

Presentation anxiety analysis: comparing face-to-face presentations and webinars

Scott Campbell
National University

ABSTRACT

This study is an exploration in the changing landscape of how people deliver presentations in an attempt to determine the advantages and disadvantages of both forms. The study focused on key differences of student expectations and experiences delivering a presentation to an audience in the same location (face-to-face) compared to a presentation delivered online to an audience they could not see or hear. The subjects were students that volunteered to be part of the study. There were a total of 50 students used in 3 different classes. Each student delivered two presentations. The students were given 4 surveys to complete during the study. Both presentations had a pre and post assessment. The end result of the surveys provided compelling information about student expectations and experiences, particularly in regards to anxiety levels. A literature review regarding anxiety associated with public address and the pros and cons of integrating technology into education was conducted. The literature review and student responses to the surveys provided evidence in order make recommendations to educators and to help educators make a more informed decision about the advantages and disadvantages of using either method of delivery.

Keywords: Presentation, webinar, face-to-face, online, delivery, anxiety.

INTRODUCTION

In recent years there has been a growing trend of using the Internet as a new medium of communication in lieu of traditional face-to-face communication. It is now commonplace for people to conduct one-on-one video chats with someone across town or across the globe. In addition to one-on-one communication, web-based conference technologies provide people with the opportunity to hold meetings, attend seminars, and deliver presentations to people all over the world without leaving their office or home.

The growth of using web-based conference technology is also evident in higher education. For institutions of higher learning as many as $\frac{2}{3}$ of all classes are held entirely online (Unknown, 2012). This is due to the changing student expectations and ability to provide once unheard of courses in this format completely online. In addition to a growing base of support by students, a recent study found that 77% of academic leaders “rate the learning outcomes in online education as the same or superior to those in face-to-face.” (Unknown, 2012)

One important aspect of this change is the way presentations are held. Originally, the presenter did presentations in a classroom setting with the audience members in the same room and viewable. However, in more recent years the face-to-face presentation is not as common and is in part being replaced by the webinar. For the purposes of this study, a *webinar* is an online slideshow-based presentation conducted via a web-conferencing tool using a slideshow application such as PowerPoint or Keynote.

Regardless of the method of delivery used, it is very important to be able identify all aspects of both methods in order to make the most educated decision when face with this choice. This study is an attempt to compare the experiences of giving a face-to-face presentation with a webinar. The study includes students enrolled in online public speaking classes. Each student delivered one face-to-face presentation and one webinar. The students participating in the study completed a survey asking questions about their expectations (pre-assessment) and reflection (post-assessment) for the in-person presentation and the webinar.

OBJECTIVE

The primary goals of the research are to gather data on student expectations and reflections of the two different experiences in hopes of making sound recommendations for anyone considering the best format in delivering a presentation. A secondary goal is to provide greater insight into the student experience in order to provide the best chance for success.

METHODOLOGY

The research in this paper was through the pragmatic approach. Empirical research was completed by direct (synchronous and asynchronous observation) of students conducting the presentations. Synchronous observation occurred during the webinar and asynchronous observation happened when students submitted a video recording of their presentation. Intellectual secondary data was collected through various journal articles. The studies focus on trends in higher education related to technology and studies related to anxiety in public address.

The subjects for the study consisted of 50 students enrolled in three different sections of a public speaking course. All students, as part of their final grade, were required to deliver a webinar and give a face-to-face presentation.

The students' first presentation was delivered as a webinar. Students were expected to create and deliver a slideshow-based presentation on a topic of their choosing. The webinar was delivered using the Elluminate web-conferencing tool (at the time of writing this paper it has since changed to Blackboard Collaborate). The presenter was not responsible for uploading the slideshow, but was expected to advance the slides during the session. The webinar was presented in real-time to a live audience. The members of the audience were located in various regions around the country. Video and audio rights were only provided to the presenter. The audience could see and hear the presenter, but the speaker was not able to see or hear individual members of the audience during the presentation. The only indication of audience presence (from the presenter's point of view) was the list of names of the attendees in the session. Aside from the list of attendees, there was no other indication of audience presence during the presentation. However, students were encouraged to ask questions at the conclusion of the presentation via a text chat feature in the software.

The second assignment was to give a presentation to a live audience in the same location. The subjects were required to make a video recording of the presentation and submit the video through the online learning management system for the class (eCollege).

Instrument:

The subjects that volunteered for the study were given 4 different assessment tools. There was a pre-assessment for each presentation (2 total) and a post-assessment after both presentations (2 total). The number of survey questions ranged from 12 (webinar pre-assessment) to 20 (face-to-face post assessment). The primary goal of the pre-assessments was to understand student expectations on a variety of factors including (but not limited to) anxiety, the ability to follow the outline, the ability to achieve the goal (informing the audience), concerns of how well prepared the student was, and any technical issues they were concerned about. The objective sought in the post-assessments was to compare the students' expectations in the pre-assessment with the actual experience (post-assessment).

The face-to-face post-assessment was the final instrument given to the students (as indicated in Appendix 1). As such, there were additional summative questions on the entire experience (both presentations). These questions were geared towards a comparison of the entire experience of the webinar and face-to-face presentation. The topics of the questions comparing the two experiences included (but were not limited to); the connection (or lack of connection) they felt with the audience, the student's level of organization and preparation during the presentation, and the method of delivery that was most effective in achieving their goal (to inform the audience). In all four assessments the students were provided an opportunity to comment after each question. There was also an opportunity to provide additional comments that were not addressed in any of the previous assessments. Finally, there were demographic-oriented questions regarding age, gender, and experience delivering a face-to-face presentation and webinar.

Sample Demographics:

A total of 50 students participated in the study. However, not all students answered all questions (some submitted at least one survey containing no responses). In most cases, 38 students responded to a particular question. In response to the question entitled "Gender", 10

people selected “male” and 19 selected “female”. The remaining students didn’t provide information or selected “prefer not to answer”. The age demographics questions provided the following information: 12 people selected the 18 - 25 option, 8 were in the 26 - 30 range, there were 8 selections for 31 - 40, and 3 people chose 41 or older. The remaining respondents did not respond or selected “prefer not to answer”. Students were asked to indicate their experience delivering a face-to-face presentation and their experience giving a webinar. Those that responded to the question about their experience delivering a face-to-face presentation provided the following information: 7 indicated they’d presented more than 20 times, 7 students selected 10 - 20 times, 10 students had presented 5 to 9 times, 10 responses indicated 1 – 4 times, and 3 students had no experience presenting to a face-to-face audience. The remaining surveys did not contain a response to this question. The students responding to the question about webinar experience indicated the following: 1 student had presented more than 20 times, 2 responses indicated 10 - 20 times, 2 people had presented 5 - 9 times, 1 person chose 1 - 4 times, and 32 had no experience presenting a webinar. The remaining surveys did not contain a response to this question.

Collecting the data

Each student was asked to complete the pre-assessment just prior to giving each presentation and complete the post-assessment immediately following each presentation. This direction was given to try and obtain the most accurate responses. Most students complied with the request. However, some students took anywhere from 2 days to 2 weeks to return the survey. Included in this group were primarily those completing the post-assessment, but included some students submitting the pre-assessment.

LITERATURE REVIEW

In recent years technology has played a major role in the changes that are shaping higher education (Brooks, 2012). And given the changing landscape in the delivery of educational content, it is important that students be prepared to stay current with those changes (Zhu, 2013). A major component of this change is the implementation of web-conferencing software (Skylar, 2009).

An important skill necessary to be successful in school and in the professional world, regardless of the medium used for presenting information, is the ability to effectively present to an audience (Johnson & Szczupakiewicz, 1987). In recent years, lectures that were traditionally conducted in the physical classroom are being replaced with online presentations (webinars). In addition, the way webinars are being conducted is changing (Marks, 2014). As a result, some teachers are forgoing the classroom environment presentation and replacing it with student-driven webinars. But presenting in front of an audience, regardless of the mode (online or face-to-face), can create anxiety (Ashkenas, 2014). Research into the “fear of public speaking” is pervasive (Heeren et al, 2014). Much of the fear is based on performance but it is also associated with technology (DeLoughry, 1993). In addition, not all concerns originate from the students: teachers experience “frustration with technology” (Genet, 2013).

In some cases, instructors will be able to decide between offering students an opportunity to present in a face-to-face environment or through web-conferencing technology. It is important for educators to be in a position to make well-informed decisions when deciding between a

webinar and a face-to-face presentation.

SURVEY FINDINGS

The students were asked to answer more than 50 questions in the pre and post assessments (4). The focus of this study was on their perceptions (pre-assessment) and reactions (post assessment) to each experience. The subjects provided many comments that shed more light on the topic in order to help understand their experiences. For example, one of the final questions in the study was to find out, if given the choice, which method of delivery would they choose in the future. Of the 37 students that responded, 14 would prefer a face-to-face delivery and 19 would prefer the webinar (4 had no preference). Given the general apprehension students had to being placed in front of a live audience (face-to-face), it was no surprise that the majority preferred the webinar to the face-to-face delivery. However, it was a bit surprising to see that the gap between the two was not greater. In a follow up question, subjects were asked to provide the biggest reason for their “preference of one method over the other”. By far, the most common response had to do with the audience. Ironically, this was true for those that preferred the webinar and those that preferred the face-to-face presentation. The students that preferred the face-to-face experience cited the following the following reasons: it “allows a more personal touch”, the audience can “be captivated by the expression of the speaker”, and the ability to “feed off of each other”. Conversely, those that preferred the webinar explained their conclusion with comments like: the speaker doesn’t “have to keep eye contact or worry about...body language when delivering a webinar”, and “the assistance of visual aids to help jot the memory when lost in thought”.

The results showed that the vast majority of students had little or no experience presenting a webinar.

Students universally felt apprehension prior to both presentations in a number of areas including but not limited to: following the presentation outline, remembering the material, achieving the goal of the assignment (informing the audience).

Students were asked to comment on the method of delivery that was a more effective way of achieving their goal. More students (16 of 37) felt the face-to-face method of delivery was more effective than the webinar (13). Eight students felt the two methods were equally effective.

The participants were asked to compare their expected anxiety levels (pre-assessment) to the levels they experienced (post-assessment). In both cases (face-to-face and webinar), the anticipated anxiety was less than the anxiety experienced. Thirty students experienced more in the face-to-face presentation and four subjects experienced greater anxiety in the webinar. Four students felt there were equal amounts of anxiety. It is important to note that no students perceived greater levels of anxiety than experienced levels.

Students were asked to select the section of the process that created the greatest amount of anxiety. Of the 36 responses, four students felt the preparation was the most anxiety inducing, 24 felt greater anxiety in the delivery, and 8 felt there were equal amounts of anxiety.

CONCLUSIONS

The data indicators point to the conclusion that students should prefer to deliver a face-to-face presentation rather than a webinar. This is true for the following reasons: the average student had much more experience delivering a face-to-face presentation, most of the subjects

felt that face-to-face delivery was a more effective way to achieve their goal, and a majority of the students felt a stronger connection in the face-to-face presentation. Additionally, subjects were not confronted with as many technical hurdles in the face-to-face presentation as they did in the webinar. Ironically, when asked to indicate which method they would prefer to use in the future if given the choice, a large majority would prefer to deliver a webinar than a face-to-face presentation. The research suggests that the primary motivation for deciding which method of delivery is preferable is based on anxiety and not on the other factors, which clearly suggest that face-to-face should be the preferred method.

RECOMMENDATIONS

It is important to take into consideration student-anxiety levels when deciding between a webinar and face-to-face presentation. The average student should have lower anxiety levels conducting a webinar. If the primary goal is to make the students most comfortable when presenting, the recommendation would be to select the webinar. If there are concerns about a lack of connection between the presenter and the audience using the webinar, one suggestion would be to require audience members in the webinar to have video technology so that the presenter can see the members. This will accomplish two things: 1) it will allow students to get more comfortable in front of an audience by giving them valuable experience, and 2) it will create a more engaging experience for the presenter and the audience (something that was lacking in the webinar in this study). It would be advisable to have audience participation be a part of the course grade. Additionally, consideration should be given to those students that ask questions. It is recommended that students wait until the end of the presentation to ask questions to avoid distracting the presenter. In addition to having the necessary equipment, it is also important to have audience members look into the camera so that the presenter could see the audience looking at the presenter. This will help ensure a more engaging experience for the presenter and audience member. Given the potential for technical limitations (bandwidth, screen size, etc.), it is recommended that no more than 5 or 6 audience members be connected via a webcam.

Some of the anxiety experienced by presenters is related to technical issues. Anxiety could be mitigated by not holding students accountable for technical issues that might arise in the presentation due to lack of experience with the technology. Another recommendation is to train students on how to use the technology prior to the presentation. It is also recommended that students be given an opportunity to load the presentation and have a minimum of one rehearsal. This will help to assure a stronger delivery and increase confidence levels with the technology. Instructors should also become comfortable using the technology. It is recommended that teachers seek out tutorials in order to accomplish this goal in advance of teaching the class (or at minimum, prior to discussing the assignment).

The survey provides evidence that a majority of the presenters felt they were able to have a stronger connection with the audience during the face-to-face presentation. The instructor should not overlook this information, particularly if the student's grade is due in part to their delivery. A face-to-face presentation would be the recommended method if body language, hand gesturing and other aspects of non-verbal communication are part of the grade. One consideration could be to conduct a webinar and have the speaker use a webcam and present from a standing position into the camera (the audience). This would be recommended if it is logistically and technologically possible. A skill that is important to learn is to look into the

camera and not the faces of the audience members on the screen. This is important so that the audience members see the presenter looking directly at them (into the camera) and not the image on the screen. When a presenter is focused on the images of the audience members it gives the appearance, from the audience's perspective, as if the presenter is not looking at the audience directly.

A majority of respondents would prefer to give a webinar in the future if given the choice. Thirty eight percent preferred face-to-face and the remaining had no preference. The primary explanation provided was to limit anxiety caused by seeing the audience. If audience members are required to be viewable in the webinar, this would balance out the preference of webinar vs. face-to-face because the audience is visible by the presenter in both instances. It is recommended that instructors consider the impact that viewing the audience (webinar and face-to-face) has on anxiety. If there are plans to integrate webinars as a medium of delivery it is recommended that instructors require audience members to be viewable. This will help assimilate students to the expectations of the class, the program, their degree, and in their future careers.

SUMMATIVE RECOMMENDATION

Anxiety caused from speaking in front of an audience can impede academic and professional advancement (Hunter, K. A., Westwich, J., Haleta, L.). In order to mitigate this issue it is important to provide students with the best opportunity to succeed. An educator's role should be to position students for the best chance for success in academia and in their career paths. Educators have an opportunity to become well informed when weighing the decision as to the preferable method of delivery for a presentation.

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Appendix 1Face-to-Face Post Assessment

Please **highlight in bold** your response to each question. If you have additional comments for each question please feel free to provide them.

This survey **must be completed after delivering Speech #2** (preferably right after you speak).

1. At what point in the speech were you most nervous?
 - A. The opening and introduction
 - B. The main part of the presentation (body)
 - C. The summary/conclusion
 - D. Equally nervous throughout
 - E. Unsure

Comments

2. After completing both assignments, which assignment gave you a greater amount of anxiety?
 - A. Webinar
 - B. Face-to-face speech
 - C. Equal amounts of anxiety
 - D. Uncertain

Comments

3. How confident are you that you closely followed the outline provided by the instructor (open with an attention getter, self intro, signposts, transitions, conclusion, etc.)?
 - A. Very confident
 - B. Somewhat confident
 - C. Neither confident or unconfident
 - D. Somewhat unconfident
 - E. Very unconfident
 - F. Unsure

Comments

4. How certain are you that you were able to successfully achieve your goal (to inform the audience)?
 - A. Very certain
 - B. Somewhat certain
 - C. Neither certain nor certain
 - D. Somewhat uncertain
 - E. Very uncertain
 - F. Unsure

Comments

5. How much anxiety did you have during your speech?
- A. Extremely nervous
 - B. Very nervous
 - C. Somewhat nervous
 - D. Not at all nervous
 - E. Unsure

Comments

6. Did you have more or less anxiety than you anticipated having prior to the speech?
- A. Much more anxiety
 - B. Somewhat more anxiety
 - C. Neither more nor less anxiety
 - D. Somewhat less anxiety
 - E. Much less anxiety
 - F. Uncertain

Comments

7. How well do you think you were able to achieve a strong overall connection with the audience (gain their interest, attention)?
- A. Extremely concerned
 - B. Very concerned
 - C. Somewhat concerned
 - D. Not at all concerned

Comments

8. Compared to the Webinar that had an audience you couldn't see, how much more uncomfortable were you about giving a speech to an audience in the same room?
- A. Much more uncomfortable
 - B. Slightly more uncomfortable
 - C. The same amount of discomfort
 - D. Somewhat more comfortable
 - E. Much more comfortable

Comments

9. How well do you think you performed in terms of your oral delivery skills (speak with confidence, clearly, conversationally, etc.)?
- A. Very well
 - B. Somewhat well
 - C. Averagely well

- D. Somewhat poorly
- E. Very poorly

Comments

10. How confident are you that your notes were well organized and helped you achieve your goal of informing the audience?

- A. Very confident
- B. Somewhat confident
- C. Not confident or unconfident
- D. Somewhat unconfident
- E. Very unconfident
- F. Unsure
- G. I'm not using notes

Comments

11. What aspect of your speech gave you the greatest anxiety?

- A. The preparation (knowing the material, organized notes, etc.)
- B. The delivery (eye contact, volume/projection, confidence, conversational tone, etc.)
- C. Equal amounts of anxiety for preparation and delivery
- D. Uncertain
- E. Other (explain below)

Comments

12. During which speech do you think the audience paid better attention?

- A. Webinar
- B. Face-to-face
- C. Equal
- D. Uncertain

Comments

13. Which format was easier to use when organizing the material for the two presentations; the use of note cards, cue cards, etc. for the face-to-face delivery, or the use of bullet points, images, etc. on the slides for the webinar?

- A. Face-to-face
- B. Webinar
- C. Equal levels of anxiety
- D. Unsure

Comments:

14. After completing both assignments, which method of delivery do you feel was a more effective way of achieving your goal (to inform the audience)?

- A. Face-to-face
- B. Webinar
- C. Equally effective
- D. Unsure

Comments:

15. Prior to taking this class, how many times have you presented in front of a face-to-face audience (at least 8 people)?

- A. More than 20
- B. Between 10 & 20
- C. 5 – 9
- D. 1 – 4
- E. No experience

Comments:

16. Prior to taking this class, how many times have you delivered a slideshow presentation online (Webinar)?

- A. More than 20
- B. Between 10 & 20
- C. 5 – 9
- D. 1 – 4
- E. No experience

Comments:

17. Prior to taking this class, how many times have you delivered a slideshow presentation to a face-to-face audience?

- A. More than 20
- B. Between 10 & 20
- C. 5 – 9
- D. 1 – 4
- E. No experience

Comments:

18. How much did the experience of presenting the Webinar first improve your oral delivery skills for Speech #2?

- A. Greatly
- B. Somewhat
- C. Didn't help or hurt
- D. Somewhat unhelpful
- E. Greatly unhelpful
- F. Other

Comments

19. How much did the experience of presenting the Webinar first improve your ability to prepare for Speech #2?
- A. Greatly
 - B. Somewhat
 - C. Didn't help or hurt
 - D. Somewhat unhelpful
 - E. Greatly unhelpful
 - F. Other

Comments

20. If you were called upon to give a speech or webinar in the future, which method of delivery would you prefer to give (webinar or face-to-face)?
- A. Face-to-face
 - B. Webinar
 - C. No preference
 - D. Uncertain
 - E. Other

Comments

21. Regarding your response to the previous question, what is the single biggest reason for your preference of one method over the other?

22. Gender
- A. Male
 - B. Female

23. Age
- A. 18 – 25
 - B. 26 – 30
 - C. 31 – 40
 - D. 41 & over
 - E. Prefer not to answer

Additional Comments:

