Book Study Blogs: Creating Self-Sustaining Online Learning Communities for Graduate Students of Educational Leadership

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration as a significant contribution to the scholarship and practice of school administration and K-12 education.

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Collaborative online learning has been adopted at all levels of education, in PK-12 public schools and universities, yet studies find student responses to the experience somewhat unpredictable. In this study, the authors draw on the practice of incorporating book study blogs at the University of North Dakota to engage doctoral students in a collaborative discourse and knowledge creation. Self- and peer-assessment data derived from end-of-course evaluations in 2009, 2010, 2012, and 2014 are used to frame a discussion concerning the development of self-regulating online collaborative learning communities. This study highlights positive outcomes for book study teams sharing high expectations of academic achievement and professional behavior, supportive relationships, and modeling of leadership qualities.

Keywords: Online collaborative learning (OCL), professional learning community (PLC), networked learning community (NLC), book study blogs, graduate education, educational leadership, group dynamics, and team skills

Introduction

Theories of learning for the 21st century, often referred to as the "Knowledge Age" (Scardamalia & Bereiter, 2006), emphasize collaboration and knowledge-building rather than the transmission of knowledge more commonly associated with 20th century instructional practices. Writers claim this shift challenges educators to meet new and unprecedented learning needs while also redesigning instruction to take advantage of the exponential growth of the Internet. The Partnership for 21st Century Skills (2013), a national organization claiming broad-based support from educators, business leaders, and civic and community groups, posits the essence of the current debate regarding instructional change to be summarized as the "3Rs" (reading, writing, and arithmetic) and "4Cs*"* (critical thinking and problem solving, communication, collaboration, and creativity and innovation). The 3Rs, reflected in basic standards of literacy and numeracy, are publically decried as inadequate for learners in the "Knowledge Age." While arguing that effective teachers in any century have enabled the development of the 4Cs, the current debate implies the need for intentional planning of instruction designed to achieve the highest level of thinking and teamwork. Learners are now expected to collaborate through Professional Learning Communities (PLCs), Networked Learning Communities (NLCs), and Online Communities of Learning (OCLs). Positive interdependence among participants in online communities is enhanced through diverse instructional methods (Woo Nam & Zellner, 2011).

Professional Learning Communities

Graduate courses for PK-12 instructional leadership at the University of North Dakota (UND) engage students in action-based PLCs modeled on seminal works spanning a decade. (DuFour & Eaker 1998; DuFour, DuFour, Eaker, & Many 2006; and Hord & Sommers 2008). A framework practiced in local schools, PLCs are "inclusive groups of people, motivated by a shared vision, who support the work of each other, finding ways . . . to enquire on their practice and together learn better and new approaches that will enhance all pupils' learning" (Stoll & Seashore Louis, 2007, p. 6). Driven in large part by high profile conferences and step-by-step manuals, the PLC movement gathered momentum in the early years of the 21st century to become a widely accepted model for continuing professional development. Typically, groups of teachers in individual school districts meet routinely to analyze student test data and plan actions designed to improve student performance in standardized tests.

Popularized leadership theory advocates for collaborative professional learning to enhance professional capital (Hargreaves & Fullan, 2012). Graduate students bring a note of skepticism to the PLC debate with stories of failed efforts in practice and anecdotal evidence of mixed reactions to face-to-face professional learning communities in their schools. The classroom controversy is exacerbated by the lack of research evidence about the usefulness of PLCs (Snijders, Matzat, & Reips, 2012; Vescio, Ross, & Adams, 2008). While there is emerging literature critical of PLCs (Stoll & Seashore Louis, 2008), published materials are generally promotional. According to students, implementation practices often reflect a 'cookie-cutter' approach with scant regard for local conditions in PK-12 schools. Leadership of face-to-face professional learning teams has become a

priority in the training of PK-12 administrators at UND. The Educational Leadership program also requires students to explore the potential for PLCs to reshape as networked learning communities (NLCs) or online learning communities (OCLs).

Networked Learning Communities

The relative isolation of educators in much of rural North Dakota has created a demand for continued professional learning beyond the limits of individual school districts. NLCs encourage collaboration between professionals in multiple school districts and can often involve stakeholders from further afield. The North Dakota University System (NDUS), Regional Education Associations (REAs), and the North Dakota Leadership and Administrator Education Development (NDLEAD 2013) Center support educators' life-long learning and integrative networking. Professional organizations, for example the Association for Supervision and Curriculum Development (ASCD), now provide self-paced courses in online Professional Interest Communities modeled on communities of practice (Holmes 2013, and Wenger, McDermott, & Snyder 2002). The trend towards networking reflects a response to the demand for what Jackson and Temperley (2008) describe as "a new unit of meaning, belonging and engagement" (p. 45). Arguing that an individual district may be too small scale and isolated to afford professional learning in a networked world, Jackson and Temperley propose a model for a highly integrated relationship between the PLC and NLC. NLCs often equate to OCLs.

Online Collaborative Learning

New theories of learning have evolved to accommodate changing demands in education. Relevant pedagogies and technology have emerged to inform educators who are "confounded and unsure of how to proceed" in an online environment (Harasim, 2012, p. 82). OCL theory builds on the work of Bruffee (1999), Scardamalia and Bereiter, (2006), and Vygotsky (1962) to elevate the social processes in learning. OCL is designed specifically for online learning environments and, by emphasizing collaborative discourse, knowledge-building, problem-solving and planning, fulfills the 4Cs.

Study Context

The UND Department of Educational Leadership doctoral course, "Leading Curriculum and Learning," is a required class delivered in a blended format with 45 hours of seat-time supplemented by online group activities including a collaborative group book study. The class is offered in three locations for cohorts in Grand Forks, Bismarck, and Fargo. The instructional challenge is to model effective adult learning practices while also addressing the leadership problem of building effective learning communities in PK-12 schools, both online and face-to-face. While Garvin (2000) and Marquardt (2011) emphasize the role of groups in solving complex problems, the practice itself is not problem-free. Uncooperative behaviors students associate with PLCs in the PK-12 context are sometimes apparent in face-to-face and online learning teams in the college environment. The book study blog assignment for this course is designed to enmesh participants in the challenges of leading and collaborating as members of a diverse group.

Learning teams are created to collaboratively read and reflect upon the course books: *Disrupting Class* (Fall 2009); *The Global Achievement Gap* (Fall 2009 and 2012); *Catching Up or Leading the Way* (Fall 2012); and *Finnish Lessons* (Spring 2014). Before engaging in online book study blogs housed in the Blackboard course site, the groups determine expectations of each other with reference to guidelines for working in the blog; grading rubrics generated by doctoral students in 2008; work samples from previous classes; and the Educational Leadership article, *Learning with Blogs and Wikis* (Ferriter, 2009).

Care is taken to identify effective teams before beginning online assignments recognizing the "I hate groups" phenomenon (Kass, 2008) often expressed by students reporting uncomfortable past experience of working with peers. In the first face-to-face class, trial learning teams are required to work together to build a tower with toothpicks and marshmallows; the winning team has the tallest tower standing at the end of a timed period. Typically, the activity prompts individual and group reflection on team dynamics and serves to identify groups for future face-to-face and online activities.

The blog, or weblog, is a time-sequenced repository for online interactions while students conduct a sequenced reading of a course text. Learning team members are required to take turns leading the blog by creating prompt questions to assigned readings and by maintaining the pace of postings. The instructor provides individuals with written feedback and provisional grades but does not engage directly in the blog during the six-week life of the assignment.

Pedagogical Problem

In 2009, the pilot launch of the online book study blog in the UND Educational Leadership program received mixed reviews from student participants. While one of the two groups reported high levels of satisfaction, the other functioned less effectively despite interventions by the instructor to remedy dysfunctional behaviors. "Online communities evoke excitement, anger, boredom, dissent, and commitment—often all at the same time!" observed Linn in Falk & Drayton, 2009, p. ix. This qualitative study provides an interpretation of student evaluations to better understand group behaviors in the blog. What conditions are required for effective interactions in the book study blog? What actions should the instructor take to ensure optimum conditions for all online learning groups? How are an individual's leadership skills and dispositions best evaluated through the use of blogs?

Data Collection

All students are required to complete self- and peer-evaluations of individual contributions to the successful achievement of group goals and are encouraged to write a narrative to explain the numerical rating of 16 behaviors (see Table 1). The information is provided on the understanding that data will be used to inform guidance for individual students but will have no power to impact final grades. Permission to use data for publication was obtained from the UND Institutional Review Board.

Feedback evaluation data submitted by a total of 45 doctoral students in December 2009, December 2010, October 2012, and May 2014, were used to examine

the functionality of online learning teams initiated in a face-to-face classroom. In practice, the information was gathered to better understand the outcomes of learning team work in the blog and explore factors promoting or preventing effective teamwork. Students are matched with peers by the instructor during the first class meeting and then given time to establish team expectations, using a nominal group process (Gregory & Kuzmich 2007), and to assign responsibilities within a weekly schedule.

Table 1.
Learning Team Self and Peer Evaluation Rubric

	SELF/PEER EVALUATION	1	2	3	4	5
1.	Takes active role on initiating ideas or actions					
2.	Is willing to take on task responsibilities					
3.	Is willing to frequently share ideas and resources					
4.	Accepts responsibility for tasks determined by the group					
5.	Helps promote team 'esprit de corps'					
6.	Respects differences of opinion and backgrounds, and is willing to negotiate and make compromises.					
7.	Provides leadership and support whenever necessary					
8.	Acknowledges other members' good work and provides positive feedback					
9.	Is willing to work with others for the purpose of group success					
10.	Communicates online in a friendly tone					
11.	Keeps in close contact with the rest of the team so that everyone knows how things are going					
12.	Produces high quality work					
13.	Meets team's deadlines					
14.	Sensitive to the needs and feelings of members of the team					
15.	Understand problems with helpful comments					
16.	Openly shares needs and feelings with team members					

Note. Adapted from CSCL Syllabus (University of Texas at Austin, 2008).
Always demonstrates the quality = 5; frequently demonstrates the quality = 4; sometimes demonstrates the quality = 3; seldom demonstrates the quality = 2; never demonstrates the quality = 1

Data Analysis

The analysis of the data was conducted in two stages: scores for each of the 16 behaviors were aggregated for individual students and teams (see Tables 2-9); comments were coded to reveal themes raised by participants in each of the learning teams (see Table 10). A cursory glance at the shaded boxes in Tables 2-9 reveals self-assessment scores. A quick comparison of Mean (with self) and Peer Mean (without self), as well as Peer Range scores, illuminate a fascinating difference in perceptions of performance.

Table 2
Book Study Evaluation Data (2009)—The Global Achievement Gap

	Group Member	Points Received						
Points Awarded		1	2	3	4	5	6	7
	1	80	80	80	80	80	80	80
	2	80	77	80	80	80	N/A	80
	3	80	80	77	80	80	80	80
	4	80	80	80	78	80	80	80
	5	80	80	80	80	76	80	80
	6	77	74	75	80	80	69	73
	7	79	79	80	80	79	78	78
	Total	556	550	552	558	555	467	551
	Mean	79.4	78.6	78.9	79.7	79.3	77.8	78.7
	Peer Mean	79.3	78.8	79.1	80.0	79.8	79.6	78.8
	Peer Range	3	6	5	0	1	2	7

Table 3
Book Study Evaluation Data (2009)—Disrupting Class

	Group Member	Points Received					
Points Awarded		1	2	3	4	5	6
	1	71	67	44	38	69	N/A
	2	80	71	59	40	80	N/A
	3	65	58	49	56	69	N/A
	4	58	59	64	63	62	67
	5	80	69	56	56	73	69
	6	N/A	N/A	N/A	N/A	N/A	N/A
	Total	354	324	272	253	353	136
	Mean	70.8	64.8	54.4	50.6	70.6	68.0
	Peer Mean	70.7	62.3	55.7	47.5	70.0	68.0
	Peer Range	22	11	20	18	18	2

Table 4
Book Study Evaluation Data (2010)—The Global Achievement Gap

	Group Member	Points Received					
Points Awarded		1	2	3	4	5	6
	1	51	72	76	67	67	73
	2	74	70	79	79	80	80
	3	77	77	73	80	80	79
	4	73	71	74	72	75	69
	5	64	74	66	72	62	67
	6	65	67	65	66	66	64
	Total	404	431	433	445	430	432
	Mean	67.3	71.8	72.2	72.6	71.6	72.0
	Peer Mean	70.6	72.2	72.0	74.6	73.6	73.6
	Peer Range	13	10	14	14	14	13

Table 5
Book Study Evaluation Data (2010)—Disrupting Class

	Group Member	Points Received					
		1	2	3	4	5	6
Points Awarded	1	80	80	80	80	80	80
	2	80	79	80	80	80	80
	3	78	79	75	78	76	80
	4	76	78	75	76	73	80
	5	68	77	72	71	75	75
	6	78	77	79	77	80	71
	Total	460	470	461	462	464	466
	Mean	76.7	78.3	76.8	77.0	77.3	77.7
	Peer Mean	76.0	78.2	77.2	77.2	77.8	79.0
	Peer Range	12	3	8	9	7	5

Table 6
Book Study Evaluation Data (2012)—The Global Achievement Gap

	Group Member	Points Received						
		1	2	3	4	5	6	7
Points Awarded	1	72	80	80	80	80	80	N/A
	2	78	70	78	79	80	79	78
	3	80	80	73	80	80	80	80
	4	78	80	77	61	76	78	77
	5	74	77	72	78	54	79	74
	6	75	72	77	67	77	72	76
	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	457	459	457	445	447	468	385
	Mean	76.2	76.5	76.2	74.2	74.5	78.0	77.0
	Peer Mean	77.0	77.8	76.8	76.8	78.6	79.2	77.0
	Peer Range	6	8	8	13	4	2	6

Table 7
Book Study Evaluation Data (2012)—Catching Up or Leading the Way?

	Group Member	Points Received				
		1	2	3	4	5
Points Awarded	1	70	80	78	75	78
	2	79	71	80	77	77
	3	78	72	74	78	74
	4	76	76	73	60	70
	5	78	75	77	72	71
	Total	381	374	382	362	370
	Mean	76.2	74.8	76.4	72.4	74.0
	Peer Mean	77.7	75.7	77.0	75.5	74.7
	Peer Range	3	8	7	6	8

Table 8
Book Study Evaluation Data (2014)—Finnish Lessons: Group 1

	Group Member	Points Received			
Points Awarded		1	2	3	4
	1	66	80	80	80
	2	N/A	N/A	N/A	N/A
	3	78	79	74	77
	4	68	71	68	69
	Total	212	230	222	226
	Mean	70.7	76.7	74.0	75.3
	Peer Mean	73.0	76.6	74.0	78.5
	Peer Range	10	9	12	3

Table 9
Book Study Evaluation Data (2014)—Finnish Lessons: Group 2

	Group Member	Points Received			
Points Awarded		1	2	3	4
	1	80	80	80	80
	2	79	73	80	64
	3	78	80	74	77
	4	68	71	68	69
	Total	305	303	302	290
	Mean	76.3	75.8	75.5	72.5
	Peer Mean	75.0	77.0	76.0	73.6
	Peer Range	9	9	12	16

Findings

Tables 2-9 reflect aggregated self- and peer-evaluation data for each of the 16 behaviors identified in the rubric (see Table 1). Tables 2 and 3 report data for 13 students in December 2009, Tables 4 and 5 for 13 students in December 2010, Tables 6 and 7 for 11 students in October 2012, and Tables 8 and 9 for 8 students in May 2014. Self-evaluation scores are highlighted and means calculated both with and without self-evaluation scores. With some exceptions, self-evaluation scores were more modest than peer-evaluation scores. While students were assumed to be honest in their responses, cautious interpretations of the numerical data preceded an analysis of freely written comments.

Comparative differences in satisfaction rates reported by the team members and expressed as a group mean are noticeable in all data sets for 2009, 2010, 2012, and 2014. The difference in the pattern of scores between teams studying *The Global Achievement Gap* (GAP) and *Disrupting Class* (DC) in 2009 show the greatest contrast in outcomes reported by participants. Team GAP (2009) proved a culturally tight and high performing group, reflected in the preponderance of maximum scores of 80 out of 80 and mean scores (excluding self-evaluation) between 80 and 77.8. Team DC appears much

less cohesive with only two maximum scores and a range of mean scores between 70.7 and 47.5. DC Team Members 3 and 4 were flagged as underperforming by peers and the higher range scores indicate a lack of agreement between members regarding expectations. This pattern is found, to a lesser degree, in the 2012 data set as demonstrated by a comparison of Team GAP, with peer mean scores of between 74.6 and 67.3 with *Catching Up or Leading the Way?* (CULW) with peer mean scores of 77.7 and 74.7. The statistical data highlights areas for deeper analysis using the narrative data provided by students to explain their responses to the tick-box section of the evaluation form.

The reasons for differences in outcomes between the teams in 2009 and 2012 are suggested in written evaluations. One student in 2012 observed, "Our group was not very effective in the blog. I couldn't afford the time to waste looking at nothing new; it frustrated me." Another in the same group wrote, "I know I need to be a better group member and participate in the blog more frequently." Responses by students in the second of the two 2012 groups reflected more positively on the experience, "The blog, the readings and my group have moved me in the direction of questioning the things we do to prepare kids and to seek the answers." In this group, students took the time to acknowledge skillful leadership; for example, "K has good insight as a high school principal. His experience gives me more to think about." Another group member was described as "Professional and serious about our work. She is constructive and thoughtful. She aims to produce high quality work."

Once collated, the combined narrative data for 2009, 2010, 2012, and 2014 were coded and sorted as either negative or positive (see Table 10). Six main themes emerged from the data:

1. Group Expectations and Relationships
2. Academic Expectations and Learning
3. Professional Expectations and Leadership Modeling
4. Personal Needs and Dispositions
5. Time Constraints and Response to Conflicting Demands
6. Response to Technology

Table 10
Self and Peer Evaluation Narrative Codes and Themes

Themes	*Codes*	
	Positive Attributes	*Negative Attributes*
Group Expectations and Relationships	- Support for completing assignments: "I believe all members of Team GAP would agree this project was a success" - Encouragement for team cohesiveness and problem-solving "I appreciated your willingness to step in and fill in for C and to take on some of her chapters" - Responsibilities: "I was confident all members would be prepared and ready to go" - Willingness to reply to posts more than once to facilitate an "online discussion":	- Delayed postings and responses - Failure to honor the agreed schedule or commitments: "Two of my blog team members enforced the 'Indian Time' mentality" - Group dynamic "a bit off balance" - "Harsh" comments regarding cultural group - Communication: "When the information was not received by the due date, I wish you would have sent reminders out so that everyone was aware and could have applied

	"The flow of the discussion was natural and productive" - "Responsible and timely with tasks" - "Sought out feedback and support *from* others" - Humor: "Makes things fun" - "Sets the tone for the group" - Communication: "Communicates with the team outside class" - Provides constructive feedback - Organizes team efforts and responsibilities and maintains pace - "Challenged team members"	some 'pressure'" - Judging: "I am lacking the words to give anecdotal evidence without feeling like I am judging my peers" - Commitment: " I think he chose not to [contribute to the blog] he did not see it as important and 'blew it off' "
Academic Expectations and Learning	- Recognition of intelligence - Appreciation for writing and presentation skills, "quality work" - Collective efforts: "The collective efforts/expectations of the group can either help or hinder the learning process – in this case it helped" - Probing questions: "Asks tough questions" - Research beyond the book study - Analysis, comparisons, and reasoning: "making sense of and applying text to real work situations" - Commitment to reading and understanding each chapter - Meaningful and extensive discussions - "Validation through examples, resources, readings, and research" - High expectations - Perspective-taking - "Force re-thinking"	- Fear poor group performance would negatively impact grade and perception of individual achievement - Negative assessment of group members' commitment to doctoral quality work and ability/willingness to follow guidelines - Plagiarism: "Your original submission was so similar to that which is posted on the website [address provided] I believe that looking at what others have said about the book can be beneficial but I was not comfortable passing it off as our work"
Professional Expectations and Leadership Modeling	- Positive reinforcement of leadership qualities: L is very professional and has a great understanding of how schools operate" - Prior knowledge and experience: ". . . this was a 'power-house team, great thinkers with high expectations of themselves and one another" - Modeling leadership: "R has been a constant and positive role model for our group. She has a wealth of knowledge and expertise . . ." - Reframes problems into possibilities	- "Unprofessional" behaviors not tolerated in the workplace: "In the workplace I would have been more proactive – I am truly surprised that those same strategies have to be used here." - Work ethic: "I find myself not wanting to work with you, not because of your abilities but because of your work ethic"
Personal Needs and Dispositions	- Insightful: "Sees possibilities and puts ideas into action" - Methodical - Friendly - Positive, "up-beat outlook" - Detail-oriented - Grounded - Reflective - Compassionate - Meticulous	- Frustration - Personal preference for order: "I am concrete sequential, organization is a strong point for me but is not for others" - Doctoral inexperience: "I am new at the doctoral level and I really need to be more focused on timelines and team-work" - Bias

	- Calm/Quiet - Open-minded and "willingness to think" - "Not defensive"	
Time Constraints and Response to Conflicting Demands	- New job experience contributes to successful work: "With her new job she was very busy . . . yet she was always there to contribute and help when asked" and "Despite significant stressors with work, school, and family, J continued to produce high quality work on a regular basis" and "As a new administrator, T had very positive and unique perspectives on some of the issues"	- Professional demands vs. academic responsibilities - New job demands: "Due to the chaos going on in my professional life . . .I found it difficult to always demonstrate each of these [16] characteristics"
Response to Technology Tools	- Successful adoption of new and untried technology tools: "I really enjoyed having the Wimba session for the first time in my life" and "I have not done much blogging . . . so it was a great activity for me" - Blog effective tool for book study: "I think the blog was a very effective tool for working through this book"	- Challenges to personal skills, knowledge and experience - New technology tools and confidence levels - "I find it difficult to 'read' people in an online environment"

Group Expectations and Relationships

Positive learning experiences include participants' timely posts, provision of constructive feedback, organization of the team's efforts, contribution to ongoing blog discussion, and encouragement and support for the successful completion of assignments. References were also made to aspects of tone, including the use of humor to "make things fun." Opposites were reported in less effective teams in which posts were delayed, members failed to honor commitments, and the "group dynamic was a bit off-balance."

Academic Expectations and Learning

The sense that team members shared high expectations demonstrated by their efforts to research beyond the study book, validate opinions, ask "tough questions," and "force re-thinking" was reassuring to team members. Those judged to be unwilling or unable to meet the rigors of doctoral work were thought likely to compromise the team's efforts and final grade. Evidence of self-regulatory processes leads to the conclusion that, despite the frustration for participants, incidents like the copying and pasting of material from an external source into the group blog create opportunities for ethical problem-solving and the practice of leadership skills. In such cases of plagiarism, instructor intervention is crucial.

Professional Expectations and Leadership Modeling

Effective collaborative work in the blog was often related to the professionalism, leadership skill, and experience of team members. Respondents commented on the wealth of prior knowledge brought to the learning experience by individuals—one described as "a constant and positive role model"—and the combined experience of one team as a

"power-house." Conversely, the lack of professionalism, in one case perceived as "unworthy in the workplace," surprised the respondent who adopted strategies used in her school district to solve a problem in her team.

Personal Needs and Dispositions

Students reported the dispositions they appreciated in team members; e.g., methodical, friendly, positive, grounded, reflective, meticulous, compassionate, and open-minded, but also criticized a minority of their peers for bias and lack of organization. Self-reflective comments show individuals to be aware of short-comings likely to impact both the success of teamwork in the blog but, perhaps more importantly, their success in the program as a whole.

Time Constraints and Response to Conflicting Demands

The majority of the UND EDL students are employed in full-time jobs, many in PK-12 leadership roles, when they begin the doctoral program, or are promoted during the life of their program of study. The data show variation in response to the pressures of studying while trying to maintain a healthy balance between personal and professional responsibilities. Respondents observed individuals who seemed able to manage the stress of a new position while also maintaining a positive presence in the blog, "Despite significant stressors with work, school, and family, J continued to produce high quality work on a regular basis." Another commented, "As a new administrator, T had very positive and unique perspectives on some of the issues." Not all participants were able to manage professional demands and academic responsibilities as one commented, "Due to the chaos in my professional life . . . I found it difficult to always demonstrate each of these [16] characteristics."

Response to Technology Tools

While some respondents reported enthusiasm for the new experience of using blogs, a minority found the tools challenging because of limited experience and lack of confidence in their ability to operate effectively in an online environment. One respondent, a practiced user of a range of technology tools, reported finding that such technologies made the situation "difficult to 'read' people in an online environment."

Study Findings and Limitations

Within the relatively new arena of online collaboration in graduate higher education, this study data validates the benefits and challenges of study blogs. Data reflect teamwork functionality, lessons that may be used to evaluate any prescribed online classroom experiences which include a group component. Handy (2013) noted online community members recognize online blogging as "an emergent process and one that is not static but flexible in its means and modes of operation." The study's data analysis lends itself to additional studies with topics for subsequent research.

Study groups were determined by the instructor based on the results of team-building activities. Yet, when grouping decisions are made by the instructor, choices and group composition are removed from the purview of the student. All graduate students in Educational Leadership are designated as adult learners. Within the andragogical lens of the adult learner, instructor selection negates one of the key non-traditional precepts of "self-concept" which denotes that adult learners choose to be responsible for the decisions affecting their learning. Adult learners wish to be involved in the development and planning of their own learning, an element which is eliminated with group pre-selection. Thus, a discussion of and explanation for this decision is a helpful accompaniment to the beginning of the assignment.

Perceptions on the efficacy of the groups are unilateral as the instructor makes all decisions pertinent to individual capabilities based on responses within the blogs. Students have differing study styles which may not necessarily meld well with others in their group. Characteristics exhibited by individuals in group participation may not be discovered until the first assignment deadline. Time preferences, from the opposite spectrums of proactively getting work done early to procrastinating until the final required submission date for an assignment, may strain the collaborative aspect of group work. Transparency in addressing the impact of study vagaries with the group at-large has the potential to encourage an appreciation for the interdependence of the group effort.

Difference Among Level of Maturity

Although student input in the study blog assignment may not have a direct correlation with level of maturity, the participation of each member reflects a commitment to group success. A degree of pride in exemplifying trustworthiness, honesty and collegiality, and a personal goal to meet or exceed class expectations goes beyond the basic mastery of skill in blogging to the desire to gain expertise in an area of technology applicable in the educational milieu.

Constructively critical self-reflection combined with forthright observation of the contributions of others provide insight to the group. Soliciting responses from group members demonstrates active engagement with peers enhancing leadership and collaborative skills while using a professional online learning style. The skill with which a student contributes to the blog may indicate an awareness of personal strengths and limitations. Recognition of bias, positive or otherwise, in the approach to the required use of study blogs may contribute to an evaluation of changes in personal learning. Individual input to a blog may characterize development in complex contextual factors, such as working with ambiguity or colleague reticence and dealing with frustration.

Researcher's Role

Research validity in this study is documented through member checking and triangulation. The numerical data is explained through narrative; an independent researcher analyzed and confirmed data outcomes; longitudinal data explicate patterns emerging from Self/Peer Evaluation. As confirmed in the section "Professional Learning Communities", graduate students may conceal a subliminal distrust of study blogs due to previous unproductive or unsuccessful participation. With the personal demands on time

and the inherent leadership qualities of some students, combined with the lack of those qualities in others, initial acceptance or resistance is best addressed proactively by the instructor as evinced through this study. This study blog is a course requirement; however, the peer- and self- evaluations are not a grade requirement. Thus, the degree and the honesty with which a student might participate encompass a bond of trust with the instructor.

Conclusion

There is much in the data to support the initial claim that online communities engender multiple, often emotional responses. While at first glance anger, boredom, and dissent might be interpreted as negative effects to be minimized at all costs, the study suggests that, in the context of a doctoral educational leadership program, the challenges of collaborative teamwork in a blog present learning opportunities replicating those encountered in the workplace. Educational leaders are expected to professionally connect with colleagues, parents, and students within a variety of interactive settings. Exposure to and practice with blogging encourages an understanding, if not a comfort level, in a style of communication used by many. Issues emanating from student comments to the blog requirement indicated a concern for the commitment and participation of some classmates and personal expectations and accountability mingled with a positive learning curve.

Written evaluations indicate that learning teams at their best function supportively and collaboratively, assisting one another in arriving at integrative solutions within respectful discussion. In the minority of cases where groups functioned less well, members were challenged to deal with a disregard for negotiated expectations from one or more of the group's members. Frustration surfaced when those students invested in the group's success were faced with a perceived lack of professionalism from other team members. Responsible, dedicated students, particularly those already in professionally accountable leadership positions, found delayed or protracted responses to be unsettling and exasperating.

School systems and instructors who include blogging in their course curricula would benefit from first addressing group dynamics and team skills. As established in this study through data and multiple codes, an understanding of group functionality would include elements to foster collaboration, factors which promote team interaction, and a component to engage group members in peer feedback. A recognition that the understanding of the term "functionality" may differ with each program and each instructor is a factor to clarify prior to implementation of a course-required blog.

Further research might include a comparative study of self-selected blogging groups versus instructor-selected; the impact professional or career leadership experience has on group dynamics; leadership qualities exemplified by individual students within their blogged responses; leadership qualities of individuals based on their feedback to peers; management skills of individuals based on judicious responses; leaders who exhibit skill in task-oriented actions. A number of leadership fundamentals may be gleaned from the promptness, quality, and thoroughness of student participation in course-required blogs.

This study demonstrates aspects which facilitate contributions of group members in a prescribed course-required activity. This study recognizes the importance of the contributions of each individual in a technology-driven communication component unheard of in past decades of educational leadership study. The difficulty of developing online or face-to-face professional learning communities should not be underestimated, but the benefits are well worth the effort.

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