 2 Discussion Threading. Successful online discussion boards often contain more Level 2 Discussion Threading than less successful discussion boards.

To investigate whether the video feedback strategy had any effect on the amount of Level 2 Discussion Threading, the discussion boards of all fourteen classes were reviewed for relevant examples. The findings appear in the tables below:

Table 23

Overall Occurrence of Level 2 Discussion Threading by Week, Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	1.00	2.00	2.00	0.00	1.25
2	8.00	8.00	12.00	10.00	9.50
3	4.00	4.00	5.00	3.00	4.00
4	0.00	1.00	2.00	2.00	1.25
5	5.00	4.00	5.00	6.00	5.00
6	9.00	6.00	3.00	3.00	5.25
7	5.00	2.00	6.00	5.00	4.50
8	4.00	3.00	4.00	3.00	3.50
9	23.00	11.00	26.00	10.00	17.50
10	3.00	2.00	4.00	2.00	2.75
11	5.00	5.00	8.00	3.00	5.25
12	13.00	16.00	12.00	13.00	13.50
13	23.00	17.00	22.00	13.00	18.75
14	1.00	1.00	0.00	0.00	0.50

Table 24

Level 2 Discussion Threads as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	6.75	4.62	7.50	4.50	5.84
Yes	6.67	7.50	8.50	6.17	7.21

These results present a tale of two student groups that is perhaps a bit starker than most. In the beginning of the term, as elsewhere in this study, both the VF and NVF students start at approximately the same level. The differences quickly become apparent thereafter. For students in the VF classes, the amount of Level 2 Discussion Threading rises steadily during weeks two and three. On the other hand, the amount of Level 2

Discussion Threading presents a more erratic pattern in the NVF classes, with the level falling, then rising again. The levels for both classes then fall from week three to week four. Nonetheless, the levels for students in the VF courses are higher at every point in the term following the first week, a result reflected in Figure 9:

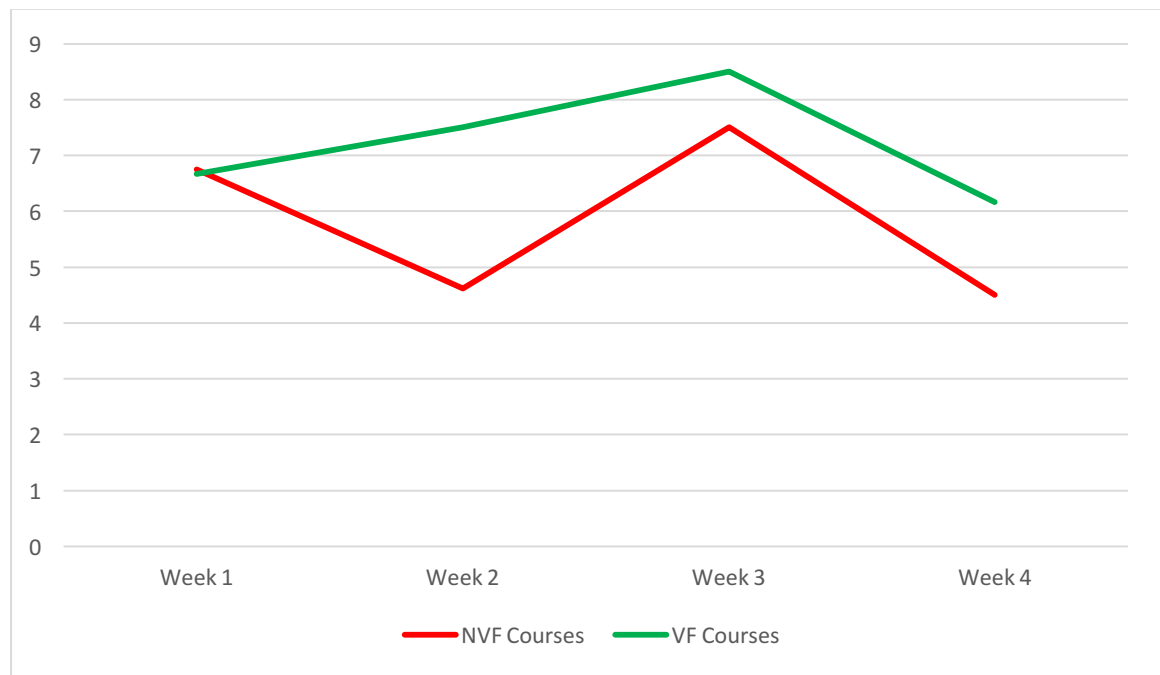


Figure 9. Level 2 Discussion Threading Totals: NVF vs. VF Courses

To ensure consistency in the overall analysis, the Level 2 Discussion Threading values were recalculated to take student participation into consideration. The results reveal an interesting pattern, for both groups of students follow approximately the same course from beginning to end. Notable is the fact that, at every point in the graph, the numbers for students in the VF courses are higher than those for their NVF counterparts.

Table 25

Overall Occurrence of Level 2 Discussion Threading with Student Participation taken into Consideration by Week, Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	0.250	0.500	0.500	0.000	0.312
2	0.727	0.727	1.091	0.909	0.864
3	1.000	1.000	1.250	0.750	1.000
4	0.000	0.250	0.500	0.500	0.312
5	1.000	0.800	1.000	1.200	1.000
6	0.692	0.462	0.231	0.231	0.404
7	0.556	0.222	0.667	0.556	0.500
8	0.667	0.500	0.667	0.500	0.584
9	1.533	0.733	1.733	0.667	1.166
10	0.750	0.500	1.000	0.500	0.688
11	0.625	0.625	1.000	0.375	0.656
12	0.928	1.143	0.857	0.928	0.964
13	1.438	1.062	1.375	0.812	1.172
14	0.333	0.333	0.000	0.000	0.166

Table 26

Level 2 Discussion Threading with Student Participation taken into Consideration as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	0.678	0.549	0.830	0.514	0.643
Yes	0.846	0.744	0.872	0.636	0.774

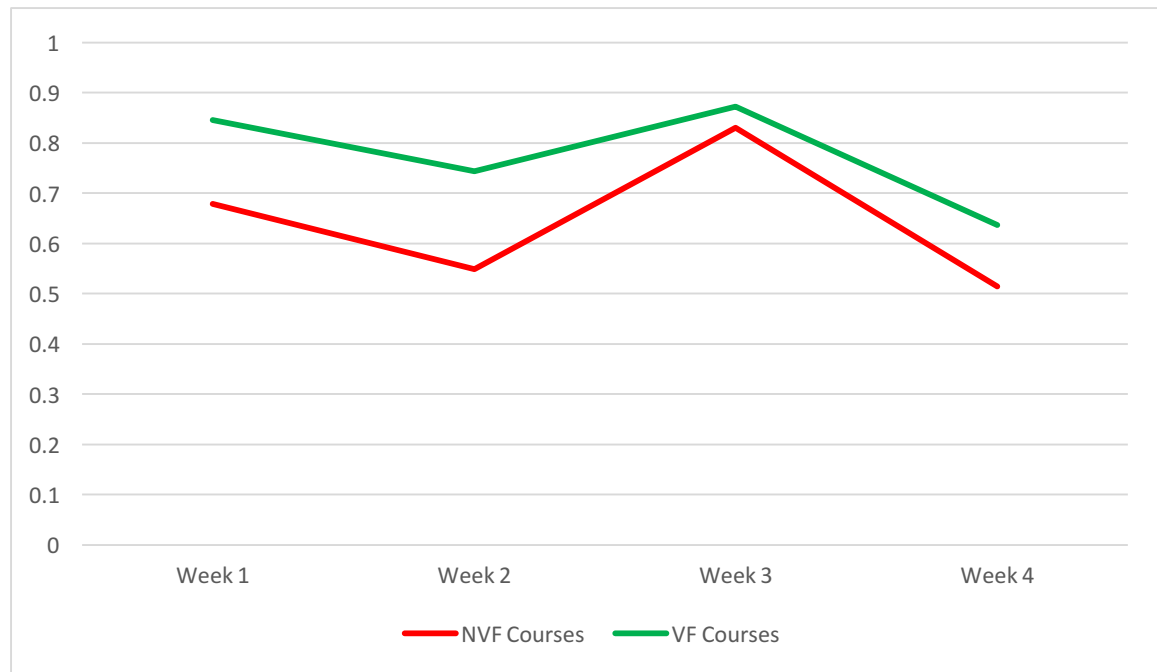


Figure 10. Level 2 Discussion Threading Totals with Student Participation Taken into Consideration: NVF vs. VF Courses

After taking a very close look at the Level 2 Discussion Threading, it was decided to re-examine the same information with a different strategy. To explain why this was done, consider the two hypothetical classes discussed earlier in this Chapter, Class X and Class Y. Presume that both classes contain the same number of students, and that the students in both classes engage in ten Level 2 discussions. From this, it would appear that the two class results should be considered equal.

A closer examination of the discussion data however indicates that there are actually more posts appearing in the results for Class Y. Upon further examination, it turns out that all ten of Class X's Level 2 discussions averaged 15 posts, while all ten of Class Y's Level 2 discussions averaged 30 posts. Given this, it would be disingenuous to consider the results for Class X and Class Y to be equal, despite the fact that each participated in the exact same number of Level 2 Discussions.

This was the reasoning behind the decision to count the number of posts that comprised each Level 2 Discussion. The results of this final analysis are revealed in the following tables:

Table 27

Level 2 Discussion Threading Posts by Week, Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	10	12	9	0	7.75
2	58	50	72	70	62.50
3	31	43	43	25	35.50
4	0	6	11	10	6.75
5	21	12	25	17	20.75
6	45	30	15	35	31.25
7	50	58	45	39	48.00
8	44	31	41	35	37.75
9	158	69	52	45	81.00
10	14	12	28	22	19.00
11	22	26	46	30	54.5
12	122	139	164	133	139.50
13	120	141	210	94	141.25
14	4	4	0	0	2.00

Table 28

Level 2 Discussion Threading Posts as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	49.50	38.99	36.00	32.38	39.22
Yes	50.83	55.33	78.83	46.50	57.87

The additional number crunching produces results similar to those obtained when reviewing the number of Level 2 discussions (without considering the number of posts within each discussion). Essentially, the two groups of students start at an almost equal level in week one before going their separate ways, with students in the VF courses

posting more often in their Level 2 Discussions than students in the NVF courses. Figure 11 is provided below for clarity:

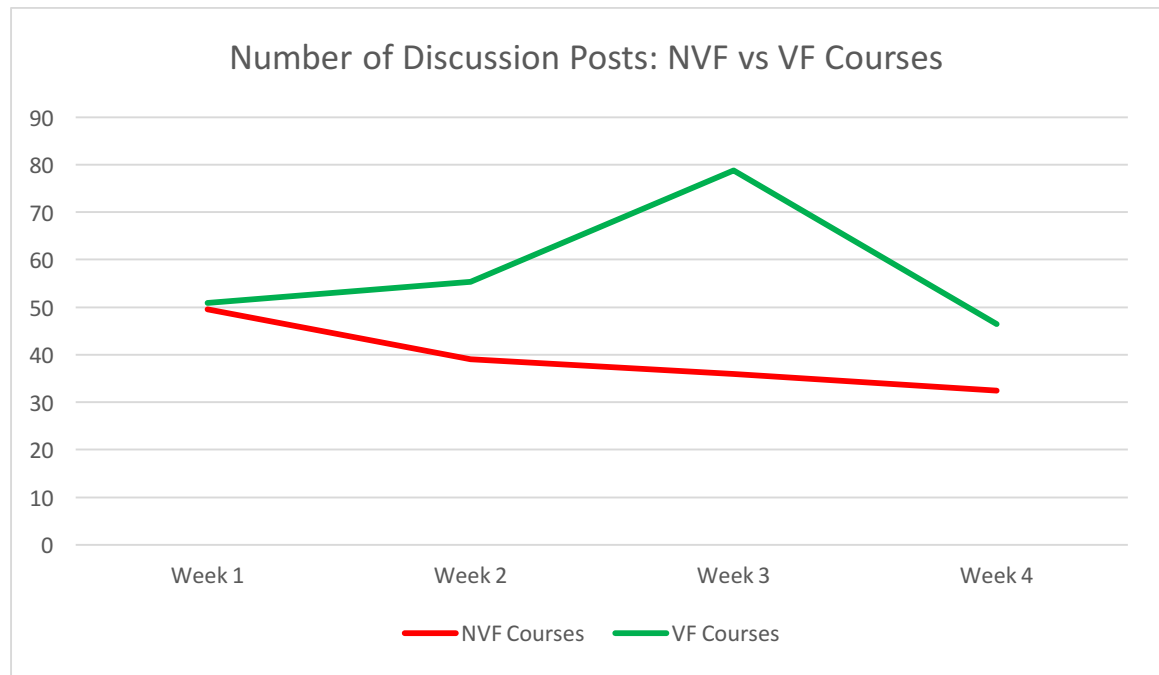


Figure 11. Level 2 Discussion Threading Posts Totals: NVF vs. VF Courses

Recalculating the results to take student participation into consideration however, did produce some interesting and admittedly unexpected results; these are included for consistency's sake. While on average the students in the VF courses still contributed more posts in their Level 2 discussions than their NVF counterparts, this was primarily due to their activity in week three. Their numbers were actually lower than those of the NVF students in weeks one and two. While admittedly the VF students did turn in higher numbers during week four, they just barely managed to do so.

Table 29

Level 2 Discussion Threading Posts with Student Participation taken into Consideration by Week, Course, and as a Function of Feedback Condition

Course #	Week 1	Week 2	Week 3	Week 4	Average
1	2.50	3.00	2.25	0.00	1.94
2	5.27	4.54	6.54	6.36	5.68
3	7.75	10.75	10.75	6.25	8.88
4	0.00	1.50	2.75	2.50	1.69
5	5.20	2.40	7.40	3.40	4.60
6	3.46	2.31	1.15	2.69	2.40
7	5.56	6.44	5.00	4.33	5.33
8	7.33	5.17	6.83	5.83	6.29
9	10.53	4.60	3.47	3.00	5.40
10	2.75	2.50	4.00	1.25	2.62
11	2.75	3.25	5.75	3.75	3.88
12	8.71	9.93	11.71	9.50	9.96
13	7.50	8.81	13.12	5.88	8.83
14	1.33	1.33	0.00	0.00	0.67

Table 30

Level 2 Discussion Threading Posts with Student Participation taken into Consideration as a Function of Feedback Condition

Used VFS	Week 1	Week 2	Week 3	Week 4	Average
No	5.30	4.79	4.84	3.87	4.70
Yes	4.71	4.71	7.00	3.96	5.02

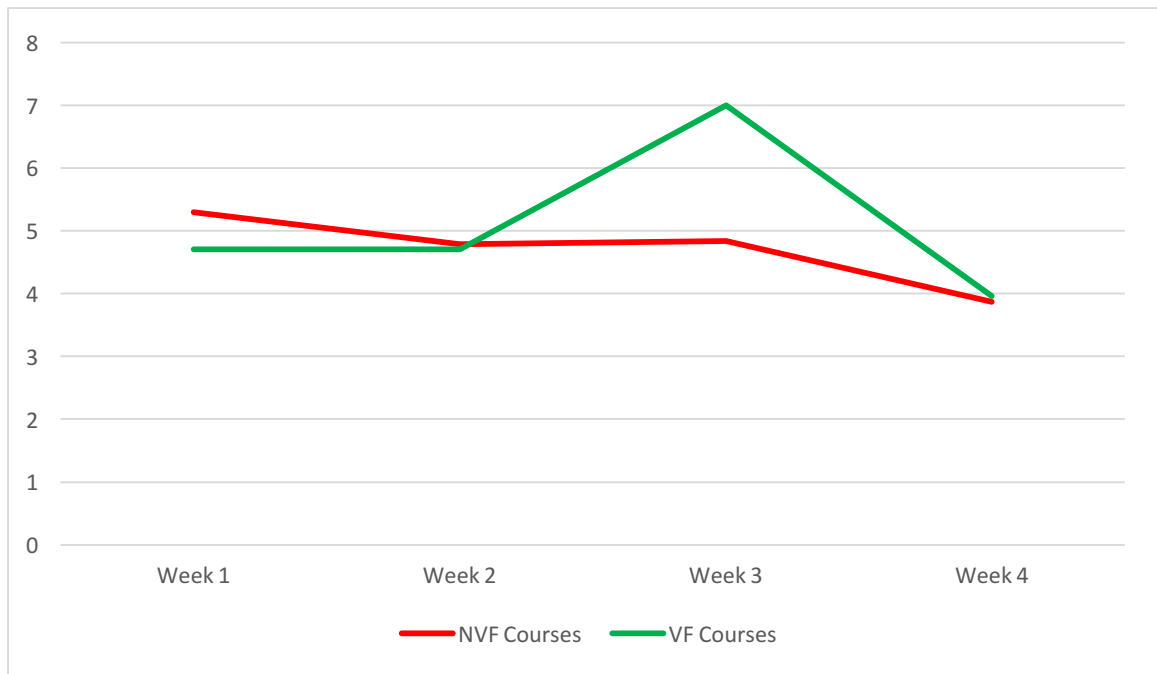


Figure 12. Level 2 Discussion Threading Posts Totals with Student Participation Taken into Consideration: NVF vs. VF Courses

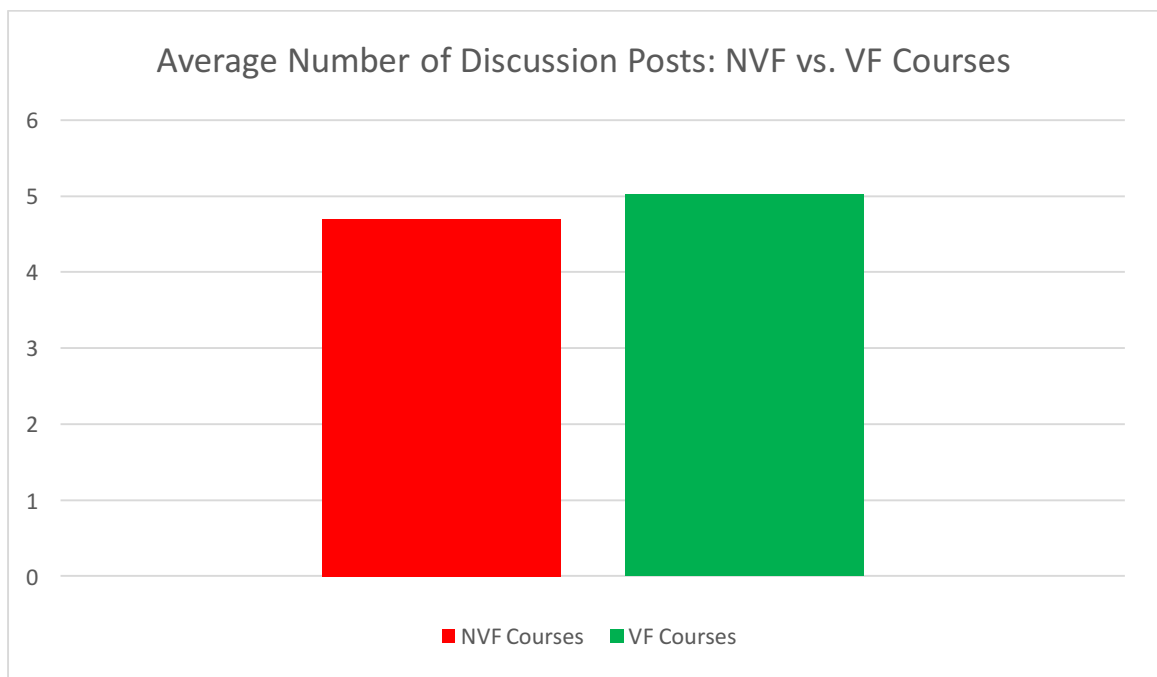


Figure 13. Average of Level 2 Discussion Threading Posts Totals with Student Participation Taken into Consideration: NVF vs. VF Courses

Courses with no Video Feedback Information. The available data were used to make one final comparison for this study: SC&I-PDS courses that were taught before the video feedback strategy was officially approved versus SC&I-PDS courses that elected not to use the video feedback strategy. The key difference here was that the instructors of the former group received no information about this project, while the instructors of the latter group received the Best Practices for Online Discussion Board Feedback memo. The results of this final comparison were negligible, indicating that if the instructors elected not to use the video feedback strategy, they likely elected not to use the Best Practices memo either.

Student Survey

All students who took one of the six VF courses reviewed in this study were invited to take an anonymous survey during the third week of their four-week sessions (Appendix G). The results indicated that the students unanimously felt that their instructors (who had all used the video feedback strategy) provided timely feedback, were motivating, engaging, and used methods that generated an interest in course materials. Students also indicated that the quality of the online discussions was high, and that their teacher had kept them engaged. The feedback provided via video was recognized as clear and helpful, and students believed that their work had been praised.

A small minority of student respondents (5.9%) suggested that there was not a high level of interaction between the class and instructor, or that the instructor's methods did not lead to a better understanding of the course material. Interestingly enough, there was also some indication that instructors did not address students by name, or keep them motivated, despite the fact that these features were unanimously confirmed by other

questions within the same survey. Furthermore, it seemed that not all students were satisfied with the classes and/or would take them again, despite the addition of the video feedback strategy.

A slightly higher percentage of respondents (11.76%) indicated feeling that their online instructor did not know who they were. Interestingly enough, the same percentage of students indicated that they would not take an online version of their class again, despite the overall positive feedback.

Instructor Interviews

In order to determine if the proposed video feedback strategy was a realistic approach, one-on-one interviews were scheduled with the instructors who had actually used the video feedback strategy in their online course(s). The questions asked during these interviews were purposely designed to reflect the recommendations listed at the beginning of Chapter IV. All eligible instructors proved ready and willing to talk about their experience in an informative and friendly manner. Due to geographical distances, the six interviews were handled via three different formats: Face-to-face meeting, video conference, and telephone conversation. Interestingly enough, these three formats ended up being distributed evenly across the six interviews, with two instances of each format.

When discussing the 5-minute time limit, the interviewees tended to focus on two themes. The first was that the 5-minute limit was sufficient for them to do what they felt needed to be done. The second was that the 5-minute limit may have actually been too much time. The distinction here appears to be tied to the number of students taking the course. Fewer students meant less time needed to deliver the personalized feedback.

When asked if the online instructors were able to keep the tone of their video feedback positive, nearly all interviewees indicated that they had no trouble doing this. Some sought to clarify their statement(s) by identifying the SC&I-PDS students as professionals who were seeking professional development. This implied that they might be harder working than the average college student. The one challenging issue mentioned at this point in the interview(s) had nothing to do with the video feedback strategy; this was the fact that even the professional students had difficulty focusing on coursework over the Christmas/New Year's recess. Realistically, such an issue might prove challenging in any learning context.

The interviewees were asked about the use of individual student names while recording their feedback videos. All but one instructor did use individual names. The single exception, an instructor who taught a relatively large class, felt that it was more efficient to refer to students in groups. Those who did use individual student names however, unanimously indicated that this was a positive feature of the video feedback strategy. Interviewees advised that their students loved hearing their own names because it confirmed that attention was actually being paid to them and to their work.

While some interviewees indicated that they did not encounter any technical issues as they recorded their feedback videos, others did confess to one or two problems. Fortunately, the reported problems were relatively minor in scope; they ranged from difficulty adjusting the audio component of the recording software, to a processing error that occurred after the actual recording had been completed. One instructor also admitted having some trouble planning sufficient time to complete all of the necessary recordings.

The interviewees indicated that they did not encounter any technical issues when providing the actual feedback to their students. Furthermore, all students seemed to be sufficiently computer literate to access the video feedback. One interviewee did admit that she forgot to email the video feedback - not once but twice. In each instance however, the instructor sent the videos as soon as she remembered to do so.

The interviews then focused on whether the 24-hour turnaround time was appropriate for the video feedback strategy. From this, two different schools of thought emerged. The first felt that the 24-hour turnaround was important, particularly in a fast-moving online course, for it helped students look at what they had just done before refocusing on what was coming up next. However, the second school of thought admitted that there were potential problems that could arise when online instructors were required to provide feedback so quickly. This was especially true with classes that were scheduled over a holiday, or when individual students fell behind. In each instance, there was a possibility of feedback being due before every student had finished submitting all of the necessary work.

When asked if they felt that their students had benefitted from the video feedback, all interviewees seemed to think so. Some even noted that their students had taken the time to thank them for the extra effort. In return, these interviewees admitted that they did think the experience had a positive impact on their own feedback.

Before officially closing-out the interviews, all interviewees were given an opportunity to add anything they felt might be relevant to the conversation. Several did take the opportunity to speak their mind. The one comment made at this point that could be interpreted as negative was a reiteration of the difficulties controlling online students

when a class was held over a holiday season. Another interviewee observed that the experience might have been different if his class had been larger. Beyond that, the closing comments were unanimously positive; they covered items such as the benefits of adding another way of connecting with students, to a suggestion that the video feedback strategy should be required of all SC&I-PDS instructors.

CHAPTER V

Discussion

Purpose of the Study

This study was designed to investigate if video feedback, provided at the conclusion of online discussion board assignments, could be used to help improve student contributions during subsequent discussion board interactions. Specifically, the hypothesis suggested that the provision of video feedback – at the conclusion of an online discussion board – would motivate students to contribute a higher number of EVPs, as well as a greater degree of Level 2 Discussion Threading, during subsequent discussion board engagements.

Findings

Some of the primary differences between a traditional face-to-face course and an online course are the vocal tones, speech volumes, body language, and facial expressions that are ideally available in the former, but are reduced or missing in the latter. The primary objective of this study was to determine if a video feedback intervention could provide these missing elements, and thereby encourage online students to enhance the educational value of their contributions to asynchronous discussion boards. Evidence from the data gathered, including full discussion texts and anonymous surveys, suggests that this objective has been met. Students who received the video feedback displayed a higher level of collaborative, critical engagement in their online discussions. The secondary objective - designing an effective feedback strategy that can easily be implemented, managed, and sustained by busy online instructors - also appears to have

been met. This second conclusion is based on evidence provided not only by the positive results of the online discussion boards, but also by the post-course instructor interviews.

While it is possible that online students may have been intrigued by this strategy simply because it was something that seemed new and different, two factors belie this assumption. First, as noted elsewhere in this report the data suggests that online students who had access to the video feedback strategy did improved their discussion board performance over the four-week period. Second, use of video in online courses is not as innovative as it was a few years ago. Technologies such as VoiceThread, Big Blue Button, GoToMeeting, and Google Hangout are now readily available in a number of online learning programs. If anything, the growing pervasiveness of online technologies has helped ensure that students may be more comfortable taking advantage of a video option if one is provided to them.

Taken as a whole, the data revealed an interesting and somewhat consistent pattern. In the first week of the four week sessions students in both the VF courses and the NVF courses produced results that were strikingly similar. This is reassuring, for having been sampled from the same student body, the students should have been similar to a degree. It also reduces the possibility that some students did better, or worse, because of academic ability, or personal differences that existed before the study commenced.

The data for weeks two and three of the sessions were a little less consistent, for sometimes students did better in one aspect while not doing as well elsewhere. Regardless, the big picture indicates that, following week one when the first video feedback was provided, students in the VF courses began to submit more EVPs and

engaging in a higher amount of Level 2 Discussion Threading. While it could be argued that students in the NVF courses also contributed a higher number of EVPs, and often engaged in more Level 2 Discussion Threading, it was during these two central weeks that the VF courses really began to distinguish themselves from their NVF counterparts.

Another interesting trend was observed during the final week of the online courses. The data indicates that overall, every course contributed less to the online discussion forums during that last week. As noted in Chapter IV, this observation may have been attributable to growing fatigue with the subject matter, or to a refocusing of energy towards final projects. Despite the fact that all classes contributed less in that final week, the values were still higher in courses that took advantage of the video feedback strategy.

While the end-of-term surveys indicated that students felt the quality of the online discussions was high, and that their teacher kept them engaged, a small minority of students unexpectedly indicated that they would not take the class online again. This could suggest either a continuing preference for face-to-face interaction, a desire not to re-take a class they had already completed, or an incorrect interpretation of the final survey question.

When the instructors were given the opportunity to speak freely about the Video Feedback Strategy, most of them offered positive feedback. Here it must be noted that the instructors who had agreed to participate in the interviews were also the instructors who had agreed to use the video feedback strategy in the first place, thus there may have been some bias in their responses. Nonetheless, a few concerns were raised by these instructors. For example, one instructor observed that “students noticed when they were not mentioned.” This could suggest that once an instructor begins using students’ names

he or she will not only have to keep doing this throughout the remainder of the class, but will also have to mention every student's name at some point to avoid unintentionally giving offense to anyone.

At the onset of this work there was hope that the video feedback strategy would enable students to improve their performance when contributing to online discussion boards. While this generally appears to have happened, three issues were raised during the instructor interviews that should be kept in mind when considering a video feedback strategy.

First, the video feedback may be difficult to prepare, and it may be difficult for students to access and digest, if the course is scheduled over a popular holiday. Here it must be acknowledged that it can be difficult to continue any scholarly work over an important holiday, thus video feedback should not be singled-out for exception. Instead, instructors and students are recommended to be mindful of potential scheduling issues in advance, and to plan accordingly.

Second, a comment was made about the viability of this strategy when used with larger classes. The largest class in the current study consisted of only 18 students. Admittedly, eighteen is not that large when considering the full potential of modern day online capabilities. It is conceivable that if the strategy was applied to much larger classes, some of the components would not work as well as they appear to have in this study. However, one might consider employing different strategies to accommodate larger numbers of students, such as addressing students in groups rather than as individuals, and dividing the feedback responsibilities among several teaching assistants.

Another issue, perhaps the overriding issue for a strategy such as this, is the time requirement. Participating instructors did not dwell upon timing issues when they were preparing the video feedback for their online classes. However, here it must be noted that a number of SC&I-PDS instructors choose not to participate in this study precisely because they felt that it would take too much time. Online teaching does take a lot of time to do well, and adding one more item to instructors' list of things to do is not something that would appeal to everyone. The fact that many still think of video feedback as an add-on, if they think of it at all, implies that it could be one of the first things to be eliminated if time begins to run tight.

In addition to the time constraint, it is possible that busy online instructors might simply forget to record the feedback, especially if they decide to take a break after a long session of grading. This is an issue of some concern, for no student can ever consider feedback that is not sent. In the current study, all instructor feedback videos were carefully monitored to ensure that they not only contained the required elements, but that the finished product was provided to students in a timely manner. If a video feedback strategy is seriously pursued at any point in the future, then it might be necessary for an individual, perhaps a department administrator or a teaching assistant, to ensure that the video feedback is recorded and sent to students on schedule.

Before concluding this section, one final, unanticipated, observation must be acknowledged. Within this study there was an instance of a single instructor using the video feedback strategy in two separate courses. The first time she tried it, her students submitted more EVPs, and engaged in more Level 2 Discussion Threading, than in her previous NVF class. In and of itself, this result matches those obtained when other

instructors taught without, and then with, the video feedback strategy. What is interesting however is that when this same instructor used the video feedback strategy a second time, the students in her second VF course produced more EVPs, and also engaged in more Level 2 Discussion Threading, than the students in either her NVF course, or her initial VF course. This suggests that an instructor's ability to effectively use the video feedback strategy may actually improve with repeated use. Alternatively, the differences may have been a result of the particular students who enrolled in the second section.

Importance of Results

Online learning can be inherently isolating, but there are ways for instructors to reach-out and make personal connections with their students. The results of this study suggest a method of accomplishing this via video feedback. However, when reviewing the results of this study, all factors should be taken into consideration. On the surface, video feedback does appear to help online students increase the number of their EVP submissions and raise their level Level 2 Discussion Threading. However, when looking at the positives one must also see the issues that could limit such an approach, issues such as the additional work and time required.

Limitations. Overall this study appears to have been well-received by the instructors and students who participated. However, this work endured a number of very real limitations that must be admitted before signing-off. While an effort was made to gather data on a wide range of online courses, including large courses, small courses, and courses taught by different instructors on different topics, on the whole this study was limited to just fourteen, four-week classes. All students were working professionals attending a single university in the Northeastern United States. The maximum class size

of eighteen students was also relatively small. While it might be tempting to extrapolate these results to online learning in general, to do so without further testing would be presumptuous.

Suggestions for Further Research. Further research into this area should focus on the areas that the current study could not. For example, full semester/fifteen-week online classes attended by matriculated college students would be a good place to start. Studies could be conducted outside of the Northeastern United States. Video feedback could also be provided to larger online classes, ranging from twenty students to very large MOOCs (Massive Online Open Courses). An additional study that might prove of some interest would be to have individual online instructors practice the video feedback strategy across multiple classes. This would help determine if an instructor can improve his or her video feedback technique with repeated use.

Final Summary

Taken at face value, the results of this study would seem to suggest a number of benefits afforded by the video feedback strategy:

- The educational value of students' posts generally increases over the four-week course period.
- The amount of Level 2 Discussion Threading generally increases over the four-week period.
- While courses that do not use the video feedback strategy do contain both EVPs and threaded discussions, the values of both decrease more quickly and/or are cumulatively smaller than the courses that do use the video feedback strategy.

- Students were admittedly motivated and engaged by the video feedback strategy, so much so that they were able to make observable improvements in the educational quality of their online discussions.
- Instructors appear to be generally adept at using the video feedback strategy without too much difficulty.
- Overall, instructors seem to feel that the video feedback strategy adds some value to their course, and to the learning experience of their students.

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Appendix ADefinition of Unique Acronyms used in this Report

Acronym	Definition
ELVP	Educationally Less Valuable Post
EVP	Educationally Valuable Post
MOOC	Massive Online Open Course(s)
LMS	Learning Management System
NVF	No Video Feedback
PDS	Professional Development Studies
SC&I	School of Communication & Information
VF	Video Feedback

Appendix B

Best Practices for Online Discussion Board Feedback

1. Summarize each Discussion Board Assignment with a final feedback message that wraps everything up.
2. Look for the following:
 - a. Educationally Valuable Posts
 - i. Exchanges where students display constructive, critical, engagement with the ideas and/or key concepts of the topic
 - ii. Building of knowledge through reasoning, articulation, creativity, and reflection
 - b. Educationally Less Valuable Posts
 - i. Exchanges characterized by a lack of substance
 - ii. Little critical and/or meaningful engagement in the online discussion
 - c. Evidence of Discussion Threading
 - i. Unanswered or 'Speak Posts' are student posts to which no one responded
 - ii. Level 1 are student posts to which one or more replies were made
 - iii. Level 2 are student posts to which replies were made, as well as replies to those replies
3. Mention 2-5 students, by name, who produced examples of Educationally Valuable Posts and/or Level 2 threading.
4. The overall feel should be positive.
 - a. The good things are noted
 - b. Suggestions are offered for improving the 'not so good' things
5. Send feedback to students via email ~24 hours after the discussion board has closed

Appendix C

Screenshots from Pearson's Learning Studio (eCollege) Tutorial

The screenshot shows the Rutgers eCollege interface. At the top is a red header with the Rutgers logo and navigation links like 'Online Feedback' and 'Instructor: John Obenchain'. Below the header is a toolbar with icons for course administration. The main content area is titled 'Online Feedback' and includes a profile picture of John Obenchain, his contact information, and course details. A sidebar on the left contains a 'Course Home' menu with links to Syllabus, eCollege Resources, and Feedback. The 'Announcements' section is empty, showing 'There are no active announcements in this course.'

RUTGERS Online Feedback Instructor: John Obenchain

course admin gradebook email share live doc sharing dropbox journal webloggy tech support help

Announcements

Expand All

Announcement	Submitter	Date/Time *
There are no active announcements in this course.		

Online Feedback

Instructor: John Obenchain, MBA, Ed.D. candidate

Course Delivery: Fully Online

Duration: self-paced

Email: jobenchain@docs.rutgers.edu

Office Hours: By Request

Course Pre-requisites:

- Dissertation Draft:**
[Video Feedback in](#)
[Online Discussion Boards](#)

Course Description:

"The single biggest problem in communication is the illusion that it has taken place" - George Bernard Shaw

This course is intended for instructors who are participating in the dissertation project: Can Video Feedback Improve Student Performance in Online Discussion Boards.

The screenshot shows a web browser window displaying a video player. The address bar shows the URL 'https://rutgers-sci.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=bd19b8c8-ab16-4a2b-beaf-3ce9b48c53e'. The video player shows a woman with long dark hair speaking. The player interface includes a search bar, a progress bar at the bottom, and a timestamp of 0:14. The browser's address bar also shows the date 'Tuesday, October 25, 2016 at 10:04:26 PM'.

https://rutgers-sci.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=bd19b8c8-ab16-4a2b-beaf-3ce9b48c53e

RUTGERS School of Communication and Information Powered by Panopto Tuesday, October 25, 2016 at 10:04:26 PM October 25, 2016 Help Sign in

Search

Discussion

0:14

-2:55 1x Speed Quality

Appendix D

Titles, dates, and Instructors for SC&I-PDS Classes, August, 2015 – March, 2017 (as published in August, 2016)

Public Relations Certificate Fall 2015 - Program Cycle

Course Name	Start Date	End Date	Instructor
Integrated Marketing Communication (Elective)	August 3	August 30	Denise Anderson
Advanced PR & Marketing Communication Writing (Required)	August 31	September 27	David Levine
Social Media Strategies (Elective)	September 28	October 25	Deirdre Breakenridge
Strategic Public Relations (Elective)	October 26	November 22	Martha Whiteley
Public Relations for a Cause: Corporate Social Responsibility (Elective)	November 23	December 20	Alysia Lew
Building a Successful Brand (Elective)	November 23	December 20	Susannah Crowley
Ethics and the Business of Public Relations (Required)	January 4	January 31	Ken Hunter
Crisis & Reputation Management (Elective)*	TBD	TBD	Matthew Golden
Smart PR Measurement (Elective) *	TBD	TBD	Shonali Burke

Online Certificate Suite – Schedule Overview – Fall 2016

Public Relations Certificate			
Course Name / Course ID	Start Date	End Date	Instructor
Advanced PR & Marketing Communication Writing [R] - (PR-ADVWRITING80116DL)	August 1	August 28	David Levine
Strategic Public Relations [E] (PR-STRATEGIC82916MW)	August 29	September 28	Martha Whiteley
Social Media Strategies [E] (PR-SOCIALMEDIA10316DB)	October 3	October 30	Deirdre Breakenridge
PR for a Cause: Corporate Social Responsibility [E] – (PR-CSR103116AL)	October 31	November 30	Alysia Lew
Ethics and the Business of Public Relations [R] (PR-ETHICS120516KH)	December 5	January 4	Ken Hunter
Integrated Marketing Communication [E] (PR-IMC10917DA)	January 9	February 5	Denise Anderson

Business and Organizational Communication Certificate			
Course Name / Course ID	Start Date	End Date	Instructor
Professional Presence and Presentations [E] (BC-PPP82916CD)	August 29	September 28	Christine Dunham
Interpersonal Communication [R] (BC-IC100316DH)	October 3	October 30	Danielle Heuer
Business and Organizational Writing [R] (BC-WRITING120516DH)	December 5	January 4	Danielle Heuer
Dynamics of Effective Teams [E] (BC-ETEAMS2017SH)	Offered Spring 2017		Scott Hebert
Persuasion and Negotiation [E] (BC-PN2017LB)	Offered Spring 2017		Leo Bottary
Diversity and Cross-Cultural Communication [E] – (BC-DCCC2017RD)	Offered Spring 2017		Richard Dool

Leadership and Managerial Communication Certificate			
Course Name / Course ID	Start Date	End Date	Instructor
Crisis Leadership and Communication [E] (LC-CRISIS103116KM)	October 31	November 30	Kenneth Mizrach
Strategic Communication Planning [E] (LC-STRATEGICCP10917LB)	January 9	February 5	Leo Bottary
Effective Managerial Communication Skills [E] (LC-MCS20617JP)	February 6	March 5	Joann Presbrey
Leadership Communication [R] (LC-LEADC2017SH)	Offered Spring 2017		Scott Hebert
Organizational Culture and Change [R] (LC-OCC2017RD)	Offered Spring 2017		Richard Dool
Leading Virtual Teams [E] (LC-VTEAMS2017RC)	Offered Spring 2017		Rob Cerjan

Appendix E

Overview of Courses Used in Study

Course Number	Date	Instructor	Video Feedback	No Video Feedback
	2016			
1	March	D. Heuer		X
2	May	M. Golden		X
3	August	D. Levine		X
4	August	C. Dunham		X
5	October	D. Heuer	X	
6	October	D. Breckenridge		X
7	November	K. Mizrach		X
8	November	A. Lew		X
9	December	K. Hunter		X
10	December	D. Heuer	X	
	2017			
11	January	L. Bottary	X	
12	February	D. Levine	X	
13	March	R. Dool	X	
14	March	C. Dunham	X	

Color Code:

Red: 3 courses taught by D. Heuer

Green: taught twice, once by M. Golden, and once by R. Dool

Blue: taught twice by D. Levine

Purple: taught twice by C. Dunham

Total Discussion Boards: 56

Total Number of Students: 116

Total Number of Discussion Posts: 3,046

Appendix F

Coding Scheme

The scheme used to code student data during this research study will use a number/letter combination to indicate the class, the student, the assignment, and the position of the post within the discussion board of interest. Additionally, one of the EVP/ELVP Characteristics will be added to each label to indicate how a post was classified, and why it was classified as such.

Class

The classes will be recognized in the order that they are listed in Appendix G. Starting with the letters of the Latin Alphabet, beginning with the letter ‘A’.

The table below illustrates how the letters will be assigned to the different classes:

Letter Code	Fall 2015 SC&I-PDS Classes
A	Integrated Marketing Communication
B	Advanced PR & Marketing Communication Writing
C	Social Media Strategies
D	Strategic Public Relations
E	Public Relations for a Cause: Corporate Social Responsibility
F	Building a Successful Brand
G	Ethics and the Business of Public Relations
H	Crisis & Reputation Management
I	Smart PR Measurement
	Spring 2016 SC&I-PDS Classes
J	Ethics and the Business of Public Relations

K	Smart PR Measurement
L	Advanced PR & Marketing Communication Writing
M	Social Media Strategies
N	Crisis & Reputation Management
O	Integrated Marketing Communication
P	Interpersonal Communication
Q	Professional Presence and Presentation
R	Business and Organizational Writing
S	Dynamics of Effective Teams
T	Leadership Communication
	<p>Fall 2016 SC&I-PDS Classes</p> <p>Note: Some of these classes will be offered in Spring, 2017, however they are assigned codes in case there is a need to incorporate them into the current study.</p>
U	Advanced PR & Marketing Communication
V	Strategic Public Relations
W	Social Media Strategies
X	PR for a Cause: Corporate Social Responsibility
Y	Ethics and the Business of Public Relations
Z	Integrated Marketing Communications
AA	Professional Presence and Presentations
AB	Interpersonal Communication
AC	Business and Organizational Writing
AD	Dynamics of Effective Teams
AE	Persuasion and Negotiation

AF	Diversity and Cross-Cultural Communication
AG	Crisis Leadership and Communication
AH	Strategic Communication Planning
AI	Effective Managerial Communication Skills
AJ	Leadership Communication
AK	Organizational Culture and Change
AL	Leading Virtual Teams

Students

The students registered for each class will be listed alphabetically by last name.

They will then receive a numerical value, beginning with the number '1'.

For example, presume that six students are participating in the SC&I-PDS classes:

- John Lennon
- Paul McCartney
- George Harrison
- Ringo Starr
- James Bond
- Han Solo

For the purposes of this example, the first three students register for Class #1, the last three register for Class #2, and all six students register for Class #3. Their codes will be assigned as follows:

Numerical Code	Class #1
1	George Harrison
2	John Lennon
3	Paul McCartney
	Class #2
1	James Bond
2	Han Solo
3	Ringo Starr
	Class #3
1	James Bond
2	George Harrison
3	John Lennon
4	Paul McCartney
5	Han Solo
6	Ringo Starr

Please note that a student's numerical code can change if he or she is registered for more than one SC&I-PDS classes. For example, while George Harrison is coded '1' in Class #1, he is coded '2' in Class #3.

Discussion Boards

Since each SC&I-PDS class will have four discussion boards, these boards will be coded using the colors red, blue, green, and yellow. The colors will be assigned as illustrated in the table below:

Discussion Board Assignment	Color
1	Red (R)
2	Blue (B)
3	Green (G)
4	Yellow (Y)

Tracking Posts Within a Discussion Board

In order to keep track of specific posts that might appear in lengthy discussion boards, a final numerical value will be assigned to each code. This value will correspond to the order in which the post appears within the overall discussion board. For example, a student's first post in a discussion board would receive a value of '1', while the student's second post would receive a value of '2'.

Summary

To sum everything up, presume that James Bond registers for the Fall, 2016 session of Social Media Strategies. He is listed second on the class roster, below Jane Austen. The code used for his posts on the second discussion board assignment would be: W2Blue (or W2B). If he makes two posts, and the first one is determined to be EVP with an 'Explanatory' characteristic, while the second one is determined to be ELVP with a 'Judgmental' characteristic, his posts will be labeled like this:

- W2B1-Explanatory
- W2B2-Judgmental

Appendix G

Student Survey (online)

You are invited to participate in an educational research study being conducted by doctoral candidate John Obenchain at Rutgers University. The voluntary survey will take approximately 15 minutes of your time. The study is important because it looks at the influence of instructor behaviors on student perceptions of the online learning experience. Your participation will help the university community to understand and make improvements in online instruction. Your responses will be kept strictly confidential. If you wish to participate, please click on the following link.

[ADD QUALTRICS LINK HERE]

The first part of the survey process is a consent form to read and acknowledge before proceeding with the actual self-administered online survey. If you are interested in the study findings, please contact John Obenchain via email at john.obenchain@gse.rutgers.edu

Thank you in advance for your participation in this academic effort.

[ADD LINK TO CONSENT FORM HERE]

1. My online instructor provides timely feedback.

- ☐ Yes
- ☐ No

2. My online instructor knows who I am.

- ☐ Yes
- ☐ No

3. My online instructor's methods generate an interest in the course material.

- ☐ Yes
☐ No

4. In general, the instructor is effective in motivating the students to interact in this course.

- ☐ Yes
☐ No

5. Interaction between the instructor and the class is high

- ☐ Yes
☐ No

6. My online instructor's methods keep me motivated.

- ☐ Yes
☐ No

7. My online instructor's methods keep me engaged in the learning process.

- ☐ Yes
☐ No

8. My online instructor's methods give me a better understanding of the course materials.

- ☐ Yes
☐ No

9. My online instructor makes a point of staying engaged with students.

- ☐ Yes
☐ No

10. My online instructor uses a variety of strategies, resources, and technologies to help me learn.

- ☐ Yes
☐ No

11. I feel that the quality of class discussions has been high throughout the course

- ☐ Yes
☐ No

12. The instructor addresses students by name

- ☐ Yes
☐ No

13. The instructor has addressed me by name

- ☐ Yes
☐ No

14. Did you feel personally motivated to take this class when you were registering?

- ☐ Yes
☐ No

15. The instructor praises students' work or comments.

- ☐ Yes
☐ No

16. The instructor's feedback is clear and helpful to me in understanding both the strengths and weaknesses of my work

- ☐ Yes
- ☐ No

17. I am very satisfied with this course

- ☐ Yes
- ☐ No

18. If I had an opportunity to take another course online, I would gladly do so

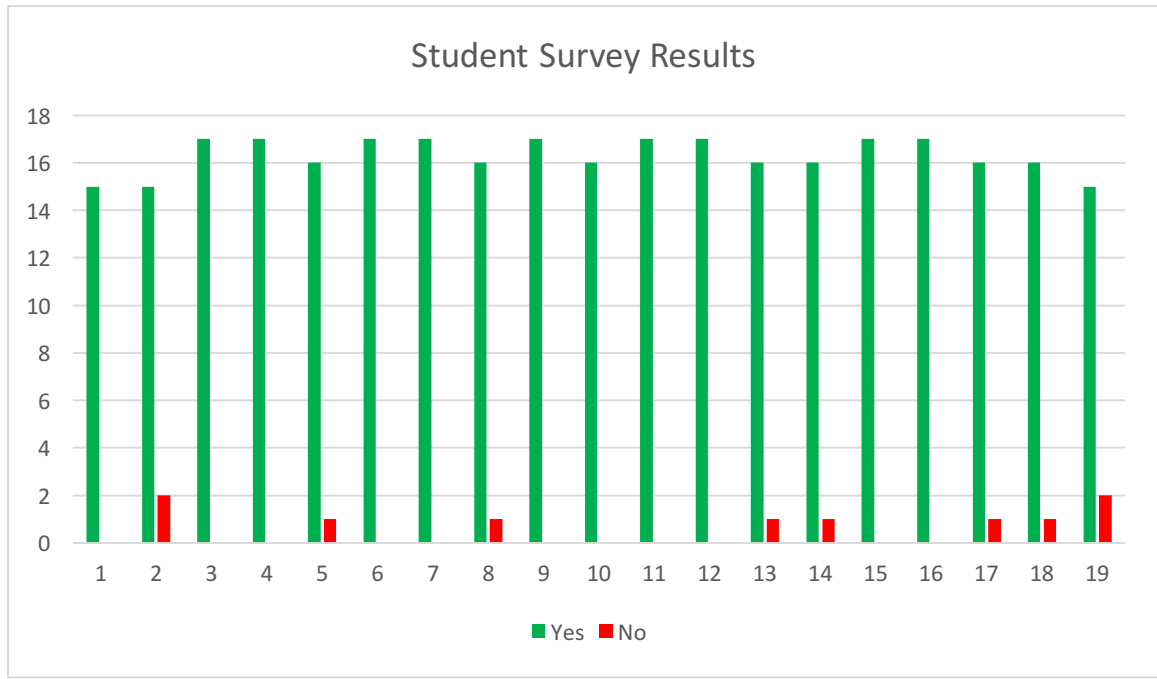
- ☐ Yes
- ☐ No

19. If I had to do it over, I would not take this course online.

- ☐ Yes
- ☐ No

Thank you for taking the time to provide your feedback on your course.

(Source: Rutgers SIRS, Retrieved from: https://ctaar.rutgers.edu/images/SIRS_form.jpg,
and Beasley, 2007)



Appendix H

John Obenchain, Interview Protocol for Online Instructors and Potential Probing Questions

Hello (insert name of participant):

Thank you for taking the time to speak with me. My name is John Obenchain and I will be conducting this interview. For research purposes, this interview will be recorded.

[At this point, provide a copy of the INTERVIEW CONSENT FORM WITH AUDIO/VISUAL RECORDING for signature]

The purpose of this interview will be to solicit your thoughts and opinions regarding the video feedback strategy you used during your _____ online class. This interview will take approximately 30 minutes and will begin with a little background about yourself and your class. Then, we will move onto your opinions and thoughts about the video feedback strategy.

Describe your experience with the video feedback strategy in your online class.

- a. Did you find the 5-minute time limit to be appropriate? Why or why not?
- b. Do you feel you were able to keep your video feedback positive? Why or why not?
- c. Were you able to use individual student names when recording feedback for the class as a whole? Why or why not?
- d. Did you experience any issues recording your videos? Please explain.

e. Did you experience any issues emailing the feedback videos to your students?

Please explain.

f. Do you feel that a 24-hour turnaround time was appropriate for this kind of feedback? Why or why not?

g. Do you feel that your students benefitted from the video feedback you provided? Please explain.

Thank you for taking the time to provide your feedback and suggestions on this feedback strategy.

Summary of Post-Course Interview with Instructor

Was the 5-minute time limit appropriate?

- Didn't take too much time to record the 5-minute feedback videos
- Students found the 5-minutes manageable
- Was able to provide a lot of feedback in 5 minutes

Able to keep the video feedback positive?

- Yes – but had good students who worked hard

Able to use student's names when recording feedback?

- Yes

Any issues recording the videos?

- Sometimes it was difficult finding the time to do it
- Had some difficulty with recording sound using Panopto during week #2

Any issues emailing the feedback?

- Forgot to do it twice (did it late)

Was the 24-hour turnaround time appropriate for this kind of feedback?

- Felt it was necessary to help avoid confusing the previous assignments with the current assignments

Did students benefit?

- Yes, felt it helped make better connections in the asynchronous environment

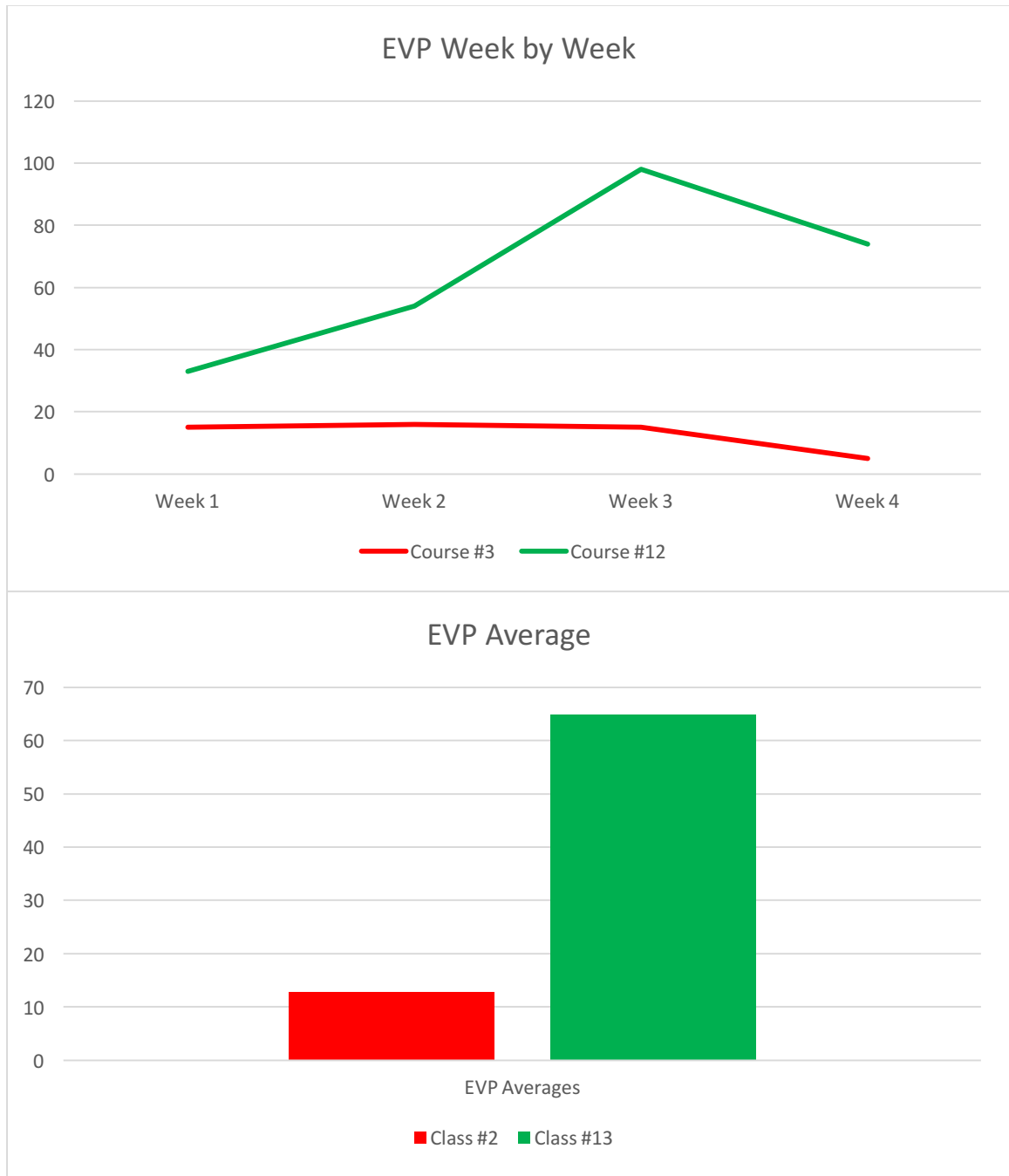
Anything else?

- Will continue to use this feedback strategy
- Feel that it should be required by SC&I for all online classes
- A positive experience
- Added another level of connection with students
- Provided an opportunity to encourage their active participation

Appendix I

EVP Charting/Graphing Example

	Week 1	Week 2	Week 3	Week 4	Average
Course #3	15	16	15	5	12.75
Course #12	33	54	98	74	64.75



Appendix JCourse Descriptions

Course #1	
Title	Business & Organizational Writing
Instructor	Danielle Heuer
Date Taught	March, 2016
Total Number of Students Registered	4
Similar Examples in this Study	Yes. Instructor Heuer taught a similar course in December, 2016 and the same course in March, 2017
Used the Video Feedback Strategy	No, the study hadn't yet been approved by the dissertation committee
Total Number of Posts	50
Any Issues	This was the first time Instructor Heuer had taught an online class for Rutgers University

Course #2	
Title	Crisis & Reputation Management
Instructor	Matthew Golden
Date Taught	May, 2016
Total Number of Students Registered	13
Similar Examples in this Study	Yes. The exact same course was taught by Instructor Richard Dool in March, 2017
Used the Video Feedback Strategy	No, the study hadn't yet been approved by the dissertation committee
Total Number of Posts	326
Any Issues	2 students dropped the course after registration, therefore a total of only 11 students participated in the actual course

Course #3	
Title	Advanced Public Relations Writing
Instructor	David Levine
Date Taught	August, 2016
Total Number of Students Registered	6
Similar Examples in this Study	Yes. Instructor Levine taught the same course in February, 2017
Used the Video Feedback Strategy	No, the study hadn't yet been approved by the dissertation committee
Total Number of Posts	150
Any Issues	2 students dropped the course after registration, therefore a total of only 4 students participated in the actual course

Course #4	
Title	Professional Presence & Presentations
Instructor	Christine Dunham
Date Taught	September, 2016
Total Number of Students Registered	5
Similar Examples in this Study	Yes. Instructor Dunham taught the same course in March, 2017
Used the Video Feedback Strategy	No, the study hadn't yet been approved by the dissertation committee
Total Number of Posts	70
Any Issues	1 student dropped the course after registration, therefore a total of only 4 students participated in the actual course

Course #5	
Title	Interpersonal Communications
Instructor	Danielle Heuer
Date Taught	October, 2016
Total Number of Students Registered	6
Similar Examples in this Study	Yes. Instructor Heuer taught similar courses in March, 2016 (without using the video feedback strategy), and in December, 2016 (with the video feedback strategy)
Used the Video Feedback Strategy	Yes
Total Number of Posts	129
Any Issues	She had some audio trouble with her video recording program in week two, so the feedback was sent 24 hours late. Also, 1 student dropped the course after registration, therefore a total of only 5 students participated in the actual course

Course #6	
Title	Social Media Strategies
Instructor	Deidre Breckenridge
Date Taught	October, 2016
Total Number of Students Registered	13
Similar Examples in this Study	No
Used the Video Feedback Strategy	No. Instructor Breckenridge was offered the opportunity, but said that she was too busy to use the Video Feedback Strategy in her online class.
Total Number of Posts	186
Any Issues	No

Course #7	
Title	Crisis Leadership & Communication
Instructor	Kenneth Mizrach
Date Taught	November, 2016
Total Number of Students Registered	9
Similar Examples in this Study	No
Used the Video Feedback Strategy	No. This was the first time Instructor Mizrach had taught online. He was uncomfortable trying to do too much.
Total Number of Posts	207
Any Issues	No

Course #8	
Title	Corporate Social Responsibility
Instructor	Alysia Lew
Date Taught	November, 2016
Total Number of Students Registered	7
Similar Examples in this Study	No
Used the Video Feedback Strategy	No. Instructor Lew was initially receptive to this dissertation study, but chose not to participate due to unrelated issues concerning her salary for teaching this course
Total Number of Posts	120
Any Issues	1 student dropped the course after registration, therefore a total of only 6 students participated in the actual course

Course #9	
Title	Ethics & the Business of PR
Instructor	Ken Hunter
Date Taught	December, 2016
Total Number of Students Registered	16
Similar Examples in this Study	No
Used the Video Feedback Strategy	No. Instructor Hunter advised that he was uncomfortable adding the Video Feedback Strategy on top of his other teaching responsibilities.
Total Number of Posts	316
Any Issues	There may have been possible issues due to the simultaneous Christmas/Hanukah/New Years Holidays. 1 student dropped the course after registration, therefore a total of only 15 students participated in the actual course

Course #10	
Title	Business & Organizational Writing
Instructor	Danielle Heuer
Date Taught	December, 2016
Total Number of Students Registered	7
Similar Examples in this Study	Yes, she taught the same course without the Video Feedback Strategy (March, 2016), and a similar course with the Video Feedback Strategy (October, 2016)
Used the Video Feedback Strategy	Yes
Total Number of Posts	91
Any Issues	There may have been possible issues due to the simultaneous Christmas/Hanukah/New Years Holidays. 3 students dropped the course after registration, therefore a total of only 4 students participated in the actual course

Course #11	
Title	Strategic Communication Planning
Instructor	Leo Bottary
Date Taught	January, 2017
Total Number of Students Registered	8
Similar Examples in this Study	No
Used the Video Feedback Strategy	Yes
Total Number of Posts	215
Any Issues	No

Course #12	
Title	Advanced Public Relations Writing
Instructor	David Levine
Date Taught	February, 2017
Total Number of Students Registered	16
Similar Examples in this Study	Yes, Instructor Levine taught the same course in August, 2016 without using the Video Feedback Strategy
Used the Video Feedback Strategy	Yes
Total Number of Posts	578
Any Issues	2 students dropped the course after registration, therefore a total of only 14 students participated in the actual course

Course #13	
Title	Crisis & Reputation Management
Instructor	Richard Dool
Date Taught	March, 2017
Total Number of Students Registered	18
Similar Examples in this Study	Yes, the same course was taught by Instructor Matthew Golden in May, 2016.
Used the Video Feedback Strategy	Yes
Total Number of Posts	584
Any Issues	2 students dropped the course after registration, therefore a total of only 16 students participated in the actual course

Course #14	
Title	Professional Presence & Presentation
Instructor	Christine Dunham
Date Taught	March, 2016
Total Number of Students Registered	6
Similar Examples in this Study	Yes, Instructor Dunham taught the same course in August, 2016
Used the Video Feedback Strategy	Yes
Total Number of Posts	33
Any Issues	3 students dropped the course after registration, therefore a total of only 3 students participated in the actual course