

## Taking the “Distance” out of Distance Education: A Humorous Approach to Online Learning

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### Abstract

As online course formats become an accepted long-term strategy in education, instructors who personalize their courses with humor can positively contribute to the students' learning experiences. The purpose of this paper was to determine student perceptions of humor added to an online undergraduate production operations management course and how that humor influenced student engagement through participation in online discussion forums. Results indicate a statistically significant difference ( $p = .000$ ) between the two groups, where group 1 had little to no humor added to the course and group 2 had humor added. The addition of humor accounted for 33.76 percent of the effect. In addition, the results of student evaluations from the second group showed that humor positively enhanced the online learning environment. This study supports previous research findings and further advances limited studies on humor and learning online pedagogy. Conclusions are drawn that humor incorporated in online courses helps motivate students to participate more in discussion and contributes to a positive learning environment.

**Keywords:** Humor, Online humor, Humor pedagogy, Humor and learning, Distance education

### Introduction

As online learning continues to grow and become accepted as a long-term strategy in education (Ferguson & DeFelice, 2010), the “quality of the student experience of learning” (Ellis, Ginns, & Piggott, 2009, p. 304) is an ongoing concern. Several studies based on traditional brick and mortar classrooms have found that there is a positive relationship between an instructor's use of humor and student learning (Fitzsimmons & McKenzie, 2003; Roth, 2008; Wanzer & Frymier, 1999). Recent publications have made contributions to the advancement of humor and online learning as pedagogy. Specifically, Goldman (2001) conducted a qualitative study to examine student attitudes toward online learning and teaching. Although not a specific goal of her study, Goldman concluded that instructors who showed a sense of humor in their online classes helped to bring students more fully into the virtual class. James (2004) provided a commentary about the need to include humor in online courses, but did not conduct a formal study. In addition, Shatz & Coil (2008) and Shatz & LoSchiavo (2006) explained how to incorporate humor into online courses. Although these publications contribute to humor and online learning, there is only one study that systematically incorporated humor into online instruction of an introductory psychology course. LoSchiavo & Shatz (2006) tested the effectiveness of humor as an instructional strategy in an online general psychology course and found that humor significantly influenced student participation, but had no effect on overall course performance. This current study extends the LoSchiavo and Shatz study because it explored humor in a production operations management course in a different university and demographic setting. In addition, the production operations management course is perceived by many students as a dread course (Kher, Molstand, & Donahue, 1999) and has a history of lower retention rates. This history is described in the background section of this paper.

The purpose of this paper was to determine student perceptions of humor added to an online undergraduate production operations management course and how that humor influenced student engagement through participation in online discussion forums. Data were collected post-hoc from four sections of the same online course with the same instructor. Grade point average (GPA) means of all students involved in this study were considered. This study is important to researchers because it advances the topic of humor in online teaching and learning as pedagogy to help increase student engagement and motivation to successfully complete course requirements.

## Related Literature

Instructor humor has the ability to enhance the learning process (Roth, 2008), to help students' understanding of concepts and meaning (Meyer, 2000), promote greater recall (Meyer, 2000; Schmidt & Williams, 2001), and to relax students in moments of anxiety and increased tension (Garner, 2006). On one hand, it appears that incorporating humor in online courses can have a positive effect both for the instructors who use the humor and for students who receive the humor. On the other hand, humor added in the classroom usually occurs spontaneously (Fitzsimmons & McKenzie, 2003) and is influenced by a particular moment or need. In the absence of spontaneity, designing the online course for strategic placement of appropriated humor is extremely important and can be quite challenging (Shatz & LoSchiavo, 2006).

### *Why should humor be included in online classes?*

As an effective pedagogy, humor has been linked with many claims about teaching and learning (Roth, 2008). For example, humor enhances creative thinking; increases group cohesion; increases student attention and interest; and builds classroom climates that promotes learning.

More specifically, humor contributes to a multitude of psychological and physiological benefits (Berk, 2001; Garner, 2003). In particular, humor can be separated into three categories where humor acts as the stimulus, mirth represents the emotional response, and laughter is the physical response or behavior (Berk, 2001). Humor, for example, stimulates "a cognitive shift in perspective" (Berk, 2001, p. 326) that permits a person to deal more effectively with an experience.

According to Meyer (2000), the incongruity theory emphasizes cognition which explains the experience incongruity when people perceive something as a shift from reality. This theory covers the majority of what an individual generally believes is funny. Specifically, the humor stimulus provides a surprise or "shocks" an individual because it is "different enough from the norm to be remarkable" (p. 313).

### *Does humor increase student engagement in online classes?*

Similar to a traditional classroom setting, humor can be used to create an online environment to encourage participation (Shatz & LoSchiavo, 2006). For example, Wanzer and Frymier (1999) investigated the relationship between "perceived teacher humor orientation and learning" (p. 48) and found that "students may pay more attention and be more willing to attend class when humor is used regularly in the classroom" (p. 58). Likewise, in a study to test the effectiveness of humor in an online psychology course, LoSchiavo and Shatz (2005) found indications that instructor humor incorporated in the online course significantly influenced student interest and participation. Goldman (2001) also found that students appear to be more fully engaged when humor is incorporated in the virtual classroom.

In a study focused on a classroom management project, Fitzsimmons and McKenzie (2003) noticed two dominant themes emerging from one of their subjects: humor as play and the nature of the resulting interaction. For this subject, humor was used to engage students and develop personal relationships that facilitated interaction between teacher and student. This interaction, "of which humor is the key component" (p. 198), created an atmosphere of engagement.

### *Does humor enhance the online learning environment?*

Several studies have found that humor enhances the learning environment (James, 2004; Shatz & LoSchiavo, 2006) and creates a positive effect on student enjoyment (Garner, 2006). Humor-enhanced online classes reduce the gap between the teacher and student and results in students seeing the instructor as more approachable (Shatz & LoSchiavo, 2006).

As it helps build relationships and support (Fitzsimmons & McKenzie, 2003) in the classroom, humor is a characteristic of the best and most effective teachers (James, 2004). In particular, humor helps build cohesiveness within a group and researchers have determined that humor used by a teacher increases student connectedness (Glaser & Bingham, 2009). When students feel a connection with the teacher and other classmates, they enjoy the classroom experience, will be "more motivated to attend class and complete assignments . . . and may learn more" (Glaser & Bingham, p. 64). In addition, humor increases student attention and motivation, which helps students mentally connect to course materials (Shatz & Coil, 2008). As a teaching strategy, humor is an "educational lubricant that can make learning more engaging, enjoyable, and memorable" (Shatz & Coil, p. 106).

*Is all humor appropriate in online classes?*

It should be noted that not all humor is conducive to a positive learning environment (Flowers 2006, Wanzer, Frymier, & Irwin, 2010). For example, humor that is offensive to students will generate a negative effect and is “likely to reduce motivation and . . . [distract] students away from the course content” (Wanzer *et al*, 2010, p. 7). Specifically, Meyer (2000) points out that the superiority approach to humor is used to exert control and is often applied at the expense of others. This type of humor has mixed interpretation and can be insulting to many people. Therefore, superiority humor is not appropriate to include in online classrooms.

However, “[h]umor that relates to the subject matter may be the easiest to use effectively” (Flowers, 2001 p. 11). According to Wanzer and colleagues (2010), humor that relates “to the course content or makes the content relevant” (p. 7) and memorable (Shatz & Coil, 2008), creates a more relaxed atmosphere that reduces anxiety and provides a mental break where a student can process information and retain course materials (Garner, 2006; Meyer, 2000; Shatz & Coil, 2008; Wanzer *et al*, 2006). In addition, the use of humorous content-specific examples may provide a student with a new perspective that leads to divergent thinking (Meyers, 2000; Ziv, 1983). Moreover, “[p]erhaps the best explanation of the humor effect is that humorous material may lead to sustained attention and subsequent elaborative processes” (Schmidt & Williams, 2001, p. 311).

**Background**

The current study involved undergraduate students enrolled in a production operations management course in an AACSB accredited regional state university. This particular course had a reputation as being a “dread” course, where students put off taking the course because of perceived difficulty of the course materials or lack of self-confidence in the content area (Kher, Molstand, & Donahue, 1999). In speaking with students who have or have not taken the course and several professors who have taught and/or continue to teach this course both in class and online, the general consensus is that this course is difficult for most students. Primary reasons given were students lack confidence in their understanding of college algebra and statistics, the challenging course requirements, and the structure of the online course. Moreover, this particular course had a history of low student retention and/or pass rate. For example, on the first class day of the Fall 2008 semester, 37 students were enrolled in an online section of the course. However, during the semester 13 students voluntarily dropped the course resulting in a 65 percent retention/completion rate. Of the students who completed the course, 92 percent earned a passing grade of C or better. This class was organized by textbook chapter with lecture notes, Microsoft PowerPoint presentations, and written solutions for example math problems. However, the class experienced a mid-term change in instructors and was not part of the study, other than providing a historical view of the course.

Prior to Fall 2009, the instructor made changes in the way the course was organized and established specific requirements for discussion participation. Specifically, the course materials were divided into lessons that consisted of written lecture notes and Microsoft PowerPoint presentations for the textbook chapters grouped into major topics relating to course objectives. The instructor also provided detailed written explanations for concepts and gave examples for solving math problems in an effort to assist students with meeting the objectives. These explanations were in the form of instructor posts to discussion boards, course announcements, and incorporated in lecture notes. On the first class day of the Fall 2009 semester, 68 students were enrolled in two sections of the same course with the same instructor. During the semester, ten (10) students voluntarily dropped from the course, resulting in an 85 percent completion/retention rate. Of the completing students, 79 percent earned a passing grade of C or better.

The Summer 2010 semesters brought further adjustments to the online course. Lecture notes were expanded to include humorous YouTube video links and cartoons that were directly and indirectly related to concepts and humorous YouTube video clips that were unrelated to specific course content. On the course homepage introduction for example, the instructor embedded the YouTube video link <http://www.youtube.com/watch?v=rLprXHbn19I> showing the Abbott and Costello routine “13 x 7 is 28” (Gershenson & Seiter, 1998) that is indirectly related to specific course materials. As another example, the instructor also embedded the YouTube video link <http://www.youtube.com/watch?v=xnq403uHn14> showing Lucy’s Schedule—The Dinner Rush (Oppenheimer *et al*, 2005), which can be related to production operation’s scheduling and sequencing concepts.

In addition, the instructor added recorded media orally explaining example math problem solutions utilizing Adobe Presenter and provided written instruction for solving the example math problems. During the Summer 2010 semesters, 73 students were enrolled in two sections of the same course with the same instructor. Of these students, two (2) voluntarily dropped from the course, resulting in a 97 percent completion/retention rate. Of the students who completed the course, 97 percent earned a passing grade of C or better.

### Method

The purpose of this paper was to determine student perceptions of humor added to an online undergraduate course and how that humor influences student engagement through participation in online discussion forums. The primary assumption of this paper was that humor enhances the online learning environment and motivates students to engage more in online discussion. In order to assess how humor influenced student experiences in the online classes, this research was guided by the following questions:

1. What is the difference in student engagement based on a class with little to no humor and a class with humor added?
2. What are student perceptions of the learning environment in a course with instructor-added humor?

Data were collected post hoc from 129 students enrolled in four online sections of an undergraduate production operations management course. Specifically, there were two sections in the Fall 2009 semester and two sections in the Summer 2010 semesters. The four class sections had the same instructor and equivalent outcome expectations. The data were entered into SPSS for analysis. The instructor method was coded into two groups, where Group 1 (e.g., Little\_to\_NO\_Humor, n=58) experienced little to no humor added by the instructor during the Fall 2009 semester and Group 2 (e.g., Humor, n=71) experienced a variety of humorous content added by the instructor during the Summer 2010 semesters. Humorous content consisted of: YouTube videos that related directly or indirectly to the course materials; announcements posted by the instructor had comments that were funny to some students; responses posted to individual students on the discussion board that were funny to some students; instructor notes for lessons had comments that were funny to some students. The number of discussion posts was counted and the total post quantity for each student was entered. The author of this article is aware that quality of input by the student is of concern to many instructors. Measures were taken by the instructor of the course to reduce the number of times students responded with the proverbial "I agree". However, because "quality" is a subjective term (e.g., is defined differently), the issue of whether or not number of post equals quality is outside the scope of this paper. For the purposes of this study, the author considers that the number of times students posted to the discussion is linked to student engagement.

To determine the difference in student engagement based on instructor method (i.e., little to no humor added; humor added), the author counted the number of times students posted to the discussion boards and entered the raw numbers into SPSS.

An independent samples *t* test was appropriate because the variable of interest, number of posts, is on a ratio scale, and there were different students in each group. Because the author is studying the difference and the order of the means is not specified, a two-tailed test was established. The  $\alpha$  level was established:  $\alpha = .05$ .

To determine student perceptions of the learning environment, the author selected the following questions from student evaluations self-completed questionnaires from the online classes included in this study:

- I was provided with a safe and caring online "class environment" that was open for learning.
- I was provided with content in the course that had meaning and value to me.
- I would recommend this instructor to another student.

The first two questions included a Likert-scale where students could respond as follows:

1 = Always; 2 = Considerably; 3 = Frequently; 4 = Sometimes; 5 = Never

The last question included a Likert-scale where students could respond as follows:

1 = Definitely; 2 = Very likely; 3 = Somewhat likely; 4 = Not likely; 5 = Never

The student evaluations also included an open-ended question where students could comment on the class and/or instructor as they wished. Responses collected from student evaluations included in this study are shown in Table 1. Finally, specific words (e.g., fun, funny, humor) were used to search student comments (open-ended question) as these words are related to the primary focus of this study.

## Results

A *t*-test of independent samples was conducted to determine if significant differences existed between the mean GPAs of the student involved in this study. Specifically, the mean score of GPA for all students included in this study is 2.97 (SD = .489). Whereas the first group (Little\_to\_no\_humor), the mean GPA = 3.01 and the second group (Humor), the mean GPA = 2.93. The results of the *t*-test,  $t(127) = |.856|$ , Sig. (2-tailed) = .394 > .05, showed no significant difference in GPA means between the two groups.

The mean score of the number of discussion posts from all students included in this study is 60.47 (SD = 28.18). In the first group (Little\_to\_no\_humor), the mean score of the number of discussion posts is 49.98 (SD = 28.674) and in the second group (Humor), the mean score is 69.04 (SD = 24.847). The results of the *t*-test showed a statistically significant difference between the two groups,  $t(127) = |4.043|$ , Sig. (2-tailed) = .000 < .05, indicating that the second group, where humor was added, possessed a greater mean level of participation than the first group, where little to no humor was added. The effect size indicates that about 34% ( $\eta^2 = .3376$ ) of the variance in number of discussion posts can be accounted for by adding humor in the online class.

In analyzing the data collected from the student evaluations self-completed questionnaire, there was a 44 percent of change in positive responses to the question: *I was provided with a safe and caring online "class environment" that was open for learning.* There was an 85 percent of change in positive responses to the question: *I was provided with content in the course that had meaning and value to me.* There was a 57 percent of change in positive responses to the question: *I would recommend this instructor to another student.* These positive changes in percentages indicate that student perceptions of the learning environment in the sections with instructor-added humor were positive.

In analyzing the open-ended comments included by the students in the questionnaire, specific words (e.g., fun, funny, humor) used to search student comments for the first group (little to no humor added), resulted in zero. In other words, none of students from the Fall 2009 course sections included any of the three search words in their comments. This indicates that the instructor did not incorporate enough humor in the class to make a difference on student perceptions. For the second group of students where humor was added by the instructor, the sentences found to include at least one of the search words are as follows:

- [Instructor name] keeps the class fun yet you learn what you need to know.
- [The instructor] made a difficult course fun and bearable!
- [Instructor name] incorporated humor and personality to her course instead of the dull atmosphere of an online course.
- The class was fun and the professor was very supportive.

Further analysis of the open-ended comments also revealed student perceptions related directly to the online environment included:

- She closed the distance between the student and instructor in "distance learning."
- She is challenging, but created an environment for a genuine learning experience.
- [E]njoyed the class. [Instructor name] is an incredible instructor.
- [Instructor name] is an amazing professor with a very broad knowledge of operations management.

## Discussion

The positive correlation between humor incorporated in online class sections and student participation suggests that humor contributes to motivating more students to engage more in online discussion. This finding supports Shatz & LoSchiavo's (2006) and Goldman's (2001) research where students appeared to be more fully engaged in humorous online classes. Furthermore, the findings in this study are consistent with Fitzsimmons and McKenzie's (2003) study of the relationship between teacher-student interactions and humor. Similarly, the increases in positive student perceptions of the instructor also suggest that humor aids in creating a positive learning environment. This is consistent with Glaser and Bingham's (2009) finding that humor increases student attention and motivation which aid in students cognitively connecting to course materials. In addition, it adds support to existing literature that humor creates positive effects on student enjoyment (Garner, 2006; Shatz & LoSchiavo, 2006).

The humor added by the instructor in summer sections was appropriate to creating a positive learning environment as perceived by the students. In the summer sessions, the students specifically recognized humor as a method that helped to create a positive learning environment.

Table 1: Self-completion student evaluation responses

<i>I was provided with a safe and caring online "class environment" that was open for learning.</i>					
	Always	Considerably	Frequently	Sometimes	Never
Little_to_NO_Humor	30 (59%)	9 (18%)	8 (16%)	2 (4%)	2 (4%)
Humor	51 (75%)	14 (21%)	2 (3%)	1 (1%)	0 (0%)
Percent of Change	27%	17%	-81%	-75%	-100%
<i>I was provided with content in the course that had meaning and value to me.</i>					
	Always	Considerably	Frequently	Sometimes	Never
Little_to_NO_Humor	19 (37%)	15 (29%)	10 (20%)	5 (10%)	2 (4%)
Humor	45 (66%)	18 (27%)	3 (4%)	2 (3%)	0 (0%)
Percent of Change	78%	7%	-80%	-70%	-100%
<i>I would recommend this instructor to another student.</i>					
	Definitely	Very likely	Somewhat likely	Not likely	Never
Little_to_NO_Humor	25 (45%)	12 (24%)	9 (18%)	2 (4%)	5 (10%)
Humor	47 (69%)	17 (25%)	3 (4%)	1 (2%)	0 (0%)
Percent of Change	53%	4%	-78%	-50%	-100%

*Note: the percent change has been calculated and is included in the table. The formula for calculating percent of change is as follows:*

*Case 2 – Case 1 / Case 1 x 100, where Case 2 is humor-added and Case 1 is little to no humor added. Specifically, the calculation shows the differences in responses (decrease/increase) between the class with humor added and the class with little to no humor added.*

*The Likert-scale responses were divided as follows:*

*Always (Definitely) + Considerably (Very likely) = a positive result indicates an increase in positive student perceptions; whereas a negative result indicates a decrease in positive perceptions.*

*Frequently (Somewhat likely) + Sometimes (Not likely) + Never = a positive result indicates an increase in negative student perceptions; whereas a negative result indicates a decrease in negative perceptions.*

The results of this study suggest that appropriate humor should be considered by instructors of online classes as a strategy for engaging students in online courses, reducing the distance-from-the-instructor barriers felt by many online students, and creating a more personalized class environment where students feel comfortable enough to ask questions when they need clarification on course materials. In addition, humor may help retain students and increase their motivation to successfully complete an online course. However, there are limitations to this study and recommendations for further research.

First, this study was conducted post hoc with limited structured observation, which may contribute to bias. It is recommended that future studies utilize valid and reliable measures, both qualitative and quantitative to reduce the bias.

Second, the instructor regularly interacted with the students on the discussion forums, posted announcements and recorded lecture to further clarify course materials. This interaction and additional explanations were not a focus of this study, but should be considered in future studies. Specifically, Fitzsimmons and McKenzie (2003) indicate that interactions between instructor-student, student-instructor, and student-student, are also indicators that enhance student learning and the online learning environment. Future research should include other affects that may contribute to online learning. In

addition, the courses compared were Fall and Summer, which may again present bias. Therefore, additional studies should be conducted that include regular term semesters as comparisons.

Third, this study and others (i.e., Garner, 2006; Shatz & Coil, 2008; Wanzer, Frymier, Wojtaszczyk, & Smith, 2006) indicated that appropriate humor is related to increasing student perceptions of learning and the learning environment, whereas inappropriate humor can negatively influence student learning. Future studies must be conducted to clarify understanding of what is and is not appropriate to incorporate in an online class.

Finally, this study is limited based on the subjects enrolled in a specific undergraduate production operations management course in a small southwestern university and may not represent the entire student population. Future studies should include a more appropriate sample to ensure generalization.

### Conclusion

Humor in the traditional classroom has long been an accepted practice for many instructors. With the online learning environment becoming increasingly accepted as a long-term strategy in education, the use of humor by the instructor can assist with taking the distance out of distance education by creating a personalized class. This personalized environment can help motivate students to engage more fully in online discussion as reflected in the statistically significant difference between the two groups. Furthermore, humor increases positive perceptions of the students about the online learning environment. Students recognize appropriate humor just as they recognize inappropriate humor. Thus, care should be taken to ensure that humor added to the online class is appropriate and relevant to course content.

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