Postmodern Openings

ISSN: 2068 – 0236 (print), ISSN: 2069 – 9387 (electronic)

Coverd in: Index Copernicus, IDEAS RePEc, EconPapers, Socionet, Ulrich Pro Quest, Cabbel, SSRN, Appreciative Inquery Commons, Journalseek, Scipio, CEEOL, EBSCO

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Postmodern Openings, 2012, Volume 3, Issue 1, March, pp: 107-122

The online version of this article can be found at:

http://postmodernopenings.com

Published by:

Lumen Publishing House

On behalf of:

Lumen Research Center in Social and Humanistic Sciences

Mandatory Online Discussions: The Effect of a Postgraduate Policy on Communication Between Faculty Members and Graduate Learners

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Abstract

A graduate-level online university located in the northwest area of the United States of America implemented a policy to help graduate learners increase their interactions with faculty and peers. No research had been conducted at the research site to examine the effects of the policy on the communication between faculty and graduate learners. In order to gain some empirical evidence that the policy was effective, the researchers measured the frequency of postings posted by faculty and graduate learners during the duration of randomly selected online classes before and after the implementation of the policy. Grounded in the social learning theory of Vygotsky, the goal of this research was to determine the relationship of the frequency of communication between faculty and graduate learners. Archived data were collected for two cohorts of 235 graduate learners and 16 faculty members from before and after the implementation of the policy. Content analysis procedures were used on the computer-mediated transcripts of the online discussions between faculty and graduate learners within several graduate courses in education offered entirely online. An

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independent sample t *test was utilized to analyze the data and a significant difference between the means of faculty and student postings was found in the two cohorts. The empirical evidence was that the communication policy increased the frequency of posting between faculty and graduate learners. The results of this study can be used by online faculty and university leadership to support the continued advocacy for professional development for faculty.*

Keywords:
online universities, online discussions, communication, policy, online learning environment, intervention and professional development programs, graduate learners

Research Study.
Introduction

Mandatory synchronous or asynchronous discourse may be an important factor for learner retention in the online learning environment to keep the learners engaged throughout their program of study and by supporting their academic and social needs. University administrators could assist faculty in creating a virtual community for graduate learners to engage in a stronger buy-in with the institution's academic programs. University policymakers could work with senior administrators and faculty to create opportunities for deep learning experiences when faculty and graduate learners interact frequently via text-based postings in online classes. Policymakers, online instructors, administrators, and graduate learners may wish to take into consideration the facilitation of mandatory online discussions to ensure student communication with faculty and peers and ultimately student satisfaction.

Online learners are determined to complete their courses (Groth, 2007). Learners' most important concern was to have communication with faculty (Noel-Levitz, 2006). Communication technology could be used by faculty and learners for online discussions for interaction purposes (Chyung, 2007). Online discussions have been conceptualized as an important success factor minimizing feelings of isolation and fostering a sense of connection among learners (Bonk, 2010; Havice & Chang, 2002; Picciano, 2002; Richardson & Swan, 2001; Swan, 2001). Faculty members benefit from high quality staff development programs (Caswell, Henson, Jensen, & Wiley, 2008; Christie, 2009; Darling-Hammond, 2005, 2006, 2008; Darling-Hammond & Richardson, 2009;

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Desimone, 2009; Kose, 2009). Faculty also benefit from opportunities to apply learning to the classroom (Chappuis, Chappuis, & Stiggins, 2009) that focus on pedagogy (Guskey & Suk Yoon, 2009).

The Research Problem

At the research site, which was a graduate-level online university in the northwest area of the United States of America, administrators experienced challenges with student retention in online courses. Via course evaluation surveys, graduate learners reported that more communication between faculty and peers was necessary due to the lack of face-to-face interactions. In order to increase interactions between faculty and students, the university implemented a policy to include mandatory discussions in each online course. No research had been conducted at the research site to examine the effects of this new policy on interactions between faculty and graduate learners. Specifically, the research problem at the research site was the lack of empirical evidence that the online discussions mandatory policy between faculty and graduate learners was effective.

Purpose of the Study

The purpose of this quantitative research was to compare the archived faculty and student discussion postings. In order to shed further light on the importance of supporting communication in the online learning environment, discussion postings were considered from before and after the implementation of the mandatory online discussions policy. The purpose of this research was also to provide stakeholders at the research site with findings on the effects of the policy on the interactions between faculty and graduate learners. Research-based findings were to assist stakeholders at the research site in regards to the success of the online courses. The findings of this study might help university faculty, administrators, and policymakers to design, implement, and evaluate policies on communication between faculty and graduate learners. Thus, a policy on discussion postings may have an impact on student retention in online courses.

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Theoretical Framework

This research was grounded on the assumption that the facilitation of online discussions was important in the vitality of the online learning institution at the research site. Building on this assumption, in conjunction with the existing literature review, the researchers recognized the importance of a policy on communication between faculty and graduate learners during online discussions. Specifically, the researchers empirically examined the extent of communication (i.e., discourse) during online discussions.

This research was grounded in the social learning theory (Vygotsky, 1978) because when faculty and graduate learners are engaged in synchronous or asynchronous communication via online discussions by posting questions and responses within a supportive learning environment graduate learners receive appropriate guidance and as a result professional learning occurs (Kearsley, 1994). Actively engaged faculty and graduate learners in online discussions using support-based learning might enhance graduate learners' proficiency in the online course. The successful implementation of the online discussions might have had an effect on faculty and graduate learners' communication where the faculty members provided responses to graduate learners. The online discussions were designed to support the premise that each online faculty member could contribute to student achievement via online discussions. Student engagement during online discussions might increase student achievement in terms of feeling more positive with and confident of their communication and course skills.

Nature of the Study

The setting consisted of an online institution of higher education offering graduate level degree programs in teacher education. The participating institution is accredited by the Higher Learning Commission (HLC) and has no residency requirements; however, interactions between faculty and graduate learners occur via threaded discussions using the institutions' computer servers in addition to email usage.

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Each online course is offered in 10-week terms and consists of seven modules. Graduate learners receive a grade for participating in online discussions, which is 10% of the final grade. The grading criteria for participation in online discussions is to post at least three times per module responses that are replies to postings posted by faculty and peers. The institution requires faculty to participate in class discussions at a minimum of 4 days per week and the interactions are specific to a given topic related to the course readings and student assessment.

Literature Review

Autonomous, self-directed, and goal- and relevancy-oriented learners may be looking to find online instruction offering sufficient instructor and learner contact. The online learning environment is for learners determined to complete their online course (Groth, 2007). Noel-Levitz (2006) found that learners' most important concern was to have communication. Adult learners may be disappointed when they are unable to accomplish the academic tasks required in higher education and this frustration could lead to disinterest and eventually withdrawing from courses (Conceicao, 2006). Moreover, the most valuable assets of any institution of higher learning are the faculty members (Schuster & Finkelstein, 2006). Nowadays, technology, the art of teaching, and the needs of learners are converging, and motivation may be based on the learner's behavior such as how quickly assignments are completed and the number of messages between educator and learner (Chyung, 2007).

Facilitating discussions through online discussions may offer rich and diverse information and knowledge and give learners a sense of belonging and connectedness to their online courses. Discussions have been conceptualized as an important success factor minimizing feelings of isolation and fostering a sense of connection among learners (Picciano, 2002). In order to overcome feelings of isolation, a sense of community between instructors and learners needs to be established because community is what gives learners a sense of belonging and connectedness to schools (Havice & Chang, 2002).

Scholars have found evidence that high quality staff development programs affect student achievement (Christie, 2009; Darling-Hammond & Richardson, 2009; Desimone, 2009; Leonard & Leonard, 2005).

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According to Mizell (2007), "Professional development has no reason to exist if it does not help educators develop the attitudes, behaviors, knowledge and skills necessary to prepare all graduate learners to perform at the proficient level" (p. 20). According to Kose (2009), high quality teaching can support a school culture that encourages continuous learning through the proliferation of learning communities and shared leadership roles and responsibilities. Fullan (2006, 2007) stated the more teachers collaborate, the more leadership is shared. As universities continue to look for ways to increase student retention and satisfaction, providing faculty with staff development about best practices is imperative.

Staff development programs should be job-embedded and related to instruction in the classroom (Greene, 2003; Kelleher, 2003). Staff development programs should be an essential part of the culture of the school (Scribner, 1999, 2000). Staff development programs should support the school cultures' view of education as collaborative (Glickman, Gordon, & Ross-Gordon, 2005) and encourage the teachers to see themselves as learners working continuously to improve their teaching practices (Kent, 2004). Teachers need ongoing opportunities to learn together, apply learning to the classroom, and reflect on what works and why (Chappuis, Chappuis, & Stiggins, 2009). Professional development programs with the largest effect on student learning offer 30 to 100 hours spread out over 6 to 12 months (Darling-Hammond & Richardson, 2009). Professional learning should be aligned to assessments (American Educational Research Association, 2005). According to Guskey and Suk Yoon (2009), effective professional development requires considerable time, and that time must be well organized, carefully structured, purposefully directed, and focused on content or pedagogy or both. According to Desimone (2009), "Measuring the effects of professional development is analogous to measuring the quality of the teachers' learning experiences, the nature of teacher change, and the extent to which such change affects student learning" (p. 188).

Teacher leadership influences teachers in the school to adapt their own practices and attitudes with graduate learners and each other to be more effective (Donaldson, 2006). Teacher leadership promotes instructional improvement (Silva, Gimbert, & Nolan, 2000). High quality

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intervention programs are sustained, intensive, focused on student learning, connected to the teachers' work with graduate learners, and include longer contact hours and sustained activities over time; and provide active learning opportunities, coherence with reform efforts, and a focus on subject matter (Casanovas, 2010; Dede, Ketelhut, Whitehouse, Breit, & McCloskey, 2009; Desimone, Garet, Birman, Porter, & Suk Yoon, 2001; Garet, Porter, Desimone, Birman, & Suk Yoon, 2001; Desimone, Porter, Garet, Suk Yoon, & Birman, 2002; Palmer & Holt, 2010).

Research Question and Hypotheses

The research question that guided this study was: What is the statistical difference in the frequency of the discussion postings between faculty members and graduate learners before and after the implementation of the online discussions policy on communication?

H0: There is no significant difference in the mean of the frequency of the discussion postings between faculty members and graduate learners before and after the implementation of the online discussions policy on communication.

H1: There is a significant difference in the mean of the frequency of the discussion postings between faculty members and graduate learners before and after the implementation of the online discussions policy on communication.

Setting and Sample

At the research site, online faculty members have: (a) a terminal degree such as EdD or PhD with specializations in their chosen fields such as education leadership in higher education; (b) been teaching specific graduate online classes; and (c) extensive face-to-face and online teaching experience. Also at the research site, graduate learners are K-12 educators working on a master's degree entirely online.

Online courses were offered via the e-College platform for a graduate teacher education program to promote communication between the faculty members and graduate learners via threaded online discussions. The online discussions were designed to provide graduate

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learners with more communication options with online faculty members and peers.

The research site administrators implemented the online discussions based on a needs assessment, which revealed the need for more opportunities for graduate learners to communicate with faculty members and peers. After the implementation of the online discussion postings policy, the research site administrators continued to provide support to faculty members via online professional learning opportunities.

The policy on online discussions entails that the faculty members use different discussion topics and posts and respond to graduate learners' questions. When graduate learners do not post to the weekly online discussions, then there is point deduction for nonparticipation. For the graduate learners' convenience, the computer-mediated transcripts of all postings during the online discussions are achieved within each course.

Assumptions, Limitations, Delimitations, and Scope

The researchers assumed that: (a) graduate learners had an equal opportunity to benefit from the online discussions; (b) the findings of this study might apply directly to the research site; and (c) accessibility to the online discussions by the graduate learners at the research site was applicable to the online university's academic needs. The researchers also assumed that the archived data represented at least three postings posted by each faculty member and graduate learner.

Limitations were used for the purposes of identifying the weaknesses of a study (Creswell, 2003, 2007). This research was limited only to faculty members' and graduate learners' postings to the online discussions. This research was also limited to its findings that may not reflect the policies on discussions implemented by similar online institutions. A limitation of the study included the assessment measure of the participants participating in the online discussions (i.e., the discussions were graded for all learners who received a point or percentage toward a final grade for attendance as a means of assessment for content and a minimum of three postings per module.

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The findings of the study might not be applicable to online faculty members and graduate learners in different contexts and might not be generalizable to the entire spectrum of online learners. Consequently, the results may be indicative of only the responding sample and boundaries of this population of online learners. The constructs of this study were analyzed at a given point in time while dynamic technological changes can occur in the online learning environment.

The scope was delimited to the specific participants at the research site. The two cohorts of faculty members' and graduate learners' postings were selected randomly. The first cohort comprised of postings posted before the implementation of the online discussions and the second cohort comprised of postings posted after the implementation of the online discussions. The two cohorts of postings were unrelated samples posted by different graduate learners and faculty members. The scope of this study was specific to online graduate learners who participated in the online discussions before the implementation of the online discussions policy and those who participated in the online discussions after the implementation of the online discussions policy. The study was bounded by the online classes randomly selected at the research site.

Data Collection

The primary data source for this research was the computer-mediated transcripts generated by online learners and faculty members as they participated in the online discussions and posted postings to the threaded discussions of their respective online courses. Each online course was 10 weeks in duration with registrations between one and 20 online learners. Each online instructor taught one or more sections of an online course. Eight online courses were randomly selected representing online discussions before the implementation of the online discussions policy. Eight online courses were randomly selected representing online discussions after the implementation of the online discussions policy.

The researchers collected archived postings posted by faculty members and graduate learners during the online discussions before the implementation of the online discussions that were not mandatory. The

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researchers also collected archived postings posted by faculty members and graduate learners during the online discussions after the implementation of the online discussions that were mandatory online discussions. The archived data were collected from the web server of the participating online institution of higher education. Specifically, the online database contained copies of the transcripts of the online discussions. The collected data were saved into a text file containing only postings posted by faculty members and graduate learners per module of each online course containing online discussions. No names of faculty members or courses or graduate learners were saved into the text file containing the collected data in order to maintain the anonymity of the participants. The edited data were saved into the text file in order to perform content analysis and to count the number of postings posted by the participants. The researchers read and counted the number of postings posted by each faculty member and each graduate student per module for each randomly selected online course.

Data Analysis

The text file contained archived online discussions that provided an ideal means to identify and analyze the extent of communication (i.e., numeric data) between graduate learners and faculty members. The researchers used content analysis to read the computer-mediated transcripts of discussions between faculty member and graduate learners within selected graduate courses in education offered entirely online and to count the postings posted by each participant. All number data (i.e., the postings posted by each participant) were entered into SPSS 19.0 for data analysis for each of the two cohorts.

Both faculty members' postings and graduate learners' postings were continuous variables. The extent of faculty members' discourse was the predictor variable and the extent of graduate learners' discourse was the criterion variable.

Descriptive statistics were performed in order to compute the student *n* size and the extent of student discourse (i.e., number of graduate learners' postings), and the faculty members *n* size and the extent of faculty members' discourse (i.e., number of faculty members' postings) within the online discussions. Descriptive statistics were also

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calculated to compute the mean and standard deviation of the number of graduate learners' postings and the number of faculty members' postings.

An independent sample *t* test was utilized to determine if there was a significant difference between the means of the postings of the two cohorts. The *t* test was performed at a confidence level at or above the 95% (a = .05). No covariates and confounding variables such as graduate learners' or faculty members' experiences with online discussions were considered because the aim of this study was to determine the difference in the means representing the postings during online discussions between the two cohorts made of graduate learners' and faculty members' postings.

The analysis revealed that the first cohort consisted of 113 graduate learners and the second cohort consisted of 122 graduate learners with 16 instructors in both cohorts (Table 1). With these two cohorts of participants, the sample size was n = 235. Descriptive statistics are displayed in Table 2.

Table 1
Participants in Cohorts 1 and 2

Postings	*n* Cohort 1	*n* Cohort 2
Faculty Members	8	8
Graduate learners	113	122
Total	121	120

Table 2
Mean and Standard Deviation of Cohorts 1 and 2

Control Group (Cohort 1)		Experimental Group (Cohort 2)	
Faculty *M* (*SD*)	Graduate learners *M* (*SD*)	Faculty *M* (*SD*)	Graduate learners *M* (*SD*)
35.15 (28.89)	51.34 (37.82)	82.19 (35.29)	106.12 (36.33)

The mean postings of the experimental group were higher than the mean postings of the control group. Based on the *t* test for the postings of faculty members, the *t* statistic exceeded the critical values, indicating that this result was considered statistically significant, t (16) = 4.14, $p < 0.05$. Based on the *t* test for the postings of graduate learners,

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the t statistic exceeded the critical values, indicating that this result was considered statistically significant, t (235) = 4.88, $p < 0.05$. The alternative hypothesis was accepted, which stated that there is a significant difference in the postings mean between faculty members and graduate learners before and after the implementation of the online discussions policy on communication.

The postings of the experimental group were statistically different from the postings of the control group. Data analysis revealed that there was a difference between the combined postings. Data analysis indicated that the postings of the second cohort were statistically significant different from the postings of the first cohort. Thus, the online discussions policy has had a positive effect on the communication between faculty members and graduate learners at the research site.

Discussion and Conclusions

The findings of this study shed further light on the importance of implementing intervention programs such as online discussions policy to increase the communication between faculty members and graduate learners in the online learning environment. A review of the literature revealed that intervention programs may have an impact on student achievement (Christie, 2009; Clayton, Blumberg, & Auld, 2010; Darling-Hammond & Richardson, 2009; Desimone, 2009; Gomez, Wu, & Passerini, 2010; Killion, 2008; Kose, 2009; Leonard & Leonard, 2005; Mizell, 2007; Semadeni, 2010; Sever & Bowgren, 2007). The findings of this study provided empirical evidence that the online discussions policy as an intervention program has assisted graduate learners to increase their communication with peers and faculty members. The empirical evidence created new knowledge for online university leaders regarding the benefits of the intervention program on student communication during mandatory online discussions.

Best practices are defined by educational theorists and researchers as the practices that have practical and documented support for assisting with faculty instruction and student communication. Some of the best practices may include integration of online technologies, frequently and timely communication between graduate learners and

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faculty members regarding student progress as well as questions, and opportunities for learners to collaborate with peers.

Online course administrators may achieve greater enrollment and retention rates in online discussions by encouraging and supporting both graduate learners and faculty members to communicate frequently and timely during online discussions. Online administrators may define the extent of interaction in online discussions as policy in the faculty members' handbook as well as in the graduate learners' handbook.

Policymakers and administrators may wish to use the findings of this study to develop a policy on mandatory online discussions. The policy may be devised in an effort to improve communication, course design, curriculum, and delivery methods. Questions still remain unanswered concerning whether or not the findings of this study would vary as a function of a policy on the extent of online discussions with regard to: (a) academic level of online courses, specifically, graduate level course in comparison to undergraduate level courses and (b) the academic strands of disciplines (e.g., education, information technology, language arts, and so forth).

In conclusion, the alternative hypothesis was accepted that stated that there is a significant difference in the postings mean between faculty members and graduate learners before and after the implementation of the online discussions policy on communication. These findings provide evidence that intervention programs may improve communication in the online learning environment.

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