

AC 2010-112: CHEESEBURGER, FRIES, AND A COKE: IT'S ABOUT THE PRESENTATION

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Cheeseburger, Fries, and a Coke: It's About the Presentation

Introduction

Many students possess the misconception that the informational content is all that matters when communicating with others. For example, numerous faculty members have experienced the student who attempts to appeal a low score on an assignment by pointing to each relevant part of their work, trying to show that all content was included while at the same time being seemingly oblivious to the lack of clarity in their presentation of that content. Instructors in the first-year engineering program at Ohio Northern University created a short video, “Cheeseburger, Fries, and a Coke,” to impart to their students the importance of how information is presented. This video, approximately one and a half minutes in length, features a couple at a restaurant, each ordering a cheeseburger, French fries, and a Coke. While the content of each meal is the same, the presentation of the meal to each customer varies considerably. The video is shown to the class without prior introduction of the topic; a discussion session is held afterwards, with the instructor steering the conversation towards the relevant points regarding the importance of both content and presentation.

Background

The original idea was developed during a Master Teacher Workshop session hosted by Ivy Tech Community College. This session, featuring participants from multiple schools in Indiana, focused on the development of innovative ideas for reaching students. The idea initially involved an in-class demonstration with the professor as the waiter and student volunteers as customers, using candy bars and water; however, any food and beverage would certainly work. The in-class version adds spontaneity to the demonstration; however, when discussed by the Ohio Northern University first-year engineering curriculum instructors, it was noted that visibility within the classroom would be an issue, plus the janitorial staff would not be happy with any messes that could possibly result from such a demonstration. Accordingly, the instructors decided that a video would be more effective as it would be more visible, provide more control over the situation being illustrated (e.g., multiple takes until the actors get it right), allow for visual close-ups featuring exaggerated responses from the actors to bring more humor into the presentation, and allow for better dissemination of the lesson if proven successful.

Methodology

In order to determine the Cheeseburger video's effectiveness, students were shown two in-class videos. The first video was the “All-in-One Guitar Playing Robot”¹ where National Instruments and Intel demonstrate the use of a quad-core processor that runs both the game and the robot which plays it. This video was shown during a lecture period where different engineering accomplishments were discussed, and was intended to show a fun and interesting side of

engineering. The second video was the “Cheeseburger, Fries, and a Coke” video created by the course instructors. The intent of this video was to visually demonstrate that presentation is an important component of any communication and can, at times, even be more important than the content.

The Cheeseburger video portrays a couple ordering a cheeseburger, fries, and a Coke from a waiter. One customer is served with the waiter’s undivided attention: a napkin is placed on her lap, each food item is presented with style, the cheeseburger and fries are served on fine china, and the beverage is poured elegantly into a wine glass. The other customer is treated disdainfully: the cheeseburger, after being dropped on the floor, is merely dusted off then served on a sheet of newspaper, with his fries tossed carelessly onto the “plate” as an afterthought. Adding insult to injury, the waiter quenches his thirst by taking a swig from a can of Coke prior to serving the can to the hapless customer. Note that both customers received the same food (content); the only difference is in the service (presentation).

One week after both videos were shown, the students were given a short survey where several questions were asked about each video. The questions asked for each video included:

1. “In your own words, explain the message presented in the video.”
2. “The video was effective at presenting the message”
(using a Likert scale of 1 – strongly disagree to 5 – strongly agree).
3. “The video was entertaining as it presented the message”
(using a Likert scale of 1 – strongly disagree to 5 – strongly agree).
4. “Please list any comments you would like to make about the video.”

Survey Results

Out of 124 students enrolled in the first-year course, 117 (94%) completed the anonymous survey. Students responded positively to both videos, as shown in Table 1, although they felt that the “Cheeseburger, Fries, and a Coke” video was more effective at delivering the message but less entertaining than the “All-in-One Guitar Playing Robot” video they were shown. The comment portion of the survey confirmed that students understood the purpose of each video.

Table 1. Quantitative survey results.

	Effective?	Entertaining?
<i>Guitar Playing Robot</i>		
Strongly Agree, %	15	30
Agree, %	64	59
Total, %	79	89
<i>Cheeseburger, Fries, Coke</i>		
Strongly Agree, %	37	23
Agree, %	54	56
Total, %	91	79

Regarding the “All-in-One Guitar Playing Robot” video, students made various comments about the purpose of the video, such as:

- “Robotics and computers have come far enough to create a computer drive device that can play a very interactive video game.”
- “...computers can run two operating boards and be very precise, but yet at the same time still have flaws in lag and are not perfect.”
- “... shows the benefits of quad-processors. It also shows the ability of a robot to outperform an operating system.”
- “You can run more than one system on a computer and program it to beat a video game. However, no matter how hard you work, there can always be unexpected problems with the equipment.”

When given the opportunity to make any comment they wished about the video, it was interesting to note that 16 (30%) of the 53 qualitative student comments stated that the guitar video was cool, awesome or neat, with more than one person noting that it showed “how cool engineering can be.” Comments such as “it was sweet” were made repeatedly. Additionally, 10 (19%) of the responses make references regarding the technical aspects of the video; among these comments were the following:

- “...showed how far computer processing technology has come in recent years.”
- “It’s a pretty cool concept in the fact that the robot controller is actually more precise than the game itself.”
- “I think it is amazing that there is a robot that can play so accurately well on Guitar Hero or Rock Band. Even though it doesn’t hit every note due to a delay from Windows XP, it still does a lot better than I could ever do.”

Two of the student comments summed up the general impression of the video with:

- “The video gives the message that engineering has multiple aspects, some of which are more fun than others.”
- “Technology can do amazing things.”

For the “Cheeseburger, Fries, and a Coke” video, a majority of students correctly identified that the purpose of the video was to show that the presentation of information is important, as represented by the following student comments:

- “There are different ways to present the same data. The reaction of the audience depends on how the presenter shows the information.”
- “The message was that presentation of material is sometimes more important than the actual information itself.”
- “The message was that presentation counts. You need to deliver your message in a way that satisfies your audience.”

One student comment was particularly insightful:

- “The video that we watched was proving how presentation is very important to everything that we do in engineering. Our presentations of ourselves, as writers, and as engineers.”

However, there were other types of responses. Some students thought that the focus was on business-related aspects, stating:

- “Presentation is key in introducing a product or service.”
- “...presentation means more than you think. A customer bases his/her judgements (sic) of a product upon presentation.”
- “Presentation is very important when it comes to a product. If it is the greatest product and it is presented in a poor manner, it will not receive the high sales the same product would in a well presented manner.”
- “Presentation is everything. If two competing products are identical (or even similar in quality), the one that is presented better will nearly always be chosen.”

whereas a small contingent of students construed either an ethical, social, or philosophical purpose behind the video:

- “Service should be fair to all persons, otherwise it will let off a negative image.”
- “It was showing the difference between certain people, due to job status.”
- “Everything is not always fair, even if it seems to be on first glance.”

When given the opportunity to make any comment they wished about the video, many students commented about the humor of the message:

- “The humor makes the video.”
- “The movie was truly entertaining and educational.”
- “It was funny to watch the differences in presentation.”
- “I thought it brought out the comical side of the professors, which was good for me.”
- “It was a nice change of pace and an entertaining movie to watch.”

Other students commented on the effectiveness of the approach:

- “It made a great point that presentation is very important.”
- “It was a clever idea and a great illustration.”
- “Very good at displaying the overall message, very easy to interpret.”
- “It was a funny video that presented the message clearly and kept the viewer interested.”
- “The video was a bit to the extreme of what not to do, but it really made the point.”

Finally, a couple of students attempted to turn the tables on their instructors with the following humorous comments:

- “I sure wouldn't eat the meal prepared for the man in that video!”
- “I feel like they spent too much money for this video. The video could have been made with less professional editing. :)”

Assessment

To ascertain whether there was any lasting effect as a result of watching the video, the video was deliberately shown prior to the start of a series of short oral presentations, called “One-Minute Engineer” (OME) presentations², being given by each student enrolled in the course. The OME is designed to be implemented with minimal sacrifice of class time, where each student individually gives a short, one- to two-minute presentation on a student-selected, engineering-related topic in areas such as devices, biographies, vocabulary, or current events. Each presentation is assessed through use of a set of rubrics developed in support of an oral presentation framework presented in a paper by Renaud, Squier, and Larsen³. This framework emphasizes oral presentation skills by focusing students’ attention on four key presentation areas:

- R – Responsiveness (e.g., audience analysis),
- S – Speech Patterns (e.g., speed, volume, enunciation),
- V – Verbal and Visual Rhetoric (e.g., presentation structure, use of visual aids), and
- P – Physical (e.g., use of stage, congruence of body language with message).

The RSVP Framework and its accompanying rubric have been shown to help students to more easily remember the criteria of an effective presentation⁴. The rubric, featuring descriptive performance level indicators based on an appropriate subset of the RSVP Framework, was distributed to the students ahead of the presentations, as it is important to provide specific information on expectations to both students and faculty prior to the evaluation process when using rubrics⁵. The rubric classifies performance into one of four possible levels: excellent, adequate, minimal, or unsatisfactory; each criterion contains appropriate descriptions for indicating each performance level. For each presentation, two sets of rubric scores are developed: an evaluation from the instructor, and the averaged results from multiple students performing a peer-to-peer evaluation. The results of these evaluations are shared with the presenter, but are not used as a basis to assign a numerical score for the presentation.

As this formative assessment methodology was used in previous years to help students improve their oral presentation skills, it was hypothesized that a comparison of data between successive cohorts, with the only difference being that the “Cheeseburger, Fries, and a Coke” video would be shown prior to the OME presentations made by the second cohort, would provide a basis for evaluating the effectiveness of the video. One section of the course from Fall 2008 and from Fall 2009 that was taught by the same instructor was chosen for this analysis. The results of the evaluations of the OME presentations for these two cohorts are given in Table 2. Please note

that each framework category represents a composite of the criteria within that category, and the data presented represents the combined results of instructor and peer evaluations.

Table 2. Comparison of cohort analysis from One-Minute Engineer presentations.

Framework Category	Cohort	Excellent	Adequate	Minimal	Unsatisfactory
Responsiveness	2008	8% (4)	52% (27)	21% (11)	19% (10)
	2009	26% (16)	53% (33)	21% (13)	0% (0)
Speech Patterns	2008	9% (5)	50% (26)	33% (17)	8% (4)
	2009	36% (22)	52% (32)	12% (7)	0% (0)
Verbal Rhetoric	2008	48% (25)	27% (14)	12% (6)	13% (7)
	2009	54% (34)	45% (28)	1% (1)	0% (0)
Physical	2008	9% (5)	27% (14)	29% (15)	35% (18)
	2009	30% (19)	55% (34)	14% (9)	1% (1)

The results shown are very positive. First, it is noted that, in all four RSVP Framework categories for the 2009 cohort, there is almost no one performing at an unsatisfactory level. Significant improvements into the excellent level were exhibited in three of the four RSVP Framework categories. Finally, when examining the number of students who performed at a level of adequate or above, improvements occurred in all four categories:

- Responsiveness increased from 60% to 79%,
- Speech Patterns increased from 59% to 88%,
- Verbal Rhetoric increased from 75% to 99%, and
- Physical increased from 36% to 88%.

Available Resources

The producers of the “Cheeseburger, Fries, and a Coke” video have made their video available to anyone who wishes to use it at their institution – free of charge – at the following web site:

<http://www2.onu.edu/~jestell/cheeseburger>

Additional resources available at this site include the lesson plans related to this video.

Conclusions

The majority of students did get the message that the instructors were trying to demonstrate with the “Cheeseburger, Fries, and a Coke” video: presentation is just as important as content. Students also indicated that they found the video to be both effective and entertaining, and that the video held its own in these areas against a more polished video that was also presented to the class. Through use of the OME presentations, there is also evidence that the message of the video was retained, as the presentations made by the 2009 cohort (who saw the video) rated significantly higher than those made by the 2008 cohort (who did not see the video). While the actors in the cheeseburger video unfortunately did not receive any Oscar nominations, one student commented on the “great acting” that was present and another referred to the

“unbelievable talent of the actor playing the waiter.” Finally, the instructors were pleased that a large majority of students indicated that the video was entertaining and educational, that the message was retained, and that they demonstrated that retention through collectively higher performance on an assignment assessed both by their instructor and by their peers.

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