

PERSONALIZING POST TITLES IN THE ONLINE CLASSROOM: A BEST PRACTICE?

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ABSTRACT

The need for student engagement is ever present in the online classroom as engaged students are more likely to feel connected with course material, classmates, instructors, and their university (Drouin & Vartanian, 2010; Wilson & Gore, 2013). According to Tayebinik and Puteh (2013), engaged students often achieve higher final scores in the class. Past studies have revealed personalized instruction can increase student learning and engagement and that student participation can be an indicator of said engagement (Clark & Mayer, 2011; Tinto, 2012). In the online classroom student participation is often revealed through written posts and responses to classmates and teachers within weekly discussion forums (Epp, Green, Rahman, & Weaver, 2010; Nagel, Blignaut, & Cronje, 2009). Small changes in how the instructor personalizes their discussion forum responses may make a difference in student participation, yet little research has been conducted to determine if a difference exists. This study was conducted to determine if there is a difference in the quantity of student posts on an online discussion forum when instructors used personalized versus nonpersonalized subject headings. A paired samples t-test revealed a significant difference between the average number of student posts for each instructor's courses with and without personalized discussion post headings. Results suggest students have a higher quantity of posts when nonpersonalized subject headings are used for instructor-generated discussion posts. Further research is needed to determine potential confounding factors and implications for these results.

Keywords: teaching presence, personalization, online education, student engagement

INTRODUCTION

Many factors can influence a student's academic performance in the online classroom. Most courses in the online modality focus on utilizing written text as the main form of communicating directions, clarifications, ideas, and more (Epp, Green, Rahman, & Weaver, 2010; Nagel, Blignaut, & Cronje, 2009). Factors such as course design, instructor personalization, and instructor/student rapport have been shown to impact student success and participation (Clark &

Mayer, 2011; Mandernach, 2009). In most cases student participation seems to be directly linked to student performance in the online modality with a generous portion of a student's grade originating from participation in the discussion forums. Most learning management systems offer the ability for the instructor to change the subject heading or title to a post (Salyers, Carter, Barrett, & Williams, 2010). This study investigated differences in the frequency of posts of online students based on whether or not instructors used personalized

subject headings in the discussion forum. The focus on instructor practices in online discussion forums was valuable to further exploring classroom items which may impact student engagement.

PERSONALIZATION PRINCIPLE AND TEACHER PRESENCE

The personalization principle of Clark and Mayer (2011) provides substantial theoretical support for the need to provide instructors the freedom and encouragement to personalize their classroom spaces. Personalization provides a medium for providing information in a more conversational and personable tone that is unique to each individual instructor (Clark & Mayer, 2011; Mandernach, 2009). Successful online course designs integrate areas of opportunity for the instructor of the course to personalize the classroom (Ausburn, 2004; Gaide, 2005). There are many options for personalization varying from instructor particulars in assignment delivery expectations to how the instructor introduces themselves (Kurt, 2011). Through personalization of supplemental materials, grade feedback, welcome messages, announcements, and more the student can piece together an idea of that instructor's unique personality and teaching style. This clearer instructor identity can make the instructor appear less machine-like and more genuine to students (Gaide, 2005).

The discussion forum has been highlighted as an essential area within the classroom for students to review, rehearse, and reflect on various ideas surrounding the content comprising that week of class. The way in which instructors contribute to the forum and interact with students can greatly impact the feel and organization of that forum (Yu-Mei & Chen, 2010). According to Yu-Mei and Chen (2010) the instructor in an online classroom is as much of a learning environment architect as they are a teacher of content. With this in mind, every personalization in the classroom has the opportunity to impact the classroom environment for better or worse. As such, changing subject headings can draw attention to posts the instructor deems important. This ability to change the post title may be small but is a valuable personalization to the discussion forum and potentially the classroom environment (Lister, 2014). For example, when an instructor retitles a post using the student's name

(Penelope and Class) it signals to students that although this is a reply to a particular student's post, it is also a conversation the entire class is invited to join in on. The instructor may also personalize the post to draw attention to particular subtopics within the discussion forum that week, such as (New Technology and Communication). At other times the instructor may decide to title the post indicative to their personality or even as a way to shock students or add humor to entice them to further click on the post to read more.

Della Noce, Scheffel, and Lowry (2014) found that students were more likely to address instructor questions within the forum when they felt genuine. Some factors contributing to this genuine feel of their teacher's presence was when instructors addressed the student(s) directly within their reply, commented on a particular aspect or point the student(s) made within their previous reply, and then provided some additional information, an alternative viewpoint, clarification, or a further question for the class in what appeared to be a personable tone (Della Noce, Scheffel, & Lowry, 2014). Furthermore, personalizing instructor discussion responses has been shown on a qualitative level to increase student efficacy in a course (Sobel, Sands, & Dunlap, 2009). Drouin and Vartanian (2010) found that creating this connection with students is of the utmost importance as students with a higher level of connectedness were more engaged in the classroom. Finally, it may be that personalizing the title of the post adds value to the personalized content within instructor posts. Thus, the choices that instructors make regarding the elements in their control are vital.

Online instructors can be somewhat limited by the course design process. One review of research analyzed 17 studies from 14 different peer-reviewed educational technology journals regarding the elements of course design and information delivery to try to pinpoint common relationships from e-learning courses (Lister, 2014). The results indicated four major themes that arose from the online course design: 1) course structure, 2) content presentation, 3) collaboration and interaction, and 4) timely feedback (Lister, 2014). Interestingly, instructors have control over many of these elements in the online environment, such as personalizing the title posts which would fall under the category of content presentation.

Murray, Pérez, Geist, Hedrick, and

Steinbach, (2012) found that students' primary reasons for selecting supporting materials for the learning process were increased access and convenience. This point is further reinforced by Salyers, Carter, L., Carter, A., Myers, and Barrett (2014), who found the greatest predictors of a positive e-learning experience for students were course design and ease of navigation. In light of this, instructors may want to place pertinent learning materials at the easiest point of access for the student, especially in the online modality where many students are already short on time (Salyers et al., 2014). These studies display the need for instructors to emphasize the elements of design and personalization they can control, such as where to locate materials or giving headings to posts that can grab the student's attention.

STUDENT PARTICIPATION AND ACADEMIC PERFORMANCE

Drouin and Vartanian (2010) state that retention in online courses is decidedly lower than face-to-face courses. Engaging students to actively participate in the online classroom is evidently more challenging than the face-to-face classroom due to the lack of the instructor's physical presence. However, online instructors who are intentional can model presence and participation in the online classroom through their own engagement and personalization of the material. Instructors who personalize posts in the discussion forum may notice a change in the level of student participation. For example, instructors may retitle a post in order to draw the students' attention to it, which could be beneficial to the students' learning or understanding of course material. Tayebinik and Puteh (2013) found a significant relationship between online student participation and passing grades. Participation in online interactions was also a significant predictor for passing grades (Tayebinik & Puteh, 2013). Moreover, Tayebinik and Puteh (2013) concluded that the more active students were in online interactions, the more likely they were to earn passing grades. Davies and Graff's (2005) study also supported the conclusion that more active students performed better in class. They reported that students who participated more frequently in discussion and interactive areas of the online classroom earned high or medium passing

grades (Davies & Graff, 2005). In addition, students who passed the class with a low grade were significantly more active than students who received a failing grade (Davies & Graff, 2005). Furthermore, Cheng, Su, Zhang, and Yang (2015) found that students who received a failing grade tended to be later contributors to the discussion topic or they did not contribute to the discussion at all.

Additional studies have investigated the relationship between student participation and other factors, including academic achievement. Yukselturk (2010) reported a significant relationship between the level of student participation in asynchronous discussion forums and three factors: academic achievement, gender, and hours of Internet use per week. Students who more actively participated in the discussion were generally more successful in the online course (Yukselturk, 2010). Duncan, Kenworthy, and McNamara (2012) investigated student participation in both synchronous and asynchronous formats. They concluded that student participation in discussion boards drives performance in online courses (Duncan, Kenworthy, & McNamara, 2012). These studies support the use of online discussion forums as an important tool for academic achievement in online education programs. The results of personalizing posts should be studied further since increased student participation posts could be linked to higher student achievement.

METHODS

Purpose

The purpose of this quantitative correlational study was to determine if differences existed in the average number of student participation responses between personalized instructor discussion-post subject headings and standard auto response titles. The study was conducted to examine if students submitted more participation posts in the discussion forum based on whether or not the instructor included a personalized subject line heading. The personalization of subject line headings could prove to be a crucial piece of the online environment given that the discussion forum usually carries significant weight with regards to students' overall grades. The study could inform instructors as to what benefits, if any, may exist when including personalized subject headings in instructor's initial

post or response posts as a teaching best practice.

Research Question and Hypotheses

1. Is there a difference between the frequency of student participation posts (average number of student posts within the discussion forum) when personalized, instructor generated versus nonpersonalized subject headings are used?

H0: There is no significant difference between the frequency of student participation posts (average number of student posts within the discussion forum) when personalized, instructor generated versus nonpersonalized subject headings are used.

H1: There is a significant difference between the frequency of student participation posts (average number of student posts within the discussion forum) when personalized, instructor generated versus nonpersonalized subject headings are used.

Participants

To answer the research questions the researchers collected data from first-year undergraduate students in an introductory online course focusing on critical thinking at a university in the Southwest. One hundred and eleven students were enrolled in the online course sections utilized in this study; only students still enrolled at the end of the course were included in the sample. Participants were enrolled in multiple sections of the same undergraduate online course during the winter 2015 semester. This course was typically the students' third class in their program. Classes were randomly assigned to include either personalized subject headings or the standard, auto-generated subject titles within instructor-generated discussion forum posts (example: Re:Re:Topic3 DQ1). Through data cleaning and screening, participants who withdrew at any point throughout the class were excluded from the sample. A total of 15 participants withdrew and were removed from the study resulting in a study sample of 96 participants.

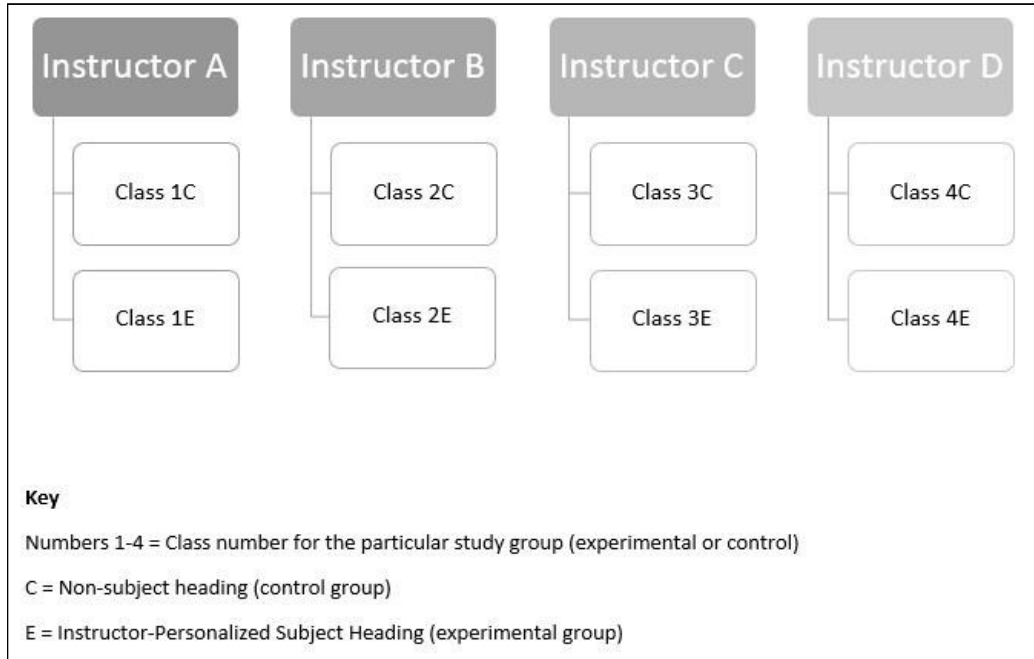
Procedure

The study focused on a single introductory critical thinking course and included four faculty members currently teaching that course. The study used a between-groups design in which instructors collected data within eight iterations of the same course (see Figure 1). Each course included the same syllabus, additional supplemental materials, announcements, and weekly lecture. The only variants between the courses were the start date,

the instructor, and the inclusion or exclusion of personalized subject headings within instructor-generated discussion posts. The learning management system allows for instructors to change the subject heading on posts. In the control group, all of the classes included posts throughout the entire class using the auto-generated reply subject titles. When an instructor hits the "reply" button to a student or to the discussion forum a title is automatically generated. These are what have been termed "standard, auto-generated reply subject titles." For example, an instructor's reply to a student's initial post would be automatically titled: Re:Re:Topic1 DQ2. In the experimental group, instructors used a personalized subject heading for every instructor post (example: Dr. C to Penelope and Class or Top Ethical Values).

Figure 1: Organization of classes per participating instructor.

This figure illustrates the distribution of courses within the experimental and control groups to each instructor. Data were collected by tallying the total number of student posts in each week of the discussion forum for each course. The average total posts per student was calculated by dividing by the total student posts per course by the total number of student participants, noted within Tables 1 and 2 respectively.



RESULTS

The results from all eight classes and four teachers are listed below in tables 1 and 2. The range of average posts per student for nonpersonalized subject headings was 57.13 to 66.36. The range of average posts per student for personalized subject headings was 51.33 to 63.33.

Table 1: Student Posting Results for Nonpersonalized Subject Heading Class Sections

Class	Total number of students	Total number of all student posts	Average total posts per students in class
Class 1C	16	914	57.13
Class 2C	25	1659	66.36
Class 3C	26	1678	64.54
Class 4C	14	926	66.14

Table 2: Student Posting Results for Personalized Subject Heading Class Sections

Class	Total number of students in class	Total number of all student posts	Average total posts per student
Class 1E	24	1232	51.33
Class 2E	21	1330	63.33
Class 3E	27	1642	60.81
Class 4E	24	1478	61.58

To answer the research question, a paired samples t-test was implemented using SPSS to compare the average number of student posts for each instructor’s courses with and without personalized discussion post titles. Table 3 below provides the results from the paired samples ttest. There was a significant difference between the average number of student posts for each instructor’s courses with and without personalized discussion posts ($t(3) = 7.189, p < 0.05$). Table 4 shows that the mean was higher for student participation posts when instructors did not customize the title of posts ($M = 63.54, SD = 4.35$) than for when posts were customized by instructors ($M = 59.26, SD = 5.39$).

Table 3: Paired Samples t-test for Student Posts with and without Personalization of Subject headings

t-test for Equality of Means				
Instructor trait	t	df	Sig (2-tailed)	p
Neuroticism	7.189	3	.006	.05

Table 4: Paired samples statistics

	M	N	SD	Std Error
No-title	63.54	4	4.35	2.18
Personalized	59.2625	4	5.39	2.70

Due to the significance of the results the null hypothesis was rejected. The alternative hypothesis, which stated there is a significant difference between student frequency of participation (average number of student posts within the discussion forum) when personalized, instructor generated versus nonpersonalized subject headings are used, was accepted.

DISCUSSION

Overview of Significant Findings

The current study sample consisted of first-year undergraduate students in what is typically the third class. The previous literature indicated that personalization of classroom material should lead to more student engagement (Mandernach, 2009; Clark & Mayer, 2011). Tayebinkik and Puteh (2013) determined in a previous study that the more active students were in the discussion forums the more likely the students

were to pass the class. Thus, this study insinuated that the personalization of classroom post titles from the instructor should equate to more students posts and greater student participation. However, as a best practice this may not be the case. Fewer student posts could be a result of better class management.

The findings of the study displayed a significant difference between the average number of posts for each instructor's courses with and without personalized discussion posts, but not in the respect that the authors anticipated. While there was a significance determined, it was a higher quantity of participation posts for students in the classes with standard, auto-generated subject titles than in the classes containing personalized subject headings.

Rodriguez-Keyes, Schneider, and Keenan (2013) stated that instructor presence can also be motivational and may lead to building a stronger classroom community. It may or may not be that a stronger classroom community equates to more posts within the discussions forums. The measurement of content within student participation posts may be more applicable to determining engagement in a connected online classroom than the quantity of participation posts, or perhaps it is a marriage of the two.

On another note, personalized instructor posts may allow the instructors to maintain a cleaner, more organized discussion forum while directing students toward the information that the instructor deems most valuable. For example, these personalized post titles may make it easier for the student to find the basic information to understand their assignments or clarify some information they need for that week of class. They then may not feel the need to connect with their other peers as often to share and compare the information they uncovered about the content that week because they feel supported and have the materials they need from their instructor's additional posts. In line with this discussion, previous literature had determined that student's reasoning for selecting additional materials such as those included in instructor posts was for increased access and convenience (Murray et al., 2012). Hence, guiding students to these materials that the instructor deems important through the application of personalized subject headings would increase access and convenience thus enhancing classroom management best

practices. The literature also indicated that one of the biggest predictors of a positive e-learning experience was the ease of navigation (Salyers et al., 2010).

Limitations

Some limitations were present in this study with regards to the research design or researchers' beliefs. The researchers may have believed that personalizing the subject headings of instructor posts would result in greater student participation. However, this bias was minimized by using quantitative methods which rely on objectivity. The sample size was limited to just four classes for personalized posts and four classes for nonpersonalized posts, so the results of the study may not be generalizable to all online courses. The study did not make note of student age; however, it was confirmed that the average age of online students within the university is 32. The age of the student could affect posting practices, especially when comparing digital natives to digital immigrants (Evering & Moorman, 2012).

Furthermore, the timing of the study was not ideal because there was a two-week break during some of the classes. The two-week break may have impacted student participation and skewed the results. Choosing just one type of course may have also delimited the generalizability of the results as the content and student familiarity and comfort with that content varies from course to course. These additional variables could result in differences in participation rates and patterns.

Implications

Future research could replicate the study for similar results with a larger sample size. As mentioned above, the discussion for future research also centers on personalizing instructor posts as a best practice for classroom management. This could be accomplished by exploring the content of the posts, as quantity does not assume quality. Furthermore, if the classroom is more organized and information is easier to find, students might have fewer questions within the individual and public questions to the instructor forum. Research on differences in the numbers of questions within a class based on an instructor's content personalization methods may reveal interesting results.

Further investigation should be also conducted to determine the cause for the significant difference

in student participation between classes with personalized and nonpersonalized instructor posts. Additionally, future research should address the reason for the greater means for student participation posts in classes with nonpersonalized instructor post titles. Possible explanations could be that students were more easily able to access and find valuable information in classes with personalized instructor posts. Thus, future research could investigate if personalizing the discussion posts reduces the number of questions the instructor receives throughout the course. Accompanying this research, it may be beneficial to look into whether there was a difference in the quality of student participation posts and where the majority of their participation occurred (whether directed toward responses to the instructor posts or other student posts) when personalized versus nonpersonalized instructor subject headings are used.

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